

Teachers and Students' Perceptions of Using Mobile Devices and Social Media in the Teaching and Learning of Business Subjects

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Abstract

The paper presents the findings of a study on secondary school business subjects students and teachers' perceptions of using mobile devices and social media in teaching and learning. The study, which employed a descriptive survey design, was carried out in a senior secondary school in Gaborone, Botswana using a sample of 10 students and 5 teachers. The findings of the study suggest that both learners and teachers value the use of mobile devices and social media in the teaching-learning process as they see the need for education to move with the times in the digital era. Both teachers and learners revealed that the deployment of mobile devices and social media in education energizes and motivates them to teach and learn respectively. It was also found out that different mobile devices and social media platforms such as blogs and WhatsApp have the potential to enhance teaching and learning if deployed appropriately in the classroom. The studies concluded by recommending that teachers should shift from using traditional teaching methods and integrate technology into their teaching practices.

Keywords: Social Media, Mobile Devices, Digital Devices, Whatsapp, Twitter, Classmate Online, Information Communication Technology

INTRODUCTION

Mobile devices connected to the internet such as smartphones and tablets have become the platform of choice for the millennial generation engaged in various internet activities. Today's students are tech-savvy and they get more engaged and really thrive when they are using mobile devices. Children as young as primary school going age interact readily with digital devices such as tablets, laptops and smartphones. This is because young people conduct their social lives through their phones, and instinctively turn to them first for news, information-sharing and entertainment. By capitalising on familiarity with mobile phone technology, education can motivate today's digital natives through new and innovative ways of teaching and learning (Lawson-West, 2017). Of late, information communication technology is dominated by social media. Students primarily conceive social media as a platform for social interaction and communication. Furthermore, students use social networking sites as types of social media, particularly Facebook, Twitter, WhatsApp and mobile phones are the most common devices they use to access social media.

According to Sad and Goktas (2013) the world is becoming a "mobicital virtual space" where people can learn and teach digitally anywhere and anytime because social media is easily accessible through mobile devices, such as phones or tablets, that provide just-in-time learning opportunities (Brooks,

2009). Mobile devices are especially very popular among the young population thus the idea of learning through mobile devices and social media is becoming a trend in the field of digital learning. Many institutions worldwide have started to experiment with various learning methods and integrating mobile phone use to facilitate students' learning. More developed countries are using modern advances in educational technologies and instructional design (Ahmad, 2020). These range from e-learning, distance education, use of online and social media, student response systems in classrooms, game-based learning, simulation technology and virtual classroom environments (ibid).

Both students and some teachers are familiar with social media networking systems and could take advantage of this and use social media networking systems as a platform for communication, learning and collaboration, as well as sharing ideas and topics of interest (Adamson, 2012 cited in Wild, Cant & Nell, 2014). In order to use social media networking systems effectively, both teachers and students should view them favourably and be aware of the benefits of social media networking systems. The same view is shared by Venkatesh, Croteau and Rabah (2014) who argue that understanding the perceptions of students regarding the effectiveness of social media use and their proficiency and knowledge of specific types of ICT tools are both influential and

critical to the success or failure of integration of ICT tools in classroom settings.

In general, positive perceptions and outcomes on the use of social media and mobile devices in teaching and learning have been shown in recent research studies (Badge, Johnson, Moseley & Cann, 2012; Carpenter, 2014). The relationship between teacher behaviour on Twitter and the positive perceptions of students has been demonstrated (McArthur & Bostedo-Conway, 2012).

