

# Social Media for Enhanced e-Education at Namibian Schools

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**Abstract** The continuous technological changes have influenced service delivery in various sectors. Within the education sector, both learners and teachers use different technological devices in teaching and learning. Devices such as computers, mobile phones, tablets, and e-readers are used to access information. Technology has power to transform the teaching and learning paradigm. One should not ignore a variety of e-Learning platforms which are available including social media. This book chapter focuses on the effects of social media in education. A quantitative case study research approach is used. This was supported by document review on current emerging teaching techniques. Approximately 800 participants from high schools and tertiary institutions were engaged. Results from the engaged participants indicate that Facebook is distracting students from studying as they spend a lot of time in online. This book chapter proposes a modern teaching approach that could be used and explains the role of social media.

**Keywords** e-Learning · Social media · e-Education · Modern teaching

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## 1 Introduction

This chapter explains modern teaching approaches and how social media could be used to improve teaching. An overview of existing social media applications, i.e., WhatsApp, Facebook, and Twitter, is given. There is no doubt that students at high school and at tertiary institutions are using social media every day. In this research, Facebook is used as the testing platform. The focus of this chapter is to show how social media could be incorporated into teaching and learning within Namibia education sector. We argue that in a situation where learners are having access to technological devices, teachers have to be very innovative and come up with new teaching approaches. Studies on WhatsApp, Internet, and Facebook usage among Namibian teenagers were conducted. However, this chapter explains findings on the use of Facebook only. It is clear that not only social media is used as an emerging approach in classrooms. There are so many other technologies available and becoming popular in many areas. The challenge is to find the most effective approach that ensures learners and teachers do benefit from the emerging technology.

The main focus is to explain how social media platforms such as Facebook could be used to improve teaching and learning. We attempt to demonstrate how Facebook can play a role in the emerging teaching and learning approaches. Our aim is to enable both teachers and learners in developing nations to fully benefit from the emerging technologies and social media. The following sections explain the current approaches that are available and used in different areas within the education sector.

### *1.1 Emerging Technologies in Teaching and Learning*

The emergence of new technologies in the teaching and learning sector has prompted for a review of the way teaching and learning is conducted. The aim is to harness these technologies in such a way that they facilitate the conduct of teaching and learning. For instance [1], recently studied the applicability of modern teaching techniques in the educational process focusing on flipped teaching, whole brain teaching, social media, among other technologies [1]. The research by Tretinjak et al. [1] conclude that the use of different modern teaching techniques such as flipped teaching, whole brain teaching, gamification, and social media is to make learning interesting, improve the students' comprehension, enhance the student-teacher interaction, and improve critical thinking [1].

In particular, to flipped teaching technique, students can use the technology to study course material online before classes. These can include Web 2.0 technologies such as blogs, Twitter, podcasts, wikis, social network sites, virtual worlds, video sharing, and photograph sharing [2]. On the other hand, class time will focus on interactive activities, exercises, illustrating concepts, projects, and discussions under the guidance of the teacher or lecturer [1]. On the other hand, whole brain

teaching technique stimulates both sides of the brain and emphasizes active learning in which students repeat core information and practice basic skills through humor and games [1]. The common modern teaching methods include flipped teaching and gamification.

## ***1.2 Social Media as a Learning and Teaching Technology***

Among the emerging learning and teaching technologies, social networking or social media is one of the technologies that are slowly gaining popularity. While some of the early research discourages the use of social networks for teaching and learning purposes, recent studies suggest it is practically possible and good practice to engage social networks in education. For instance [2], noted concerns raised in some of the early researches between 2006 and 2007 relating to privacy and anxiety in interacting with professors in social networks motivating a belief that it does not serve an academic purpose and the opinion that faculty should simply avoid “educationally appropriating” these “backstage” social spaces [2]. Nevertheless, more case studies have demonstrated the successful use of social networks in facilitating teaching and learning [3–5]. The use of social networks is motivated by the fact that while students consider teachers as the main source of information, they depend on each other to complete the learning process [3]. Accordingly, teaching and learning methods seek to incorporate the use of already popular social networks or media in facilitating learning. Among other challenges is how to include social media in teaching and learning.

Different approaches to incorporating social networks in education have been suggested. For instance [3], through their study: “Learning by Challenging: a Social Network and Privacy Based Approach” demonstrate the use of social media in education. They indicated how a classroom simulation (Intelligent Tutoring Systems (ITS)) can be achieved in a virtual learning environment using human peers, rather than software, as learning companions. This was achieved through a virtual system (Learning by Challenging strategy) whereby a learner is challenged by another learner/friend or the system to perform a task and obtain a better score. It was found that learners who learn by challenging their friend’s scores perform better than those who try to beat the score predefined by the system and that participants who received recommendations from LBC made better progress in their learning [3].

