CLASS APP: Tool of Support in Blended Learning Environment

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Abstract

Aim: As the teaching and learning shifted from classroom instruction to different learning modalities during the time of pandemic, teachers encountered different educational challenges. This paved way to the teacher-researcher to innovate CLASS APP, a teacher-made digital learning material which aim to provide engagement learning, ease of access and simple to use with a minimal amount of needed data necessary for blended learning.

Methodology: Through descriptive research, a structured open-ended survey questionnaire was utilized through Google Forms and are supplemented with the data obtained from Focus Group Discussion. Purposive sampling was used in the study wherein 40 Grade 12 HUMSS students of Cuenca Senior High School served as respondents of the study who have been using printed modules and at the same time have access on Class App.

Results: Findings revealed that the features of Class App such as Teacher's Info, Class Schedules, Modules, Activities, Video Lesson and Class Standing were helpful tool in students' academic needs in blended learning. Their experiences on its use showed that they positively accept its usability and effectiveness.

Conclusion: The result showed that the features of Class app support students learning and increase their success. Teachers should be able to integrate digital learning materials such as this one to fit the needed learning gaps. Also, the proposed enhancement on the use of Class App will help students and teachers for its future use.

Keywords: blended learning, learning materials, digital tools, technology

INTRODUCTION

As the teaching and learning shifted from classroom instruction to different learning modalities during this time of pandemic, different challenges were encountered by teachers. With this, the Department of Education released an Order No. 12 s. 2020 about the Adoption of the Basic Education Learning Continuity Plan for School Year 2020-2021 in light of the COVID-19 Public Health Emergency, stating that the Most Essential Learning Competencies (MELCs) shall be delivered in multiple learning modalities and platforms. It urges teachers to become innovative and think of different learning materials, in print and digital, which will suit best to the learning modality of the school.

With the advent of technology and the current trend in education, blended learning has been offered as a learning modality which teachers preferred as a big help to students. Blended learning or the integration of face-to-face and online instruction is widely adopted across higher education with some scholars referring to it as the "new traditional model" or the "new normal" in course delivery (Ross and Gage 2016,). Accordingly, this model combines the advantages of online learning and the benefits of classroom education; this education is based on the integration between the traditional learning and online learning.

In blended learning, access to learning devices such as cellphones, tablets, laptops or computers are important since it transmits learning using internet. Those devices are used to maximize teaching and learning, particularly in the context of the new normal. However, it is also important to note that the goal of blended learning

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should not simply be to incorporate technology into the classroom; rather, it should help students to become exposed to different learning experiences, both social presence and interaction (Al-Rimawi, 2016).

Additionally, in the lens of blended learning amid pandemic, teachers are likely to skew different teaching methods and materials. Along with these materials are audio, text, animation, simulation, and assessment in between which are referred as Digital tools. According to Conley (2010), Digital Tools (DT) pertain to interactive online applications. It also supports the development of Digital Instructional Materials necessary for online and blended learning. Classroom management is supported by DTs that can save time and release energy, help provide and evaluate online learning, improve student behavior, and set up scheduled tasks to keep the virtual classroom running as a well-functioning engine (Garcia, 2017). The actual use of digital learning tools in the classroom can increase student participation, help teachers improve the curriculum, and promote modified learning. It also helps students acquire important 21st century skills.

Hence, online teaching tools give student presence and are effective for learning, especially when teachers teach online with appropriate methodology along with such tools. Additionally, researchers have urged that there is a lot of focus on incorporating technology into the classroom through new teaching practices and styles that focus on helping students to attain the intended learning outcomes. Likewise, the concept of 'anywhere/anytime learning' becomes apparent as mobile devices are fast becoming a necessity to 21st-century learners and teachers (Bandalaria, 2017).

As a matter of fact, educators are impelled to assess the pedagogical implications and advantages of such devices to maximize teaching and learning, particularly in the context of the new normal. However, it is also important to note that the goal of blended and flexible learning should not simply be to incorporate technology into the classroom; rather, pedagogical objectives should dictate the various modes of instruction.

To support the asserted need to adjust in the new normal and implement the integration of technology, Cuenca Senior High School has adapted blended learning as its learning modalities for the school year 2021-2022. Teachers have seen the effectiveness of blended learning as it offers more efficient learning experience and increased learner engagement, which leads to improved learner performance and measurable results. Teachers take the responsibility of monitoring the progress of the learners by using different learning platforms such as Facebook group, Messenger Group chat, Google Classroom, Google Meet and Zoom to effectively deliver asynchronous or synchronous learning.