A study by Lee, Lee and Kim (2015) on the perceptions of teachers and students towards the educational application of social media networks and mobile devices in secondary schools in Turkey came to the conclusion that teachers reported their positive effects as improvement of students' learning competences, interactive classroom atmosphere, developing students' collaboration capabilities and improving communication skills. Students also considered the positive aspects and these included the promotion of learning activities, after-school activities, improving memorisation of learning content and establishing personal relationships. The above findings are in agreement with studies by Kafyulilo (2014), Kousloglou and Syrpi (2018) and Nikolopoulou (2020) who concluded that teachers' major perceived benefits of using social media and mobile devices were students' active involvement/motivation, the interactive-enjoyable lessons, the easy access to information and students' familiarity with technology. The most commented benefit in Nikolopoulou's study in Greek secondary schools was that these devices promote/increase students' participation and engagement, a view also expressed by around one third of the participants who did not use tablets and/or mobile phones in the classroom.

The educational affordances of mobile devices such as their communication features and facilitation of access to information via internet have the potential to support classroom pedagogical practices (Crompton, Burk & Gregory, 2017). In parallel, challenges have been reported with regard to mobile technology usage in schools. For example, smart/mobile phones have been seen more as distracters in the classroom rather than learning aids (Anshari, Almunawar, Shahrill, Wicaksono & Huda, 2017) and several countries have banned/restricted their usage in school premises and some teachers have conceived them as disruptive to the learning process (Ashfaq and Mirza 2018).

Despite the negatives associated with the use of mobile devices in teaching and learning, continued advances in mobile and information communication technologies are leading to greater use of mobile technology in the education sector, and particularly at

the secondary and tertiary levels. Since many institutions worldwide have started to experiment with various learning methods and integrating mobile phone use to facilitate students' learning, it is worthwhile to investigate the usage of the same technologies in African contexts.

Literature on the use of mobile devices and social media in Botswana secondary schools is scanty and not readily available. In their study on the use of mobile technology devices in Botswana secondary schools, Mafa and Govender (2018) found out that the most commonly used applications for teaching and learning are Facebook, WhatsApp, Twitter, Instagram and YouTube. Facebook is the most commonly used tool of all, and most learners reported that they had used it and still use it in the classroom. On Facebook, groups are created where learners will be able to collaborate and exchange educational content material, and/or post comments and reminders about assigned work, pending tests and other important class materials so that others can see them. Mafa and Govender went further to say that even though Facebook is invaluable in learning, learners use it in class without the knowledge of their teachers, since they fear that their smartphones will be taken away if caught using them in school.

A mobile phone based application that is currently in use in Botswana secondary schools is Classmate Online which was developed in response to the suspension of classes in all educational institutions due to COVID-19. According to Swanga (2020), Classmate Online Solution is an online mobile application platform, launched in partnership with Botswana Innovation Hub (BIH) and Classmate (Pty) Ltd. The app contains Botswana Certificate of Secondary Education (BGCSE) content that includes all subject syllabuses, past examination papers, education quizzes, e-library books and video tutorials amongst other educational materials. The Classmate Online system is self-sustaining and dependent on the inputs from students' interactions with one another as well as tailored online content which includes competitions, quizzes, tutorials and sharing of experiences by students (Botswana Communications Regulatory Authority, 2020).

Statement of the problem

Smart mobile devices and social media, especially smartphones and tablets, are increasingly ubiquitous among teachers and students in Botswana. While their use is on the rise, many teachers are not effectively incorporating this technology into their teaching, which may be attributable to their negative perceptions of these devices. This study examined business teachers and students' perceptions of the value of integrating mobile devices and social media into their teaching and learning activities.

Research Questions

The study sought to examine students and teachers perceptions of using mobile devices and social media in the teaching and learning of business subjects in Botswana secondary schools. Of particular concern were the research questions:

1. What are the students' perceptions in using mobile devices and social media in teaching business subjects?
2. What are the teachers' perceptions in using mobile devices and social media in teaching business subjects?

Methods

This study used survey research and follow up interview to collect information about the use of social media for learning by college students. The purpose was to understand how students informally use social media and explore student perceptions about the potential to integrate social media as a formalized learning tool within college classroom settings. Survey provided opportunity to systematical capture students perspective while follow up interview provided researchers opportunity gain deeper insight and develop richer understandings of student perceptions about social media as a learning space.