## **2 Social Media and Facebook as a Case**

Social networking applications and sites are now in place to help people connect and communicate with each other [6]. The devices used to access these social networking sites range from personal computers to mobile phones, which are well

accessible to learners especially in urban schools. This means that learners have access to mobile phones during school time, thus the intervention by the ministry of education to implement the cell phone policy in public schools. It is perceived that cell phones are a distraction to learners since in the current curriculum everything they need to learn is in the textbooks and thus the introduction of the cell phone policy. In this age, there are a lot of things learners can get on social sites either to their advantage to advance in school or to their detriment.

Faliagka et al. [6] further state that teenagers are at the forefront when it comes to using social networks as a way to share their concerns and socialize without any critique or anyone trying to put them down [6]. This also result in parents coming forth with concerns that their children spend a lot of time on social networking sites and disconnecting from family and friends. It is of utmost importance that the authors chose to investigate the issue of social networking among teenagers due to the concerns raised by parents as well as stakeholders in education.

In addition, Stewart use a case study approach to demonstrate the use of Facebook in building a virtual community of readers [7]. His study reports Jessie's experiment that involves the use of a social literacy activity on Facebook in stimulating critical thinking and animated discussion. The whole process starts with the group leader allocating a book to students to read and then ask related questions. For this to be done on the Internet, Jessie created a group on Facebook named Virtual Literature Circle on which the group leader would post tasks related to the book that the students (group members) have been asked to read. For any questions, students would use the wall and use Facebook's chat system for interacting with each other as they share opinions. Jessie's idea of using Facebook as a platform for encouraging studies was aligned to the theoretical basis of social learning by Vygotsky which argues that social scholarship is important for in cognitive development because students are able to interact, share experiences, and learn from one another [7]. In addition, Bandura's social learning theory highlights the fact that people learn from one another via observation, imitation, and modeling (Learning Theories Knowledgebase 2008a in Steward, 2009). As such, Facebook is herein used as the platform to encourage the interaction and sharing of information among students.

Based on the experiment, Jessie concluded that the Facebook virtual literature circle was an excellent teaching environment for social and group work [7]. It was noted that the development of group dynamics and the application of cooperative structures encouraged equal and shared responsibility from all members, including even the quietest students [7].

While Jessie reports success using her virtual learning group on Facebook [5], argue that a group is one of the weakest Facebook communication methods. Miller and Jensen [5] noted that students may join a group to express an opinion and very little of these students participate in these groups [5]. As such, they focused on amassing friendship and making news feeds as a way of promoting library information. Introduced in fall 2006, the Facebook news feed is now a core feature that is automatically generated for all users every time they sign in [5]. Accordingly [5], report Lauren's experiment on Facebook, courtesy of news feeds, to communicate

library news to students. Lauren took advantage of the fact that students keep coming back to Facebook because information is constantly changing and the fact that students read what Facebook puts in front of them not what they seek out on their own.

## 2.1 Research Approach

A quantitative research approach was used in this study. A questionnaire survey of seven hundred and fifty (750) learners was engaged. Two high schools in Khomas region (Windhoek) and one tertiary institution were engaged. The data was analysed using SPSS version 23 (Statistical Packages for the Social Sciences). A  $p$  value  $<0.05$  was considered as statistically significant. Data analysis was initiated with a check of the outliers, missing data, and normality through skewness and kurtosis values that could affect relations between variables. A descriptive statistical analysis of the data (means, standard deviations, ranges, frequencies, and percentages) was initially conducted. Frequency distribution tables and bar graphs were used to summarize categorical variables. An independent samples T-test was used to compare the average number of hours per week on the two groups (High School and Tertiary). This chapter presents the results that were obtained from Facebook survey. The survey engaged Namibian schools and a tertiary institution. The aim of the study was to find out the view and usage on Facebook among the learners at high schools and at tertiary institution. By studying the implications of social networks on teenagers, it helps educators to be aware of the learners' needs. This will enable the integration aspects in the curriculum so that the engagement of learners with social networks does not detriment academic achievement.

Summary of the findings (Table 1).

Results show that tertiary participants had a statistically significantly higher number of hours spent on Facebook ( $20.93 \pm 27.14$  h) compared to high school participants ( $15.43 \pm 18.04$  h),  $t(659) = -3.221$ ,  $p = 0.001$ . The values of the standard deviation were a bit too high reflecting the high margin on the hours spent on Facebook by the participants.

