



Evaluating the Use and Impact of Mobile Apps in Learning: A Study in The College of Business Administration

Jolly B. Mariacos, Marilou A. Dela Peña

Baguio Central University, Baguio City, Philippines

DOI: https://doi.org/10.51244/IJRSI.2023.10611

Received: 30 May 2023; Revised: 13 June 2023; Accepted: 19 June 2023; Published: 13 July 2023

Abstract: The main purpose of the study is to evaluate the use and impact of mobile apps in learning: A study in the College of Business Administration, Baguio City for the School year 2021-2022. It involved one hundred fifty (150) CBA students as the respondents of the study. The research study utilized the descriptive research design the mixed method with a checklist and interview guide questionnaire as the main data gathering instrument. The following are the findings of the study: the mobile apps use in learning in the College of Business Administration (CBA) were the Facebook and Messenger, level of extent of agreement on the use and impact of mobile apps in learning in the College of Business Administration is agree; attitude towards use of mobile apps in learning in the (CBA) department is positive impact. The conclusions of the study are drawn from the findings: mobile apps have potential to enhance learning within the College of Business Administration, their effective implementation is crucial; not all students utilize these apps, and those who do not have varying opinions on their usefulness; and the study suggests further exploration on how mobile learning apps can improve students' performance and motivation.

Keywords: Mobile apps, Learning process, Higher education, College of Business Administration, Student attitudes, Teaching methods

I. Introduction

The use of mobile devices by students in higher education has increased recently GMI. (2019). Technology breakthroughs are driving civilization forward and causing situations to change quickly. Higher education institutions (HEIs) must keep up with these technological breakthroughs and changes in order to enhance and enrich the teaching-learning process. HEIs are not exempt from these changes and advancements in technology.

The development of innovation is additionally pushing civilization, coming about in rapidly moving settings. Higher instruction educate (HEIs) must receive these mechanical breakthroughs in arrange to upgrade and improve the teaching-learning prepare. HEIs are not excluded from these mechanical changes and progressions.

Mobile apps for learning should be built on creative problems and techniques that can inspire students and foster teamwork and communication for a successful conclusion.

As these Apps can form a solid infrastructure for learning content delivery at universities. To integrate this technology, a number of research tasks should be conducted in order to design, develop, apply, test and evaluate these technologies.

If correctly incorporated into the settings now in use at universities, mobile apps can be an effective learning tool that improves teaching and feedback while streamlining the learning process for students by allowing them to learn in the way that suits them best.

According to (Auquilla A., Urgiles M.), the usage of mobile applications for education has a higher global influence in developed nations. The researcher's interest in investigating the function and advantages of these devices as a tool in t learning was spurred by the growing usage of these devices. The usage of mobile applications in learning can help students learn and will assist and enhance their progress. Additionally, the use of mobile apps can benefit students' motivation, engagement, and academic success in a variety of learning environments, including elementary, middle, high school, and institutions of higher learning.

Universities and colleges are putting mobile applications into place quickly for this reason. However, they must comprehend how these mobile applications are seen by pupils in order to do so. There is limited study on mobile applications because businesses that create these applications only just made them available to the general public. The results of this study's findings encourage other schools and universities to implement mobile learning in their decision-making applications, giving pupils a fresh teaching resource that will edification is available to students anytime and wherever they want it.

According to (Baah, K. 2018). the new generation of mobile apps, which have emerged over the last few years and already have captured the market.



ISSN No. 231-2705 | DOI: 10.51244/IJRSI | Volume X Issue VI June 2023

The researchers hope that the results of this research would be beneficial for other researchers. The research may contain useful information that other researchers may take into consideration while using mobile applications at universities. Also, the researchers hope that the study findings will support and develop the uses of mobile applications. They have suggested solutions to the inventors of the applications to update them in a way that suits students. This is the reason why the researchers conduct this study to find out the problems that arise in the learners encountered through the use of smartphone in the classroom.

The main objective of this study was assessing the mobile apps used in learning. To achieve the general objective, the following specific objectives guided by the study; to determine the mobile apps commonly used in learning by students, to assess the level of agreement on the use of mobile apps in learning.

Purpose of Study

The main objective of this study is to assess the use and impact of mobile apps in learning within the College of Business Administration, with a focus on students attitudes and teaching methods A mobile phone can make a lot of your tasks easy for you and also saves a lot of time. Visiting the library and selecting books, data collection is no more a challenge (vidyalankar.org, 2021).

Research Questions

The study aims to assist the used of mobile apps in the College of Business Administration (CBA) students for their proper use and limitation of mobiles in education for learning.

Specifically, it sought to answer the following questions:

- 1. Which mobile apps do you use on your mobile phone in learning in the College of Business Administration?
- 2. What is the level of extent of agreement on the use of mobile apps in learning in the College of Business Administration?
- 3. What's is the attitude towards using mobile apps in learning?
 - 3.1 What mobile apps are useful or not? Why?
 - 3.2 What are the difficulties of using mobile apps in learning?
 - 3.3 What are the solutions for the difficulties in using mobile apps?

Significance of the Study

The findings of the study would be used as a foundation for the assessment of the CBA students in preparation for the Mobile-friendly methods allow learners to access information in a quickly and easily, able to pick up learning as and when suits them. As a result, smartphone learners complete course material 45% faster than those using a desktop computer. Mobile learning is also time-efficient from an administrative standpoint.

Learning and Innovation go hand in hand. In this Era of Innovation, a lot of things are getting evolved and so is education. Learning is a continuous process and does not have any end no matter how much you learn or understand there are still things left that you can still explore but the only thing you require is information. Moreover, this study is conducted to benefit the following:

Students. As the respondents of this research, they would benefit confidently since the study looked into their advantage of use of mobile apps in their learning area.