Participants

The participants of this research were 46 college students at a doctoral research institution in the Rocky Mountain region including international and American college students age 18-45. While some demographic information was collected, the participants were gender non-specific and included both graduate and undergraduate students currently attending the university. The participants were solicited through electronic communications (email, Facebook, etc.) on a voluntary basis providing a convenience sample of participants who fit the criteria of a. current college student and b. used at least one social media tool.

The Study

The data collected in this study included: (1) a digital survey shared with the participants through university listservs and Facebook groups. The survey consists of 6 questions and the participant's responses were anonymously submitted electronically through an online survey tool. The collection period was 2 months at the end of the fall semester. (2) Follow up interviews took place on campus during the following spring semester. Analysis of the survey data was used to guide the follow up interview process. Interview participants were randomly selected from the pool of participants. Because of the anonymous survey procedures, researchers did not know individual survey

responses of the interview participants unless the interview participant explicitly indicated such during the interview process.

Data Analysis

The survey was created by researchers to identify perceptions of participants about the uses of social media and its potential for pedagogical applications. The survey consists of four sections: 1. Demographics, 2. Social media background, 3. Devices used and time spent, and 4. Evaluation and assessment (see Appendix A). After conducting the survey, quantitative data were processed through a description analysis. After that, data were analyzed and interpreted accordingly.

There were 46 participants; 37 male and nine female. Twenty-one of them are married and the rest are single. The majority of the respondents were between 18-30 years old. Only 15 of them were between 31-50 years old. In terms of race/ethnicity, researchers noticed that there were a variety of participants from different ethnicity although that data was not formally collected. The survey included on both graduate and undergraduate students from different fields of study. Twenty-seven of the respondents were graduate students and the rest were undergraduate.

After the survey data was analyzed, interview questions were developed in order to clarify researchers understandings and to serve as a comparative data set for reliability. Qualitative Data was collected through audio-recorded interviews and analyzed using an interpretiveist model of qualitative research. According to Erickson (1986) "the basic task of data analysis is to generate assertions that vary in scope and level of inference, largely through induction, and to establish an evidentiary warrant for the assertions one wishes to make" (p. 146).

The three-step process of open coding, axial coding, and selected coding as described by Strauss and Corbin (1998) was conducted to construct assertions and understand the relationships among sets of data and across the process of design and units of study (see figure 1)

METHODOLOGY

The study adopted a descriptive survey design in which both qualitative and quantitative data were collected from the teachers and students participating in the study. There was a mix of question types in the form of five-point Likert-scale items and open-ended questions. Survey items provided the opportunity to systematically capture teachers and students' perspectives while follow up open-ended items provided the researchers the opportunity to gain deeper insight and develop richer understandings of

the respondents’ perceptions of the use of social media and learning devices in Business Education.

The sample for the survey consisted of 10 Business Studies students and 5 teachers who were purposely selected from a senior secondary school in Gaborone. Ethical considerations were abided with. The researchers applied for permission to conduct research in schools from the Ministry of Basic Education. Thereafter permission from the school head to conduct research in the school was sought and granted. Participation in the study was voluntary and issues of confidentiality were guaranteed.

Limitations of the Study

The study was carried out during the Covid-19 pandemic when entry into schools was restricted and the researchers were unable to collect data using face-to-face interviews as initially planned. As a consequence, only questionnaires were used. For the same reason, the researchers ended up collecting data in one school instead of three as initially planned. The use of only one data collection method in one school may impact on the findings in that they may not be generalizable to the larger population and may only be applicable to the school used in the study.

RESULTS AND DISCUSSION

Profile Respondents

Respondents were 5 teachers who teach business subjects at a senior secondary school in Gaborone, (T₁, T₂, ... and T₅). 2 of the teachers were male and 3

were female and all are certificated graduates. 10 students, (S₁, S₂, S₃ ...and S₁₀) took part in the study. The students were in Form 4 and 5 and all were taking Business Studies.

