

EXPLORING THE PEDAGOGICAL POTENTIAL OF YOUTUBE AND TIKTOK: AN EMPIRICAL ANALYSIS OF PLATFORM ACCEPTANCE IN A TERTIARY EDUCATION INSTITUTION

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Abstract

This study examined the acceptance of YouTube and TikTok as tools for knowledge acquisition among faculty and students in a state college's teacher education program. Grounded in the Technology Acceptance Model (TAM), the research explored how content richness—operationalized through relevance, sufficiency, and timeliness—alongside personal innovativeness, perceived ease of use, and perceived usefulness, influenced user satisfaction and platform acceptance. Utilizing a quantitative, cross-sectional research design, data were gathered through a self-administered survey involving 242 students and 21 faculty members. Descriptive and inferential statistical techniques, including t-tests and ANOVA, were employed to analyze differences across age, year level, and user groups. Findings revealed that YouTube consistently outperformed TikTok in terms of user satisfaction and perceived educational value. While both platforms were positively evaluated, YouTube yielded significantly higher ratings in content sufficiency and perceived usefulness. Conversely, TikTok was more favored for its timeliness and engagement appeal, especially among students. However, platform acceptance varied significantly by year level but not by age group. The study underscores the importance of aligning digital content delivery with pedagogical goals and learner expectations. Implications for instructional design, teacher training, and policy formulation in digital education are discussed.

Keywords: *Technology Acceptance Model, YouTube, TikTok, knowledge acquisition, digital pedagogy, content richness, user satisfaction, personal innovativeness*

1.0 Introduction

Learning, as a dynamic and multifaceted process, entails the acquisition and refinement of knowledge, skills, and atti-

tudes through experience and reflection. It leads to relatively stable and transferable behavioral and cognitive transformations (de Arruda et al., 2017). In

the digital age, the modalities through which learning occurs have expanded significantly. No longer confined to traditional, face-to-face instruction, contemporary education increasingly leverages digital platforms that enable multimodal, asynchronous, and personalized learning experiences. The emergence of the COVID-19 pandemic accelerated the integration of technology in education, reshaping pedagogical norms and compelling institutions to adopt remote and blended modalities of instruction (Srinivasacharlu, 2020). This digital shift has underscored the necessity of accessible, engaging, and effective online learning tools. Among the technologies that have gained prominence are video-based social media platforms, particularly YouTube and TikTok, which offer rich opportunities for microlearning, visual instruction, and learner autonomy.

YouTube, established in 2005, has evolved into the world's most prominent video-sharing platform, boasting over 2.5 billion active users and more than 500 hours of content uploaded every minute (Leskin, 2020). It supports diverse educational applications, from recorded lectures and tutorials to edutainment and peer-gen-

erated instructional content (Ferraris, 2014; Snelson, 2018). Its open-access nature and flexible content architecture make it a preferred tool among Generation Z learners (Miranda & Martin, 2020), enabling both self-paced learning and reinforcement of complex academic concepts. TikTok, by contrast, emerged in 2017 as a short-form video-sharing platform tailored for mobile devices. Despite its initial branding as an entertainment app, TikTok has become a popular outlet for educational content—especially among youth under 25—by providing quick, creative, and visually engaging snippets that are easily consumable and shareable (Sunhare & Shaikh, 2019; AlQudah et al., 2021). Educators and learners alike have begun using TikTok to explain academic concepts, demonstrate skills, and foster digital collaboration (Azman et al., 2021; Xiuwen et al., 2021).

Although YouTube and TikTok are both widely adopted platforms with increasing relevance in education, their comparative effectiveness and acceptance in formal knowledge acquisition contexts remain underexplored. While YouTube has been studied extensively for its educational potential (Mullen & Wedwick, 2008; Snelson, 2018),

scholarly attention toward TikTok has only recently emerged, with most research still focused on its sociocultural or entertainment aspects. Moreover, most studies tend to examine these platforms independently, with few offering comparative analyses that consider demographic variances, pedagogical alignment, and user perceptions of educational value. Existing literature suggests that social media, broadly defined, enhances learner interaction, peer collaboration, and self-regulated learning (Zachos et al., 2018; Mustafa et al., 2021). Studies also highlight how social media usage in educational settings may bridge formal and informal learning environments, promote digital literacy, and enable collaborative content creation (Ezeani & Igwesi, 2012). However, concerns persist regarding distraction, content quality, and cognitive overload—especially with platforms like TikTok that prioritize brevity and visual stimulation (Paksoy, 2022; Lin et al., 2022). Conversely, YouTube’s abundance of content presents challenges in curating relevant and high-quality material, and users may require advanced information literacy skills to distinguish credible sources from noise (Snelson, 2018). Further-

more, while both platforms provide asynchronous access and enable diverse learner engagement, their user interfaces, content algorithms, and community cultures differ significantly, likely influencing user satisfaction and acceptance. Yet, empirical investigations comparing the two platforms in terms of their educational affordances, especially within teacher education programs, remain scant.

This study responds to the gap in the literature by investigating the comparative acceptance and perceived effectiveness of YouTube and TikTok in academic knowledge acquisition among students and faculty members in the School of Teacher Education at Northwestern Mindanao State College of Science and Technology (NMSCST), Philippines. Grounded in the Technology Acceptance Model (TAM) developed by Davis (1989), the research aims to assess how specific constructs—namely, perceived usefulness, perceived ease of use, content richness, personal innovativeness, and user satisfaction—influence platform acceptance and usage in an academic setting. The TAM framework posits that individuals’ behavioral intention to use a technology is influenced by their perceptions of its utility and

ease of use. Recent extensions of TAM have incorporated variables such as subjective norm, playfulness, and content sufficiency to contextualize technology use in educational settings (Alghizzawi et al., 2019; Dumpit & Fernandez, 2017). This study expands the TAM model by integrating content richness dimensions (sufficiency, timeliness, relevance) and user traits such as personal innovativeness to provide a nuanced understanding of technology acceptance among digital learners and educators.

Thus this investigation contributes to the evolving discourse on digital pedagogy by offering a critical appraisal of two dominant social video platforms in contemporary education. Beyond assessing their individual pedagogical merits, the study seeks to inform strategic and evidence-based approaches to the integration of social media technologies within teacher education and broader academic contexts.

2.0 Conceptual Framework

This study is primarily anchored to the Technology Acceptance Model (TAM) by Davis 1989. The Technology Acceptance Model (TAM) has been used by researchers in studies that intend to examine the

acceptance and adoption of technology by users in different fields. It is a critical factor used to measure the success of a system and the outcomes of specific experiences (Niederhauser et al., 2010). Technology Acceptance Model (TAM) has two main constructs that influence the socio-technical aspects; hence, it is used to examine users' behavioral intention to use a particular system. The perceived ease of use and perceived usefulness are crucial to understanding users' attitudes or beliefs toward the information system. They can be defined as the degree to which the users believe that the system is free of effort and useful (Davis, 1989). Past literature has focused on these two constructs as crucial factors contributing to the acceptance of technology and the behavioral intention to use it (Al Kurdi et al., 2020).

It is well established in the literature that behavioral intent to use technology, such as social media sites, may explain its actual usage. However, in its application to higher education institutions, students' intention to use, and actual usage of social media sites are not always the same. We used YouTube as an example of social Dumpit and Fernandez International Journal

of Educational Technology in Higher Education (2017) media site and examined students' usage behavior using the Technology Acceptance Model (TAM) and incorporated additional constructs such as subjective norm, perceived playfulness, and Internet reliability speed.

Similarly, other studies have focused on the conceptual

model of TAM to achieve different objectives, such as investigating the motives behind using YouTube for procedure learning, the benefits of using YouTube as a tool for teaching and learning, the effect of ads on purchasing a service; and the influence of student social media usage on the acceptance of e-learning platforms (Alghizzawi et al., 2019).