With all the means of providing learning platform, the researcher has seen the need to create a teacher-made digital learning material known as Class App that is accessible and engaging. This is a personalized and conceptualized through the use of Google Slides, Canva and tinyurl.com website. Unlike other apps, it is not downloadable. The teacher will just set the link to the class group chat in Messenger so students can have access to it. The need to strengthen the use of digital learning materials was seen to be necessary as well, to lessen the production of modules. This study aims to identify the features of Class App that is beneficial to them as well as their experience with its use. It intends that the proposed enhancement of the app will be a necessary technique for increasing students' involvement and knowledge acquisition.

Research Questions
This study focuses on the qualitative - descriptive method of research about Class App as a Tool of Support in Blended Learning Environment by the Grade 12 HUMSS students in Cuenca Senior High School. Specifically, it sought to answer the following questions:
1. What are the features of Class App that help students learn in blended learning?
2. What are the students' experiences in using Class App as tool of support in blended learning?
3. What enhancement on the use of Class App maybe proposed to improve its utilization for future use?

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METHODS

Research Design

This study employed pure qualitative-descriptive survey method to serve the purpose of the study and to find students' experiences and perception on the effective use of Class App as a Tool of Support in Blended Learning Environment. The researcher made use of descriptive survey design of research. It is thought to be the most appropriate for the purpose of describing the status of events, people or subject as they exist.

Gall (2017) mentioned that the goal of descriptive research is to describe a phenomenon and its characteristics. This research is more concerned with what rather than how or why something has happened. Therefore, observation and survey tools are often used to gather data.

Population and Sampling

The study covered 40 Grade 12 HUMSS students in Cuenca Senior High School from the school year 2021-2022. This paper studied the students' experiences and perception on the effective use of Class App as a Tool of Support in blended Learning in the subject Trends, Network and Critical Thinking in the 21st Century Culture. These students were using the Learning Activity sheets and at the same time, they had access to the teacher-made Class App on their mobile phones.

Instrument

The researcher developed a Class App using Google slides, Canva, and tinyurl.com website for its link. The needed learning materials and activities are included to make it available for the students. Also, clickable icons are placed using hyperlink for easy access and organization of its content. Then, the CLASS APP was sent to one section of HUMSS which has 40 students for them to experience it and justify its accessibility and usefulness. In this study, the researcher used a structured open-ended questionnaire which was sent via google forms. With the given set of questions, respondents were able to freely express their experiences on the use of class app and its effectiveness.

The criterion includes the aid in the data collection process, a thorough conversation, sharing of personal experiences through a Focus Group Discussion (FGD), and conversational interviews were done with the purposely selected participants which aimed to develop a deep understanding of the phenomenon and to create a dialogue between the participants and the researcher.

Data Collection

In gathering the appropriate data for the study, focus group discussion was used to validate students' responses. Focus Group Discussion (FGD) is a method for collecting qualitative data that gathers community members together to discuss a specific topic. Questions are open-ended, with the aim of stimulating an informal discussion and investigating people's views in more detail about their experiences with the use of class app. It also allows researcher and participants to ask follow-up questions for clarification. The researcher used video recordings, note-taking, and form interviews to reach more profound responses from the participants.

Data Analysis

Once data collection was completed, the analysis was conducted. Transcripts from the focus group discussion were transcribed verbatim, and each participant was assigned a code, such as Participant 1, Participant 2, and so on.

In order to answer the research questions, the data were analyzed utilizing Thematic Analysis. According to Braun and Clarke (2016), thematic analysis is a qualitative research method used to identify, analyze, and report patterns (themes) within a dataset, typically involving textual or visual data. It involves systematically organizing and interpreting data in order to understand the underlying meanings, patterns, and relationships present in the material. Thematic analysis aims to uncover the broader significance of these patterns and provide insights into the research question or topic of interest.

Various meanings were developed from significant responses to themes in the next stage of the analysis. Through this method, the researcher developed clusters of meaning from these significant statements into themes and then used them to write a textual description of the students' experience with the use of Class App. She also used these significant statements to describe the feature of class app that is helpful in learning as well as the suggestions on how it can be improved.

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Ethical Consideration

Research Protocols were observed by the researcher to ensure the quality and reliability of the study and research findings. The researcher sought approval from the School Principal and the participants to conduct the study. Consent letters were provided for the participants to express their willingness to take part in the study. When approved, the researcher scheduled the FGD with the participants. Also, the researcher considered the confidentiality of the respondents' profile to protect the fundamental human right of privacy as stipulated in Data Privacy Act 2012.

RESULTS and DISCUSSION

This section presents the analyses and interpretation of data obtained from the participants of the study. The information is presented in themes with interpretation and implication. The presentation is organized based on the order of the problems in the statement of the problem.

