

TikTok as Learning Media: Challenges and Opportunities in Vocational Education

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ABSTRACT

Short-video platforms have become an important part of young people's media consumption, raising interest in their potential as learning tools. This study explores the challenges and opportunities of using TikTok as a learning medium at SMK Yuppentek 2, a vocational high school in Tangerang, Indonesia, using a descriptive qualitative approach. Data were collected through in-depth interviews with ten informants, supported by observation and documentation, and analyzed using the Miles and Huberman interactive model with source and method triangulation. The findings show that students mainly perceive TikTok as an entertainment platform. The main challenges include algorithm-driven distractions, limited depth of short-form content, unequal internet access, and the lack of systematic classroom integration. Despite these limitations, TikTok supports vocational skill demonstrations, self-directed learning, creativity, digital literacy, and school promotion. Viewed through the distinction between gratifications sought and gratifications obtained, the findings indicate that TikTok's educational value depends on its ability to meet students' learning motivations and expectations. Therefore, TikTok has the potential to serve as a complementary learning medium in vocational education when supported by appropriate instructional strategies.

Informasi Artikel

Kata Kunci:

TikTok; media pembelajaran; pendidikan vokasi; uses and gratification; literasi digital.

ABSTRAK

Platform video pendek telah menjadi bagian penting dari konsumsi media generasi muda sehingga menarik perhatian sebagai media pembelajaran. Penelitian ini bertujuan mengkaji tantangan dan peluang pemanfaatan TikTok sebagai media pembelajaran di SMK Yuppentek 2, Kota Tangerang, dengan pendekatan kualitatif deskriptif. Data dikumpulkan melalui wawancara mendalam terhadap sepuluh informan yang didukung observasi dan dokumentasi, kemudian dianalisis menggunakan model analisis interaktif Miles dan Huberman dengan triangulasi sumber dan metode. Hasil penelitian menunjukkan bahwa siswa masih memandang TikTok terutama sebagai platform hiburan. Tantangan utama meliputi distraksi akibat algoritma, keterbatasan materi dalam video berdurasi singkat, kesenjangan akses internet, serta belum terintegrasinya TikTok secara sistematis dalam pembelajaran. Di sisi lain, TikTok mendukung demonstrasi keterampilan vokasional, pembelajaran mandiri, kreativitas, literasi digital, dan promosi sekolah. Ditinjau melalui perbedaan gratifications sought dan gratifications obtained, penelitian ini menunjukkan bahwa nilai edukatif TikTok bergantung pada kemampuannya memenuhi motivasi dan harapan belajar siswa. Oleh karena itu, TikTok berpotensi menjadi media pembelajaran pelengkap dalam pendidikan vokasi apabila didukung oleh strategi pembelajaran yang tepat.

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1. Introduction

Short-form video applications have become one of the most consequential developments in contemporary digital communication, reshaping not only how young audiences consume entertainment but also how they encounter, search for, and process information [1]. Among these platforms, TikTok has grown into one of the most widely used applications globally, with more than 1.5 billion monthly active users [2], and is now recognized as a particularly influential medium for Generation Z [3]. What began as a platform associated almost exclusively with entertainment, music, and viral trends has gradually attracted scholarly attention as a potential site for informal and formal learning, prompting communication researchers to ask how audiences' everyday media habits intersect with educational use [4].

In Indonesia, this global trend is amplified by an exceptionally large user base. Indonesia's internet penetration reached more than 221 million users by 2024 [5], and TikTok alone accounts for more than 109 million active monthly users in the country [6]. National statistics further indicate that social media use is concentrated among the 13-24 age group [7], placing vocational high school students squarely within TikTok's core demographic. This convergence of a digitally fluent, practice-oriented student population with an entertainment-dominant platform creates a communication phenomenon worth investigating: how young media users in a vocational education context actually use and make sense of a platform built for entertainment when it is repositioned as a learning resource.

Communication scholarship has long argued that media audiences are not passive recipients but active agents who select media to satisfy specific needs [8]. The Uses and Gratification (U&G) framework rests on the premise that media use is goal-directed: audiences approach a medium with particular needs, choose content expected to meet those needs, and evaluate the medium according to the satisfaction it ultimately provides [8,9]. Classic formulations distinguish cognitive, affective, personal-integrative, social-integrative, and tension-release needs, each of which can be served, more or less successfully, by a given medium. Crucially, U&G separates the gratifications an audience seeks from a medium from the gratifications it actually obtains, treating the gap between the two as the mechanism that explains continued or discontinued use [10]. This sought-versus-obtained logic is what allows U&G to move beyond cataloguing motives toward explaining why some media experiences are judged satisfying and repeated while others are not.