Researchers. This research will serve as a guide to improve the integration of mobiles in their teaching and learning critical thinking and analytical skills in the College of Business Administration (CBA)

Teachers. The research study will serve as guide in new learning methodology and teaching and learning and for new communication.

Future Researchers. This study can provide as a resource reference for future researchers. They can use the recommendation as a guide in formulating their problems to come up with a proper solutions.

Parents. This research will serve as guide in assisting their children in the proper use of a mobile apps in the classroom and at home for educational purposes.



ISSN No. 231-2705 | DOI: 10.51244/IJRSI | Volume X Issue VI June 2023

Scope and Limitations of the Study

The study focuses on the use of mobile apps in learning in the College of Business Administration of Baguio Central University. The data collection was conducted on the students enrolled in the CBA department for the school year 2021-2022 since where the researchers were assigned of the said university. The other department were not included as a participant of the study.

Furthermore, the study will focus on the use of mobile apps in the department since now a days technology were already as a tool in learning it is not only for communication. Each of the participants in the research were given the same questionnaires to answer, and the results of the study was applicable to the respondents of the study and will not be used as a measure to the others students who were not included in the study. The main source of data will be the questionnaire which is prepared by the researcher.

Definition of Terms

Facebook. is a website which allows users, who sign-up for free profiles, to connect with friends, work colleagues or people they don't know, online. It allows users to share pictures, music, videos, and articles, as well as their own thoughts and opinions with however many people they like (webwise.ie, n. d.).

Google Chrome. is a free web browser developed by Google, used for accessing web pages on the internet. As of March 2022, it is the most popular web browser of choice worldwide, with more than 62% of the web browser market share (Moreau, E., 2022)

Mobile Apps. is a software application developed specifically for use on small, wireless computing devices, such as smartphones and tablets, rather than desktop or laptop computers (Hanna, K.T, 2023)

Modern application. is an approach that enables you to innovate rapidly by using cloud-native architectures with loosely coupled microservices, managed databases, AI, DevOps support, and built-in monitoring (Duncan, R., 2021)

Students. Refers to the clients of the university who enrolled a chosen course that they want finish in preparation for their future endeavor. Referring to someone who is studying in order to enter a particular profession

II. Review of Related Literature

In HEIs there is also a growing tendency among members of the academic community to use mobile devices in their daily activities (Oliveira et al., 2017), and students expect these devices to be an integral part of their academic tasks, too (Dobbin et al., 2011). A great number of users take advantage of mobile devices to search information and, since they do not always have computers available, these devices allow them an easy access to academic and institutional information (Vicente, 2013).

This study finds support from the different theories and concepts which is very important and utilized the two theories of learning: Technological Pedagogical and Content Knowledge (TPACK) and Connectivism theory. As mentioned by Mishra and Koehler (2013), the theory of TPACK includes three core elements such as technology, pedagogy and content and according to this theory, these days education not only follows the traditional modes of learning and teaching but the modern technology is also utilized along with traditional methods. As far as Connectivism theory is concerned, it is highlighted by Transue (2013) that Connectivism theory is used to explain how new opportunities have been created by internet technologies and how people today have better opportunities to learn and exchange knowledge.

According to Dones (2008), Connectivism theory allows people to share ideas through modern resources of learning. The Connectivism theory provided the basis to the creation of mobile learning content for this research because the notion of a network is dominant in this theory which illustrates facts as a course by means of a system of living beings and non-living objects (Hosseini, 2015). This theory is about the sharing of cognitive duties between humans and technology through nodes to handle a swift transformation in the data field and the influence of theories of systems, intricacy and confusion (Tschofen and Mackness, 2012). However, the nodes through which the duties are shared can be people, groups, structures, fields, thoughts, reserves or communities.

The theory of connectivism is highly associated with the modern learning resources such as the internet and mobile phones. According to Dones (2008), Connectivism theory allows people to share ideas through modern resources of learning. The Connectivism theory provided the basis to the creation of mobile learning content for this research because the notion of a network is dominant in this theory which illustrates facts as a course by means of a system of living beings and non-living objects (Hosseini, 2015). This theory is about the sharing of cognitive duties between humans and technology through nodes to handle a swift transformation in the data field and the influence of theories of systems, intricacy and confusion (Tschofen and Mackness, 2012).

The modified Technology Acceptance Model (TAM) was adopted and guided the study. The model describes how a technology may be adopted to facilitate performance of a particular activity. Yang and Lin (2010) describe TMA to be the most influential model for testing information system. According to Alrafi (2005), TAM helps to assess how potential users of a particular



ISSN No. 231-2705 | DOI: 10.51244/IJRSI | Volume X Issue VI June 2023

technology come to accept and use it. The model explains the causal relationships between system design features, perceived usefulness, perceived ease of use, attitude toward using, and actual usage behavior. The model assisted in assessing the mobile applications used by teaching staff and the perceived usefulness of mobile phones in teaching and learning. The model will be used to assess perceived ease of use, behavioral and cultural intention to use. It was also be used to assess the actual use of smart phones for teaching and learning in the College of Business Administration.

Usability of mobile applications (apps)

The is an emerging area of research because of the increasing use of mobile devices around the world. App development is challenging because each application has its own purpose, and each individual user has different needs and expectations from the apps. There are various apps available for each purpose, and the success of the application depends on its usefulness (Alturki, R., and Gay, V., 2019).

Application Development for Organizations

The most relevant articles were considered for review which showed the importance of application development for organizations. Also, the blended procedure helps the organization to acquire right cellular technologies which can sync with existing set of operations and can fulfil the operational need. Bartin et al. (2018) proposed a fourstage evaluation framework for mobile ticketing innovations out in the open travel to enhance their convenience and improve their adoptability by the potential clients.