Classmate Online Platform

The results of the study indicated that students and teachers at the school appreciate the use of social media in teaching and learning respectively. Students pointed out that there is a Classmate Online platform in their school that they use for interaction and discussions anywhere. The school took advantage of the tech-savvy generation and implemented a platform that the students can utilize at their own convenience. It’s a platform similar to a blog that discussions are carried out at regarding educational content and it is easily accessible. Both students and teachers have positive perceptions of this platform as it improves collaboration and interaction in the classroom. Ideas that were not discussed in class are discussed in this platform.

Students’ perceptions of the use of mobile devices and social media in teaching and learning of business subjects

Items were set to gauge the students’ perceptions of the use of mobile devices and social media in teaching and learning of Business Studies and as expected in this digital era where almost everybody owns a mobile device or has access to social media platforms.

Table 1: Students’ perceptions of the use of mobile devices in teaching and learning

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Do you value the use of mobile devices in learning?	5	4	1	0	0
Do you think mobile devices could be beneficial in learning business subjects?	3	3	4	0	0
Do you think the use of mobile devices in teaching could energize your interest in learning?	5	2	3	0	0
Do you think social media can be used in teaching and learning of Commerce, Accounting or Business Studies?	4	5	1	0	0

Responses in Table 1 show that the majority of the 10 respondents see the potential of mobile devices and social media in their learning. The results indicate that students do see the need for their education to move on with the times in this digital era and that the use of mobile devices and social media in learning could be vital and contribute positively to learning. Students had this to say about the use of mobile devices and social media in teaching and learning:

S₁: “Mobile devices and social media should be used in teaching as they enable teachers and learners to be exposed to wide range of information and research can be done in class and exchanged amongst us in class”.

S₂: “It can help to speed up learning activities e.g when a student doesn’t understand a topic they can

use YouTube to research about it and at end of the lesson when the teacher wants to give home-work they can easily send”.

S₃: “Because some students may use mobile devices negatively e.g. getting into Facebook during lessons but I agree as we can use them to search for information in internet (sic)”.

S₆: “I personally agree that mobile devices and social media should be used in teaching and learning because it enables students to be exposed to a wide range of information via research and advanced technology as well as learning never gets boring since there is broad students’ interaction e.g. classmate platform”.

An item meant to measure students’ attitudes to the use of social media and mobile devices in teaching and learning and their perceived usefulness yielded

the results presented in Figure 1 below which suggest that students have a favourable perception towards the use of social media and mobile devices in learning:

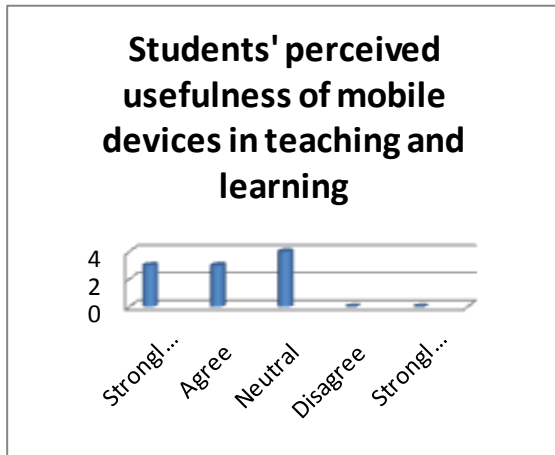


Figure 1: Students perceived usefulness of the use of mobile devices and social media in teaching and learning

Some of the reasons cited by the respondents are quoted below:

S₁: “The way we are taught overall is not as fascinating as seeing the actual demonstration in a video which can be remembered easily”.

S₂: “Books are not as always as fun and interesting to read, so mobile devices and social media where videos are watched and scenarios are explained making the teaching and learning process enjoyable”.

S₄: “One encounters different personnel via online learning through platforms like Classmate then seek help or educational assistance from not only one person but many of them thus interest is boosted in learners”.