Although U&G was originally formulated to explain leisure-oriented media consumption, its core assumptions translate readily to learning, which is itself a goal-directed, needs-driven activity. Conceptualizing learning within U&G requires specifying three elements. First, the educational needs at stake are most directly captured by the cognitive category: the drive to acquire information, build understanding, and resolve gaps in

knowledge. When a student turns to a medium to clarify a concept left unclear in class or to observe a procedure before attempting it, an educational need is being treated as a gratification to be sought. Second, the motivations underlying media use for learning are not confined to cognition; personal-integrative needs (competence, recognition, and the construction of a capable self) and tension-release needs (relief from academic strain) also shape when and how students engage learning-relevant content, and may compete with it. Third, learning satisfaction can be theorized as a gratification obtained: the extent to which the medium actually resolves the knowledge gap that motivated its use. Framing learning satisfaction as a gratification obtained, rather than as a learning outcome measured in test scores, keeps the analysis within the communication tradition and foregrounds the learner's own appraisal of whether the medium met the need that prompted its use [11].

A growing body of communication research supports this extension of U&G to learning contexts. Studies of social media in formal and informal education have shown that learners approach these platforms as active decision-makers who seek, use, and apply content for their own purposes, and that "learning" emerges as a distinct gratification factor alongside social and affective ones [12]. Within the short-video environment specifically, U&G research has consistently identified information-seeking and self-development as motives that coexist with, and are frequently overshadowed by, entertainment and recognition [13,14]. This is the tension that makes TikTok analytically interesting for education: the same platform can satisfy cognitive and personal-integrative needs while its dominant entertainment coding and algorithmic curation continually redirect attention elsewhere. Related research notes that TikTok's recommendation system increasingly transforms the traditional logic of audiences actively seeking information into a condition in which information instead finds the audience [15], a shift with direct implications for whether the gratifications students seek from the platform for learning are the gratifications they ultimately obtain.

At the same time, education-adjacent communication research has begun documenting TikTok's instructional applications across disciplines. A systematic review of TikTok use in higher education found applications spanning physical education, medical education, and language learning, while also flagging persistent concerns about algorithmic bias, attention fragmentation, and data-privacy scrutiny [16]. Within vocational settings specifically, TikTok has been explored as a microlearning tool for building students' creativity and communication skills [4], and as a resource for cultivating digital literacy and critical engagement with content [17]. However, the same body of work cautions that problematic short-video use is associated with academic procrastination and perceived learning ineffectiveness among vocational students [18], underscoring that TikTok's educational value is neither automatic nor uniform:

it depends on how the platform is used, and by whom.

Despite this growing body of international literature, communication research focusing specifically on Indonesian vocational secondary education remains limited. Existing Indonesian studies have predominantly approached TikTok from instructional-design or educational-technology perspectives, emphasizing its effects on learning outcomes [19] or student confidence [20]. Comparatively less attention has been devoted to explaining how vocational students and teachers perceive TikTok as a communication medium, what motivates them to use it for learning, and how their expected learning-related gratifications correspond with the experiences they ultimately report. This distinction is particularly relevant in vocational education, where procedural learning, practical demonstrations, and students' everyday digital-media habits intersect. SMK Yuppentek 2, a vocational high school in Tangerang, Indonesia, provides an appropriate context for examining this issue because its students are highly active TikTok users, while the platform has not yet been systematically integrated into formal classroom instruction. Consequently, the relationship between students' everyday media practices and formal learning remains insufficiently understood.

Rather than proposing a theoretical extension of Uses and Gratifications (U&G) theory, this study applies the distinction between gratifications sought and gratifications obtained to better understand TikTok use within the context of Indonesian vocational education. Previous communication studies have shown that information seeking, entertainment, and self-development frequently coexist as motives for TikTok use [13,14], while vocational-education research has documented the platform's potential for microlearning and digital-literacy development [4,17]. Building on these findings, the present study contributes contextual evidence by examining how students' learning-related motivations correspond with their reported

experiences of using TikTok as a supplementary learning medium. In doing so, the study provides an empirically grounded explanation of why TikTok simultaneously presents opportunities and challenges for vocational learning, emphasizing that its perceived instructional value depends on the alignment or mismatch between the gratifications users seek and those they perceive to obtain within a specific educational context.

To address this research gap, the present study examines the challenges and opportunities associated with using TikTok as a supplementary learning medium at SMK Yuppentek 2 through the perspective of Uses and Gratifications theory. Specifically, the study investigates: (1) the challenges encountered by students and teachers when TikTok is used to support learning, and (2) the opportunities perceived by participants for utilizing TikTok in vocational education. In addressing these questions, the study foregrounds audience motivation, media perception, and platform-driven content exposure as communication phenomena, while drawing on Uses and Gratification theory to interpret why an entertainment-oriented platform can simultaneously support and constrain learning. The findings are expected to contribute contextual evidence to communication research on digital-media use in vocational education while offering practical recommendations for teachers, schools, and policymakers seeking to integrate students' existing media habits into learning activities. These recommendations should be interpreted as implications derived from participants' experiences rather than as practices evaluated within the present study. Figure 1 summarizes the conceptual framework guiding this study, illustrating how Uses and Gratification needs shape TikTok use and give rise to its dual character as both a challenge and an opportunity for vocational learning.

