

UTILIZATION OF SMARTPHONE IN TEACHING AND LEARNING PROFESSIONAL EDUCATION COURSES

Helen B. Boholano, Bernard Evangelicom V. Jamon, Roberto Cajés, George Stewart Q. Boholano
Cebu Normal University, Department of Education & Trinidad Municipal College

ABSTRACT

The use of instructional materials is an essential in the classroom. It is when you plan what learning materials will be used in order to achieve your goal or whatever you aim for. Professional education instructors/professors look for the best way to help our learner's on how they could learn and comprehend better with the basic fundamental skills. The aim of this study is to find the effects using smartphone in teaching and learning professional education courses in Teacher Education. The study utilized the mixed method of qualitative and quantitative methods. Qualitative part falls more on studying human behavior and reasons that govern to such behavior. For the quantitative part, the researchers check on the numbers of students who better understands English using smartphone. The study participated by the Bachelor in Elementary Education students. Researchers found out that integrating smartphone in teaching and learning can enhance the effectiveness of the students in learning the different teaching skills. Thus, the study concluded that the used of smartphone in the classroom settings was integral part to the learning of the students. The teachers may see to it that integrating smartphone in their teaching will help students use High Order Thinking skills (HOTS) as it makes them harness search skill by searching information online and will allow them to conceptualize the right information.

Keywords: Smartphone, teaching and learning, professional education courses, HOTS, instructional materials

INTRODUCTION

Technology plays a vital role in teaching and learning as it makes our work easier. "Education in the 21st century highlights globalization and internationalization" as cited in Boholano (2017). This implies that technology is important in the classroom. It makes communication between teachers and students faster and more convenient. According to Kumar (2016) "using technology in the classroom enables teachers and students to find the new conclusion of daily life problems". Moreover, the use of technology supports teaching and learning to create a better educational resources and student assessment as well. The author found that, it is really important to integrate technology into classroom settings.

Today, smartphone is one of the most valuable in the daily learning. Smartphone to be exact is very helpful in terms of saving files, data gathering and sharing information's into one another. It is used as an instrument of learning innovations that molds students to be more acquainted to new technology. The use of mobile technologies in education is one of the essential tools in the 21st century. Education 4.0 "transforms the world through its impressive progress in creating technological breakthroughs and limitless possibilities" Alda, Boholano and Dayagbil (2020). Both "school and government level initiatives have rolled out these technologies in the classroom" (West, 2012). It is enumerated that there are potential benefits of using mobile technologies for learning according to Cochrane (2010): (1) facilitating learning across contexts; (2) facilitating contextual learning; and (3) providing personalization in both personal and collaborative environments. These potentials mark smartphone as a ideal tool for learning and teaching English.

The researchers observed that most of the education students have eagerness to learn with the use of technology. Thus, the researchers designed this study to discern the positive and negative effects of Smartphone usage during classes in "The Teaching Profession" as one of the professional education courses in teacher education.

Objective of the Study

The study determines the effects of using Smartphone in teaching and learning. Specifically, the study intended to answer the following objectives:

1. Determine the pre-test and post-test performance of the education students;
2. Determine the significant improvement in the pre-test and posttest performance of students; and
3. Identify the disadvantages and advantages in the use of Smartphone in teaching and learning.

REVIEW OF RELATED LITERATURE

There are many literature that mention the effectiveness of the use of technology in teaching and learning. According to Jacobs (2013) mobile learning technologies enable access to digital content and online communities at days and nights, which make learning different from classroom environment, and help teachers and learners, organize their time and use it more effectively. Further, he claims that when students get access to such digital content, they take advantage of their learning as they can adapt to their pace, method and style. In terms of

Smartphone use in learning English, Zilber (2013) states that it is clear that they won't substitute dedicated teachers, but their frequent use by second language learners, enables them sufficient English language practice to support their attempts to learn it regardless of their locations.

Alda, Boholano and Dayagbil (2020) signifies that "educators play a significant role in any decision making and policy reform as they are the navigators and the direct implementers of these curricular changes". Salameh (2017) also investigated the attitudes of students towards knowledge and skills in the web page of Facebook. It is noted that Facebook has a potential of supplementing students' education with a secondary source that could enhance knowledge and skills among students with the target to further improve students' achievement. The participants of his study possess high, positive attitudes towards the use of Facebook in gaining knowledge. Moreover, Abbasi and Hashemi (2013) have conducted another study that investigates the effect of using mobile phones on the retention of vocabulary of intermediate EFL learners and the effect of learner's gender in vocabulary retention while using mobile phones. The study concludes that the use of mobile phones by intermediate EFL learners has a significant effect on their retention skills. The study also reveals that gender does not have any effect on learners' vocabulary retention.

