

The Innovative use of social media for teaching and learning: A case study at the University of Johannesburg

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Abstract

Covid 19 forced lecturers and students to accept that inspirational and beneficial teaching and learning does not necessarily rest within the four walls of a lecture hall. When higher education institutions had to transition rapidly from face-to-face to online education, social media platforms became a powerful catalyst for effective teaching and learning. Undoubtedly social media platforms have influenced our lives in an unprecedented manner. It has also altered the teaching and learning landscape by taking on an innovative role in online education. This investigation explored students' experiences of learning module content via TikTok. TikTok was adopted as a teaching tool because it is considered an appealing social media platform for Gen Z users, with its central attraction being short video content. This investigation primarily relied on Bandura's social learning theory as the theoretical lens applied to the data as it points to the importance of an individual's self-regulation and the external situation in terms of learning. It also offers an alternative view of social learning by seeing it as situated in communities of practice. Through a qualitative inquiry, teacher education students' reflections on being taught using TikTok were gathered. Evidence from the survey administered to 80 students strongly suggests that TikTok offered an efficient, fun, and exciting way of gaining unlimited access to learning content. It also enhances retention and creativity, making it a suitable 21st-century teaching strategy that promotes self-directed learning. It is a perfectly suited social media platform for a generation that prefers to consume content via rich video formats that act as confidence boosters. Hence making it an innovative teaching tool that encourages a new form of social learning.

Keywords: social media, (TikTok), teaching and learning, social learning theory.

1. Introduction

COVID -19 has affirmed the global volatility, uncertainty, complexity, and ambiguity (VUCA) in all spheres of life (OCED, 2018). Harder et al. (2020:2) state, "Its lasting global effects have significantly expanded the implications and concreteness of this term for the millions whose lives have been completely transformed in a matter of

days." The COVID-19 pandemic rapidly changed the world's teaching and learning landscape. Schools and higher education institutions abruptly shut down their campuses and moved to remote teaching and learning. This overnight migration to a remote environment also exposed the limitations of traditional instructional approaches as teaching and learning. An environment heavily reliant on technology suggests curricular transformation and calls for social and technological innovation. Students who once were on the receiving end of education became the catalyst for changing teaching and learning. Forcing higher education institutions to acknowledge the students' digital native nature and access to technology and see this as a unique survival opportunity and enabler to proceed with teaching and learning despite lockdowns and social distance restrictions.

We have become acutely aware that the nature of the student (Gen Z and beyond) demands that teaching and learning occur in ways different from the past. This generation of learners can use the internet and a technological device such as a smartphone, laptop, or tablet to express themselves. Coupled with this is the need to ensure student retention and interest within a module, thus offering an opportunity to introduce exciting and alternative teaching strategies, one of which was using social media. Using social media in education can allow students to access valuable educational information quickly, in fun, and conveniently. Social media may also improve communication skills, provide immediate access to timely information and create social networks for learning. Gikas and Grant (2013) suggest that despite a physical boundary, social media still provides an excellent e-learning educational opportunity where students can collaborate academically and access course content and tutors.

The main aim of this inquiry was to explore how introducing a social media platform, namely TikTok, in a second-year module on assessment for learning in a teacher education programme (B.Ed) would influence students' learning under remote learning conditions. Under the assumption that social media is not to be considered a distractor to effective pedagogy but an enabler of learner-centred e-pedagogy, TikTok was adopted as a teaching tool. TikTok is currently one of the fastest growing apps, with over an estimated 1 billion users whose average daily usage is at least an hour. Also, it is considered an appealing social media platform for Gen Z (most users are between 14-30 years old), with its main attraction being short video content (about 60 seconds). These small bites of easily digestible and fast-paced "micro-learning" videos (Jaeger, 2020, p. 1) appeal to this generation of diverse digital natives who have distinct social and cultural awareness and a strong instinct to be creative. The research question that framed this investigation was: "What are students' experiences of being taught through TikTok compared to a traditional method of teaching?"

What is TikTok?

TikTok is a social media sharing application that allows users to create and edit videos of about 15-60 seconds in any style they desire (Edwards, 2020:1; Jaeger, 2020:1; Su, Baker, Doyle, & Yan, 2020:). It is a platform frequented by tweens, teens, and adults under the age of 30 (Tutt, 2021:1; Roderick, 2020:1). TikTok is a free application where

members upload short-form mobile videos on any topic they want (Ruiz, 2020, p. 1; Wang, 2020, p. 2). It is currently one of the fastest growing applications, with over 1 billion users and 800 million active monthly users (Mishra, 2020, p. 1). Research indicates that teens and tweens are early adopters who use the application for about 82 minutes a day - making it an increasingly valuable technology platform for educators to consider (Tutt, 2021, p. 1). Similarly, Mishra (2020:1); Roderick (2020:1) highlight that video has become a way of learning platform which the majority of the teens and tweens age group prefer to use, making the application a potential tool for education. Klein (2019:1) confirms that the TikTok video-sharing platform is becoming increasingly popular with tweens and teens, and some teachers have started using it in their classrooms. The platform is built to make music videos, lip-sync, dance, and comedy shorts, but it lets the users do anything they need and is easy to use (Edwards, 2020, p. 1; Escamilla-Fajardo, Alguacil, & López-Carril, 2021:2).