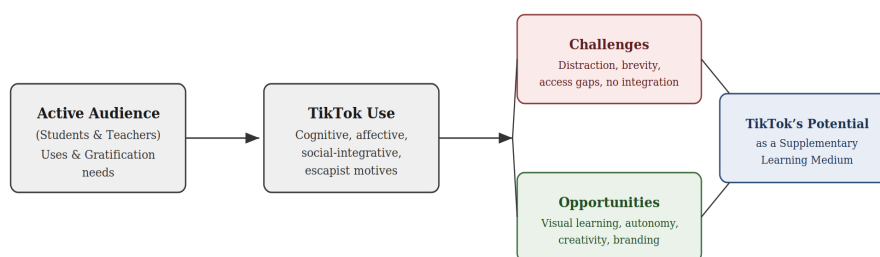


Figure 1 Conceptual framework linking Uses and Gratification needs, TikTok use, and its dual instructional character.

Source: Author's analysis (2026), adapted from Katz et al. (1974)

2. Method

This study employed a descriptive qualitative approach to obtain an in-depth understanding of how TikTok is perceived and used as a learning medium at SMK Yuppentek 2, a vocational high school in Curug, Tangerang Regency, Indonesia. A

qualitative design was chosen because the research questions concern meaning, motivation, and lived experience rather than measurable effects, consistent with the interpretive aims of communication research into audience media use [21]. The study draws on Uses and Gratification theory as its interpretive framework, treating students and teachers as active media users whose engagement with TikTok is shaped by specific needs

rather than by the platform's technical features alone [8,9]. Operationally, the Uses and Gratifications (U&G) framework informed the analysis through a combination of inductive and deductive procedures. During the initial stage, interview transcripts were subjected to open coding to identify meaningful statements describing participants' experiences with TikTok as a learning medium. These codes were then grouped inductively into broader themes representing the challenges and opportunities of TikTok-based learning. In the second stage, the resulting themes were interpreted deductively using the U&G framework. Each theme was mapped to one or more of the five U&G need categories (cognitive, affective, personal-integrative, social-integrative, and tension-release). In addition, the distinction between gratifications sought and gratifications obtained was used to examine whether participants' initial motivations for using TikTok corresponded with their reported experiences after use. Gratifications sought were identified from statements describing participants' reasons for accessing TikTok, whereas gratifications obtained were identified from statements reflecting perceived usefulness, satisfaction, or limitations encountered during learning [10].

Ten informants were selected through purposive sampling to represent different perspectives on the phenomenon. They comprised six students (S1-S6) from different majors and grade levels who were active TikTok users. Active users were defined as students who had accessed TikTok at least four days per week during the previous three months and had used the platform for both educational and non-educational purposes. Six student participants were considered sufficient because no substantially new themes emerged during the final interviews, indicating that data saturation had been achieved. The remaining informants included two teachers (G1-G2), representing productive (vocational-practice) and normative subjects to capture different classroom contexts; one school representative (P1) responsible for curriculum and digital-media policy; and one education lecturer (D1) who served as an external informant by providing an academically grounded perspective. This combination of informants enabled triangulation across the perspectives of students, teachers, school management, and academia.

Data were collected between February and April 2026 through three complementary techniques. In-depth, semi-structured interviews constituted the primary technique, guided by an interview protocol derived from the study's two focal indicators, challenges and opportunities in TikTok-based learning, and informed by Uses and Gratification constructs. Questions were tailored to each informant category: students were asked about their TikTok usage patterns, content preferences, and perceptions of the platform's instructional value; teachers were asked about their digital readiness and experience integrating social media into lessons; the school representative was asked about institutional policy and infrastructural support; and the external informant was asked to reflect conceptually on the phenomenon. All interviews were audio-recorded with informants' consent and

fully transcribed. Each interview lasted approximately 30–45 minutes and was conducted face-to-face in a quiet room within the school environment to ensure participant comfort and confidentiality. Non-participant observation focused on students' patterns of TikTok use, classroom interaction during digital learning activities, smartphone use during instructional sessions, and teachers' management of digital media in classroom settings. Documentation analysis included school policy documents related to digital learning, photographs of learning activities, screenshots of educational TikTok content referenced by participants, and other supporting materials used to contextualize interview findings.

Data analysis followed the interactive model proposed by Miles and Huberman [22], consisting of data reduction, data display, and conclusion drawing and verification. The first author conducted the transcription and initial coding of all interview data. During data reduction, transcripts were first subjected to open coding to identify meaningful units related to participants' experiences. Similar codes were subsequently grouped into broader themes representing challenges and opportunities. Open coding and theme development were conducted inductively, whereas the resulting themes were interpreted deductively through the Uses and Gratifications framework by identifying the dominant need category and distinguishing between gratifications sought and gratifications obtained. A coding framework (codebook) was developed iteratively throughout the analysis to maintain consistency in assigning codes and themes across the dataset. A summary of the coding framework is presented in Table 1. The coded data were subsequently displayed through narrative synthesis supported by representative quotations. Conclusions were drawn through constant comparison between interview transcripts, observation notes, and documentary evidence to ensure that interpretations remained grounded in the empirical data.