1. Feature of Class App

Learning materials can support student learning and increase student success. Ideally, the learning materials will be tailored to the content in which they're being used, to the students in whose class they are being used, and the teacher. Learning materials come in many shapes and sizes, but they all have in common the ability to support student learning (Right,2018). In this study, the teacher- researcher crafted a learning material digitalized and called it as Class App. A Class App is a teacher-made application done through Google Slides. It is saved in a Google drive wherein teacher can edit, personalize, and add additional features that students can easily access. The following are considered by the students as helpful features of the App: *(refer to figure 2)*

A. Teacher's Info. This feature shows the teacher's information where students can easily access. The teacher's full name, subject handled, contact number, email address, Facebook account, and Facebook Messenger are posted here. Since most of the feedback are needed in a blended learning, this feature provides students a lot of means to communicate with their teacher.
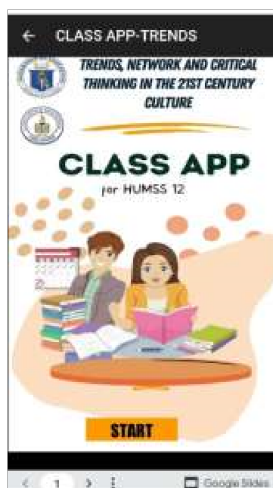

Figure 1. Interface of Class App

Figure 2. Class App Menu

B. Class Schedule. The class program for the subject for modular class and face-to-face class are within this feature. During the first week of the class, students were not yet familiar with their class schedule, but with this feature, they can give access on the specified time and days as well as learning modality assigned to them.

C. Modules. This feature when click will ask students to categorize which quarter they need to access. *(Refer to figures 3 and 4)* Once accessed, it will ask them again to choose what specific week is needed to obtain the modules. When the student chooses his preferred week, it will go over the modules or learning materials prepared by the teacher. The printed material and the digital one in the class app are just the same. This will give ease of access to the students wherever they are.

D. Activities. Just like the features of modules, learning activities in this feature are categorized into quarter and weeks. This will guide students on what learning task they must accomplish for each week. Students are encouraged to be organized and systematized in doing their outputs.

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E. Video Lesson. This feature includes the link of the teacher-made video lesson for the specific topic of each week. Students can directly access here the link of video lesson posted in the Facebook group even if they missed to watch it in FB group. It has video links also from other websites such as YouTube which the students can access to support their learning.

Figure 3. Modules are divided into quarters

Figure 4. Modules are divided into weeks

F. Class Standing. One of the favorite features of the students is the Class Standing since this area reflect their accomplishment for each quarter *(refer to figure 5).* It showcases if they have accomplished their tasks weekly, submitted the required performance tasks and taken the summative tests. It serves as an instant teacher's feedback on their achievement. It is classified into sections.

With all these features it can better guide students to actively learn during blended learning. As stated by Chen (2013), creating a custom teacher resource is something that should be encouraged, as it has many benefits. It does not have to be time-consuming or hard to do. With a little practice, every teacher should be able to create a custom resource that fits the needs of their students.

Moreover, the result of the study is supported by the study of Alawamleh (2020) where the result claimed that learning tools and technology enable students to develop effective self-directed learning skills. They are able to identify what they need to learn, find and use online resources, apply the information on the problem at hand, and even evaluate resultant feedback. This increases their efficiency and productivity. In addition to engaging students, digital learning tools and technology sharpen critical thinking skills, which are the basis for the development of analytic reasoning. Hence, creating teacher made supplemental lessons such as Class App will help teachers teach the content in a way that will work on students.

2. Students Experiences in Using the Class App

The following subsections present the themes that reflect different students' experiences in using the Class App from participants' open-ended responses.

accessible anytime, anywhere. Students use of Class App during blended learning made their task simpler since it is easy to use and can be opened whenever they are or whatever activity they are doing. Those who are working while studying benefited from the App as they can access the lesson and activities even on their workplace.

> "*I can open and use the Class App anytime, even without the supervision of the teacher, we can still accomplish our output because it is easy to use*"

Based on the response of participant A, it shows that they were appreciative on the use of Class App as they can also have an instant copy of the modules. Students will no longer have to ask teachers to send them a pdf copy of their modules. Installation of the App is not needed, the teacher just have to send the link and in a tap of a finger, they can browse the App.

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Paperless and time saver. With the current use of printed learning activity sheets and modules, students must gather all of their learning materials as they accomplish their outputs. Some students affirmed that there were times when their modules are being crumpled, torn, misplaced and even water poured due to its bulkiness.

"Class App is good because it is paperless, we don't have
to keep a lot of modules in our house. It saves us time for
browsing the activity for the week"

Module distribution and retrieval is lessened as well with the use of Class App as responded by participant B. it was also confirmed that class app is time saver since it has clickable icon for weekly task which students can directly access.

Organized and systematic. One of the challenging experiences of blended learning is to become organized in time, output and lesson. Students have commented that Class App has offered them ways on how to become organized with their output and written notes. Mostly, they opened the class app and look for the topic for the week and even for the following weeks. Their outputs were labeled accordingly before submitting it.

