Integrating Telegram Messenger Application for Effective Instructional Content Delivery in Post COVID-19 Era

Celestine Unoh Nkanu[1], John Eteng Imoke[2], Anthony Etta Bisong[3]

[1,2,3]*Department of Curriculum and Teaching (Educational Technology Unit) University of Calabar, Calabar*
unoh@unical.edu.ng

Abstract

Since the emergence of the novel Corona-Virus 2019 (COVID-19) pandemic and its attendant effect which span through all aspects of human endeavours including education, it has necessitated both the instructors and the learners to adopt and adapt several mobile and social media applications for instructional delivery and learning purposes. These mobile and social media applications allow for synchronous and asynchronous instructions and learning. Telegram as one of such media has proven to be a better substitute to the conventional classroom for both instructors and learners alike. Research lately across different discipline have consistently yielded results that tend to emphasize that Telegram utilization is an effective online instructional delivery medium. It can be used for creating and sharing online live and recorded videos/presentations and ensuring learners' participation by asking them to make comments. The platform encourages self-paced learning via internet enabled mobile gadgets and eliminates or reduces the requirements of physical learning environments. In view of the crucial role that Telegram plays in effective instructional content delivery, if and when well implemented, this paper takes into consideration a general overview of Telegram Application, outlines the features, benefits accruable to using Telegram for instruction, and also the advantages and disadvantages associated with using Telegram for instructional content delivery in post COVID-19 era.

I. Introduction

The advent of Coronavirus 2019 (COVID-19) pandemic has left a negative signature on every sphere of human endeavour, and the world over. This negative impact felt hard on the economy, agriculture, transportation, sport, and educational activities to name but a few. According to World Health Organization WHO (2020) the virus mode of transmission is basically through bodily contact with infected person, their saliva, droplets from their cough or sneezing. As a first step towards ameliorating the unpleasant effects of the virus universally, businesses and educational institutions were forced to closed down or stop any physical activities as the rate of infection upsurge exponentially (Winthrop, 2020). This decision led to almost a worldwide lockdown instigating people to sit-at-home for a long time, except for persons on essential duties.

Humans were forced to look forward to other alternative ways of doing things and continued existence and transaction, online technologies and platforms were found to be a veritable alternative to the face-to-face actions. Online learning was chosen as one way to reduce the potential for the spread of the COVID-19 pandemic (Suprianto, et al 2022). Sembiring et al (2022) acknowledges that online learning system is one of the efforts that

can be made to overcome problems and make it easier for students to access learning materials irrespective of distance, place, or time. While other works of life struggle to catch up with the new normal, education was not left out, as educators adopt and adapt both technological hardware and software applications to effectively deliver instructions to their students (Johnson, et al, 2021). There have been enormous improvements in every field in the modernized and technological period occasion by the pandemic (Alahmad, 2020). The adaptation strategies have led to the introduction of so many online and social media applications to be used for instructional delivery and upgrading of existing ones.

Researchers have reported positive benefits of using social media in educational settings for students and teachers alike. For example, (Raut, & Patil, 2016; Imoke, et al, 2021) submitted that most educational institutions have now integrated diver's social media software tools and free web base applications to improve learning, communication, and engagement, between instructors and students synchronously or asynchronously. According to Loveless, (n.d) Social media strength is in its capability to encourage teamwork, partnership and sharing of information. Though, every social media platform has its own set of power that can be leveraged upon even in the classroom. In the recent past, many online and social media platforms have surface in the educational scene, of which the educational value of some have not been fully utilized by both teachers and students. Notable among such platforms include "Telegram Messenger Application". Nevertheless, not much have been reported in literature about its numerous compatibilities and user-friendly interface when use in instructional delivery. Thus, this study tends to Xray it educational uses, features, challenges, benefits to both the teachers and students in an instructional setting.

II. Review of Literature

Though, there are paucity of literature on the instructional benefits of Telegram Messenger application, there researchers have search extensively to gather some more for the purpose of this study. Telegram is a cloud base social networking application which offers it users with an enhance communication interface such as sharing media files, instant messaging, and calls between person to person and groups. According to Aladsani (2021) Telegram is a free of charge social networking application with an unbound space for cloud storage, support media file sharing irrespective of size or type. Solomon (2021) defines Telegram as a user friendly, free educational tool with many features that can seamlessly allow teacher-student engagement in a cloud-based classroom which can be virtual or non-virtual. Kechil (2019) describe Telegram as one of the most popular interactive social media applications for educators because of its suitability for sending messages, sharing lecture notes, and being accessible not only via smartphones but also computers without the need for a smartphone connection. Telegram, which was created in August 2013, irrespective of several upgrade, addition of newer versions, and its security sophistication, it was not given the popularity it deserves until the outbreak of COVID-19 pandemic.