Mobile Learning Apps

The last decade has witnessed a drastic change in the education system around the world as online or digital education has become the norm. A key player in this revolution is the educational mobile apps which help students in the learning process. Adeoye and Adeoye (2017) as cited by (Olalere, J. O. 2022) recommended that lecturers and other academic staff should use electronic media resources in delivering lectures in order to challenge the confident level of undergraduates in using electronic media. Learning appears to be simpler as students migrate from the old/traditional mode of learning to mobile apps.

Academic Engagement

The theory predicts that students who are more involved in school activities, in both the academic and social spheres, have better outcomes than students who are not as involved. Binti, Fadhilah, and Anuah (2018) as cited by (Olalere, J. O. 2022) explained that the theory of involvement emphasizes active participation of the student in the learning process. Therefore, institutions are encouraged to focus less on what they do and focus more on what the students do, how motivated the students are and how much time as well as energy they devote to the learning process. Students, who study, interact with faculty and other students, spend time on campus and participate in student organizations would be considered involved students.

Material Learning Based

Teaching and learning using multimedia applications as a teaching and learning tools facilitates teachers to deliver a good learning. This is because learning has taken place by teachers become a source of reference for students to reinforce knowledge acquired based on learning materials multimedia applications provide multiple access to body of knowledge as it is more convenient and students can make referrals more quickly. The material provided in this method have been through a process conducted by experts in their field. Through this Learning method, it is based on the ability of students to learn, test, and assessment of their self-esteem level.

Mobile Device

Mobile devices or known as electronic devices such as smart phones. This device commonly used as a tool to communicate between people. it is not just used as a communication tool but can be used as a learning tool since various mobile applications have been developed according to the latest design of the devices. There are various advantages of using this mobile device in sign language learning.

Pedagogy Strategies

Learning strategy is an important aspect of education. It is aims to determine the strategies to the teachers in achieve the learning objectives. It is supported by Kemp (1995) as cited by Samsudin, M. R., et al (2018) which is learning activity used by teachers in teaching and learning to achieve learning objectives. The learning strategy also refers to the appropriate activity or training chosen by educators to help students achieve the learning goals that they want to achieve (Kozma 2007; Cropper,1998). While Sunhaji, (2008) as cited by Samsudin, M. R., et al (2018) stated that the learning strategy is a way of how the learning method used by the teacher to plan the learning method to be used.





III. Methodology

The research study utilized the descriptive research design the mixed method. A descriptive research design is a procedure in research in which investigators administer a survey to a sample or the entire population of people to describe the attitudes, opinions, behaviors, or characteristics of the population (Cresswell, 2014). Descriptive research design refers to information that has been analyzed to reveal the underlying characteristics of the data collected or used in research (Fowler, 2013). This study employs a mixed-method, which consists of quantitative and qualitative approaches. The quantitative data was collected through a questionnaire and the qualitative data was used for support reliable source of the qualitative part of the respondents and an informal interviews by the researchers for clarification and follow up from the respondents.

The descriptive design was chosen for the reason that this type of design delved into what it is. This research design is appropriate for studies that aim to find out what prevails in the present conditions or relationships, held opinions and beliefs, processes and effects, and developing trends. Knowledge or familiarization of any of these is not the only concern of descriptive research. It also seeks to determine relationships between variables, explores causes of phenomena, tests hypotheses, and develops generalizations, principles, or theories based on its findings (Calmorin, 2010).

Locale and Population of the study

This focused on the College of Business Administration students who enrolled in the seven program from first year to fourth year in the said department of Baguio Central University for the academic year 2021-2022. The total enumeration was used for the survey questionnaire. The distribution is shown in the table below:

Programs Number of Respondents **BSBA** 108 **BSOA** 11 **BSPA** 2 17 **BSCS** ACT 10 2 **CCS Overall Total** 150

Table 1. Distributions of Respondents

Source: BCU-Registrar Database, (2021-2022)

Table 1 shows the distribution of respondents on the different program offered in the College of Business Administration (CBA) with their corresponding numbers with an overall total of one hundred fifty (150). Where the respondents distributed their questionnaires.

Data Collection

The researchers used a survey questionnaire with an open-ended question to gather the data needed for the research study. It is a modified questionnaire which were based from previous researches which are related to the study in order to be align to the research questions which are anchored on the different readings of literature, journals, and online resources. A questionnaire is research instrument consisting of a series of questions to gather information from the students.

There were three parts of the questionnaire in the study of which, Part I present on the mobile apps use in learning in the College of Business Administration (CBA), Part II dealt on the level of extent of agreement on the use of mobile apps in learning in the College of Business Administration, and the Part II present the qualitative part mobile apps do you use on your mobile phone in learning in the College of Business Administration, the level of extent of agreement on the use of mobile apps in learning in the College of Business Administration, the attitude towards using mobile apps in learning

what mobile apps are useful or not? Why? the difficulties of using mobile apps in learning and the what are the solutions for the difficulties in using mobile apps



ISSN No. 231-2705 | DOI: 10.51244/IJRSI | Volume X Issue VI June 2023

Reliability and Validity of the Instrument

The items in the questionnaire were taken from reliable sources and published materials, thus, they have already content validity and reliability. This gave the reason why there will be no test of reliability and validity of the questionnaire. The following were the sources where the questionnaire items were derived at Farrah, M. (2018).