Table 1 Summary of the Coding Framework Used in Data Analysis

Initial Code	Theme	U&G Interpretation	Gratification Category
Watching entertaining videos	Challenge	Gratification sought	Tension-release
Searching tutorial videos	Opportunity	Gratification sought	Cognitive
Understanding practical procedures	Opportunity	Gratification obtained	Cognitive
Distracted by FYP recommendations	Challenge	Gratification obtained	Tension-release
Limited explanation in short videos	Challenge	Gratification obtained	Cognitive
Creating promotional videos	Opportunity	Gratification obtained	Personal-integrative
Sharing school activities	Opportunity	Gratification obtained	Social-integrative

To enhance the credibility of the findings, the study applied source triangulation and method triangulation. Source triangulation involved comparing perspectives obtained from students, teachers, the school representative, and the external academic informant to identify convergent as well as divergent viewpoints. Method triangulation was achieved by comparing interview data with observation notes and documentary evidence. Throughout the analysis, coding decisions and emerging themes were reviewed repeatedly by the research team through peer discussion to strengthen interpretive consistency. An audit trail documenting coding decisions and theme development was maintained throughout the analytical process.

Prior to data collection, permission to conduct the research was obtained from the management of SMK Yuppentek 2. Because the study involved minor participants, parental or guardian consent as well as student assent were obtained before interviews were conducted. All participants received an explanation regarding the purpose of the study, their voluntary participation, and their right to decline answering any question or withdraw from the study at any time without consequence. Audio recordings and interview transcripts were anonymized and stored in password-protected digital files accessible only to the research team.

3. Results and Discussion

3.1. Results

Ten informants participated in this study: six students (S1-S6), two teachers (G1-G2), one school representative (P1), and one education lecturer as an external informant (D1). The six student informants were active TikTok users from different majors and grade levels at SMK Yuppentek 2, selected to capture varied patterns of media consumption, motivation, and perception toward TikTok's instructional potential. The two teacher informants differed in instructional context: G1 taught a productive (vocational-practice) subject and was therefore positioned to observe TikTok-related behavior during hands-on practice sessions, while G2 taught a normative subject conducted primarily in the classroom, offering a contrasting instructional setting. The school representative (P1) held curriculum and digital-policy authority, providing an institutional perspective on social-media governance. The external informant (D1), an education lecturer, offered a conceptual and reflective viewpoint not bound to the day-to-day operations of the school, functioning as a form of source triangulation. Table 2 summarizes each informant's role, dominant gratification orientation, and the focal data obtained

Table 2 Summary of informant roles, dominant needs, and focal data in the study of TikTok as a learning medium.

Code	Informant Type	Role	Dominant Needs (Use & Gratification)	Focal Data Obtained	Initial Category
S1	Student, Grade XII	Active TikTok user	Entertainment, Information	Usage patterns, motivation for use	Challenge & Opportunity
S2	Student, Grade XII	Active TikTok user	Entertainment, Social interaction	Content consumption habits, learning distraction	Challenge
S3	Student, Grade XII	Active TikTok user	Information, Personal identity	TikTok use for self-directed learning	Opportunity
S4	Student, Grade XI	Active TikTok user	Entertainment, Information	TikTok's effect on learning focus	Challenge
S5	Student, Grade XI	Active TikTok user	Information, Self-development	Use of educational content	Opportunity
S6	Student, Grade XI	Active TikTok user	Social interaction, Entertainment	Intensity of use and its effects	Challenge
G1	Productive-subject teacher	Practice facilitator	Information, Instructional effectiveness	Views on classroom use of TikTok	Challenge
G2	Normative-subject teacher	Classroom facilitator	Information, Instructional innovation	TikTok's instructional potential in normative classroom teaching	Opportunity
P1	Deputy head of school	Policy decision-maker	Oversight, System effectiveness	Policy on social-media use	Challenge
D1	Lecturer (external)	Academic perspective	Information, Media analysis	Academic perspective on TikTok	Opportunity

Source: Field data, processed by the author (2026).

All informants were interviewed directly using the in-depth interview method under a semi-structured protocol, audio-recorded with consent, and transcribed for analysis. This composition of informants allowed the study to present a

comprehensive picture of how TikTok is perceived and experienced across different positions within the school community.

