

Student Learning with Tik Tok Tool: A Literature Review

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Abstract: *It is well known that social media applications in education play significant roles in teaching reformation and learning style transformation. The popular social media Tik Tok with its unique functions and special characteristics has successfully attracted broad attention from younger millennials. With the rapid development tendency of Tik Tok application in education, it is very important and urgent to review the effect of Tik Tok application in student learning. However, the current literature mainly focused more on the review on online learning and social media such as Facebook, Blogs, and Twitter. Though there existed literature review on Tik Tok, Tik Tok was only mentioned and just treated as part of social media. To date, no study has reviewed student learning with Tik Tok, particularly concerning learning outcomes, student psychology, learning challenges, and improvement strategies. This article bridges the gap through content analysis on relevant literature. The main conclusion is that Tik Tok has a positive effect on students' learning outcome and negative effect on student psychology. Main challenges include unhealthy information and entertainment orientation content, frequent psychological problems among college students and new social media platform application, and traditional knowledge-oriented teaching. Curriculum development is highlighted as the principal avenue for advancing student learning via Tik Tok integration.*

Keywords: Tik Tok, Learning outcomes, Student psychology, Learning challenges, Curriculum development

1. Introduction

Social media is a group of internet-based applications for the creation and exchange of user-generated content (Kaplan & Haenlein, 2010), including knowledge generation, dissemination and consumption (Shi, 2001). Most teachers recognize that it is necessary for them to integrate modern communication and media technologies into their multiple teaching settings, especially under the background of the pandemic of covid-19. Social media applications in educational environments can supply an alternative for teachers reshaping the course design and development, evaluation and quality assurance, to meet the needs of teaching innovation and reformation. Therefore, nowadays more and more scholars and practitioners pay much attention to how social media influences teaching and learning. Tik Tok, a 15-second short video as one type of social media, has become one of the most popular social platforms since it came out in 2016, mainly due to its special characteristics of user-generated content, fragmentation of spread, conscious content push, satisfying social needs (Chen, 2020; Wang,

2019; Zhang, 2020; Shi & Chung, 2020). As a result, many researchers begin focusing on the combination of Tik Tok and learning under the background of teaching reformation. Thus, this article will review literature relevant to student learning with Tik Tok, more specially, on how Tik Tok affects learning outcomes, students' psychology, and course design, etc.

2. Problem Statement

Short video platforms have become a popular form of social media applications among millennials for sharing entertaining contents (Patrick, 2018). As an emerging social media platform since it was first launched in China, Tik Tok differed itself from the other social media due to its unique functions with music, video editing, and special effects. Together with its own characteristics of user-generated content, fragmentation of spread, conscious content push, satisfying social needs, Tik Tok has attracted thousands of millennials' attention all over the world. Besides that, Tik Tok's great popularity has also influenced the education field in the form of applying music, video editing, and special effects for student learning.

Social media application in student learning has been the increase in the past decades. Being the components of an online learning environment, there have been review studies conducted on the broader aspects of online learning, examining major research themes within the field. Relying on the existing literature reviews (Berge & Mrozowski, 2001; Hung, 2012; Tallent-Runnels et al., 2006; Zawacki-Richter et al., 2009), Martin et al. (2020) systematically reviewed online teaching and learning from 2009-2018 with twelve themes and a framework across learner, course and instructor, and organizational levels. Some researchers from different perspectives reviewed the literature of social media application in student learning. For example, Tarantino et al. (2013) explored the effects of student engagement with social media on student learning, and the themes included collaborative learning, virtual community, course content, learning achievements, challenges, and instructional support. Tess (2013) investigated the potential role for social media as a facilitator and enhancer of learning, among which included the results from specific social networking sites (SNSs) such as Facebook, Blogs, and Twitter. Other review studies conducted on social media such as academic practice (Guy, 2012), knowledge sharing (Ahmed et al., 2019), professional development in higher education (Luo, Freeman, & Stefaniak, 2020), school-based initiatives in media literacy education (Hobbs, 2004), medical education (Cheston, Flickinger, & Chisolm, 2013), initial teacher education (Iredale, Stapleford, Tremayne, Farrell, Holbrey, & Sheridan-Ross, 2020).

When narrowed the scope of social media, this study turns to the review of Tik Tok application in student learning. Literature reviews where Tik Tok was mentioned could be found. For instance, Duradoni et al., (2020) discussed the relationship between the most used social media addiction measures and well-being. Tik Tok application was treated as a part of social media activities people are engaged in, increasing usage of social media (including Tik Tok) could be associated with addiction (Turel et al., 2018; Wang et al., 2016) and social media users might expect a lower quality of life and well-being (Turel & Qahri-Saremi, 2016). Thus, future research could extend current reviews of social media in education by focusing on TikTok as a platform for enhancing student learning.