Data Gathering Procedure

After the approval of the research from the research panels, the researchers asked permission from the Vice President for Academic Affairs and from the College of Business Administration (CBA) Dean to conduct the questionnaire. The researchers reproduced the questionnaire for gathering the data and informed the respondents about the nature and scope of the study. The checklist questionnaire with qualitative part distributed to the respondents personally by the researchers. Finally, all the data gathered were tallied, organized, tabulated, analyzed, and interpreted.

Treatment of Data

The data gathered in the study were presented in a series of table, classified, and analyzed on the quantitative part. The descriptive statistics such as frequency count, and weighted mean were used to analyze the data were taken from the respondent's answers to the questionnaire. The Qualitative part of the questionnaire the answer of the respondents were collated to come as one for those who have the same findings to come up with a synchronize findings.

For Part I of the Questionnaire rated from to highest to lowest mobile apps used by the respondents which presented in pie graph.

For Part II of the Questionnaire, which is the level of extent of agreement on the use of mobile apps in learning in the College of Business Administration (CBA). The following scales were used for the said part.

Numerical value	Statistical Limit	Descriptive Equivalent	Symbol
4	3.26 – 4.20	Agree	A
3	2.51 - 3.25	Neutral	N
2	1.76 – 2.50	Disagree	D
1	1.00 - 1.75	Strongly Disagree	SD

For the Part III of the questionnaire is the qualitative part where in the respondents wrote their ideas based on their uses and advantages, difficulties, remedy in the used of mobile apps in learning

Ethical Considerations

In conducting this study, the researcher was very careful in mingling with all participants, and had a careful choice of words to use when addressing issues related to participants. The researcher did this in order to ensure that the study adhered to human right, national policies and morals common in the area of study. Moreover, the researcher paid reasonable attention to regulations and rules during the process of preparation, conducting research in the field and reporting of the data.

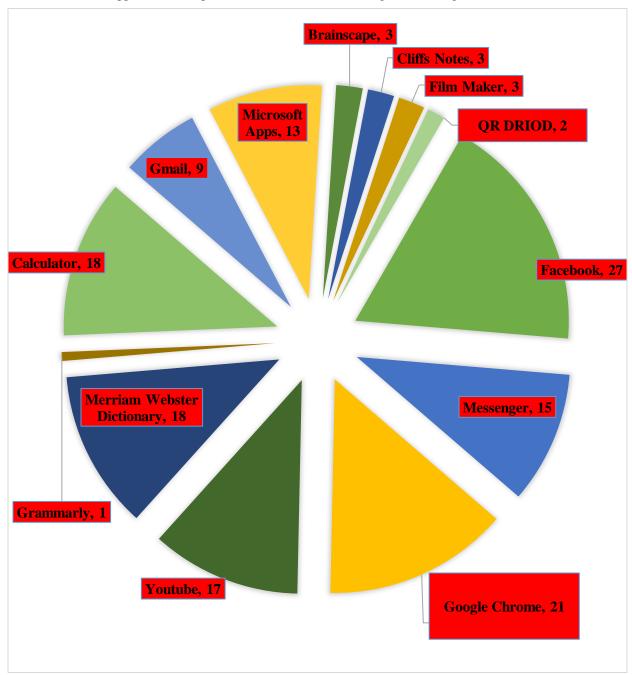
IV. Findings and Discussions

Mobile Apps Use in the Mobile Device in Learning in the College of Business Administration

Table 1 shows the frequency distribution of the respondents according to their mobile apps used in learning in the College of Business Administration. It shows that out of the (150) respondents (27) of them rate Facebook as the top mobile apps use in the College of Business Administration. Since Facebook is currently the most popular social networking site globally and inevitably getting integrated into different facets of life. The prevalence of Facebook and its profuse affordances (both technical and social) have raised controversial opinions among scholars on applying Facebook to education. Also, while the country is struggling to improve its long-criticized education system and catch up with global trends of integrating new technologies into learning teaching contexts, there is a void of understanding on social networking sites, especially Facebook, in relation to education. The findings of Mazman & Usluel, (2010) confirmed that the three primary usages of Facebook for educational purposes include communication, collaboration, and sharing of resources or materials.



Table 1 Mobile Apps Use and Impact of Mobile Device in Learning in the College of Business Administration



Based to the pie graph, Google Chrome was evaluated as the second-most important mobile app for research purposes by the respondents, and it is one of the apps that were loaded on their smart phones or other devices. Additionally, according to the respondents, Google Chrome is a quick, safe, and easy web browser that was created for the current web. It is also available on a variety of platforms, including Mozilla Firefox, Safari, and Internet Explorer. Additionally, since document files may be shared with peers and changed in class, students give this mobile app top priority. It is a free application that integrates email and document storage, according to Phan (2015). The Google platform also enables teachers to observe student discussions and leave comments while allowing students to interact and discuss subjects covered in class.

The calculator and Webster dictionary were also the third mobile app used by the respondents, with a frequency of (18). This indicates that the respondents use these two mobile apps to look up the definition of a word they don't understand and simply browse from their mobile device. Students also noted that they mostly used the mobile dictionary for writing, spelling, and, most



ISSN No. 231-2705 | DOI: 10.51244/IJRSI | Volume X Issue VI June 2023

importantly, discovering the meaning of new words. They enjoyed and learned from their experiences using this kind of technology for language acquisition. The use of dictionaries is a great aid in learning vocabulary, and in modern times, the development of electronic dictionaries has added a new and valued resource for vocabulary learning. Electronic dictionaries are now common as new technological tools for vocabulary learning as well as calculators for numeric numbers that they must calculate to arrive at the right result (Asgari, 2011). According to Lawrence (2012), students who utilized calculators outperformed those who did not.