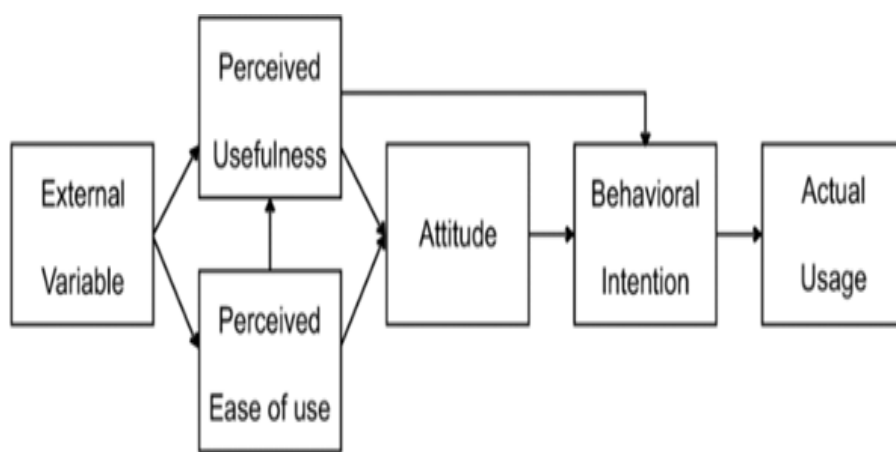


Fig.1. Technology Acceptance Model (TAM) Davis, 1989

The Technology Acceptance Model (Davis, 1989), or TAM, posits that there are two factors that determine whether a computer system will be accepted by its potential users: (1) perceived usefulness, and (2) perceived ease of use. The key feature of this model is its

emphasis on the perceptions of the potential user. That is, while the creator of a given technological product may believe the product is useful and user-friendly, it will not be accepted by its potential users unless the users share those beliefs.

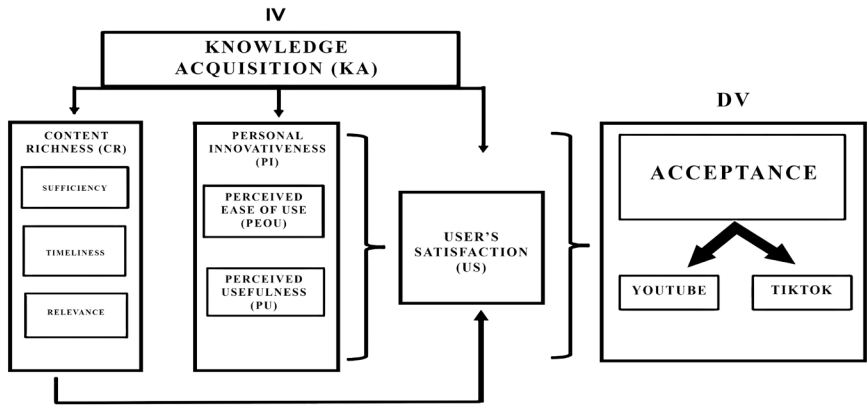


Figure 2. Schematic Diagram

Figure 2 illustrates the conceptual framework guiding this study, which centers on the acceptance of YouTube and TikTok for knowledge acquisition, assessed through key constructs including content richness, perceived usefulness, perceived ease of use, personal innovativeness, and user satisfaction. Content richness – comprising relevance, sufficiency, and timeliness – plays a critical role in influencing users' technology acceptance. Relevant and timely content enhances learning engagement, while sufficiency ensures conceptual completeness (Tung et al., 2009). Research shows that content richness positively correlates with perceived usefulness and satisfaction (De Wulf et al., 2006; Park et al., 2012), and that

outdated content can reduce the technology's perceived value. Personal innovativeness refers to an individual's willingness to adopt new technologies. Users with high innovativeness often display greater motivation and confidence, influencing both their perceptions of ease of use and usefulness (Serenko et al., 2008; Agarwal & Prasad, 1998; Ciftci et al., 2021). This trait also reflects risk-taking behavior and openness to experimenting with emerging digital tools (Cho et al., 2021). User satisfaction, defined as the emotional and cognitive response to using a technology, is a key determinant of continued use. Satisfaction is both a consequence of and contributor to perceptions of usefulness and ease of use (Liao et al., 2009; Alshurideh et al., 2012; Bavarsad et al.,

2013). When satisfaction is high, users are more likely to engage with the platform; conversely, dissatisfaction often results in disengagement (Teoo, 2011; Liaw, 2008).

Statement of the Problem

This study examined and compared the acceptance of YouTube and TikTok as platforms for knowledge acquisition among faculty and students in the School of Teacher Education at a state college. Anchored in the extended Technology Acceptance Model (TAM), the study assessed the influence of content richness, personal innovativeness, and user satisfaction on platform acceptance.

Specifically, the study sought to answer the following questions:

1. What were the demographic profiles of the respondents in terms of:
 - a. Age
 - b. Year level (for students)
 - c. Educational qualifications (for teachers)
2. What was the level of knowledge satisfaction with respect to content richness,

measured in terms of:

- a. Sufficiency
- b. Timeliness
- c. Relevance

3. What was the level of personal innovativeness of the respondents based on:

- a. Perceived Ease of Use (PEOU)
- b. Perceived Usefulness (PU)

4. What was the overall level of user satisfaction in using YouTube and TikTok for educational purposes?

5. Were there significant differences in knowledge satisfaction (content richness) based on respondents' profiles?

3.0 Method

Research Design

This study employed a quantitative cross-sectional design, which involved collecting data from faculty and students at a single point in time to investigate their acceptance and use of TikTok and YouTube as platforms for educational engagement. A cross-sectional approach is appropriate for examining relationships between variables without

influencing them (Thomas, 2022). A self-administered survey questionnaire served as the primary data collection tool, targeting participants from a higher education institution's teacher education program.

Research Locale

The study was conducted in a tertiary institution in Northern Mindanao, offering undergraduate and professional programs in education and related disciplines. The site was selected due to the active use of digital learning platforms among faculty and students in the teacher education unit, providing a suitable context for examining social media's role in knowledge acquisition through YouTube and TikTok.

Sampling Procedure

The study involved 263 participants, comprising 21 faculty members and 242 students. Faculty respondents were selected through total enumeration, while purposive sampling was used for students. As defined by Thomas (2022), purposive sampling enables researchers to select participants based on specific characteristics relevant to the study—in this case, the active use of TikTok and YouTube for academic content.

Research Instrument

A researcher-designed Likert-scale questionnaire was used, consisting of four parts: (1) demographic profile, (2) content richness (sufficiency, relevance, timeliness), (3) personal innovativeness (perceived ease of use and usefulness), and (4) user satisfaction. The 5-point scale followed the original design by Rensis Likert (2017), ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Separate versions were created for faculty and students to ensure contextual relevance.

Three domain experts were consulted to assess the content and face validity of the instrument. Suggestions were incorporated to enhance item clarity and contextual relevance. The instrument's reliability was tested using Cronbach's Alpha, ensuring internal consistency across items.

Data Collection Procedure

Permission was secured from the administration and a close coordination with the guidance office was conducted to identify eligible participants. Students were approached respectfully, informed about the purpose of the research, and asked for their consent. Upon agreement, questionnaires

were distributed and collected after completion. All data were reviewed, organized, and submitted for statistical analysis.

Data Analysis

To address the research objectives and test the hypotheses, the collected data were subjected to both descriptive and inferential statistical analysis. Descriptive statistics—including frequency distributions, percentages, and measures of central tendency such as the mean—were used to profile the respondents based on age, year level (for students), and educational qualification (for faculty), as well as to summarize their levels of content richness, personal innovativeness, and user satisfaction (Field, 2018; Creswell & Creswell, 2018).

To examine the predictive relationships and significant differences among variables—such as acknowledged satisfaction, perceived

usefulness, and perceived ease of use—independent samples t-tests and one-way Analysis of Variance (ANOVA) were employed. These inferential techniques are appropriate for comparing group means and identifying statistically significant differences across categorical variables (Gravetter & Wallnau, 2020).

Ethical Considerations

This study adhered to ethical protocols outlined by Bryman and Bell (2007). Key ethical principles included voluntary participation, informed consent, anonymity, and confidentiality. Participants were informed of their right to withdraw at any time without consequence. No form of coercion or deception was employed. Disclosure of the study’s purpose, risks, and benefits was clearly stated prior to participation.

4.0 Results and Discussion

Profile of the respondents in terms of Age, Year Level for students, and Educational Qualifications for teachers

This section analyzes the various demographic characteristics of the respondents.

Profile	Count	Percent
Age		
below 18	2	0.82%
18-20	111	45.86%
21-23	104	42.97%
24-26	16	6.61%
27 and above	9	3.71%
Year Level (Students)		
First Year	85	35.12%
Second Year	39	16.11%
Third Year	31	12.80%
Fourth Year	87	35.95%
Total	242	100%

Table 1.1 *Profile of Students*

As shown in table 1 above, among 242 students participated in this study, whereas in students, 2 (0.82%) where below 18 years old, 111 (45.86%) where 18 to 20 years old, 104 (42.97%) where 21 to 23 years old, 16 (6.61%) where 24 to 26 years old and 9 (3.71%) where 27 years old and above. The larger category of students came from the age of 18 to 20 years old. The year level of students who participated in the study were, 85 (35.12%) in the First Year, 39 (16.11%) in the Second Year, 31 (12.80%) in Third Year, and 87 (35.95%) in Fourth Year. The larger portion of students belongs to Fourth Year followed by First Year.

