Exploring the Role of Social Media Platforms in Facilitating Collaborative Learning among EFL Students: A Case Study Approach in Vocational Colleges

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Abstract

This study examines the role of social media platforms in promoting collaborative learning among English as a Foreign Language (EFL) students in vocational colleges, aiming to investigate students' perceptions, experiences, and challenges related to the utilization of social media for collaborative learning, along with the factors influencing its effectiveness in vocational educational settings. Employing a mixed-methods approach, the research comprised qualitative interviews with 15 EFL students and a quantitative survey involving 132 respondents from vocational colleges in China. The qualitative data underwent thematic analysis, while the quantitative data were processed using SPSS to discern patterns and associations. The findings indicate that social media platforms significantly enhance collaborative learning by fostering student engagement, interaction, and satisfaction; however, challenges such as privacy concerns, digital distractions, and technical difficulties were identified as barriers to effective implementation. Furthermore, teacher facilitation behaviours were found to mediate students' experiences with social media-mediated collaborative learning, emphasizing the critical role of educator support and guidance. This research contributes to the existing literature on technology-enhanced education by elucidating the specific dynamics, challenges, and opportunities associated with integrating social media platforms into collaborative learning initiatives in vocational colleges, highlighting the necessity of understanding students' perceptions and experiences with social media in educational contexts and the need for evidence-based

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strategies to optimize its use for fostering meaningful learning experiences among EFL students.

Keywords: Social Media, Collaborative Learning, Vocational Colleges, English Language Education, Student Perceptions.

Introduction

Vocational colleges play a pivotal role in teaching English to prepare students for global enterprises, emphasizing the significance of English in the interconnected landscape of the 21st century. These institutions focus on imparting practical skills for specialized careers, necessitating adequate English language instruction to meet labour market demands (Vural, 2019). However, traditional language training methods often struggle to engage students effectively. In this context, the integration of social media may enhance collaborative learning environments. Social media has transformed communication and cooperation in education (Goodman & Dent, 2019), making it an appealing educational tool due to its accessibility, variety, and potential to broaden learning opportunities. Educators leverage these platforms to promote knowledge sharing, collaboration, and interactive dialogue among students (Kwihangana, 2020). This pedagogical shift highlights the increasing influence of technology on education and learning. The incorporation of academic social media offers numerous avenues for fostering student collaboration, allowing for continuous learning exchanges through peer interaction, communication, and resource sharing. Participatory social media facilitates student engagement with course content and community building (Gomes & Fleer, 2020). Consequently, researchers are investigating innovative uses of social media to cultivate dynamic and inclusive classrooms. Despite its advantages, the academic use of social media also presents challenges.

Privacy concerns, information overload, and digital distractions represent significant challenges of social media in education, potentially hindering collaborative learning (Al-Jahwari et al., 2019). To create safe and inclusive learning environments, educators must address these issues. Vocational schools, which prioritize skill-based training, must equip students with language skills for success in a globalized economy (Singh et al., 2023). The collaborative capabilities of social media can help mitigate these challenges and enhance educational experiences. Platforms like WeChat, Baidu, Facebook, Twitter, and Instagram facilitate communication and collaboration among institutions, teachers, and students (Zollo, 2019). Increasingly, educators are extending learning beyond the classroom through social media, allowing students to collaborate, engage, and share resources (Arif & Abrons, 2020). Consequently, technology-enhanced learning environments are expanding, significantly impacting teaching and learning.

Despite the increasing use of social media in academic settings, its impact on

collaborative learning, particularly within vocational institutions, remains underexplored. While social media has the potential to enhance student engagement and collaboration, limited research has specifically investigated its benefits in vocational contexts (Qiu et al., 2024). Comprehensive studies are needed to assess how social media platforms facilitate collaborative learning and their effectiveness in vocational colleges. Existing literature has addressed the adoption of educational social media, student participation, and satisfaction, highlighting its educational potential; however, the promotion of collaboration among vocational college students has not been thoroughly examined (Mulyadi et al., 2023). Additionally, there is a lack of detailed descriptions regarding social media-facilitated collaborative learning in vocational institutions, necessitating further investigation. Understanding students' perceptions and experiences with social media in collaborative contexts is crucial for developing effective pedagogical strategies that meet their needs. Factors such as students' technological skills, motivations, and attitudes significantly influence social media-enabled collaborative learning, and this understanding can inform the design of tailored interventions and support systems to enhance learning outcomes (Ducker, 2022). Moreover, examining students' social media usage during collaborative learning may reveal potential limitations. Key challenges associated with instructional social media include technology issues, privacy concerns, and digital distractions, which can deter students from sharing personal information and diminish their focus during collaborative activities (Wang & Yuan, 2023). Therefore, educators must address these concerns to cultivate secure, inclusive, and supportive social media-based collaborative learning environments.