The fourth mobile apps used by the respondents were YouTube with a frequency of (17) YouTube apps also used by the respondents where to post the video clips that they have created and download some educational video clips that are related to their topics to understand the lesson. This shows that the integration of YouTube or videos is important in learning. Jones (2017) cited the possible uses of YouTube in the educational process, stating that YouTube videos can be used directly in the classroom as part of the teaching process. They can be used to introduce new concepts, display information during instruction, or at the end of the lesson to confirm number one points. In addition, Shea (2011) points out that many universities have established their own channels on YouTube to view their lecturing videos, and the YouTube is available for students and teachers to use effectively in and out of the classroom to help students learn, stimulate class discussion and achieve learning goals.

Messenger, which enables users to send text messages, phone and video chats, transmit money, files, stickers, altered photographs, and GIFs over the platform, was the fifth mobile app utilized by the respondents. Users can add movies or photographs and create groups that let them talk or play games with several individuals. This demonstrates that the users of the survey are using the mobile apps for educational communication.

Followed by the Microsoft apps with a frequency of (13) this shows that the respondents also use their gadgets to encode their documents their slide presentation and their electronic spreadsheet activities.

The following apps that were least used by the respondents were Gmail with a frequency of (9), Brainscape, Filmmaker, CliffsNotes with a frequency of (3), and the QR Droid with a frequency of (2). This shows that the least respondents are using the above mobile apps due to the relevance of the activities that the respondents do that are related to their subject.

According Prensky (2011) said that "digital natives," are conflicting with faculty who are often viewed as "digital immigrants." Because "digital natives" and "digital immigrants" often have different expectations of what learning is and how it should be done effectively teaching new generations of students with traditional methods will become increasingly more difficult. Students are beginning to demand more flexibility, alternative modes of delivery of instruction, and more multimedia-enriched and interactive course materials.

Presents the Student's Observation on the Level of Extent of Agreement on the Use of Mobile Apps in Learning in the College of Business Administration.

Table 2 present, the respondents observed the use of mobile apps in learning as agreed. This is evidenced by the average weighted mean of 3.59 interpreted as agreeing. This means that these mobile apps used by the respondents can be possibly integrated into class in other subjects that different mobile apps can be applied. To sum up, Prensky (2004), Cui and Wang (2008), Kizito (2012), and Wang (2017) as cited by (Farrah, M. A. and Abu-Dawood A.K. 2018) A assert that using mobile phone applications in teaching and learning provides positive ideas and benefits that motivate students to learn and understand better.

On the details of the mobile apps used in class in the College of Business Administration, the most applicable use of mobile apps in learning is using mobile apps in learning strengthen knowledge with a weighted mean of (3.92) which is interpreted as agree. This implies that CBA students were much knowledgeable on the proper use of mobile apps in educational purposes. These mobile apps are appreciated by the respondents due to their availability for use in the classroom for the accessibility of the information in a short time needed by the learners.

Furthermore, it shown in the table that the respondents rated the using mobile apps in learning is diversionary for me with a weighted mean of (3.81). This implies that respondents are familiar with the importance of mobile apps in learning. This means that mobile apps tools were very important in the learning process in the school.

The tables presented that the respondents rated the using mobile apps in learning reinforces what I'm weak in with a computed weighted mean of (3.80). This shows that respondents agreed on the importance of mobiles apps in learning. Mtega et al. (2012) as cited by Farrah, M. A. and Abu-Dawood A.K. (2018) conducted a study in order to reinforce teaching and learning. The researchers stated that the mobile phone applications are suitable in teaching and learning, selecting special activities that are convenient for learning via mobile phones. Also, Ferry (2018) has indicated that mobile phones help students to access and adjust web-based content, and they make students cooperate with others.

Another indicator using mobile apps in learning is convenient with computed weighted mean of (3.71). This shows that access to any information from anywhere at any time makes the learning process convenient and easy. In these changing times, access to





information is at the fingertips through mobile phones. The massive use of mobile devices has created new forms of social interaction, significantly reducing the spatial difficulties that could exist, and today people can be reached and connected anytime

Table 2 Level of Extent of Agreement on the Use and Impact of Mobile Apps in Learning in the College of Business Administration

	A	N	D	SD			
Indicators	4	3	2	1	TWP	WM	DE
1. Using mobile apps in	138	12	0	0			
learning strengthen knowledge	552	36	0	0	588	3.92	A
2. Using mobile apps in	89	45	10	6			
learning helps to access the content of learning	356	135	20	6	517	3.69	A
3. Using mobile apps in	116	27	5	2			
learning is convenient	464	81	10	2	557	3.71	A
4. Using mobile apps in	124	23	2	1			
learning reinforces what I'm weak in	496	69	4	1	570	3.80	A
5. Using mobile apps in	122	18	0	10			
learning reduces my misconceptions	488	54	0	10	552	3.68	A
6. Using mobile apps in	101	35	14	0			
learning helps me store and call data	404	105	28	0	537	3.58	A
7. I use mobile apps to contact	98	43	6	3			
with my colleagues through	392	129	12	3	536	3.57	A
Facebook, Twitter, and SMS							
8. Using mobile apps in	110	40	0	0			
learning is diversionary for me	440	120	0	0	571	3.81	A
9. I use my mobile apps just for	90	26	22	12			
texts and calls	360	78	44	12	494	3.29	A
10. I do not know my mobile	33	67	48	2			
apps type	132	201	96	2	431	2.87	N
Average Weighted Mean						3.59	A

Legend:

4	3.26 – 4.20	Agree	A
3	2.51 - 3.25	Neutral	N
2	1.76 - 2.50	Disagree	D
1	1.00 - 1.75	Strongly Disagree	SD

and anywhere (Monteiro et al., 2017) as cited by (Manuel, D. et al 2021). This also applies to the school environment, where students bring small devices (smartphones, tablets and eBook readers) with them, which, thanks to easy access to an Internet



ISSN No. 231-2705 | DOI: 10.51244/IJRSI | Volume X Issue VI June 2023

connection, keep them permanently connected, even during classes. This means that it the less consumption of time, and effort gadgets can access the learning. This shows that the respondents agree with the use of mobile apps in the classroom.