According to statistics, 85% of TikTok users are under the age of 18, and a high proportion of them are college students. Moreover, TikTok had more than 26 million college student users, accounting for 80 percent of all college students. Therefore, short videos on TikTok are developing rapidly and exerting a profound influence on college students, which has great research value (Liang 2023). On the other hand, most of the users of YouTube are between 18-34 ages. According to statistics published by YouTube, people watch over one billion hours of video in a day via YouTube (YouTube, 2020).

Profile	Count	Percent
Age		
below 25	4	19.04%
25-28	7	33.33%
29-31	3	14.28%
32 and above	7	33.33%
Educational Qualification		
Baccalaureate	8	38.08%
Masters	12	57.14%
Doctors	1	4.76%
Total	21	100%

Table 1.2 *Profile of Teachers*

Based on the table on Teacher's profile, 4 (19.04%) were below 25 years old, 7 (33.33%) were 25 to 28 years old, 3 (14.28%) were 29 to 31 years old and 7 (33.33%) were 32 years old and above. The larger portion of teachers

who participated came from the age of 25 to 28 and 34 and above. Also, on the Educational Qualification of Teachers who participated in the study were, 8 (38.08%) graduated with a Baccalaureate degree,

12 (57,14%) graduated with a Master's Degree, and lastly, 1 (4.76%) where Graduated their Doctor's degree. Many faculty use social media sites for both personal and professional reasons, and a somewhat smaller proportion also believe that social media sites have a place within their courses. There is an interesting age pattern among the 41 percent of teaching faculty who report "monthly or more frequent" social media use in their classes. Unlike the patterns observed for personal use and professional use of social media, the pattern of teaching used by age group does not show the youngest faculty being in the lead. Faculty in the two middle age groups (25 to 29 and 30 to 40) both have higher rates of teaching usage than the youngest faculty members (Seaman, 2013).

Table 2. Level of knowledge satisfaction in Content Richness (CR)

TEACHERS				CONTENT RICHNESS	STUDENTS			
TIKTOK		YOUTUBE		ITEMS	YOUTUBE		TIKTOK	
Remarks	Mean	Remarks	Mean	A. Sufficiency	Mean	Remarks	Mean	Remarks
Neutral	3.05	Very High	4.29	1. This app provides students with sufficient content for knowledge acquisition, sharing, and application.	4.35	Very High	3.21	Neutral
Neutral	2.76	Very High	4.24	2. This app provides reliable information.	4.15	High	3.02	Neutral
Neutral	3.14	High	4.19	3. This app provides realistic Video Quality.	4.07	High	3.32	Neutral
Neutral	2.90	Very High	4.29	4. This app provides qualified and necessary skills to be acquired.	4.17	High	3.27	Neutral
Neutral	3.14	High	4.19	5. This app provides necessary literacy skills to be acquired	4.10	High	3.26	Neutral
Neutral	3.10	High	4.19	6. This app provides necessary life skills to be acquired	4.10	High	3.29	Neutral
Neutral	2.95	Very High	4.38	7. This app provides suitable educational videos for everyone.	4.59	Very High	3.15	Neutral
Neutral	3.05	High	4.14	8. This app is appropriate for addressing the special needs based on learning competencies set.	4.21	High	3.07	Neutral
Neutral	3.01	Very High	4.24	Overall Mean of Sufficiency	4.22	High	3.20	Neutral
B. Timeliness								
Neutral	3.24	Very High	4.48	1. This app has the latest educational information that can be shared and accessed.	4.22	High	3.40	Neutral
High	3.57	Very High	4.43	2. This app provides updated version for timeliness of content	4.11	High	3.38	Neutral
Neutral	3.29	Very High	4.24	3. This app provides automatic restrictions for inappropriate contents	3.94	High	3.35	Neutral
Neutral	3.29	High	4.14	4. This app has multi-dimension accuracy	4.05	High	3.21	Neutral
High	4.05	Very High	4.24	5. This app provides latest trends in the world	4.19	High	4.07	High
High	3.49	Very High	4.30	Overall Mean of Timeliness	4.20	High	3.48	High

C. Relevance									
Neutral	3.05	Very High	4.29	1. This app provides me with relevant topics.	4.36	Very High	3.24	Neutral	
Neutral	3.14	Very High	4.48	2. This app suggests relevant videos related to my interest.	4.20	High	3.42	Neutral	
Neutral	3.05	Very High	4.24	3. This app provides applicable content in acquiring knowledge	4.36	Very High	3.27	Neutral	
High	3.19	Very High	4.24	4. This app provides filter feature for ease video searching	4.14	High	3.55	High	
High	3.14	Very High	4.48	5. This app provides contents/videos applicable for knowledge acquisition	4.31	Very High	3.49	High	
Neutral	3.11	Very High	4.34	Overall Mean of Relevance	4.27	Very High	3.40	Neutral	
Neutral	3.17	Very High	4.29	OVERALL MEAN	4.20	High	3.33	Neutral	

Hypothetical Mean Range:1.00–1.80= *Very Low*; 1.81–2.61= *Low*; 2.62–3.42= *Neutral*; 3.43–4.23= *High*; 4.24–5.00= *Very High*

Table 2 compares students' and teachers' levels of knowledge satisfaction across three components of content richness—sufficiency, timeliness, and relevance—for TikTok and YouTube. Overall, YouTube outperformed TikTok across all categories and respondent groups, with most items rated from *high* to *very high* in knowledge satisfaction, particularly by teachers. Among students, timeliness in TikTok received the highest satisfaction rating ($M = 3.48$, *High*), suggesting that its rapid content updates and algorithm-driven feeds offer timely information (Rahimullah, 2022). This resonates with recent findings that TikTok

engages students through short-form videos that break learning monotony and cater to timely trends (Ngilangil, 2022). However, sufficiency in TikTok scored the lowest ($M = 3.20$, *Neutral*), indicating doubts about the depth and completeness of information. Teachers similarly rated TikTok lower across all CR components. Their lowest satisfaction came from sufficiency ($M = 3.01$, *Neutral*), reinforcing the view that while TikTok may provide engaging content, it lacks the structured reliability essential for formal instruction (Paksoy, 2022; Yu, 2019). In contrast, YouTube received very high satisfaction scores, particularly among

teachers, who rated both videos (Snelson, 2018). timeliness and relevance at M = 4.48. Students likewise rated YouTube highly in sufficiency (M = 4.22) and relevance (M = 4.27), consistent with its role as a trusted educational platform with extensive, accessible, and visually engaging materials (Esmari, 2022). However, students rated timeliness the lowest among the three dimensions (M = 4.20), potentially due to challenges in filtering outdated or irrelevant

videos (Snelson, 2018). YouTube’s consistent high ratings affirm its utility for both learners and educators, particularly in delivering in-depth, relevant content in formal learning environments (Chhabra, 2012; Soffar, 2015). While TikTok presents opportunities for innovative, quick learning moments, especially among younger users, its educational limitations suggest it should be used as a complementary tool rather than a primary resource.

Table 3.1. *Personal Innovativeness (PI) of Students and Teachers*

STUDENTS				TEACHERS				
TIKTOK		YOUTUBE		ITEMS	YOUTUBE		TIKTOK	
Remarks	Mean	Remarks	Mean		Mean	Remarks	Mean	Remarks
High	3.51	High	4.19	1. As a student, I am ready to use this app as new technology.	4.38	Very High	3.33	Neutral
High	3.51	High	4.17	2.As a teacher, I accept the innovativeness of this app.	4.38	Very High	3.48	High
Neutral	3.36	High	3.47	3. I am usually hesitant to use this app as new technology.	3.33	High	3.52	High
Neutral	3.17	Very High	4.41	4. Acquiring knowledge that I need from the application is easy.	4.48	Very High	3.38	Neutral
High	3.45	High	4.03	5. I feel completely engaged when I use this app.	4.52	Very High	3.10	Neutral
Neutral	2.82	High	3.75	6. I think this app keeps me more focused.	4.19	High	2.71	Neutral
Neutral	3.12	High	3.97	7. The application is safe and conducive to use.	4.19	High	3.14	Neutral
Neutral	2.93	High	3.79	8. The application is suitable for young users.	4.05	High	3.05	Neutral
High	3.75	Very High	4.34	9. The application is easy to download	4.57	Very High	3.67	High
Neutral	3.11	High	3.80	10. The application is safe and conducive to use.	4.43	Very High	3.43	High
Neutral	3.27	High	3.99	OVERALL MEAN	4.25	Very High	3.28	Neutral

Hypothetical Mean Range:1.00–1.80= Very Low; 1.81–2.61= Low; 2.62–3.42= Neutral; 3.43–4.23= High; 4.24–5.00= Very High

The table below shows the mean, description and remarks of the results accumulated among 242 students and 21 teachers who participated in the study. This table tackled the Personal Innovativeness (PI) of the students in terms of Perceived Ease of Use (PEOU).