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This paper gives the results on the Facebook usage among the participants and explains how the results could influence the modern teaching approaches (Fig. 1).

**Table 1** Average hours spent on Facebook per week

Category	$N$	Mean
High school	338	15.4294
Tertiary	377	20.9310

The results show that just over 50% of the high school learners agree that they feel Facebook is part of their life. We interpreted this as a feeling which was supported by the hours spent on Facebook. Of course, about 30% of the tertiary students disagree that Facebook is part of their life. This could be due to the fact that tertiary students are matured. This means in as much as they use Facebook, they also have other priorities (Fig. 2).

Results indicate that learners are feeling that Facebook is taking most of their time and this is affecting the schoolwork. The other interesting finding is the variations of the high school learners' results. This could be attributed to the fact that some learners do not have access to Facebook all the time. Some either access Facebook at schools or at home. As for the tertiary learners, we could argue that a greater percentage of over 70% disagree that Facebook is affecting their schoolwork. This could also be attributed to maturity and the ability to manage the Facebook.

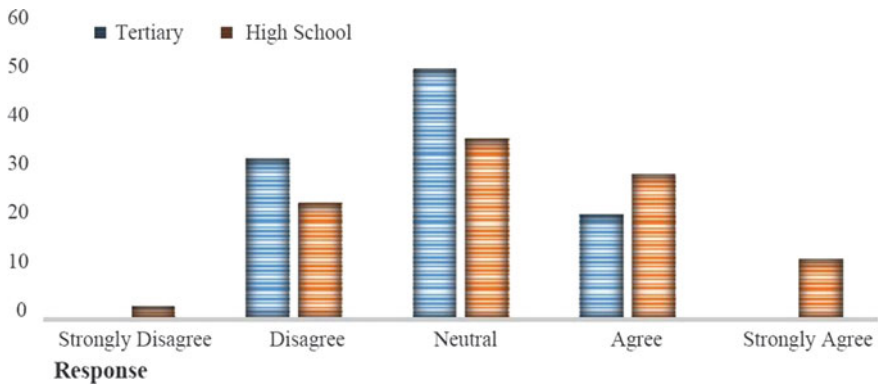


Fig. 1 Facebook as part of life

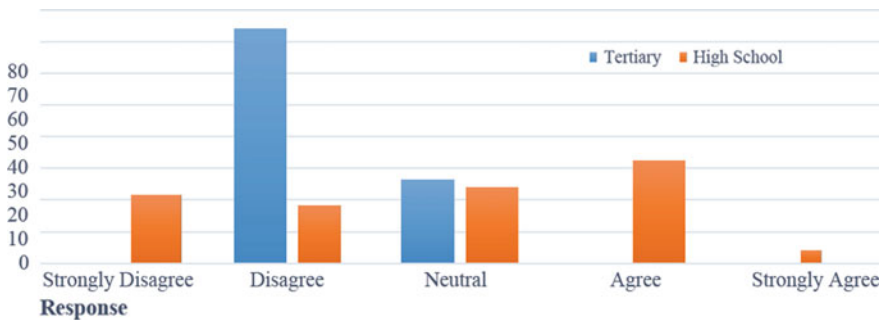


Fig. 2 Has your schoolwork been disturbed because of Facebook

This could show that possibly for high school learners, social media education could be required (Fig. 3).

There were more numbers on high school learners who sleep late using Facebook. At the same time, a significant percentage of almost 15% strongly disagree to that. This could be those who do not have access to Facebook at home. Or those whose parents ask them to sleep early. Still, a greater percentage of tertiary learners indicate that they manage Facebook well and know when to sleep. An almost 50% of the tertiary learners were neutral on this question. This may be due to the definition of sleeping late. So some learners may not be sure on what late hours are (Fig. 4).

On the participation on Facebook discussion, higher percentages of participants were neutral. This indicates that some do participate or at times they initiate discussions so in the end they were not sure whether that could be participating. Of course, a greater percentage of over 35% of high school learners agree that they participate in discussions (Fig. 5).