Abu-Ayfah (2019) investigated the EFL College students' perceptions of using Telegram for English language learning. The participants of the study were 300 EFL college students, 200 female and 100 males were selected randomly from the department of English and Translation at Tibah University in AL-Medina AL-Manwarah in Saudi Arabia. The study followed a quantitative approach in which a survey questionnaire was utilized as an instrument for data collection. The results of the study revealed that the

majority of EFL students perceived Telegram as a useful tool for English language learning, particularly in vocabulary learning. The findings of the study also contributed to developing the process of improving learning techniques in higher education in Saudi Arabia.

Ammade et al, (2022) Asserted that Telegram is a messaging application which offers fast and reliable messaging and calls, and it has special feature as a cloud-based messenger with seamless sync. During COVID-19 pandemic, telegram contributes big support in continuing teaching learning process. The above was in a study titled: Telegram app in E-learning of English reading: Impact on students' reading ability and its efficacy using pre-experimental method research design. The study location was at SMP Muhammadiyah prepare and took 14 sample from the third-grade students which was chosen using accidental sampling. The data was gathered using reading test of narrative text to know the impact of telegram on students' reading ability, and questionnaire was distributed to get data on telegram's efficacy on students learning of English reading. Thus, it was analyzed using quantitative analysis. Based on the reading test, it was found in pre-test that students' reading skill can be categorized fair based on national education standard 2018 as the average students' reading score was 61. Therefore, the assistance of telegram in accommodating the learning during pandemic is assumed helpful in boosting students' learning on English reading. The results of the data analysis on reading test showed that telegram application can support the students' learning on English reading. It is indicated by the scoring gap between pre-test and post-test. Regarding the data from questionnaire through google form, the students agreed that telegram is effective and has benefits in helping students' English reading.

Ibrahim et al (2016). Researched on perception of students on the implementation of a Telegram application as an enhancement tool for teaching and learning. The study population consisted of 66 students who were studying a Bachelor of Electrical and Electronic Engineering programme at Universiti Teknologi MARA (Pulau Pinang). The students were using the Telegram tool in their teaching and learning process during the academic semester. Instrument for data collection was an online survey consisting of a number of agreement-level questions and open-ended questions were developed in google form. At the end of the semester, the form was distributed to students via a link created in Telegram discussion groups to collect students' valuable feedback. The student feedbacks were analyzed to obtain the results of their perception on the Telegram application as an enhancement tool for teaching and learning process. The results showed that Telegram application support teaching and learning enhancement by providing a quick way and easy platform for sharing information between students and instructors.

As COVID-19 pandemic disrupted educational and other socio-economic activities globally, Oteyola et al (2021) started advocating for online classes in preparing senior secondary school III students in Nigeria for the West Africa Senior School Certificate Examination (WASSCE). The argument for and against the adoption of the emerging technologies necessitated determination of the level as well as parental background influence on the students' acceptance of WhatsApp/Telegram for online classes. The researchers adopted the survey research design. The population of the study were all Federal Unity SSS III students that registered for the 2020 WASSCE in Osun State. One hundred SSS III students each from the three Federal Unity schools in the State were sampled using the accidental sampling technique. Students' acceptance of Telegram/WhatsApp based online classes; a Likert-type questionnaire was used for data gathering. Lawshe's CVR test ($\alpha = 1$) and Spearman's correlation produced ($r = 0.71$). The study concluded that the acceptance of WhatsApp/Telegram by the Federal Unity SSSIII

students is slightly high and that none of the demographic variables (gender, parental background) influenced the acceptance of the technologies.

Telegram applications are meant to share information with students and through this medium, students can share pictures, files, audio, video and more with users and friends (Kechil, 2019). In addition, the authors uphold that the app also aims to facilitate and make learning among students more enjoyable. Teachers need to be more creative to produce quality learning content, integrate with other applications, save time, and connect more effectively with the teacher-student community. Since learning in the 21st century is moving in favour of interactive media as an intermediary and a form of channel in the transmission of knowledge.

III. Research Methods

This is descriptive research. The methods are based on a literature review of available sources found on the research topic in three acknowledged databases: Web of Science, Scopus, and Thompson Reuter Journals.

IV. Results and Discussion

4.1 Telegram as a Social Media Learning Application
There are many features in telegram which single it out as an ideal instructional delivery app. Scholars have continued to identify more innovative ways to utilize telegram for improve instructional delivery. Scientific World (2019) outlined several methods to effectively utilize Telegram for instructional delivery some of which are:

a. Preparing instructions and delivering it through group
This is a situation where the instructor creates a group for a particular class of students. Typical of this type of group is that the instructor announces the class time and set objective(s) to be achieved with class duration mandating all students to login to the class group. Usually, the lesson is delivered in three different methods namely: (a) Text, (b) Audio and or (c) video.