The highest obtained mean in student's perception about TikTok is (WM=3.75) while the highest obtained mean in teacher's perception about TikTok is (WM=3.67) indicating that for the students and teachers the application Tiktok is easy to download. According to Kirchhoff (2021) the app is free to download on Apple and Google Play stores. During the first quarter of 2020, TikTok had more than 315 million installs across the Apple and Google Play app stores, which was the most downloads ever for an app in a single quarter (Briskman, 2020). This was a significant increase from the 219 million installs during the fourth quarter of 2019 (Statista Research Department, 2022b). During the first quarter of 2022, TikTok was the most downloaded app worldwide (Sensor Tower, 2022). In YouTube the highest obtained mean for students is 4.34 and 3.67 for teachers implying that the application YouTube is also easy to download just like the Tiktok app. YouTube has continued to grow and has become a very popular video platform where

people can enjoy various types of videos, can download them for free, and even share them with friends (Chau, 2010). On the YouTube platform, there are various types of video content that can be watched, for example about music, entertainment, people and blogs, films and animation, and certainly about education (Almurashi, 2016). In addition, the strengths of regulated learning using YouTube are YouTube provides plentiful learning materials, the ease to use YouTube, flexible of time and place using YouTube (Putri et al., 2020)

Furthermore, the lowest obtained mean of Tiktok from the students is (WM=2.82) while the lowest obtained mean of Tiktok from the teachers is (WM=2.71), both indicating that they can't keep their focus in using TikTok. In the findings of Lin et al. (2022), the students confront several challenges when using TikTok and one of them is the inability to concentrate due to the distractions from other videos. The more that someone found themselves going on TikTok each day, the more they lost track of time on TikTok. These findings show that TikTok can impact college students' abilities to be able to pay attention in class and get their schoolwork done, so students have the possibility of doing worse in a class if they have and use the app TikTok (Mekler, 2021). Some teachers

are also concerned that instead of promoting learning, allowing TikTok in the classroom is nothing more than a distraction. Those who have integrated the platform successfully note that they do take measures to limit the distraction factor (K12 LIFTOFF, 2020). TikTok can captivate anyone who is using the app and can cause something like an addiction, where you do not want to get off the app. The more time per week that people spend on social media, the more they become addicted to social media (Ciplak, 2020). In Youtube, as shown in the table, the lowest obtained mean from students is (WM=3.47) while for the teachers is (WM=3.33). It both indicates that teachers and students are not hesitant in using the YouTube application as new technology. The availability of free, high-quality, and informative videos online on platforms like YouTube is an intuitive addition to modern learning environments. Educators, students, and parents all agree on the effectiveness of online videos as a teaching-learning tool. The use of YouTube videos in class can be handy for teachers and fun for learners. Students are more engaged with visually motivating activities and are more likely to concentrate when watching videos rather than reading walls of text in the books and notes (Arizona State University, 2022).

Table 3.2 Personal Innovativeness (PI) of Students and Teachers

STUDENTS				TEACHERS				
TIKTOK		YOUTUBE		ITEMS	YOUTUBE		TIKTOK	
Remark s	Mean	Remark s	Mean	I. Perceived Usefulness (PU)	Mean	Remark s	Mean	Remark s
Neutral	3.10	High	4.12	1. As a student, I find the application useful in my daily life.	4.48	Very High	2.76	Neutral
Neutral	3.06	Very High	4.26	2. The application is very applicable in my learning styles.	4.38	Very High	2.90	Neutral
Neutral	3.18	High	4.15	3. The application contains videos that achieve my expectations.	4.33	Very High	2.90	Neutral
Neutral	3.18	Very High	4.26	4. The application is very workable and feasible to use for my needs.	4.24	Very High	3.00	Neutral
Neutral	3.06	Very High	4.33	5. The application gives worth to my teaching/learning approach	4.33	Very High	2.95	Neutral
Neutral	3.03	Very High	4.28	6. The application provides me adequate and quality asynchronous support in online teaching.	4.38	Very High	2.86	Neutral
Neutral	2.81	High	4.21	7. As a student, I find the application useful in creating assignments.	4.38	Very High	2.86	Neutral
Neutral	3.02	Very High	4.35	8. The application served useful purpose	4.33	Very High	3.05	Neutral
Neutral	3.35	Very High	4.34	9. The application is useful in finding unique ideas quickly.	4.38	Very High	3.19	Neutral
Neutral	3.09	Very High	4.26	OVERALL MEAN	4.36	Very High	2.94	Neutral

Hypothetical Mean Range:1.00–1.80= Very Low; 1.81–2.61= Low; 2.62–3.42= Neutral; 3.43–4.23= High; 4.24–5.00= Very High

Table 3.2 presents the perceived usefulness (PU) of TikTok and YouTube among students and teachers, highlighting notable differences in platform acceptance. YouTube consistently received higher ratings across all items, with both students ($M = 4.36$, *Very High*) and teachers ($M = 4.36$, *Very High*) affirming its practical value in academic settings. Students identified YouTube as particularly helpful for serving useful purposes ($M = 4.35$), echoing findings by D'Aquila et al. (2019) that instructor-curated YouTube content can enhance learning outcomes and exam preparedness.

Teachers reported the highest usefulness score for YouTube in relation to daily instructional needs ($M = 4.48$), consistent with Sharma and Sharma's (2021) conclusion that YouTube enriches lesson delivery and conceptual understanding. These findings support YouTube's continued relevance as a robust educational resource. In contrast, TikTok was rated Neutral in usefulness

by both students ($M = 3.09$) and teachers ($M = 2.94$). Students found TikTok most helpful in generating unique ideas ($M = 3.35$), consistent with Jumiadini and Saidah (2022), who noted the platform's creative potential in content delivery. However, its use in completing assignments received the lowest score ($M = 2.81$), reflecting hesitation about its academic credibility and structure.

Teachers rated TikTok's daily utility lowest ($M = 2.76$), indicating limited integration into formal teaching practices. While TikTok can serve as a creative outlet and tool for science communication (Radin & Light, 2022), concerns remain about distractions, misinformation, and its appropriateness in classroom contexts (Langreo, 2022). Overall, the findings suggest that while TikTok fosters creativity and informal learning, YouTube remains the more widely accepted and functionally integrated platform for formal academic use, both for students and educators.

Table 4.1 YouTube and TikTok User's Satisfaction

STUDENTS				USER'S SATISFACTION ITEMS	TEACHERS			
TIKTOK		YOUTUBE			YOUTUBE		TIKTOK	
Remarks	Mean	Remark s	Mean		MEAN	Remark s	Mean	Remarks
<i>Neutral</i>	3.30	<i>Very High</i>	4.26	1. Compared with other video application, I am more than satisfied with this application	4.52	<i>Very High</i>	3.10	<i>Neutral</i>

Neutral	3.37	Very High	4.26	2. After using the app, I feel very satisfied.	4.38	Very High	3.00	Neutral
Neutral	3.07	High	4.13	3. My need is meet when using this app.	4.48	Very High	3.05	Neutral
Neutral	3.02	High	4.02	4. I think using this application is a wise decision	4.43	Very High	3.00	Neutral
Neutral	3.35	Very High	4.26	5. I feel much comfortable using this app.	4.52	Very High	3.19	Neutral
High	3.70	Very High	4.35	6. I love using this app in watching videos	4.57	Very High	3.38	Neutral
Neutral	3.16	Very High	4.29	7. This app met my expectations in knowledge acquisition	4.33	Very High	3.05	Neutral
High	3.38	Very High	4.24	8. I am delighted to be using this app.	4.48	Very High	3.05	Neutral
Neutral	3.20	Very High	4.39	9. I am well provided with knowledge that I want to know.	4.33	Very High	2.95	Neutral
High	3.35	Very High	4.36	10. I am convinced that I can acquire knowledge through this app.	4.52	Very High	3.81	High
Neutral	3.29	Very High	4.26	OVERALL MEAN	4.46	Very High	3.16	Neutral

Hypothetical Mean Range:1.00–1.80= *Very Low*; 1.81–2.61= *Low*; 2.62–3.42= *Neutral*; 3.43–4.23= *High*; 4.24–5.00= *Very High*

Table 4.1 compares the satisfaction levels of students and teachers regarding their use of TikTok and YouTube for educational purposes. The data reveal that both cohorts reported significantly higher satisfaction with YouTube than with TikTok. Students rated YouTube with a *Very High* mean satisfaction score ($M = 4.26$), while TikTok received a *Neutral* mean ($M = 3.29$). A similar pattern was observed among teachers, who rated YouTube *Very High* ($M = 4.46$) and TikTok *Neutral* ($M = 3.16$).