What is evident is that overall, students are in agreement that the use of mobile devices and social media can bring about positive benefits to learning and that their perceptions of their usage is positive and favourable. This is not surprising at all given the fact that the ownership of mobile devices is widespread and students are especially heavy users of cell phones and related mobile devices. Furthermore, students’ responses based on their use of the Classmate Online platform show that the use of mobile devices increases their engagement, interaction and interest in course content (Figure 2).

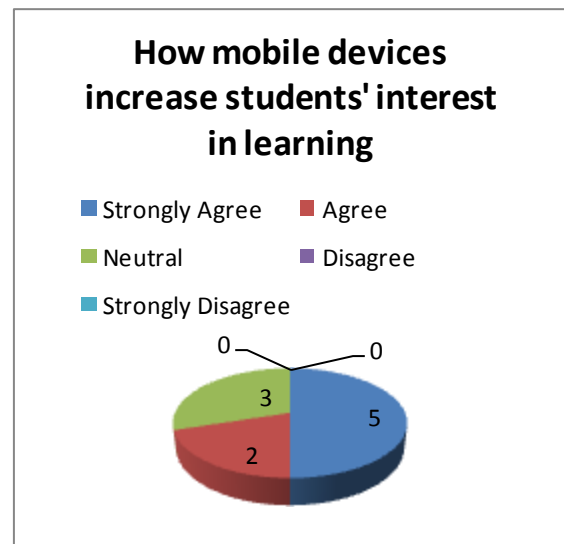


Figure 2: How mobile devices increase students' interest in learning

The findings as presented in Figure 2 above are not surprising at all. It is common knowledge that students love mobile technology and use it regularly in their personal lives. It therefore is no surprise that young people want to employ mobile devices to make education more engaging and personalize it for their particular needs. The educational benefits of using mobile devices and social media in Business Education could be immense if the increased interest in learning could translate to increased engagement, retention and academic achievement in the subjects.

Business teachers’ perceptions of the use of mobile devices and social media in teaching and learning

For mobile devices and social media to be effective in education teachers should see their value otherwise it would be futile to try and introduce them as pedagogical tools. Also the utilization of mobile devices and social media in education will have to motivate teachers in delivering content. It is for this reason that items were set to gauge the value that teachers place on the use of mobile devices and social media in teaching. 4 teachers strongly agreed that they see value of using mobile devices and social media in teaching while 1 remained neutral. None of the teachers disagreed. The teachers’ perceptions of mobile devices and social media in teaching and learning in a positive manner were sought. Teachers’ responses in this regard are summarized in Figure 3 below:

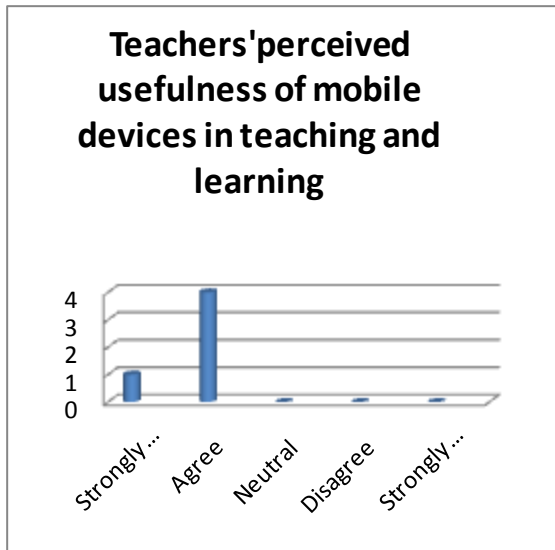


Figure 3: Teachers perceived usefulness of the use of mobile devices and social media in teaching and learning

From the bar graph above it is evident that teachers perceive the utilization of mobile devices and social media in teaching and learning in a positive manner as all 5 teachers agree that they view it that way and no teacher views it otherwise. Teachers had this to say about their views:

T₁: “It helps one to research topics which are very difficult to be taught and help in terms of self-discovery to identify areas of learning and ways of teaching which are meaningful to one’s own environment”.