With the rapid development tendency of Tik Tok application in education, it is very important and urgent to review the effect of Tik Tok application in student learning. However, the current literature mainly focused more on the review on online learning (Martin et al., 2020) and social media such as Facebook, Blogs, and Twitter (Tess, 2013). Though there existed literature review on Tik Tok, Tik Tok was only mentioned and just treated as part of social media, and

to date, no study has reviewed student learning with Tik Tok, particularly concerning learning outcomes, psychological dimensions, learning challenges, and improvement strategies. Thus, the purpose of this study is to review literature on student learning with Tik Tok.

3. Research Objectives and Questions

The purpose of this study can be developed into several research objectives, including: a) to understand how Tik Tok influence students' learning outcome, b) to understand how Tik Tok affect student psychology, c) to identify the challenges for students to use Tik Tok as the learning tool, and d) to explore what can be done to improve student learning with Tik Tok.

The research questions that guide this review are as follows: a) how Tik Tok influences students' learning outcome? b) how Tik Tok affects student psychology? c) what are the challenges for students to use Tik Tok as the learning tool? and d) what can be done to improve student learning with Tik Tok?

4. Methodology

Key words "Tik Tok * education" OR "Tik Tok * learning" were utilized to search information in the Google scholar and CNKI database, and 9 articles (see Appendix) were selected for this review. This study used content analysis to code relevant data by reading through the whole articles in detail. Finally, all data were collapsed into four broader categories: learning outcome, student psychology, challenges, and improvement strategies. Research methods of these articles were also counted.

5. Findings

Among these articles, five of them mainly derived from Chinese literature employed a qualitative research method, three articles all came from English literature used a quantitative research method, and only one applied the mixed research method.

RQ1: the influence on students' learning outcome

Researchers investigated the relationship between Tik Tok application and students' learning outcome, such as English learning (Yang, 2020), English writing skill (Yunus et al., 2019), and self-confidence levels (Palupi et al., 2020). They found that Tik Tok application has a positive effect on students' learning outcome.

RQ2: student psychology effect

When it refers to the student psychology, Tik Tok could meet student social needs, however, it also leads to student internet addiction (Wang, 2020; Cui, 2019; Chen, 2020; Wang, 2019), cognition bias and interpersonal relationship problems (Wang, 2020). Besides that, Wang (2019) explained these phenomena of instant gratification's negative influence on students' negative attitudes towards the profession with Tik Tok.

RQ3: the challenges for student learning

Based upon the data analysis, these studies pointed out that students were always confronting the following challenges: unhealthy information and entertainment orientation content (Chen,

2020; Wang, 2019; Xu & Xu, 2019), frequent psychological problems among college students and new social media platform application (Wang, 2020), and traditional knowledge-oriented teaching (Wang, 2018).

RQ4: improvement strategies for student learning

Due to its positive effect, negative influence, or challenges of Tik Tok, suggestions mainly centered on curriculum development, such as mental health education curriculum development (Wang, 2020), multi-dimensional curriculum system development (Cui, 2019), media literacy curriculum development (Xu & Xu, 2019), sports performance professional curriculum development (Wang, 2018). Other suggestions included network psychological knowledge learning and improvement of social media platform application capability (Wang, 2020), making the application wisely as a place to share creativity (Palupi et al., 2020).

6. Summary

This study used a content analysis method to review 9 articles on student learning with Tik Tok. It can be found that the emerging social media can influence students' learning outcome and student psychology. When applied as the learning tool, Tik Tok also brought some new challenges in the learning process. Finally, in order to improve student learning with Tik Tok, this article summarized the suggestions originated from solving the problems of its application.

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Conflict of Interest Statement

The authors declare that there is no conflict of interest regarding the publication of this study.

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Appendix

The articles selected from Google scholar and CNKI

Author/ year	Article title
Wang (2018)	Exploration of the teaching of sports performance " Tik Tok short video" in the context of "new audio-visual media"
Cui (2019)	Phenomenon reflection and education guidance of campus vibrato culture
Wang (2019)	Playing the active role of Tik Tok in online ideological and political education
Xu & Xu (2019)	Investigation report on the use of Tik Tok among college students
Yunus et al. (2019)	The potential use of social media on Malaysian primary students to improve writing
Chen (2020)	Exploration of online ideological and political education for college students based on Tik Tok App
Palupi et al. (2020)	The effect of using Tik Tok application on self-confidence levels
Wang (2020)	Innovative research on mental health education for college students under the new media environment
Yang (2020)	Secondary-school Students' Perspectives of Utilizing Tik Tok for English learning in and beyond the EFL classroom