The importance of mobile apps is using mobile apps in learning helps to access the content of learning with a weighted mean of (3.69) interpreted as agreeing. The respondents observed that this can help to search for information that they cannot understand right away in for them to be clear in the information.

Using mobile apps in learning reduces my misconceptions which were rated by the respondents at 3.68. This shows that the respondents least agree on the importance of mobile apps that will reduce misconceptions in learning. Ferry (2018) has concluded that using mobile phone applications helps students to concentrate on their weaknesses, reduce their misconceptions, and reinforce learning. Also, it helps instructors determine students' difficulties and misunderstandings. In addition, instructors can adapt activities, practice teaching, and reinforce assessment and feedback.

Wang (2017) asserts that using mobile phone applications in teaching and learning provides positive ideas and benefits that motivate students to learn and understand better. Using mobile phone applications has a positive impact on teaching and learning vocabulary (Basal, 2016). Basal (2016) conducted a study to show the effectiveness of mobile phone applications in enhancing the student's vocabulary reservoir. Elfeky (2016) carried out a study in order to look for the impact of using mobile devices on students' achievements and improvements. Their aim was achieved by using the quasi-experimental approach and observation. The result indicated that learning through mobiles had important effects on the students' achievements and skills. The researchers recommended using the applications of mobile phones in classes.

In addition, the respondents rated the use mobile apps to contact my colleagues through Facebook, Twitter, and SMS. It has a weighted mean of (3.56) interpreted as strongly agree. This was found that these mobile apps are common and accessible and used by different people for transactions and for communication. To address such a knowledge void, this research focuses on young Facebook users in higher education (HE) environments students are mostly young adults – the dominant user group of Facebook – and the teaching-learning process is likely to be more flexible compared to lower levels, allowing more possibilities of integrating social media. Facebook networking service, as stated on its official homepage (facebook.com), is "a social utility that helps people share information and communicate more efficiently with their friends, family, and co-workers (Nguyen, T, 2017).

And the importance of the mobile apps was rated by the respondents where I do not know my mobile apps type with a weighted mean of (2.87) was h interpreted as neutral. Some teachers are utilizing mobile devices to an extent in their lessons. Students have been using their mobile devices to search for information, do group work, take pictures and make videos during their studies. Kahoot has been mentioned by students, which is an interactive competitive quiz teacher can use to engage with students. However, almost a quarter of students said that teachers have not considered their mobile devices in lessons.

This study is related to the findings of Jason (2017) that most students are using their mobile devices at school in lessons, if not every lesson. When students were asked how they used their mobile devices during lessons, none of them answered that they only use their mobile device for non-school related activities and five people used theirs mostly for school or learning-related activities which suggest most students are at least using their mobile devices to aid their learning in some way. However, only two people said that they used their device for only school-related activities with six people saying they used their device an even amount for learning and personal activities (JASON, A., 2017).

There is now potential for utilizing mobile devices for teaching and learning especially as mobile devices are very popular with young people and the current generation of students and research shows more students are owning them (Brown et al. 2015). Furthermore, to encourage students to use mobile applications that can aid their learning, the applications must be designed to provide an enjoyable experience for the student. Applications should be user-friendly, understandable, learnable, and aesthetically pleasing to the user. The application should not just be a copy of the desktop alternative but be designed to be effective on a smaller screen with touch screen capability without compromising the usability available on the desktop version where possible (Ali et al. 2014).

What's your attitude towards using mobile apps in learning?

First of all, there was an agreement among the interviewed students that mobile phone applications were great because a lot of information can be taken from the different apps, it helps in learning like in research, it gives relaxation because we would not have a hard time to the learning, learners pointed out that smartphones, can be use the applications for educational purposes. Moreover, they added that smartphones are necessary, needed, and valuable sources for learning. Finally, they said that using mobile phone applications use them in the classroom. However, students said that they used them in a way that does not distract others. Most of the students pointed out that they prefer using smartphone applications because they are meaningful, especially for learners who always need such applications. Furthermore, they declared that they like using smartphone applications due to their educational benefits. They explained that using smartphone applications has helped them in their academic life.



ISSN No. 231-2705 | DOI: 10.51244/IJRSI | Volume X Issue VI June 2023

Do you believe that using mobile apps is useful or not? Why?

First, using the different applications is useful because they have a lot of advantages in terms of access to information and convenience, instructors can ask their students to look for meanings at any time. Moreover, it helps the students to participate in the learning process. They added that using such applications is useful because it helps students to learn easily and these applications are considered a source of information that facilitates access to information. For instance, dictionary applications are used so much as they help students to look for any meaning, pronunciation, synonyms, antonyms, definitions, and terminology. Furthermore, they added that using smartphone applications is meaningful because it facilitates work, study, access to knowledge, practice, and training. Finally, they emphasized the idea that time can be wisely used. Similarly, the interviewed students listed many advantages of using smartphone applications. The first advantage is that mobile phone applications have helped them access information quickly and easily. For instance, dictionaries applications, them to get the meaning of words wherever and whenever they need them. WPS Office applications where they can encode their document create their slide presentation. They mentioned that these applications can improve skills. Moreover, the applications help them save time, money, and information. Furthermore, they mentioned that mobile applications encourage them to share knowledge with each other. Finally, most of the students emphasized that meaningful applications entertain students, enhance their goals, and help them get rid of daily stressful routines.