Analysis of the interview, observation, and documentation

data identified two overarching themes regarding the use of TikTok as a learning medium at SMK Yuppentek 2: challenges and opportunities. These themes emerged inductively from participants' accounts and were subsequently interpreted through the Uses and Gratifications (U&G) framework described in the Method section. Across the interviews, students, teachers, school management, and the external informant described different motivations for using TikTok (gratifications sought) as well as different experiences after using the platform (gratifications obtained). While students generally sought TikTok for entertainment, information, or practical tutorials, the extent to which these expectations were fulfilled varied depending on the nature of the content, the platform's algorithmic recommendations, and the educational context. The findings presented below therefore describe not only the opportunities and challenges identified in the field but also how these reflect the alignment or mismatch between gratifications sought and gratifications obtained.

3.1.1. Challenges in Using TikTok as a Learning Medium

Dominant perception as entertainment (gratification sought versus gratification obtained). Most students reported that they initially accessed TikTok primarily for entertainment rather than learning, indicating that entertainment gratification remained their dominant motivation (gratification sought). S1 explained that TikTok was mostly used for "watching entertaining videos, such as films or funny clips," while S2 similarly stated, "I usually use it to look for entertainment, sir." Because entertainment-oriented use shaped students' everyday interaction with the platform, educational content was often encountered only incidentally rather than intentionally. Consequently, participants generally perceived TikTok as continuing to function primarily as an entertainment platform, suggesting that entertainment gratification was more consistently experienced than learning-related gratification. This finding suggests that the main challenge is not the absence of educational content but the predominance of entertainment-oriented media habits that influence how students perceive and use the platform.

Distraction and algorithmic influence (FYP effect). A further challenge concerns distraction from irrelevant entertainment content surfaced automatically by TikTok's recommendation algorithm. S5 noted, "Sometimes when I'm looking for something to study, an entertainment video suddenly pops up and distracts me," and S6 added, "Once you watch one video, more keep appearing." The external informant (D1) concurred: "The main challenge is the distraction from irrelevant entertainment content, as well as limited control over the algorithm." These findings indicate that although students often accessed TikTok with the intention of finding educational content (gratifications sought), algorithmically recommended entertainment videos

frequently diverted their attention before those learning objectives were achieved. Consequently, the gratifications obtained often shifted from learning to entertainment, illustrating a mismatch between users' intended purposes and their actual media experience.

Access and data-quota disparities. Several students reported that TikTok's data consumption posed a distinct obstacle. S1 stated plainly, "The biggest challenge is the data quota, TikTok eats a lot," and S6 added, "It's heavy when you're using mobile data." These responses suggest that students expected TikTok to provide convenient access to learning materials (gratifications sought). However, unstable internet connections and limited mobile-data availability prevented some participants from fully benefiting from the platform. In these cases, the expected learning gratification could not always be achieved because of infrastructural limitations rather than limitations of TikTok itself.

Lack of systematic integration into formal instruction. Interview data indicate that TikTok's use has not yet been structurally embedded in classroom instruction. S2 stated, "So far, no teacher has used TikTok," and S3 similarly noted, "There hasn't been any so far." Although the school supports social-media use for institutional promotion, TikTok has not yet been systematically integrated into classroom instruction. Consequently, students' educational use of TikTok remains largely dependent on individual initiative rather than structured pedagogical planning. This condition limits the extent to which students' learning-related gratifications can be consistently achieved through formal educational activities.

3.1.2. Opportunities in Using TikTok as a Learning Medium

Visual medium supporting practical learning. As a vocational school emphasizing practice-based learning, TikTok was seen by several informants as a visual medium capable of presenting work processes directly and concisely. S4 stated, "Yes, [I have used it], usually for tutorials related to my major," while S5 added, "More for tutorials, like practical demonstrations." These statements indicate that students intentionally searched for tutorial videos to better understand practical procedures (gratifications sought). Most participants perceived these tutorials as helpful for visualizing work processes before conducting practical activities, suggesting that the expected informational gratification was generally obtained. Nevertheless, participants also acknowledged that TikTok functioned primarily as a supplementary learning medium rather than a substitute for direct teacher instruction because of the limited depth of explanation.

Support for self-directed learning. TikTok also creates space for students to learn independently according to their own needs and interests. S1 reported, "If there's material I don't understand, I search for it again on TikTok," and S3 added, "Sometimes when

the teacher hasn't explained it in detail, I look it up myself." These findings demonstrate that students actively sought additional explanations when classroom instruction was perceived as insufficient (gratifications sought). Participants generally reported that TikTok helped address these specific learning needs, indicating that the expected cognitive gratification was largely obtained. This pattern also reflects students' increasing tendency toward self-directed learning, in which they independently identify learning needs and select appropriate digital resources.

Cultivating creativity and digital literacy. Beyond content consumption, TikTok opens opportunities for students to develop creativity and digital skills. Content production requires the ability to plan a concept, structure a narrative, capture footage, and edit. The school representative (P1) noted that students are encouraged to produce content as part of departmental promotion: "Students are required to make videos, [thinking about] how to make them good and creative for school promotion." Unlike the previous findings, this opportunity emerged primarily from institutional practice rather than students' individual learning behaviour. Through project-based content creation, TikTok provided opportunities for students to develop creativity, digital communication, and media-production skills. Although these activities were not designed specifically to measure learning outcomes, participants perceived them as valuable experiences for strengthening digital literacy and creative expression.