1. Text

Here Telegram permits instructors to either deliver instructions through posting a prepared pdf or doc files to the group for students to interact or type a live text during group interaction. The students can as well be interacting in the live class by responding and making input to the instruction by asking and answering question post by the instructor. The instructor can also post assignment to students and assessment results through the group while students can also interact with the instructor vice-versa.

2. Audio

Telegram allows instructional audio to be send to the students' group by the instructor and also permit full interaction through voice note or live teaching between instructor and learners in the group. Learners are allowed to express their opinion through answering question or commenting and asking question. Iksan and Saufian (2017) observed that learners are encouraged to express their opinion confidently contrary to face-to-face classes, where not all students are able to express their opinions and ideas especially when it comes to personal matters.

3. Video

As it is peculiar to other social media platforms, Telegram allows instructional video sharing between instructors and students. Precisely, on July 30, 2021, Telegram enhanced it Video calls to accommodate up to 1000 viewers, Video Playback Speed, High Quality Video Messages, Screen Sharing with Sound. Ledesma (2022) asserted that even in a virtual instructional scenario, telegram still allows instructors to share files of any format with learners and communicate in a regulated process to keep everyone organized for effective and efficient learning. An instructor can decide to share his screen with the learners as he/she super imposes a visual image while the instructional delivery is ongoing. Again, in September 2021, Telegram upgraded to version 8.0 its interface include: Live Stream, Flexible Forwarding, Jump to Next Channel and Trending Stickers which allows users preview videos and stickers.

4.2 Benefits of Utilizing Telegram in an Instructional Delivery

There are several benefits which accrued to both teachers and students in the utilization of telegram for instructional delivery. There include:

a. Organized Group Chart

Having organized Telegram group chats among learners can be very supportive for studying, exchanging notes, and working together on projects. It is also a productive way to interact with classmates, ask questions, and exchange study tips (Tick Tech Told, 2023). With organized group chats, students can stay in touch and collaborate effectively with one another. The teacher also benefits in that he/she has an almost direct communication with the learners as in person through the Telegram group. He creates and manages the platform to keep it organized and used for the purpose it meant for without the students taking an undue advantage.

1. File sharing

Instructors and students enjoy unlimited file sharing in telegram, making the app suitable for sharing research papers, presentations, assignments, and other useful documents. The app also allows users to upload their files to the cloud so they can access them from anywhere at any time. File sharing is a vital feature for students so that they can work together on group projects, share notes, and access each other's learning materials. If properly organized, it reduces the load of moving about with hard copy (printed text) to soft copy for both students and teachers' convenience.

2. Voice and video calls:

Instructors can call in through high-definition voice and video using Telegram's voice and video call features. Most students who were unable to attend the live teaching section, can benefit recorded voice and videos by replay it. These recorded call and video features benefit students with several categories of learning challenges to replay them until they assimilate the content. These features are incredibly helpful for students who need to contact their classmates and teachers from distant locations. It also enhances students' easy communication with their colleagues and teachers. This function is especially helpful in remote learning environments where students must virtually interact with their instructors and classmates (Tick Tech Told, 2023).

b. Advantages of using Telegram for Instructional Delivery

There are several advantages associated with using telegram for instructional delivery as few are as follow:

1. Security:

Telegram has a high security encryption technique as it offers more security than any other messaging app.

2. Speed

It offers an extremely fast speed messaging service, almost at the speed of light between individuals and groups making it one of the most admired and preferred application for online teaching and learning (soffar, 2022). It has a self-destruction mode that enables all the chats to work flawlessly, it runs with a very stable and reliable performance and the messages are delivered without delay, so, it is one of the fastest messenger apps available for teaching and learning.

3. Offline and Online mode:

The offline mode help students who missed the active class session to catch up with information on the topic of discourse and make their input at a later time. The mode put the learners in an advantage point as according to Iksan and Saufian (2017) a learner testifies that even when she's late to class, on like the face-to-face classroom, she can still follow what was discussed in the class by reading back the conversations before with missing anything.

4. files sharing:

Teaching and learning between instructors and students become interesting through the use of files sharing features which allows for a seamless file sharing, be it picture, video, assignment, or any other type of file that can be useful in the learning process. Instructor can use this medium to share post students' grade and performance with the file sharing feature.

c. Disadvantages of using Telegram for instructional delivery

With it many advantages, Telegram also has disadvantages in it usage for instructional delivery as follows:
a. Students becomes lazy or intentionally skipped class since they are going to read and view all that happen during the live section.
b. It kills creativity in teachers, as most teachers would just download materials and send to the students' group without any modification to suit the topic, course, or learners' level.

V. Conclusion

Covid-19 lock down actually disrupted instructional delivery between the teacher and students in the conventional classroom and caused a positive migration to online learning aided by the use social media and online applications. Telegram's application predates Covid-19 but, it instructional delivery benefits was popularized by the upsurge Covid-19 and the collapse of physical gathering and teachers and learners. With the associated benefits telegram has been proven suitable and should be properly utilized for higher levels of education.

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