What are the difficulties of using mobile apps in learning?

The difficulties that were mentioned by students were similar. One of the students stated that some applications usually need access to the internet in order to benefit from the applications in the learning process. They said that the benefits of the applications depend on access to the internet. Furthermore, a student said that there are some applications with a complicated system (internet access, e-mail, and passwords). This prevents students from using applications effectively. Finally, one student stated that students get distracted because they may chat with friends. The findings implies that some application software were not free to use in learning.

What are the solutions for the difficulties of using mobile apps?

The students offered a number of suggestions for the difficulties and the problems they face. The first suggestion is that the internet should be available in any place, especially in the classroom. The second suggestion is that the inventors of such applications ought to design applications that have easy systems. The third suggestion is WIFI must be available in the classroom. The findings implies that the students encounter a problem in integration of mobile apps to learning. In addition, the respondents mention that wifi were not found in some of the classroom due to its location which were block by the cement wall.

V. Conclusions

The following conclusions were drawn from the study: mobile apps have potential to enhance learning within the College of Business Administration, their effective implementation is crucial. Not all students utilize these apps, and those who do not have varying opinions on their usefulness; and The study suggests further exploration on how mobile learning apps can improve students' performance and motivation.

References

- 1. Ali, A. & Alrasheedi, M. & Capretz, L. & Ouda, A. 2015. A study of the interface usability issues of mobile learning applications for smart phones from the users perspective.
- 2. Alrafi, R. (2008) on the move with Mobile Web: Library and Mobile Technology. Library Technology Reports, 44 (5), pp. 12-17.
- Alturki, R., and Gay, V., (2019). Usability Attributes for Mobile Applications: A Systematic Review. Retrieved from https://link.springer.com/chapter/10.1007/978-3-319-99966-

 5#:~:text=The%20important%20usability%20attributes%20expected,4%2C5%2C6%5D.
- 4. Asgari, A. (2011). The type of vocabulary learning strategies used by ESL. English Language Teaching, 84-90.
- 5. Baah, K. (2018). Integration of Smart Phones in Teaching and Learning in SecondCycle Educational InstitutionsInternational Journal of Advances in Scientific Research and Engineering (ijasre) E-ISSN :2454-8006 DOI: http://dx.doi.org/10.7324/IJASRE.2018.32614 Volume 4, Issue 2 February-2018.
- 6. Bartin, B., Ozbay, K., & Yang, H. (2018). Evaluation framework for mobile ticketing applications in public transit: a case study. IET Intelligent Transport Systems, 12(9), 1166–1173. https://doi.org/10.1049/ietits.2018.5248.
- 7. Basal, A., Yilmaz, S., Tanriverdi, A., & Sari, L. (2016). Effectiveness of mobile applications in vocabulary teaching. Contemporary Educational Technology, 7(1), 47-59. https://eric.ed.gov/?id=EJ1105763.
- 8. Brown, D. & Ferguson, F. & Grant, M. & Jones, L. & Sweeney, J. & Tamim, S. (2015). Teaching and Learning with Mobile Computing Devices: Case Study in K-12 Classrooms USA.
- 9. Calmorin, L.P. (2010). Educational Research Measurement and Evaluation, 2nd ed. Madaluyong: National Book Store.
- 10. Chowdhry, A. (2017). SnapChat vs Facebook from a first mover to a fast follower standpoint.