Promotion and school branding. From an institutional standpoint, TikTok is used as a promotional medium. The school's official account is used to showcase practical activities, student achievements, and information about new-student admissions. P1 explained, "Our TikTok is always live for promotion, and there are also videos made by students and teachers." This finding reflects an institutional opportunity associated with TikTok rather than a direct instructional outcome. While participants acknowledged that TikTok contributed to promoting the school's activities and strengthening

institutional visibility, these benefits should be interpreted as organizational rather than pedagogical. Nevertheless, involving students and teachers in content production may indirectly support digital communication skills and strengthen students' sense of belonging to the school community.

Algorithmic support for interest-based learning. TikTok's content-personalization algorithm, often framed as a source of distraction, can also become an opportunity when used deliberately. The external informant (D1) observed, "TikTok's algorithm can display content suited to users' interests, thereby supporting self-directed learning based on students' interests and needs." Participants perceived that when they consistently interacted with educational content, TikTok's recommendation algorithm increasingly presented similar materials, thereby supporting continued exposure to learning resources. In this situation, the gratifications sought and obtained appeared to be more closely aligned. Nevertheless, participants also recognized that this opportunity depended on intentional media use and adequate digital self-regulation, since the same algorithm could also prioritize entertainment content when users' viewing behaviour changed.

Taken together, these findings indicate that TikTok holds meaningful potential as a learning medium in vocational education, as mapped in Figure 2, which presents the full set of challenges and opportunities identified at SMK Yuppentek 2. The identified opportunities span visualizing practice, reinforcing self-directed learning, developing creativity and digital literacy, and supporting institutional branding. Overall, the findings demonstrate that TikTok presents both opportunities and challenges as a supplementary learning medium in vocational education. Across participants, these opportunities and challenges reflected differing relationships between the gratifications initially sought by users and those ultimately obtained through their interaction with the platform. The implications of these findings are discussed in relation to Uses and Gratifications theory in the following section.

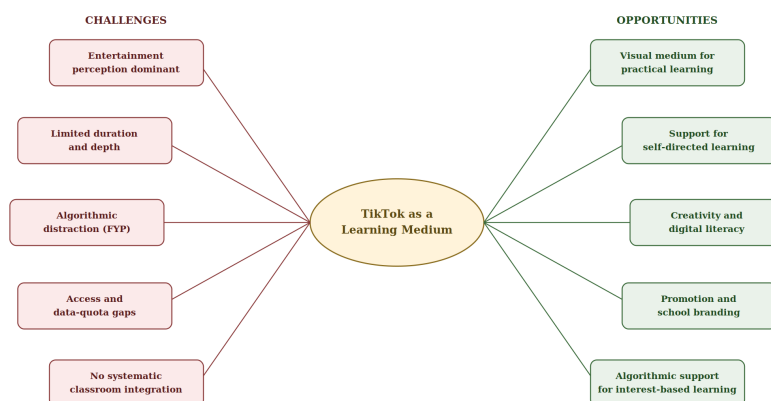


Figure 2 Thematic map of challenges and opportunities in using TikTok as a learning medium at SMK Yuppentek 2.

Source: Author's thematic analysis of interview, observation, and documentation data (2026)

3.2. Discussion

The findings indicate that TikTok's role as a learning medium in vocational education is shaped by the interaction between students' motivations for media use and their subsequent experiences while using the platform. Interpreted through Uses and Gratifications (U&G) theory, the findings demonstrate that TikTok serves multiple functions beyond entertainment, although the extent to which these functions support learning depends on the alignment between gratifications sought and gratifications obtained. Rather than viewing TikTok as inherently beneficial or detrimental for learning, the present findings suggest that its educational value is contingent upon students' purposes for using the platform, teachers' instructional guidance, and the broader institutional context.

Uses and Gratification theory holds that individuals are active media users who consciously select particular media to satisfy specific needs [8,23]. In this study, students as TikTok users were not passive; they actively determined the type of content consumed according to their respective needs and interests, using TikTok variously for entertainment, information-seeking, and practical-learning reference. Based on the interviews, most students still use TikTok predominantly to satisfy entertainment needs, indicating that affective and entertainment gratification remains the dominant motive in TikTok use. This finding suggests that students' dominant entertainment orientation may limit the extent to which learning-related gratifications are experienced during routine TikTok use. Rather than indicating that TikTok cannot support learning, the results imply that educational use requires a deliberate shift in users' motivations and media practices [10].