Creating an excellent educational video requires knowledge and skills of camera operation and editing video production and an understanding of multimedia learning, especially the cognitive learning theory, which says for quality of learning experience. The designer should consider the intrinsic load of the topic, reduce the extraneous load, and optimize the germane load to help mentally organise the information presented (Escamilla-Fajardo et al., 2021, p. 2).

According to Mishra (2020:2), the principles of multimedia that a compelling video should focus on are: (i) Coherence principle - learning is better when extraneous materials are excluded, and only strictly necessary content is covered; (ii) Segmenting principle - learning is better when content is presented in small chunks.

Recent research on the engagements of the video shows that learners mostly use video of six or less with one concept; (iii) Contiguity principle - learning is better when corresponding words and pictures are presented close by, and (iv) Signaling principle - understanding is better when cues are used to direct learners' attention to key concepts. These principles and guidelines are helpful for longer videos.

TikTok entails creating and sharing video content using editing tools that make it possible for anyone to produce near-professional results (Roderick, 2020, p. 1). For its usage in education, Klein (2019:6) suggests that students must be taught how to use it safely outside of class, including how to make the application account private.

A couple of benefits are attached to using TikTok for students and educators. Tutt (2021:2) states that TikTok has the potential to speak to 21st-century students in a way that other kinds of lessons have not talked to them. Mishra (2020:1) finds that in 2019, about 98% of students saw video skills as necessary in today's workplace, and 86% think that today's educators must include video in their teaching. Edwards (2020:1) and Roderick (2020:1) state that TikTok is fun creating videos, which helps engage students and encourage their creativity. Similarly, Klein (2019:1) indicates that TikTok provides a chance for students to be creative, and it is a fun way for them to show what they know. TikTok also helps students condense and simplify

their thoughts, making the lesson easy to remember (Edwards, 2020, p. 1). It is also valuable for highlighting key points from a lesson as an after-class resource that students can view from home to help reinforce any points made in the lesson (Roderick, 2020, p. 2; Edwards, 2020, p. 1; Escamilla-Fajardo et al., 2021, p. 2).

TikTok in the education arena makes students self-serve the gaps in their understanding and to have unlimited access to revisiting the bite-sized lessons again and again until they understand them (Edwards, 2020:2; Escamilla-Fajardo et al., 2021:2; Roderick, 2020:1; Tutt, 2021:3). In addition, TikTok is a platform students can relate to that provides several pedagogical affordances, which include: provision of realistic experiences, motivational influence, ability to control and review, and engage students as creators (Mishra, 2020:1; Roderick, 2020:2). TikTok afford students to work individually or together to create content that demonstrates their understanding of concepts, which promotes peer-to-peer teaching (Roderick, 2020:1). It also inspires some innovative teachers and learners to share learning content within closed classroom groups and other schools can also get and share ideas (Roderick, 2020:1, Edwards, 2020:2). Creating TikTok videos an excellent way for teachers as well as students to connect with one another, sharing tips, events, assignments, tricks, and hacks (Edwards, 2020:1; Ruiz, 2020:1). TikTok platform is especially helpful for students who are reluctant to ask for help in class and need different entry points to the curriculum thereby increasing their engagement and participation in the teaching and learning process (Edwards, 2020:1; Ruiz, 2020:4; Tutt, 2021:3).

While TikTok videos are funny and go viral quickly, preparing them is not easy. It requires much creativity and effort to create meaningful messages enjoyed by many (Mishra, 2020, p. 1). Depending on the grade one teaches, creating a personal connection with students can be daunting (Jaeger, 2020, p. 2).

Distraction is another challenge of using TikTok. Some parents and teachers are concerned that allowing TikTok in the classroom is nothing more than a distraction instead of promoting learning. A brief review of available content shows plenty of students creating videos during school hours unrelated to classwork (Roderick, 2020, p. 2). Teachers are concerned about privacy settings issues, as there is usually a lack of clarity about data use from social media platforms (Mishra, 2020, p. 1; Roderick, 2020, p. 1). Some privacy advocates have concerns about students sharing their data on any social media platform because it is unclear what companies do with it (Klein, 2019, p. 2). Furthermore, TikTok has the potential to become a bullying platform, in part because users can comment on each other's videos (Klein, 2019:1, 3).