ISSN No. 231-2705 | DOI: 10.51244/IJRSI | Volume X Issue VI June 2023

- 11. Creswell, J. W. (2014). Research Design: Qualitative, Quantitative and Mixed Methods Approaches (4th ed.). Thousand Oaks, CA: Sage.
- 12. Cui, G., & Wang, S. (2008). Adopting cell phones in EFL teaching and learning. The University of Southern Mississippi, 1(1), 69-80. doi: 10.18785/jetde.0101.06 http://aquila.usm.edu/jetde/vol1/iss1/6.Retrieved from https://www.researchgate.net/publication/323882333_Using_Mobile_Phone_Applications_in_Teaching_and_Learning_Process.
- 13. Dobbin, G., Dahlstrom, E., Arroway, P., & Sheehan, M. C. (2011). Mobile IT in higher education. Educause, 1–33. Retrieved from file /Downloads/s40561-021-00159-6.pdf.
- 14. Downes, S. (2008) Places to go: Connectivism& connective knowledge. Innovate: Journal of Online Education, 5(1), p.6.
- 15. Duncan, R., (2021). Modern Application Development. Retrieved from https://riduncan.medium.com/modern-application-development-88588e67d761.
- 16. Fowler, F. J. (2013). *Survey Research Methods*. New York, NY: SAGE Publications. Retrieved from https://ivypanda.com/essays/descriptive-statistics-and-correlational-design/
- 17. Elfeky, A. (2016). The effect of mobile learning on students' achievement and conversational skills. International Journal of Higher Education, 5(3), 20-31. doi: https://doi.org/10.5430/ijhe.v5n3p20.
- 18. Farrah, M. A. and Abu-Dawood A.K. (2018). Using Mobile Phone Applications in Teaching and Learning Process. International Journal of Research in English Education 3(2)DOI:10.29252/ijree.3.2.48.Retrieved from https://www.researchgate.net/publication/323882333_Using_Mobile_Phone_Applications_in_Teaching_and_Learning_Process.
- 19. Ferry, B. (2018). Using of mobile phones to augment teacher learning in environmental education. Proceedings Ascilite Melbourne, 295-298.
- 20. Jason, A. (2017). Mobile device use in student learning process supporting student learning process with use of mobile devices.
- 21. Jones, T. (2017). YouTube: Educational Potentials and Pitfalls, Computers in the Schools 75-85.
- 22. Hanna, K.T, (2023). Retrieved from https://www.techtarget.com/whatis/definition/mobile-app#:~:text=A%20mobile%20app%20(or%20mobile,than%20desktop%20or%20laptop%20co
- 23. Hosseini, Z. (2015) Development of Technological Pedagogical Content Knowledge through Constructionist Activities. Procedia Social and Behavioral Sciences, 182, pp.98-1031.
- 24. Kizito, N. (2012). Pre testing mathematical concepts with the mobile phone: implications for curriculum design. The international review of research in open and distributed learning, 13(1). Retrieved from https://www.researchgate.net/publication/323882333_Using_Mobile_Phone_Applications_in_Teaching_and_Learning_Process.
- 25. Lawrence (2012). Calculator access, use, and type in relation to performance on the SAT: Reasoning test in mathematics. Applied Measurement in Education, 15, 95-112.
- 26. Manuel, D. et al (2021). The use of mobile applications in higher education classes: a comparative pilot study of the students' perceptions and real usage. Retrieved from https://slejournal.springeropen.com/articles/10.1186/s40561-021-00159-6.
- 27. Mazman, S. G., & Usluel, Y. K. (2010). Modeling educational usage of Facebook. Computers & Education, 55(2), 444-453. doi:10.1016/j.compedu.2010.02.008.
- 28. Mehdipour, Y. and Zerehkafi, H. (2013) Mobile learning for education: Benefits and challenges. International Journal of Computational Engineering Research, 3(6), pp.93101.
- 29. Monteiro et al., (2017). Monteiro, A., Bento, M., Lencastre, J., Pereira, M., Ramos, A., Osório, A. J., & Silva, B. (2017). Challenges of mobile learning A comparative study on use of mobile devices in six European schools: Italy, Greece, Poland, Portugal, Romania and Turkey.
- 30. Revista de Estudios e Investigación En Psicología y Educación, 13, 352. https://doi.org/10.17979/reipe.2017.0.13.3229–357.
- 31. Moreau, E., (2022) What Is the Google Chrome Browser. Google's web browser is fast, secure, and can sync your data. Retrieved from https://www.lifewire.com/what-is-google-chrome-4687647.
- 32. Mtega, W., Bernard, R., Msungu, A., &Sanare, R. (2012). Using mobile phones for teaching and learning purposes in higher learning institutions: the case of Sokoine University of agriculture in Tanzania. Proceedings and report of the 5thUbuntuNet Alliance annual conference, 118-129. Retrieved from https://www.researchgate.net/publication/323882333_Using_Mobile_Phone_Applications_in_Teaching_and_Learning_Process.
- 33. Nguyen, T, (2017) Undergraduate Students' Use of Facebook for Educational Purposes: Advantages, Difficulties, and Potential for Connected Learning.
- 34. Phan, W. (2015). Head Back to School with new features in Google Classroom. Google for Education.



ISSN No. 231-2705 | DOI: 10.51244/IJRSI | Volume X Issue VI June 2023

- 35. Olalere, J. O. (2022). Use of Mobile Learning Applications and Academic Engagement of Library and Information Science Students in Universities in South-West, Nigeria. Retrieved from https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=13822&context=libphilprac.
- 36. Oliveira, D., Tavares, R., & Laranjeiro, D. (2017). Estudo de avaliação de aplicações móveis de instituições de ensino superior português. https://www.researchgate.net/publication/307981176.
- 37. Prensky (2011). Digital natives, digital immigrants. On the Horizon, 9(5), 1–2. Retrieved from www.marcprensky.com/writing/Prensky% 20-% 20 Digital% 20 Natives, % 20 Digital% 20 Immigrants% 20-% 20 Part 1.pdf.
- 38. Samsudin, M. R., et al (2018). Conceptual Framework in Teaching and Learning Using Mobile Application for Special Students.

 Retrieved from https://www.researchgate.net/publication/328279810_Conceptual_Framework_in_Teaching_and_Learning_Using_Mobile Application for Special Students.
- 39. Shea (2011). Youtube: Online video and participatory culture, continuum Journal of Media & Cultural Studies, 24(2), 327-330.
- 40. Sunhaji, (2008). Strategi Pembelajaran: Strategi Pembelajaran: Konsep dan Aplikasinya Jurnal Pemikiran Alternatif Pendidikan, 2008. Vilume 13(Issue 3): p. 13.
- 41. Transue, B. (2013) Connectivism and Information Literacy: Moving From Learning Theory to Pedagogical Practice. Public Services Quarterly, 9(3), pp.185-195.
- 42. Tschofen, C. and Mackness, J. (2012) Connectivism and dimensions of individual experience. The International Review of Research in Open and Distributed Learning, 13(1), pp.124-143.
- 43. Wang, B. T. (2017). Designing mobile apps for English vocabulary learning. International Journal of Information and Education Technology, 7(4), 279-283. doi: 10.18178/ijiet.2017.7.4.881.
- 44. Webwise.ie, (n. d.). Retrieved from https://www.webwise.ie/parents/explained-what-is-facebook-2/.
- 45. Yang and Lin, O. (2010) Preservice teachers' perceptions about using mobile phones and laptops in education as mobile learning tools. British Journal of Educational Technology, 45(4), pp.606-618.
- 46. Vicente, F. (2013). WelcomeUA: Desenvolvimento de interface e avaliação da usabilidade. 136. https://ria.ua.pt/handle/1 0773/12403.
- 47. Vidyalankar.org, (2021). https://www.vidyalankar.org/blog/benefits-of-mobile-apps-in-education#:~:text=Education%20Apps%20helps%20students%20to,learn%20practically%20and%20not%20theoretically.