However, the study also found that students use TikTok to satisfy cognitive needs, such as seeking practical tutorials and explanations for material not fully understood in class. When students reported searching for supplementary material or major-specific tutorials, this reflects a motivation to acquire information and deepen understanding. From a U&G perspective, this condition shows that TikTok can satisfy informational and learning needs when users approach the platform with a clear purpose. In these instances, the interview data suggest that the cognitive gratification sought was generally perceived to be obtained, although participants also acknowledged that the platform's short-video format limited the depth of explanation for more complex vocational topics [12,24]. This pattern is consistent with broader communication research on TikTok's gratification structure, which similarly identifies information-seeking as a salient motive alongside entertainment and recognition [14,25].

Findings on self-directed learning further reinforce the relevance of the Uses and Gratifications framework. Students who actively searched TikTok for supplementary explanations

demonstrated awareness of their own learning needs and intentionally selected the platform to address specific knowledge gaps. This finding also extends previous studies by showing that self-directed learning was particularly evident in vocational education, where students frequently searched for procedural demonstrations before engaging in practical activities. Unlike general academic subjects, vocational learning emphasizes observable work processes, making short-form visual demonstrations especially relevant as supplementary learning resources.

Conversely, the challenge of distraction and algorithmic influence can also be interpreted through the Uses and Gratifications framework. Although students actively selected TikTok with particular learning purposes, the recommendation algorithm influenced the content they ultimately encountered. When participants reported being distracted by automatically recommended entertainment videos, the gratifications obtained differed from the gratifications initially sought. This finding illustrates an important tension within U&G theory: while users actively choose media to satisfy particular needs, algorithm-driven curation simultaneously shapes the media experience by influencing what users actually consume. Rather than reflecting user choice alone, media use on TikTok represents an interaction between individual agency and platform design, consistent with recent studies on algorithmic curation [15,26].

The limitation of TikTok's short-video format further illustrates the relationship between gratifications sought and gratifications obtained. Participants expected concise videos to help them understand vocational procedures; however, many also perceived that complex topics required more detailed explanations than the platform could provide. Consequently, the cognitive gratification sought was only partially achieved for some participants. These findings suggest that TikTok should be viewed as a supplementary learning medium rather than a replacement for formal classroom instruction, consistent with previous systematic reviews [16,27].

The opportunity for creativity and content production identified among students reflects the fulfillment of personal-integrative needs within the Uses and Gratifications framework. Through creating promotional and educational videos, students were able to express ideas, demonstrate practical competencies, and strengthen their digital communication skills. Importantly, these findings reflect participants' perceptions of creativity development rather than objectively measured improvements in creative ability. Future studies employing performance-based assessments would therefore be valuable for examining this relationship more directly [1,28].

From an institutional standpoint, the school's use of TikTok for promotional purposes reflects the fulfillment of social-integrative needs, whereby digital media are used to strengthen relationships between the institution and the wider community. The existence of an official school TikTok account illustrates

that social media has become part of the school's communication strategy, consistent with previous studies on educational branding [29,30]. However, this organizational benefit should be distinguished from TikTok's pedagogical function because the present study did not evaluate branding activities as indicators of student learning.

Overall, the findings suggest that TikTok may function as a valuable supplementary learning medium in vocational education when its use is supported by clear instructional objectives, digital-literacy skills, and appropriate teacher guidance. Within the Uses and Gratifications framework, the platform's educational value appears to depend less on its technological features than on how users intentionally engage with it and whether the learning-related gratifications they seek are ultimately perceived to be fulfilled.

3.2.1. Practical Implications for Vocational Education

As a vocational school emphasizing practice-based learning, TikTok's visual and demonstrative character aligns reasonably well with the instructional needs of vocational education, which requires students to master procedural competencies, technical skills, and applied capabilities directly relevant to the workplace.

First, from a pedagogical standpoint, TikTok can serve as a learning medium that supports visual, practice-based instruction. Its short-video format allows material to be presented concretely and accessibly, particularly for skills-based learning consistent with vocational education's emphasis on practical competence. As an illustrative application, teachers in technical majors such as Computer and Network Engineering or Motorcycle Engineering could assign students to produce short tutorial videos demonstrating practical steps, such as basic network installation or routine engine maintenance, which are then uploaded to TikTok as both documentation and a learning resource for peers. Through this process, students not only understand the material but also learn to articulate the practical procedure systematically.

Second, from the standpoint of student engagement, TikTok use can increase motivation and participation in learning. Engaging and interactive content can capture students' attention, making the learning process more enjoyable; without adequate management, however, this same quality can become a distraction that undermines focus. A concrete application would be a content-based project in which students produce short educational videos with a creative concept, such as "learn while practicing" or "quick tips to understand the material," for example, "one minute to understand basic electrical circuits" or "a fast way to remember computer components." This approach increases active student involvement because they are directly engaged in producing the learning content itself.