Theoretical Framework

Social media has undoubtedly changed how humans experience social interaction. It may be defined as; "forms of electronic communication (as Web sites for social networking and microblogging) through which users create online communities to share information, ideas, personal messages, and other content (such as videos)" Merriam Webster online dictionary (<http://www.merriamwebster.com>). This

investigation offered the opportunity to apply Bandura's social learning theory (1977) and social learning within communities of practice (Wenger, 1998) to understand how student learning can be enhanced through social media, namely TikTok.

Before Bandura, it was Rotter (1954) who suggested that behaviour is mainly acquired in social settings. For him, individuals behave in a certain way because of their situation and the expected behavioural outcomes they value. Albert Bandura (1977) expanded on Rotter's social cognitive theory. He presented the notion of initiative responses as a critical instrument in social learning, implying that learning does not occur in a vacuum. According to Bandura, individuals learn and imitate from observing and modeling the behaviour of others. For him, Social learning Theory meant that an individual's learning is potentially affected by themselves, peers and situations. According to Bandura and Locke (2003), social learning theory is rooted in the notion that people function as anticipators and purposive and self-regulated agents for their motivation and actions. Central to social learning is the individuals' belief in their abilities which motivates and guides their learning. Also, social learning theory views learning as a social process where an individual can interact within a situation and with peers.

As Yu et al. (2010) suggest, "Peers and the situated environment exert prominent influences on individuals' cognition and behavior by their own vicarious (observational) learning from peers (e.g., observations and acquire information) and the situations (e.g., learning the environmental norms, cultures, policies) ."In a social media learning context, this is in no way different. Active engagement in constructing knowledge, individuals' interpersonal interaction in cooperative situations, and problem-solving contexts exist too. Hence, social learning theorists view learning as knowledge constructed socially, conversationally, and interactively. For Jonassen, Howland, Marra & Crismond (2008), using technology as a social learning tool encourages collaboration, discussion, argument, consensus, and supporting communication amongst such knowledge-building communities of practice. Learning thus becomes an internal and social process. It is, therefore, evident that social media platforms have genuinely expanded the borders of learning and human interaction.

For this investigation, social media and social learning theory are interwoven. In this case, social learning theory offers a broader lens in understanding learning than a behaviourist or cognitive approach. The reason is that while behaviourist and cognitivist focus on how an individual acquires knowledge, social learning theorists believe that learning is a negotiated social exchange of knowledge.

An alternate view also proposes that social norms influence all individual learning, and most learning occurs in a social context. Hence social learning should instead be considered a process of social change where people can learn from each other to benefit a broader social-ecological system (Reed et al., 2006, p. 5).

Here, social learning is defined as active participation in the practices of a community (Lave & Wenger, 1991; Wenger, 1998). The dynamic interaction between people and

the environment is emphasized in constructing meaning and identity. Thus, social learning should enable what is learned within a smaller group of members to spread to a broader community of practice to which such a group belongs. Reed et al. (2006:7) suggest that "social learning is a change in understanding that goes beyond the individual to become situated within a wider social community of practice through social interactions between actors within social networks."

It is proposed that both theoretical frameworks are relevant, serve a useful purpose in our understanding of social learning, and are applied to the analysis of data gathered.

2. Methodology

The focus of this inquiry was on students' comments about the two different methods of learning content, a traditional method and one incorporating Tik Tok as a social media tool for learning. Commonly recurring themes prevalent were identified, and these helped answer the research questions posed. In designing the inquiry, two tutors were first guided on creating TikTok clips on a particular section relating to the module's content. The content we chose related to formal and informal assessment forms. The tutors then created the respective clips. Next, we evaluated the TikTok clips for accuracy, creativity, and understanding. Two groups of students, each consisting of 40 students, were first taught the content in a traditional lecture method. In the week that followed, they were taught the same content by the same tutors, but this time they used the TikTok clips. After that, students were asked to reflect on the two learning experiences by answering an online survey.

A qualitative design was applied to this inquiry. Data was gathered through an online survey instrument by 80 purposively sampled second-year students. Using Google Forms, the students were asked to comment on their experience of being taught using a traditional lecture method compared to being taught through a social media platform, namely TikTok.

Using a thematic approach to analyse the qualitative data was particularly suitable because we wanted students' experiences, views, and perceptions of teaching and learning using TikTok. In using this method, reported patterns (themes) were identified, analysed, and reported. Hence, the data was described in rich, subtle detail (Braun & Clarke, 2006, p. 79).