"Class App serves as a communication activities in one place, everything we need
is here. Teachers' info, modules, activities, video lesson and even class standing.
You just click what you need."

It was justified by participant C that the app motivates them to accomplish the task to see their names posted in the class standing. If questions were needed, the teachers' info is available. They highlighted that since each quarter the lessons were categorized into weeks, they too become systematized in studying. It became a pattern for them to achieve learning.

Self-paced learning. Students have different learning styles more so are those students who learn best at their own and in their most convenient time. Students acknowledged that the app taught them to become independent learners. When compared to printed modules, the app offers asynchronous learning such as teacher-made video lesson. The learning materials were simplified with complete explanation and examples.

"Ang maganda dito sa Class App, manageable namin lahat
ng features. Kapag gc kc at fb page maraming distractions na notification,
dito click ka lng ng click, makikita mo lahat ng
kailangan mong malaman."

Participant D attested that self-paced learning is still important to give focus and attention to the lesson. Notifications from collaborative activities in group chat and Facebook group are sometimes distracting which in the end will led them to start browsing social media.

Requires internet and gadgets. Though the use of app is truly helpful, students also confirmed that it has drawbacks. Using it will require them gadgets and mobile data which is unavailable for some students. Problems like this arises during the blended learning, but mostly the app requires only a minimal amount of data.

"Not all students have gadgets and money to buy load. They will
not be able to use the app for learning. I hope there could be an
offline Class App."

As responded by participant E, gadgets and network connection are the common problems they encountered in blended learning. Unknowingly, the teachers have innovated the Class App where shareable digital resources are available to ensure that blended learning is sustainable. Despite this drawback, students looked for some ways and

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resources on how they can still use gadgets and access the app such as taking a screenshot of learning materials and saving it on their phones.

With the presented themes on students' experiences in using the Class App, it summarizes that student have positive experiences in using it in blended learning and teachers must orient them on its usability. As mentioned by Zuñiga-Tonio, (2021), the aim of blended learning is to provide practical opportunities to make learning independent, useful, sustainable and ever growing. Teachers are now innovators of learning. The rapidly advancing technologies make ubiquitous mobile learning possible (Cummins, 2012).

As cited by Estira (2021), people live in a world where everything is easily accessible through a web-enabled digital medium. Going digital bestows students with a lot of exposure that is, beyond the limits of textbooks and syllabus. Therefore, students can learn better by exploring any subject on a broader spectrum. Digital learning paves the way for a modernized approach to learning and eventually helps them evolve and thrive in this fast-paced technology-driven age. Therefore, the innovation in digital learning materials such as Class apps has raised interests among teachers because it facilitates teaching and learning.

3. Proposed Enhancement on the Advantage of Class App for future use

Class App is a teacher-made digital learning material that is personalized and customized according to students' needs. It has clickable icons where it will direct students on the learning materials they wanted. With the presented features and experiences of the students, the researcher, through face-to-face focus group discussion with students, come up with the proposed enhancement on the use of app. This includes the following:

1. Learning is more engaging and entertaining if there are background sounds on the interface and menu of the Class app.
2. A video presentation that orients students on the use of class app must be provided. This will guide those who were not gadget-literate.
3. Proper labeling and slides hyperlinking should be maintained to avoid confusion among students when icons are clicked.
4. A checklist of activities to be submitted should be added as one of the features of the app so students will be reminded weekly.
5. The font size of the learning materials should be larger to make it more visible to the students.
6. Pictures and other videos can be added to make learning more attractive and engaging.
7. Additional reading materials can be added to support students' learning.

Technology in education opens a huge world of possibilities as to how teachers convey, share and engage with students presenting different ideas, facts and theories (Hsu,2011). With today's generation of learners never having known anything other than digital mediums, teachers' main goal is to ensure that lessons incorporate current technology to enhance the learning experience and capture the minds of the learners.

Conclusions

Based on the results of the study, the following conclusions are drawn:
Class App is a helpful tool in students' academic needs in blended learning environment. The students' experiences on the use of Class App concluded that though it has drawbacks, they positively accept its usability and effectiveness in blended learning.
The features of Class App that support students' achievement in blended learning are teachers' info, class schedule, modules, activities, video lesson and class standing.

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Students' experiences in using the class app that were thematized and interpreted includes the following: accessible anytime anywhere, paperless and timesaver, organized and systematic, self-paced learning and requires internet and gadgets.

The proposed enhancement of the class app with students who used it was done through face-to-face group discussions are necessary to further improve it for future use.

Recommendations

The result suggested that the school must encourage teachers to integrate the use of Class App in blended learning modality. Also, professional development programs and capacity-building program for teachers must include ICT integration to maximize the use of technology in teaching.

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