Much more improved percentages agree that they browse videos, photographs, and images on Facebook. This could support the idea that if Facebook is to be used

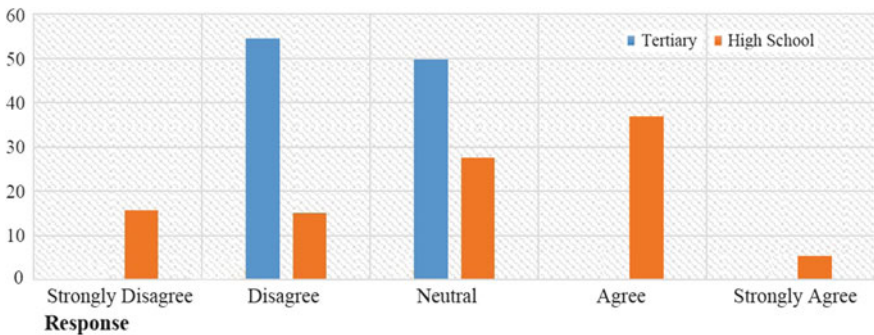


Fig. 3 Facebook affects sleeping time

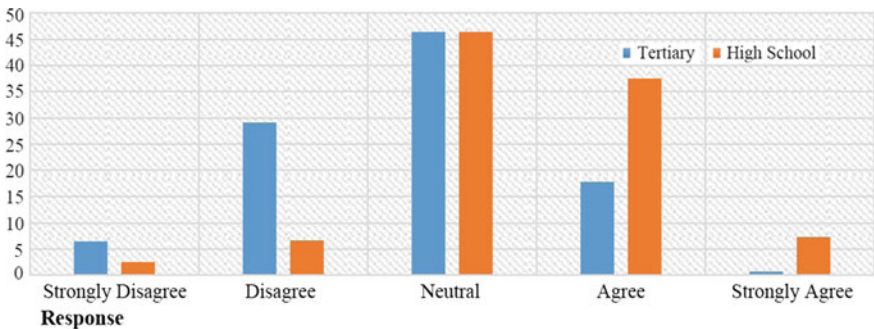
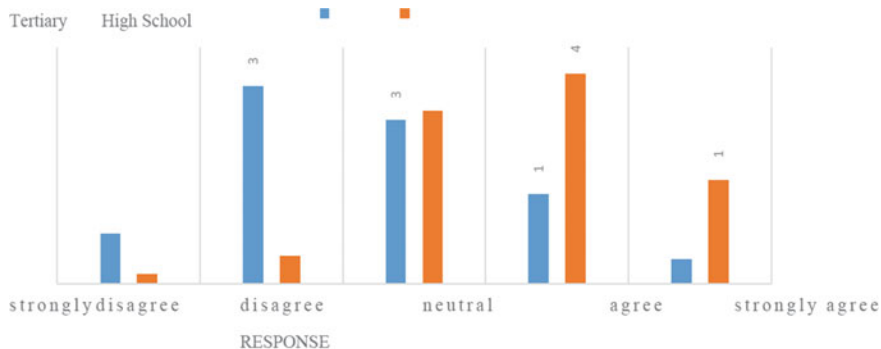


Fig. 4 Participation on facebook disussion



**Do you browse videos, photos and images on FB?**

**Fig. 5** Facebook usage

in teaching and learning, then it has to be interactive and be in different graphical forms.

**Summary of results**

Results clearly show variations in the usage and understanding of Facebook among the two groups of participants. However, the notable observation was that Facebook is popular and has been used even during class time. Learners also mentioned during the study that some lecturers and teachers are boring, so they end up using Facebook. If the teaching approach is one and does not engage students, then majority end up sleeping or using Facebook especially tertiary learners who have access to Facebook anytime. We agree that the power of social media to transform the teaching and learning is undebatable. And possibly as technology changes, new ways of accommodating social media in the classroom are required.

**3 Achievements and Recommendations**

This chapter has exposed the current usage and views of learners on Facebook. There is a clear evidence to support that the Namibian learners from the schools and the tertiary institution engaged are using Facebook. For a much benefit for both the learners and the teachers, we argue that Facebook could be used in the teaching and learning. This could improve the integration of technologies in the classroom and lecturer rooms. There is a need for all education stakeholders to work together in raising the curriculum and accommodate social media. We understand that this cannot happen without proper planning and involvement of the major stakeholders. For example, some of the major recommendations include the following:



- Revisiting of the curriculums to incorporate social media into teaching and learning;
- Coming up with supporting social media policies;
- Equip schools and teachers with the ICT skills;
- Educate learners and teachers on effective ways of using social media;
- Ensure that teachers are involved and not let out.

## 4 Conclusion

Experience from the current teaching and learning in Namibia shows that the use of different modern teaching techniques such as flipped teaching, whole brain teaching, gamification, and social media could be used to make learning interesting, improve the students' comprehension, enhance the student–teacher interaction, and improve critical thinking. In addition to this, social media, i.e., Facebook, could play a significant role in ensuring the success of emerging technologies. This chapter highlights the views on learners using Facebook. Our proposal is for social media and education experts to engage in discussions in which the incorporation of the social media in teaching and learning could be proposed and implemented. We agree that Facebook has many features that could be used in teaching and learning.

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