Among students, the item “I love using this app in watching videos” was the most positively rated on TikTok ($M = 3.70$), consistent with Herlisya et al. (2022), who described TikTok as a culturally dominant platform among millennials

during the pandemic due to its engaging short-form content. However, the lowest student rating was for the item “I think using this application is a wise decision” ($M = 3.02$), possibly reflecting concerns around its time-consuming nature and its perceived lack of academic depth (Nichita, 2021).

On the other hand, YouTube received the highest student rating on the item “I am well provided with knowledge that I want to know” ($M = 4.39$). This supports Dubovi’s (2020) claim that YouTube serves as an effective tool for informal learning and knowledge acquisition, although the depth and pedagogical rigor of some content may vary.

For teachers, TikTok received its highest satisfaction

rating for “I am convinced that I can acquire knowledge through this app” ($M = 3.81$), echoing findings from Pratiwi et al. (2021), who emphasized TikTok’s ease of use and educational flexibility. Nonetheless, most TikTok-related items for teachers remained in the Neutral range, suggesting cautious adoption and perceived limitations in instructional applicability.

In contrast, all items related to YouTube received Very High ratings from teachers, with the highest score attributed

to “Compared with other video applications, I am more than satisfied with this application” ($M = 4.52$). This supports Maynard’s (2021) assertion that YouTube is a preferred platform for self-motivated learners due to its diverse content and accessibility. In sum, while TikTok shows promise as an innovative educational tool, YouTube remains the more trusted and widely endorsed platform for academic satisfaction among both students and faculty.

Table 5. Significant difference on the knowledge satisfaction in terms of content richness to the profiles of the respondents.

A. YOUTUBE

Table 5.1 Test of significant differences on the knowledge satisfaction in terms of content richness according to Age

Variable	DF	Adj SS	Adj MS	f-value	p-value	Interpretation
Age	4	3.659	0.9146			
Error	237	79.166	0.3340	2.74	0.029	Significant
Total	241	82.824				

*. significant at $\alpha = 0.05$

There is a significant difference among the 4 age groups. It means each of them may have different knowledge satisfaction in terms of content richness on YouTube. There are several factors that can cause differences in the types of content and audiences on YouTube across different age groups. These can include: Technological

literacy: Younger age groups tend to be more technologically literate and comfortable with using the internet and social media, which can make them more likely to use YouTube. Content preferences: Different age groups may have different interests and preferences for the types of content they watch on YouTube. For example, younger

age groups may be more likely to watch gaming and vlogging content, while older age groups may be more interested in educational or news-related content. (Matthew S. Eastin, 2022)

Table 5.2 Test of significant differences in the knowledge satisfaction in terms of content richness according to Year Level

Variable	DF	Adj SS	Adj MS	f-value	p-value	Interpretation
Year Level	3	0.171	0.0575			
Error	238	82.6529	0.34728	0.16	0.920	Not
Total	241	82.8241				Significant

*. significant at $\alpha = 0.05$

The results indicated no statistically significant difference, $F(3, 238) = 0.16$, $p = .920$, suggesting that students across year levels reported similar levels of satisfaction with YouTube’s educational content.

This finding implies that YouTube’s appeal and utility as a learning resource may transcend academic year level, likely due to its intuitive interface, wide availability, and extensive repository of accessible educational content. As noted by Smith (2018), YouTube is inherently user-friendly and caters to individuals with diverse educational backgrounds, offering content that is relevant and understandable across varying levels of academic exposure.

B. TIKTOK

Table 5.3 Test of significant differences on the knowledge satisfaction in terms of content richness according to Age

Variable	DF	Adj SS	Adj MS	f-value	p-value	Interpretation
Age	4	4.428	1.1071			
Error	273	122.547	0.5171	2.14	0.076	Not
Total	241	126.975				Significant

*. significant at $\alpha = 0.05$

An analysis of variance (ANOVA) was performed to determine whether knowledge satisfaction in terms of content richness on TikTok differed significantly across five age groups. The results showed no statistically significant difference, $F(4, 273) = 2.14$, $p = .076$, indicating that users of various age groups demonstrated relatively similar levels of satisfaction regarding TikTok's content richness.

This finding aligns with prior reports suggesting that TikTok has achieved broad age-range appeal, with no

substantial variations in user engagement or content utility across age demographics. As highlighted by Forbes (2021), TikTok's user base spans teens to older adults, all of whom utilize the platform in similar ways for content consumption and sharing. Business Insider (2021) and TechCrunch (2021) likewise emphasized that TikTok's unique blend of short-form video and interactive features attracts a demographically diverse audience, making it a cross-generational tool for learning, entertainment, and self-expression.

Table 5.3 Test of significant differences on the knowledge satisfaction in terms of content richness according to Year Level

Variable	DF	Adj SS	Adj MS	f-value	p-value	Interpretation
Year Level	3	5.917	1.9723			
Error	238	121.058	0.5086	3.88	0.010	Significant
Total	241	126.975				

*. significant at $\alpha = 0.05$

The results revealed a statistically significant difference, $F(3, 238) = 3.88$, $p = .010$, indicating that students across different year levels reported varying degrees of knowledge satisfaction related to TikTok's content richness.

This finding suggests that academic progression influences how students perceive the value and depth

of information obtained from TikTok. As supported by prior research, users with higher levels of educational attainment tend to engage with social media platforms for more professional, informational, and developmental purposes, whereas users at lower educational levels often utilize these platforms primarily for

entertainment and leisure (Social Media Today, 2021; Digital Trends, 2020). These behavioral patterns underscore the evolving nature of media literacy and digital content engagement as learners advance through academic levels.

5.0 Conclusion and Recommendation

This study affirmed the significant role that TikTok and YouTube play in digital knowledge acquisition among faculty and students in teacher education. Grounded in the extended Technology Acceptance Model (TAM), the findings revealed that while both platforms are widely accepted, they serve distinct educational functions shaped by users' age, experience, and content needs.

TikTok was notably valued for its timeliness and ease of use, particularly among students who appreciated its short-form, engaging videos that support immediate learning and reinforce concepts through repetition. Its informal, user-generated nature makes it suitable for microlearning and fostering motivation, though its depth may be limited.

Conversely, YouTube was consistently perceived as more sufficient and pedagogically robust, especially by teachers who rely on structured, in-depth content aligned with academic standards. It was preferred for

comprehensive explanations, tutorials, and professional development. Both platforms were rated highly for ease of use, but differences in perceived usefulness and satisfaction varied by demographic profiles—highlighting that technology acceptance is both personal and context-dependent.

Given these insights, educators should strategically integrate both platforms into instructional design. YouTube can support long-form content and structured lessons, while TikTok can be harnessed for quick reviews, creative student outputs, and supplemental learning. Students should be guided to reflect critically on their use of these platforms—not merely for entertainment but as purposeful learning tools. Similarly, parents can support students' learning by understanding how social platforms shape their digital engagement and by encouraging balanced screen use.

Institutions are encouraged to formalize digital pedagogy policies that include training on social media integration, content evaluation, and ethical guidelines. Future research may expand on this work by using mixed methods or exploring cross-disciplinary and cross-cultural applications of these platforms in educational settings.

Ultimately, YouTube and TikTok are not just digital distractions—they are dynamic learning spaces that, when used wisely, can transform traditional educational paradigms and foster deeper, more flexible learning experiences in the digital age.