Al Aamri (2011) has tried to investigate the use of cell phones in the process of learning that sheds light on the behavior, the attitudes and the problems that Omani students face in using their mobile phones in the process of learning. Results of this study show that the use of mobile phones in the classroom is still limited because teachers discourage students from using their phones while students prefer to do so. In the same vein, Darmi and Albion (2014) have reviewed studies using mobile phones in different learning contexts. It was concluded that mobile phones are accepted by learners and found it very useful in learning the course and several studies have substantiated that integrating technology can improve learning and professional skills. They call upon researchers in the field of language learning and acquisition to do more research to examine the integration of mobile learning, especially that mobile phones with recent design and features can be used as learning tools that aid second language learning and language learning acquisition theories.

The above reviewed literatures and studies on the use of Smartphone in education showed a close resemblance to the study. Hence, this study is pursued to find the effects of using Smartphone in teaching and learning in teacher education professional education courses. Moreover, it would worthwhile find out how this study to be made helpful in teaching endeavour of tertiary education teachers and in learning struggles of the learners in their knowledge of the course.

RESEARCH METHODOLOGY

This study utilized the qualitative and quantitative research type. Qualitative part falls more on studying human behavior and reasons that govern to such behavior. And for quantitative, we will measure numbers in terms of the students' understanding. The study was conducted in Trinidad Municipal College, Trinidad Bohol. Mixed method was utilized in the analysis of the data. Interview guide questions were also administered. Additionally, focus group discussion was also done in order to determine the advantages and disadvantages of the use of smartphone in the classroom. Ethical considerations emphasized in this study include (a) informed consent, (b) confidentiality and anonymity, (c) respect for privacy, and (d) token as compensation was also given to the respondents and the right to withdraw from the study anytime.

RESULT AND DISCUSSION

This part presents the discussion, analyses and interpretation of the gathered data on the performance in The Teaching Profession course after integrating the use of Smartphone in teaching and learning the subject.

Table 1 Pre-test Performance Profile

This table shows the pre-test performance among students. The test questionnaire given composed of 40 items and the passing score is 30.

Number of Students	Passing Percentage Criterion (75%)	Mean Score	Standard Deviation	Description
60	30	27.87	3.51	Below Average

Table 1 presents the pre-test performance of the Bachelor in Elementary Education students in the course The Teaching Profession. As shown in Table 1, the mean score (27.87) is and the standard deviation of 3.51. This implies that the pretest performance is below average.

Based on the result, an effective strategy may implement in the class is “through integrating technologies of mobile learning have the potential to transform the educational field in favor of learners as the ability of students to have access on internet using their Smartphone create great learning opportunities through different platforms” (West, 2012). The use of smartphone use in teaching and learning can be of great benefits especially in vocabulary acquisition, spelling and pronunciation, grammar, listening and reading skills (Chi-Yen Chiu, 2015).

Based on the given test questions, it was found out that most of them did not get the correct answer. This implies that the question is very difficult. Many kinds of errors arise in students learning because they do not master the competencies well. This implies that most students do not have a good foundation in professional education courses. Thus, “with these fast and spontaneous economic and social changes, teacher education institutions should see that they are preparing their graduates for a future that has never been this uncertain” (Alda, Boholano & Dayagbil, 2020) and prepare them with the 21st century skills.

Table 2 Posttest Performance Profile

This table show where 99% of the students who got the passing percentage criterion with the use of Smartphone during learning process.

	Number Of Pupils	Mean Score	Standard Deviation	Mean Difference	Description
Pre-test	60	27.87	3.51	3.86	Significantly Improved
Posttest	60	31.73	2.10	3.86	Significantly Improved

In the table, it shown that the mean score (31.73) is higher from the passing percentage criterion of 30 considering their standard deviation of 2.10. This implies that the posttest performance is absolutely above average. This could potentially mean that using Smartphone in teaching and learning in Professional Educations courses has a great impact to the learners in which they could help to improve their performance. According to Dami and Albion (2014), have reviewed studies using smartphone teaching can increase performance. Smartphone are accepted by education learners and this findings is substantiated by several studies that the integration technology in education can improve learning skills and related areas.

According to Kiernan and Aiza (2004) discovered that designing learning tasks to be learned through smartphone or android phones encouraged students to develop their reading skills, vocabulary use and comprehension skills. Therefore, Cavus and Ibrahim (2008), “emphasized that the widespread use of smartphone among students has led us to take into account how this technology might help us to improve the motivation of students and help in teaching and learning.”

As a shown table, the pre-test and posttest main difference of 3.86 was considered as significantly improved. As the results indicate on mean difference, the pupils showed improvement in the posttest, after the lesson with the used of Smartphone. Integrating of Smartphone during class lecture as well as in taking the test was absolutely very effective to the learners, because 99% of them got the passing score of 30. This implies that the use of smartphone during learning process can improve their academic performance especially in learning professional education courses.