Third, from a digital-literacy standpoint, TikTok use encourages students to become not merely content consumers

but also content producers, contributing to the development of digital skills, creativity, and communication ability, competencies that carry direct value for vocational graduates entering the workforce. As an example, students could be guided to build a TikTok-based digital portfolio documenting their accumulated practical projects throughout their studies, which can later serve as demonstrable evidence of skill when approaching industry partners or prospective employers.

Fourth, regarding the role of teachers and the institution, the findings show that successful TikTok integration depends heavily on teachers functioning as facilitators and directors of the learning process. Teachers are required not only to master subject content but also to integrate technology meaningfully into instruction, while school-level policy support remains an important factor in establishing a structured and well-directed learning system. A practical application would be a school policy establishing a "School TikTok Education" program, in which teachers assign structured video-based tasks and curate student-produced content to ensure alignment with educational values, supported by an assessment rubric covering content accuracy, creativity, and clarity of delivery.

Fifth, at the level of the broader instructional system, TikTok's use needs to be integrated systematically into curricular strategy. Without clear integration, its use tends to remain sporadic and fails to produce maximal impact on the learning process. As an example, TikTok could be incorporated as part of project-based learning, in which students are tasked with producing educational content as a learning output, or as a medium for instructional reflection, in which students summarize material in the form of a short video following a lesson.

Overall, these findings indicate that TikTok carries substantial potential as a learning medium in vocational education, though realizing that potential requires appropriate management, strengthened digital literacy, and support from multiple stakeholders. With a deliberate, well-directed approach, TikTok need not remain solely an entertainment medium; it can be transformed into an innovative learning medium relevant to the demands of the digital era.

3. Conclusion

This study set out to examine the challenges and opportunities of using TikTok as a learning medium at SMK Yuppentek 2, approached from a communication-science perspective grounded in Uses and Gratification theory. The findings show that several challenges constrain TikTok's instructional use: students continue to perceive TikTok predominantly as an entertainment medium rather than a learning tool, limiting its priority as an educational resource; the brevity of video content limits the depth and comprehensiveness with which procedural, practice-based material can be conveyed; TikTok's personalized

recommendation algorithm carries the potential to distract students by privileging entertainment-oriented content over learning-relevant content; unequal access to internet connectivity and data quotas restricts some students from using TikTok optimally as a learning resource; and TikTok's use in formal instruction remains unsystematic, relying on individual initiative rather than a structured, school-wide instructional strategy. Taken together, these findings suggest that the educational use of TikTok at the study site remains largely dependent on students' individual learning initiatives and teachers' personal practices rather than systematic institutional implementation.

At the same time, the study identifies several opportunities that position TikTok as a promising supplementary learning medium. Its visual and demonstrative character supports practice-based learning by presenting work procedures concretely, facilitating students' comprehension of technical and applied material. TikTok also functions as a medium that supports self-directed learning, allowing students to actively seek and access material suited to their needs and interests. Furthermore, TikTok use carries the potential to enhance students' creativity, visual-communication skills, and digital literacy, particularly through content-creation and content-management activities. TikTok can additionally serve as a medium for school promotion and institutional branding, disseminating information about student activities, practical outcomes, and achievements to the broader public. Overall, the findings suggest that TikTok may serve as a valuable supplementary learning medium in vocational education when its use is supported by appropriate instructional guidance, curated educational content, and adequate digital infrastructure. However, this conclusion reflects participants' perceptions rather than direct evidence of improvements in learning effectiveness or learning outcomes.

Theoretically, this study demonstrates the usefulness of the Uses and Gratifications framework for interpreting TikTok use within the context of vocational education. Rather than extending the theory itself, the findings provide contextual evidence that the distinction between gratifications sought and gratifications obtained helps explain how students' motivations for using TikTok relate to their reported learning experiences and perceived challenges. Accordingly, this study contributes contextual insight into the application of the gratifications sought–gratifications obtained distinction in explaining informal learning practices among vocational-school students rather than proposing a theoretical extension of Uses and Gratifications theory. Practically, the findings support several recommendations for schools, teachers, and students seeking to integrate TikTok into learning activities. These recommendations are derived from participants' experiences and the authors' interpretation of the findings rather than from interventions evaluated within this study. The study

acknowledges certain limitations: findings rely substantially on informants' self-reported experiences; the cross-sectional design did not permit longitudinal assessment of TikTok's sustained instructional impact; and the study's scope was confined to a single vocational school, limiting generalizability. Future research is encouraged to broaden the range of research settings, incorporate quantitative measures of learning outcomes, and examine in greater depth how platform algorithms interact with student motivation and concentration over time.

In addition, because the study relied on qualitative interviews and observations, it did not measure students' learning achievement, motivation, or behavioural changes following TikTok use. Consequently, any educational benefits identified in this study should be interpreted as participants' perceptions rather than objectively verified learning outcomes. Future studies employing longitudinal, mixed-methods, or experimental designs would be particularly valuable for examining whether the perceived opportunities identified in this study translate into measurable improvements in vocational learning.

3. References

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