REFERENCES

- Akram, W., & Kumar, R. (2017). A study on positive and negative effects of social media on society. *International Journal of Computer Sciences and Engineering*, 5(10), 351-354. <https://doi.org/10.26438/ijcse/v5i10.351354>
- Al Kurdi, B., Alshurideh, M., & Salloum, S. A. (2020). Investigating a theoretical framework for e-learning technology acceptance. *International Journal of Electrical and Computer Engineering (IJECE)*, 10(6), 6484-6496
- Al Kurdi, B., Alshurideh, M., Nuseir, M., Aburayya, A., & Salloum, S.A. (n.d.). The Effects of Subjective Norm on the Intention to Use Social Media Networks: An Exploratory Study Using PLS-SEM and Machine Learning Approach.
- Alghizzawi, M., Habes, M., Salloum, S. A., Ghani, M. A., Mhamdi, C., & Shaalan, K. (2019). The effect of social media usage on students'e-learning acceptance in higher education: A case study from the United Arab Emirates. *International Journal of Information Technology and Language Studies*, 3(3).
- Al-Marroof, R.S., Alfaisal, A. M., & Salloum, S. A. (2020). Google glass adoption in the educational environment: A case study in the Gulf area. *Education and Information Technologies*. <https://doi.org/10.1007/s10639-020-10367-1>
- Almurashi, W. A. (2016). The Effective Use of YouTube Videos for Teaching English Language in Classrooms as Supplementary Material at Taibah University in Alula. *International Journal of English Language and Linguistics Research*.
- AlQudah, A. A., Salloum, S. A., & Shaalan, K. (2021). The Role of Technology Acceptance in Healthcare to Mitigate COVID-19 Outbreak. *Emerging Technologies During the Era*

- of COVID-19 Pandemic, 348, 223. https://doi.org/10.1007/978-3-030-67716-9_14
- Alshurideh, M., Masa'deh, R., & Alkurdi, B. (2012). The effect of customer satisfaction upon customer retention in the Jordanian mobile market: An empirical investigation. *European Journal of Economics, Finance and Administrative Sciences*, 47(12), 69-78.
- Alsuraihi, A. K., Almaqati, A. S., Abughanim, S. A., & Jastaniah, N. A. (2016). Use of social media in education among medical students in Saudi Arabia. <https://doi.org/10.3946/kjme.2016.40>
- Arizona State University (2022) Benefits of Using YouTube For Your Online Education. <https://web.asu.edu/newblog/benefits-using-youtube-your-online-education>
- Atikuzzaman, M. (2021). Use of social media in academic activities by LIS students: A study in a public university in bangladesh. *Library Philosophy and Practice*, 0_1,1-16. <https://www.proquest.com/scholarly-journals/use-social-media-academic-activities-lis-students/docview/2619745172/se-2>
- Azman, A. N., Ahmad Rezal, N. S., Zulkeifli, N. Y., Mat, N. A. S., Saari, I., & Ab Hamid, A. S. (2021). Acceptance of TikTok on the Youth towards Education Development. *Borneo International Journal EISSN 2636-9826*, 4(3), 19-25. Retrieved from <http://majmuah.com/journal/index.php/bij/article/view/98>
- Barry, D. S., Marzouk, F., Chulak-Oglu, K., Bennett, D., Tierney, P., & O'Keeffe, G. W. (2016). Anatomy education for the YouTube generation. *Anatomical sciences education*, 9(1), 90-96.
- Bautista, P. S., Alonso-López, N., & Giacomelli, F. (2021). Fact-checking in TikTok. Communication and narrative forms to combat misinformation. *Revista Latina de Comunicación Social*, (79), 87-112.
- Bavarsad, B., & Mennatyan, M. A. (2013). A Study of the effects of technology acceptance factors on users' satisfaction of E-government services. *World Applied Pro-*

- gramming, 3(5), 190-199.
- Boyd, D., & Ellison, N. B. (2007). 'Social network sites: definition, history, and scholarship'. *Journal of Computer-Mediated Communication*, 13: 210-230. <https://doi.org/10.1111/j.1083-6101.2007.00393.x>
- Briskman, J. (2020) Exploring COVID-19's Impact on the Global App Ecosystem, Sensor Tower. Sensor Tower's Q1 Data Digest. <https://sensortower.com/blog/q1-2020-data-digest>
- Brown, L. "Tips for Teachers Using YouTube in Classroom." Filmora, <https://filmora.wondershare.com/video-editing-tips/tips-for-using-youtube-in-classroom.html>.
- Cayari, C. (2018). Connecting music education and virtual performance practices from YouTube. *Music Education Research*, 20(3), 360-376.
- Chaty S. Lin¹, Rifki Irawan², Septian Aji Permana (2022) Problems Faced by the EFL Students in Implementing TikTok as a Speaking Learning Medium. https://doi.org/10.2991/978-2-494069-39-8_28
- Chau, C. (2010). YouTube as a participatory culture. *New Directions for Youth Development*. <https://doi.org/10.1002/yd.376>
- Chen, B., & Bryer, T. (2012). Investigating instructional strategies for using social media in formal and informal learning. *The International Review of Research in Open and Distributed Learning*, 13(1), 87-104. <https://doi.org/10.19173/irrodl.v13i1.1027>
- Cho, J., Cheon, Y., Jun, J. W., & Lee, S. (2021). Digital advertising policy acceptance by out-of-home advertising firms: a combination of TAM and TOE framework. *International Journal of Advertising*, 1-19.
- Ciftci, O., Berezina, K., & Kang, M. (2021). Effect of Personal Innovativeness on Technology Adoption in Hospitality and Tourism: Meta-analysis. In *Information and Communication Technologies in Tourism 2021* (pp. 162-174). Springer.
- Cihangir, H. H., & Çoklar, A. N. (2021). Using YouTube as an Education Environment. *Examining Follower Views*, ISSN, 2602-2885.

- <http://itejournal.com/>
- Ciplak, E. (2020). Variables Predicting Social Media Addiction: Narcissism, Happiness and Average Weekly Time Spent On Social Media. *International Online Journal of Educational Sciences*, 12(5), 48-58. <https://doi-org.libserv-prd.bridgew.edu/10.15345/ijoes.2020.05.005>
- Clifton, A., & Mann, C. (2011). Can YouTube enhance student nurse learning? *Nurse education today*, 31(4), 311-313.
- Cornejo, R., Tentori, M., & Favela, J. (2013). Enriching in-person encounters through social media: A study on family connectedness for the elderly. *International Journal of Human-Computer Studies*, 71(9), 889-899. <https://doi.org/10.1016/j.ijhcs.2013.04.001>
- D'Aquila, J.M., Wang, D., Mattia, A. (2019) Are instructor generated YouTube videos effective in accounting classes? A study of student performance, engagement, motivation, and perception. *Journal Accounting Education*. <https://doi.org/10.1016/j.jaccedu.2019.02.002>
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 319-340. <https://open.library.okstate.edu/foundation-sofeducationaltechnology/chapter/2-technology-acceptance-model/>
- De Arruda, H. F., Silva, F. N., Costa, L. D. F., & Amancio, D. R. (2017). Knowledge acquisition: A Complex networks approach. *Information Sciences*, 421, 154-166.
- De Wulf, K., Schillewaert, N., Muylle, S., & Rangarajan, D. (2006). The role of pleasure in web site success. *Information & Management*, 43(4), 434-446.
- Dumpit & Fernandez *International Journal of Educational Technology in Higher Education* (2017) 14:5 DOI 10.1186/s41239-017-0045-2
- Ebied, M. M. A., Kahouf, S. A. A. S., & Rahman, S. A. A. (2016). Effectiveness of using YouTube in enhance the learning of computer in education skills in najran university. *International Interdisciplinary Journal of Education*, 5(3), 619-625.
- eduloco.com (2022) <https://>

- www.eduloco.com/blog/tiktok-not-just-another-silly-app-but-an-actual-learning-tool/
- Encyclopædia Britannica, inc. (n.d.). Rensis Likert. Encyclopædia Britannica. Retrieved September 11, 2022, from <https://www.britannica.com/biography/Rensis-Likert>
- Eva Fachriyah, R. D. M., Badriyah, E., & Perwitasari, (2020) Using YouTube to Evaluate and Practice English Skills: A Case Study of Blended Learning. <https://doi.org/10.2991/assehr.k.200303.007>
- Ezeani CN & Igwesi U (2012) Using social media for dynamic library service delivery: The Nigeria experience. *Library Philosophy and Practice* (e-journal), 814, 1-9. <http://digitalcommons.unl.edu/cgi/view-content.cgi?article=2011&context=libphilprac>
- Feldkamp, J. (2021). The rise of TikTok: The Evolution of a social media platform during COVID-19. In *Digital responses to covid-19* (pp.73-85). Springer, Cham.
- Ferraris, M. C. D. (2014). How To YouTube: A Study on the Filipino Youth's Experience of YouTube, Unpublished Undergraduate Thesis, University of the Philippines, College of Mass Communication. <https://iskomunidad.upd.edu.ph/flipbook/viewer/?fb=2010-23763-MARIA-CE> View Thesis
- Foulger, T. S., Ewbank, A. D., Kay, A., Popp, S. O., & Carter, H. L. (2009). Moral spaces in MySpace: Preservice teachers' perspectives about ethical Issues in social networking. *Journal of Research on Technology in Education*, 42(1), 1-28. <https://doi.org/10.1080/15391523.2009.10782539>
- Fyfield, M., Henderson, M., & Phillips, M. (2021). Navigating four billion videos: teacher search strategies and the YouTube algorithm. *Learning, Media and Technology*, 46(1), 47-59.
- Gefen, D., & Straub, D. W. (2000). The relative importance of perceived ease of use in IS adoption: A study of e-commerce adoption. *Journal of the Association for Information Systems*, 1(1), 8.
- George, D. R., & Dellasega, C. (2011). Social media in