T₂: “Mobile devices in teaching and learning will be very vital because learners will be able to focus as they will be visuals which will help them remember especially slow learners. Learners will also be able to work at their own pace”.

T₃: “Even though mobile devices and social media are good to use in teaching and learning, some students may use them not for the intended purposes during the lessons or during school hours”.

It is encouraging to note that teachers view the use of mobile devices and social media in teaching positively. Teachers’ perceptions are important because their views towards the value of technology to aid students’ learning have a strong effect on the actual technology use in the classroom (Khlaif, 2017). The success of integrating technology in the classroom requires positive perceptions and attitudes toward that technology and some awareness about its benefits. Some teachers, however, disagree that mobile devices should be allowed in the classroom and their concern exists about the distraction caused by the use of mobile devices. They fear that students may spend time texting, surfing websites or chatting online with their friends, which means that they are not paying attention to the teacher. Research shows that test performance is

significantly lower for the students who are distracted by mobile devices during lessons (Walsh, Fielder, Carey & Carey, 2013). Such conduct may cause problems for classroom management in general.

Classroom applications of mobile devices and social media in Business Education

Teachers and learners’ views on the classroom application of mobile devices in Business Education classrooms were sought. The results indicate that Facebook, YouTube and blogs are not of much use in the classroom. Only WhatsApp seems to have potential classroom applications. 4 teachers and 9 students indicated WhatsApp could be used for teaching and learning; they did not say that they actually use it. Some of the potential uses of this application were mentioned in the responses:

S1: “Information can be exchanged between teachers and students of revision materials in group chats where questions can always be asked”.

S2: “There can be groups of different business subjects with all students and teachers involved to share information and materials”.

T1: “By forming educational groups which can help students to discuss their subjects with other students and their subject teachers”.

T2: “A group can be formed for each business subject and class by the teacher to exchange work (being revision, test papers) at times even a complex topic can be taught on WhatsApp when not in school and all will be expected to participate”.

The results show that a majority of respondents are aware that social networking tools based on WhatsApp mobile learning activities can help through collaborative learning and knowledge sharing. Research has shown that WhatsApp group discussion offers efficient and useful communication between the students and their teacher(s) and stimulates exchanges between students themselves. A study in Rwanda on using WhatsApp discussion groups in learning by Gashegu, Mfashingabo, Shingiro, Mugisha, Mokaya and Kiswezi (2019) demonstrated that WhatsApp can enhance learning by creating a conducive environment for students’ free exchange of information. The presence of the teacher stimulates the exchange and also assures the doubtful students. Apart from WhatsApp group chats, the application also offers users many other functional features which can be used in Business Education, such as text messaging, voice and video calls, photos and videos, document sharing, and links to web address. It enables communication with anyone who possesses a smartphone, internet connection, and the application.

CONCLUSION

Of late we are witnessing an exponential growth in the use of mobile digital devices and social media. These have now infiltrated nearly every field,

including the educational arena. These online social networks are increasingly being used for different reasons not only by students but by teachers at every level of education. The developments have ushered in a new paradigm of teaching and learning as well as posing plenty of challenges such as building infrastructure to support new types of learning and teaching, convincing sceptical teachers, ensuring accessibility of these gadgets and platforms for all students and keeping up with the increasingly rapid pace of technological advancement.

The policy makers at government and educational management levels have a choice of whether or not to explore the capabilities of mobile devices and social media for learning purposes. Students should be motivated to use mobile learning devices and encouraged to collaborate through various communication channels while teachers should adapt to changing times and teaching styles by providing learning activities suitable to the students' learning styles in the digital era. Although many teachers believe that use of cell phones and social media in the classrooms as a means of mobile learning creates distraction, research has shown that using smart phones and allied platforms as educational tools can enhance learning and enable students to have access to global resources. Thus, it may be time to shift from traditional teaching methods and integrate technology into the classrooms to enhance both teaching and students' learning.

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