It is in accordance with the study of Alda, Boholano and Dayagbil (2020) that “faculty members in teacher education institutions do not only acknowledge the fact that they need to take advantage of the digital tools available but also to take the lead in adopting and conceptualizing new methods, a new concept of teaching, to

keep abreast with the fast-paced technological advancements”. This implies that student learn more with the use of smartphones or android phones.

According to Syaiful (2019), the use of Smartphone provides a lot of information that students can develop their knowledge about anything and some applications could help students to improve in learning English such as Dictionary, Mathematical formula, definitions, English grammar, etc. According also to Azad (2014) using of Smartphone has a great impact on learning. All the participants used Smartphone as mobile tools to improve their learning. A wide range of smartphone applications associated with different learning skills and international tests, were used by the participants to engage with the meaningful and interactive learning. Therefore, smartphone can help extend learner opportunities in meaningful ways (Thornton, 2005).

The Advantages and Disadvantages in the Use of Smartphone in Teaching and Learning

This part shows the students’ responses about the advantages and disadvantages through the use of smartphone during classes. It comprises of three themes: (1) facilitative and effectiveness of the device to the learners’, (2) the sue of smartphone increase performance and (3) the use of technology is prone for destruction . The following are the responses of the students based on their experienced with the use of smartphone in learning process.

Theme 1: facilitative and effectiveness of the device to the learners’

The students’ utterances are important in determining the effectiveness of smartphone in teaching and learning. One of the participants said:

“Smartphone is very helpful in this generation, it will help you to search about information that are not in the book” (P 2).

According to the study of Chartrand (2007) that “mobile devices can be used to enhance classroom learning. Some of the useful features include the ability to access information, record data, and create podcasts”. This also confirmed the study of Scommavacca, Huff, and Marshall (2009) that they can also be used as a way to gather data for classroom presentations and enhance interactivity in large classroom settings. Other students also said that:

“ Smartphone is very useful and convenient, it easy to access our notes and use the internet to gather information especially in our classes.” (P3).

This implies that the use of smartphone in learning process can help pupils to improve and develop their academic performance. It is because smartphone has the ability to search information through internet where the learners can get easily the information that they need. In addition, 21st century learners are adept in using modern technologies whereas they utilize their smartphone for searching answers for their assignments, quizzes, and other forms of assessments. According to Pachler (2010) “smartphone can easily connect to the internet, and the ability to browse the web makes such devices useful in a learning context”. Richard (2018) stated that smartphone also make it convenient for the students to surf web and these devices are integrated with mobile browsers that enable them to search and access websites anytime and anywhere. Moreover, the standard features of these devices, including internet access, voice messaging, text messaging, and camcording, can enable communicative language practice, access to authentic and task completion (Chinnery, 2006).

Theme 2: The use of smartphone increase performance

The student believes that, smartphone in the classroom can increase performance. This si evident in their narratives:

“My score increases when my teacher let us used the smartphone. I can now search the difficult words in the internet”. (P4).

“I am very happy with the sue of smartphone because I was able to present the task with the use of technology” (P6).

This implies that technology will aid instruction. In preparing future teachers, the tertiary education faculty will be ready in the 21st century skills. Education 4.0 is here and we have to be realistic in giving task to students using technology enhanced materials.

Theme 3: the use of technology is prone for destruction

Some students said that, “ *The use of smartphone during classes can cause distraction to study and they can’t focus to listen their teacher during discussion.*” Some concern exists about the distraction caused by the use of mobile

devices. Students may spend time texting, surfing websites or chatting online with their friends, which means that they are not paying attention to the teacher (Tindell & Bohlander, 2012). Research show that test performance is significantly lower for the students who are distracted by mobile devices during a lesson, indicating that there is a loss of concentration if students are doing non class-related tasks (Chaklader & Bohlander 2009, Rosen et al., 2011). In addition to the student doing other tasks on the mobile device, it is also possible that the instructor can be distracted by students' actions.

Another problem is technical. Technical and internet connectivity was experienced by some students. There are some software issues (e.g. network loss, lag, etc.) that can cause delay in teaching the lessons or in doing exam.

CONCLUSION

The use of smartphone in teaching and learning is effective especially in professional education courses. The mobile learning theory coined by Ahmad and Mentor, is useful in catering to the diverse learning styles and needs of learners. Thus, it is essential to the students to have some knowledge on the use of smartphone in order to learn and understand the course well. Teaching innovation skills especially with the sue of technology is essential because it will boost the knowledge and skills of the students and keeping them equipped on tools in this modern world.

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