- medical education: two innovative pilot studies. *Medical Education*, 45(11), 1158-1159. <https://doi.org/10.1111/J.1365-2923.2011.04124.X>
- Goldstuck, A. (2012). Internet matters: The quiet engine of the South African economy. *World Wide Worx*. <https://hsf.org.za/publications/focus/focus-66/AGoldstuck.pdf>
- Guíñez-Cabrera, N., & Mansilla-Obando, K. (2022). Booktokers: Generating and sharing book content on TikTok. *Booktokers: Generar y compartir contenidos sobre libros a través de TikTok Comunicar*, 30(71), 113-123. <https://doi.org/10.3916/C71-2022-09>
- Han, M., & Zhang, X. (2020). Prospects for the advancement of the TikTok in the age of 5G communication. In *2020 13th CMI Conference on Cybersecurity and Privacy (CMI)-Digital Transformation-Potentials and Challenges (51275)* (pp. 1- 5). IEEE.
- Hasanah, U., & Pujiastuti, H. (2022). The Perception Of High School Students About Mathematics Learning Educational Content In Tiktok Applications. *Proximal: Jurnal Penelitian Matematika Dan Pendidikan Matematika*, 5(2), 30-39.
- Hayes, C., Stott, K., Lamb, K. J., & Hurst, G. A. (2020). "Making every second count": Utilizing TikTok and systems thinking to facilitate scientific public engagement and contextualization of chemistry at home.
- Holmes, K. & O'Loughlin, N. (2012). The experiences of people with learning disabilities on social networking sites. *British Journal of learning Disabilities*. 42(1). <https://doi.org/10.1111/bld.12001>
- Hosen, M., Ogbeibu, S., Giridharan, B., Cham, T., Lim, W. M., & Paul, J. (2021). Individual motivation and social media influence on student knowledge sharing and learning performance: Evidence from an emerging economy. <https://doi.org/10.1016/j.compedu.2021.104262>
- Huang, H. M. (2002). Toward constructivism for adult learners in on-line learning environ-

- ments. *Br J Educ Technol.* 2002;33:27-37. <https://doi.org/10.1111/1467-8535.00236>
- Hughes, G. (2009). Social software: New opportunities for challenging social inequalities in learning? *Learning, Media and Technology*, 34(4), 291-305. <https://doi.org/10.1080/17439880903338580>
- Inoue, M., Shimoura, K., Nagai-Tanima, M., & Aoyama, T. (2022). The relationship between information sources, health literacy, and COVID-19 knowledge in the COVID-19 infodemic: Cross-sectional online study in Japan. *Journal of Medical Internet Research*. <https://doi.org/10.2196/38332>
- Insorio, A. O., & Macandog, D. M. (2022). Video lessons via YouTube channel as mathematics interventions in modular distance learning. *Contemporary Mathematics and Science Education*, 3(1), ep22001.
- Internet in Saudi Arabia [Internet]. Communications and Information Technology Commission; c2011 [cited 2013 December 24]. <http://www.internet.sa/ar/internet-in-saudi-arabia/#more-98>.
- Jumiatini, O.T. & Saidah, Z. (2022). tempat mistis putri erika: pemanfaatan tiktok sebagai media promosi 'wisata mistis' di kota yogyakarta. *Bina sarana information*. <https://doi.org/10.31294/jc.v22i2.13232>
- Jung, I., & Lee, Y. (2015). YouTube acceptance by university educators and students: a cross-cultural perspective. *Innovations in Education and Teaching International*, 52(3), 243-253.
- K12 LEARNINGLIFTOFF. (2020). How Teachers and Students Are Using TikTok in the Classroom. <https://www.learningliftoff.com/tiktok-in-the-classroom/>
- Kaltura. (2019). Sixth Annual State of Video in Education 2019. *The State of Video in Education 2019-1*. <https://corp.kaltura.com/wp-content/uploads/2019/07/>.
- Khlaif, Z.N., & Salha, S. (2021). Using TikTok in Education: A Form of Micro-learning or Nano-learning? *Interdiscip J Virtual Learn Med Sci*. <https://doi.org/10.30476/>

- ijvlms.2021.90211.1087. Li, K.C., & Wong, B.T.M. (2020). Social Media in Higher Education: A Review of Their Uses, Benefits and Limitations. CTE 2020. Communications in Computer and Information Science, vol 1302. Springer, Singapore. https://doi.org/10.1007/978-981-33-4594-2_21
- Kirchhoff, D. (2022). More Tok on the Clock: Introducing longer videos on TikTok, TikTok Newsroom, <https://newsroom.tiktok.com/en-us/longer-videos>
- Kutu, J. O., & Kutu, F. I. (2022). The use of social media for academic purposes by postgraduate information studies students: a case of University of KwaZuluNatal South Africa. Library Philosophy and Practice (e-journal). 6917. <https://researchspace.ukzn.ac.za/handle/10413/19784>
- Lange, P. G. (2019). Informal learning on YouTube. The international encyclopedia of media literacy, 1-11.
- Langreo, L. (2022) Students Are Turning to TikTok for Homework Help. Is That a Bad Thing? Education Week. <https://www.edweek.org/technology/students-are-turning-to-tiktok-for-homework-help-is-that-a-bad-thing/2022/11>
- Leskin, P. (2020). History of YouTube. Wikiwand. [online] Wikiwand. https://www.wikiwand.com/en/History_of_YouTube#/References
- Liaw, S.-S. (2008). Investigating students' perceived satisfaction, behavioral intention, and effectiveness of e-learning: A case study of the Blackboard system. Computers & Education, 51(2), 864-873
- Literat, I. (2021) "Teachers Act Like We're Robots": TikTok as a Window into Youth Experiences of Online Learning during COVID-19. E I S S N - 2 3 3 2 - 8 5 8 4 <https://journals.sagepub.com/home/ero>
- Lobo J., Dimalanta, G., Bautista, C., Buan, E., & Al De Dios, D. (2022) <https://journals.e-palli.com/home/index.php/ajet>.
- Maryville University (2021). The evolution of social media: How did it begin and where could it go next? Maryville Online.

- <https://online.maryville.edu/blog/evolution-social-media/#history>
- McCarthy, A., et al. (2014). Worldwide internet, social network and Q2 2014 Complete Forecast. eMarketer, June, 34.
- McFadden C., (2020) YouTube's History and Its Impact on the Internet <https://interestingengineering.com/youtubes-history-and-its-impact-on-the-internet-garage>.
- Mekler, A. (2021) The Effects of Tiktok Use on College Student Learning. BRIDGEWATER STATE UNIVERSITY.
- Mekler, A. (2021). The Effects of TikTok Use on College Student Learning. Undergraduate Review, 16, 145-153. https://vc.bridgew.edu/undergrad_rev/vol16/iss1/19
- Middleton, S. (2022). For You? Using TikTok to Teach Key Content. Management Teaching Review, 23792981221096871.
- Moghavvemi, S., Sulaiman, A., Jaafar, N. I., & Kasem, N. (2018). Social media as a complementary learning tool for teaching and learning. The case of youtube. International Journal of Management Education, 16(1), 37-42. <https://doi.org/10.1016/j.ijme.2017.12.001>
- Mullen, R., & Wedwick, L. (2008). Avoiding the digital abyss: Getting started in the classroom with YouTube, digital stories, and blogs. The Clearing House: A Journal of Educational Strategies, Issues and Ideas, 82(2), 66-69.
- Mustafa, A. (2020) DOI:10.21125/inted.2020.1036 <https://www.researchgate.net/publication/3401200185>
- Neier, S. & Zayer, L. T. (2015). Students' Perceptions and Experiences of Social Media in Higher Education. <https://doi.org/10.1177/0273475315583748>
- Nellison. (2007). ECAR: Facebook as a teaching tool? Blog. <http://nellison.blogspot.com/2007/12/ecar-facebook-as-teaching-tool.html>
- Niederhauser, D. S., & Perkmén, S. (2010). Beyond self-efficacy: Measuring pre-service teachers' instructional technology outcome expectations. Computers in Human