The content of the data, which was analysed inductively, determined how it was coded and developed into themes. The elegant three main themes are presented below and illustrated by relevant examples.

3. Results and Discussion

The study was qualitative and primarily employed a survey method of collecting data. Data were collected from 80 students enrolled in a second-year teacher training module on assessment for learning. In the survey, students were asked two main questions related to their experience of being taught a particular section of work through a social media platform, viz. TikTok. Secondly, their experience designing

their TikTok clips based on any aspect of the module content they were taught. This investigation was based on grounded theory (Strauss & Corbin, 1994). Data was reviewed, and concepts that emerged from the data were identified. These were then tagged with codes that succinctly summarised the concepts. After that, these codes were grouped into categories or themes.

Benefits of using TikTok as a social media platform for teaching and learning

The use of social media is undoubtedly affecting teaching and learning in higher education. During COVID-19, lecturers were forced to find innovative ways to make learning exciting and accessible to all students. Therefore, the affordances that social media offers make it an attractive tool to use in teaching and learning.

A core pattern across the data was students' overall positivity toward learning from TikTok clips presented to them and from it. They found that it allowed them to be creative and, in so doing, was pleasurable or, as they described it, "fun and engaging." In studies by Mishra (2020:1) and Roderick (2020:2), students expressed similar sentiments. Most students perceived TikTok as contributing positively to the teaching and learning process. They were also able to learn the module content better. They were already motivated to do so when tasked to create their TikToks, having learned from the TikToks created for the module content. A majority of them remarked on the ability of TikTok to harness their creativity. Klien (2019:1) purports that TikTok provides a chance for students to be creative and is a fun way to show what they know.

TikTok also allowed for instant communication and immediate sharing of content. Students felt a human connection with the lecturer, which was considered very supportive under remote teaching and learning circumstances due to COVID-19. Related to this was the view that TikTok embedded students' learning within the realm of 21st-century learning and encouraged the development of technological skills. They commented on how they were being trained to use social media as future teachers in the technologically rich classrooms before 21st-century learners would find themselves in the years to come. As Tutt (2021:2) also affirms, "TikTok can speak to the 21st-century learner in a way other kinds of lessons have not spoken to them."

TikTok vs. Traditional teaching and learning

Interesting patterns emerged in analysing the data for the research question relating to students' experience of learning using TikTok compared to traditional teaching methods. While a majority of them felt the experiential learning exercise, viz. TikTok was beneficial; some did indicate, however, that as a result of their learning styles (visual vs. kinetic vs. auditory), they still preferred learning using reading, writing, and kinaesthetic styles. Hence, TikTok became an unfavourable tool for teaching and learning for such students.

Overall, however, TikTok provided an alternate pedagogical opportunity to traditional teaching and learning. For instance, the opportunity for a functional interaction to occur, to motivate or inspire students, and for the students to "go back"

and review the content taught. Edwards (2020:2) also suggests that TikTok "can be watched multiple times so students can revisit the content taught when learning." Some students also felt that in designing their TikToks that they were challenged at first. This exercise seemed "more difficult" than just reading the module content and answering the questions set. However, after they observed their tutors' TikTok clips and watched others on the internet, they found it easy to create and succeed.

Students also commented on traditional learning not being student/learner focussed and lecturer centred instead. Some felt that they felt more anxious in a formal context than in traditional teaching and learning offered. They also felt that the TikTok learning environment was informal, relaxed, and appealed to their age group. As one student remarked:

"TikTok is a great alternative to traditional teaching as it uses modern technology to transmit information to learners; it is ubiquitous and allows students to learn anywhere. However, it is advantageous to have access to documents to refer to when studying (which may be considered traditional teaching. Also, the formality and structured nature of traditional teaching does make it easier to follow content. If there were perhaps a way to include some kind of reference material alongside the TikTok videos, this would take advantage of both the structure of traditional teaching and the ubiquity of TikTok videos."

4. Conclusions

Based on the results of this investigation, it was found that TikTok did make a positive overall contribution to the teaching and learning process. The use of social media in Education 4.0 necessitates pedagogical rethinking and challenges current approaches to how the curriculum is designed, delivered, and assessed. Chawinga (2017:10) suggests: "Incorporating social media in teaching works to the advantage of lecturers and students as it plays a supplementary role to a traditional face-to-face approach to teaching." Barczyk and Duncan (2011:27) also explain that "if social media tools are available to help better engage and educate students, they should be incorporated into the curriculum, not exclusively but in a supplemental fashion." This investigation further revealed that lecturers and students could rise to the occasion and use innovative ways to keep teaching and learning from faltering even under a crisis. Students expressed opinions that they are enthusiastic about using social media to learn and can use it practically and, in so doing, offer a valuable resource to their peers too.

5. References

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