- Behavior, 26(3), 436–442.
- Novitasari Novitasari, & Ainul Addinna, (2022) Students' Perception on the Use of TikTok for Learning English <https://doi.org/10.24036/jelt.v11i4.119484>
- Ogirma (2021), Future Teachers' Perception towards the Use of YouTube for Teaching Learning Activities in Nigerian Basic Schools DOI: 10.53400/mimbar-sd.v8i1.31378. <http://ejournal.upi.edu/index.php/mimbar>
- Omar, B., & Dequan, W. (2020). Watch, share or create: The influence of personality traits and user motivation on TikTok mobile video usage.
- P, J. P. (2020). Topic Modeling and Sentiment Analysis of Martial Arts Learning Textual Feedback on YouTube. *International Journal of Advanced Trends in Computer Science and Engineering*, 9(3), 2712–2718. <https://doi.org/10.30534/IJATCSE/2020/35932020>
- Park, Y., Son, H., & Kim, C. (2012). Investigating the determinants of construction professionals' acceptance of web-based training: An extension of the technology acceptance model. *Automation in Construction*, 22, 377–386.
- Pattier, D. (2021). Science on Youtube: successful educators. *TECHNO REVIEW. International Technology, Science and Society Review*, 10(1), 1-15.
- Pool, E. (2022) Educational Benefits of YouTube. *Ember Academy*. <https://emberacademy.edu.za/educational-benefits-of-youtube/>
- Putri, H.F.H., Wijayanto, A., & Supriyadi, S. (2020) Strength and Weaknesses of Self-Regulated Learning through Youtube: Indonesian EFL Student's Perceptions. *ELS Journal on Interdisciplinary Studies on Humanities*. <https://doi.org/10.34050/els-jish.v3i4.11749>
- Radin, A.G.B. & Light, C.J. (2022) TikTok: An Emergent Opportunity for Teaching and Learning Science Communication Online. *Journal of Microbiology & Biology Education*. <https://doi.org/10.1128/jmb.e.00236-21>
- Richter, N. F., Cepeda, G., Roldán, J. L., & Ringle, C.

- M. (2015). European management research using partial least squares structural equation modeling (PLS-SEM). *European Management Journal*, 33(1), 1-3.
- Roberd, A., & Roslan, R. (2022). Social Media and Primary School Science: Examining the Impact of Tiktok on Year 5 Students' Performance in Light Energy. *International Journal of Social Learning (IJSL)*, 2(3), 366-378.
- Saarinen, C., Arora, V., Ferguson, B., & Chretien K. (2013) Incorporating social media into medical education [Internet] Alliance for Academic Internal Medicine; c2011. <http://www.im.org/p/cm/ld/fid=1017>
- Sajonia, K. (2022). EduWOW: TikTok App as an Educational Creative Platform. Available at SSRN 4000091.
- Saleh, E. (2020). Using e-Learning platform for enhancing teaching and learning in the field of social work at Sultan Qaboos University, Oman. In *E-Learning and Digital Education in the Twenty-First Century-Challenges and Prospects*. <https://doi.org/10.5772/intechopen.94301>
- Sensor Tower (2022). Store Intelligence Data Digest, Sensor Tower, <https://go.sensortower.com/rs/351-RWH-315/images/Sensor-Tower-Q1-2022-Data-Digest.pdf>
- Serenko, A. (2008). A model of user adoption of interface agents for email notification. *Interacting with Computers*, 20(4-5). *International Journal of Data and Network Science* 5 (2021) 213 461-472.
- Sharabati, A. A. A., Al-Haddad, S., Al-Khasawneh, M., Nababteh, N., Mohammad, M., & Abu Ghoush, Q. (2022). The Impact of TikTok User Satisfaction on Continuous Intention to Use the Application. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(3), 125.
- Sharma, T. & Sharma, S. (2021). A study of YouTube as an effective educational tool. *Journal of Contemporary Issues in Business and Government* Vol. 27, No. 1, 2021. https://cibgp.com/article_9383_e81004d9b09ca13e5e7063f540b82e92.pdf
- Sharma, T., & Sharma, S. (2021).

- A study of YouTube as an effective educational tool. *Journal of Contemporary Issues in Business and Government* Vol, 27(1).
- Shen, C. C., Yang, C. C., Mao, T. Y., & Sia, W. Y. (2019). Do YouTube fitness videos help YouTube user to learn fitness. *Int J Innov Creat Chang*, 5(2), 93-104.
- Shutsko, A. (2020). User-generated short video content in social media. A case study of TikTok. In *International Conference on Human-Computer Interaction* (pp. 108-125). Springer, Cham.
- Siersdorfer, S., Chelaru, S., Nejd, W., & San Pedro, J. (2010). How useful are your comments? Analyzing and predicting YouTube comments and comment ratings. In *Proceedings of the 19th international conference on World Wide Web* (pp. 891-900).
- Snelson, C. (2018). The benefits and challenges of YouTube as an educational resource. In *The Routledge companion to media education, copyright, and fair use* (pp. 203-218). Routledge.
- SoZhai Xiuwen, Abu Bakar Sunhare, R., & Shaikh, Y. Razali,(2021) "An Overview of the Utilization of TikTok to Improve Oral English Communication Competence among EFL Undergraduate Students,". *Universal Journal of Educational Research*, Vol. 9, No. 7, pp.1439-1451,2021. DOI: 10.13189/ujer.2021.090710. <http://www.hrpub.org>
- Srinivasacharlu, (2021), "Using Youtube in Colleges of Education." *Shanlax International Journal of Education*, vol. 8, no. 2, 2020, pp. 21-24. DOI: <https://doi.org/10.34293/education.v8i2.1736> <http://www.shanlaxjournals.com>
- Srinivasacharlu, A. (2020). Using YouTube in Colleges of Education. *Shanlax International Journal of Education*, 8(2), 21-24.
- Statista Research Department: Number of first-time TikTok installs from 2nd quarter 2016 to 4th quarter 2021, Statista, <https://www.statista.com/statistics/1078692/china-tiktok-worldwide-downloads-quarterly/>, last access:16 March 2022b.

- (2019). Study of security vulnerabilities in social networking websites. *International Journal of Management, IT and Engineering*, 9(6), 278-291.
- Syah, R. J., Nurjanah, S., & Mayu, V. P. A. (2020). Tikio (TikTok App Educational Video) Based on the Character Education of Newton's Laws Concepts Preferred to Learning for Generation Z. *Pancaran Pendidikan*, 9(4).
- Taha, A. (2021). The Wave of Change in The Methods of Education Brought by Social Media: A Case Study of TikTok's Potential for Educational Content Creators (Doctoral dissertation, Aalborg University).
- Teo, T. (2011). Technology acceptance research in education. In *Technology acceptance in education* (pp. 1-5). Springer.
- Tess, A. (2013). The role of social media in higher education classes (real and virtual) – A literature review. <https://doi.org/10.1016/j.chb.2012.12.032>
- Thomas, L. (2022). Cross-sectional study: Definition, uses & examples. Scribbr. <https://www.scribbr.com/methodology/crosssectionalstudy/#:~:text=A%20cross%2Dsectional%20study%20is,observe%20variables%20without%20influencing%20them.>
- Tung, F. C., & Chang, S. C. (2008). Nursing students' behavioral intention to use online courses: A questionnaire survey. *International Journal of Nursing Studies*, 45(9), 1299-1309.
- University of Florida. (2022) Introduction to Social Media. University Communications and Marketing. <https://www.usf.edu/ucm/marketing/intro-social-media.aspx>
- Vosoughi, S., Roy, D., & Aral, S. (2018). The spread of true and false news online. *Science* 359(6380):1146-1151. <https://doi.org/10.1126/science.aap9559>
- web.asu.edu <https://web.asu.edu/newblog/benefits-using-youtube-your-online-education>
- Williams, D., Sullivan, S.J., Schneiders, A.G. Big hits on the small screen: an evaluation of concussion-related videos on YouTube. *British Journal of Sports Medicine* 2014;48:107-111.

- Xiuwen, Z. & Abu Bakar, R. (2021). An Overview of the Utilization of TikTok to Improve Oral English Communication Competence among EFL Undergraduate Students. *Universal Journal of Educational Research*. 9. 1439-1451. 10.13189/ujer.2021.090710.
- Zachos, G., Paraskevopoulou-Kollia, E.-A., & Anagnostopoulos, I. (2018). Social media use in higher education: A review. *Education Sciences*, 8(4), 194. doi:10.3390/educsci8040194