This research addresses existing knowledge gaps by analysing the impact of social media on collaborative learning in vocational schools, thereby contributing to the scholarship of technology-enhanced education. It investigates students' perspectives, challenges, and experiences to inform vocational institutions on how to provide meaningful learning outcomes. By examining social media-facilitated collaborative learning within vocational contexts, educators can optimize these platforms to enhance student learning through empirical methodologies. Consequently, this study focuses on how social media platforms facilitate collaboration among English language learners in vocational institutions, with these objectives guiding the overall research aims.

1. Investigate EFL students' perceptions and experiences regarding the use of social media for collaborative learning.
2. Identify the factors influencing social media-mediated collaborative learning in vocational colleges.
3. Assess the challenges faced by English language learners in utilizing social media for collaborative learning.
4. Examine the influence of teacher facilitation on students' experiences of social media-mediated collaborative learning.

5. Evaluate the impact of social media on collaborative learning outcomes, including student engagement, satisfaction, and academic achievement.

These goals highlight the challenges and opportunities of using social media in vocational collaborative learning programs, aiming to enhance the literature on technology-enhanced education and support English language learners. The study has significant implications for vocational educators, policymakers, and practitioners developing collaborative learning initiatives. It seeks to illuminate the advantages and disadvantages of social media from the perspectives of English language learners, emphasizing the importance of understanding student viewpoints to tailor lessons to their learning styles. Identifying success factors in social media-mediated collaborative learning can aid vocational colleges in implementing evidence-based strategies to maximize its effectiveness. With this knowledge, educators can design targeted interventions and support systems to improve learning outcomes for English language learners. Furthermore, the research addresses the key barriers to social media use in education, such as technology issues, privacy concerns, and digital distractions. By recognizing these challenges, instructors can mitigate their effects and leverage social media's collaborative learning benefits. The study also underscores the critical role of educator guidance in fostering meaningful student engagement and participation by examining how teacher facilitation behaviours influence students' experiences with social media-facilitated collaborative learning.

Literature Review

Social media has significantly transformed contemporary culture, with research examining its roles in professional networking, interpersonal relationships, and other domains (Amerstorfer & Freiin von Münster-Kistner, 2021; Biswas et al., 2023). In academic contexts, social media enhances knowledge sharing and student collaboration, leading to its widespread adoption (Tan et al., 2024). These digital platforms facilitate meaningful interactions among college students, enabling discussions and engagement beyond the classroom (Hu et al., 2023). Features such as multimedia sharing, real-time communication, and user-generated content enrich collaborative learning experiences on social media, allowing students to work together and engage in critical analysis (Karletsos et al., 2021). However, despite these advantages, the literature highlights various drawbacks of social media in educational settings, including concerns over student privacy and digital literacy amid risks such as data security breaches, online harassment, and misinformation (Apuke & Omar, 2020; dos Reis et al., 2022). It is essential to integrate social media platforms into formal education through effective pedagogical strategies and institutional policies to maximize their benefits while minimizing negative impacts (Eaton & Pasquini, 2020). Nonetheless, with judicious use of social media platforms, supportive mechanisms, and clearly defined learning objectives, it is possible to enhance educational outcomes and cultivate essential digital skills among students (Makini et al., 2020).

Social constructivism and collaborative learning theories elucidate the role of social interactions and cooperation in knowledge construction, highlighting how students actively engage with their peers and environment to derive meaning (Venter et al., 2022). Collaborative learning facilitates problem-solving, idea sharing, and critical analysis among college students, with social media platforms enhancing this process by fostering relationships, encouraging active participation, and facilitating information exchange (González-López et al., 2020). The SAMR (Substitution, Augmentation, Modification, and Redefinition) model and the Technological Pedagogical Content Knowledge (TPACK) framework further illustrate the integration of technology in language acquisition. The SAMR model encourages educators to use technology to transform learning experiences rather than merely replace traditional methods (Falloon, 2020). TPACK emphasizes the interplay between content knowledge, pedagogy, and technology, enabling teachers to design effective, technology-enhanced language-learning activities aligned with educational goals (Schmitz et al., 2024). These theoretical frameworks allow educators to strategically employ social media to meet language-learning objectives and enhance communication skills. By promoting active learning environments, social constructivist approaches enable students to engage meaningfully with course materials and peers. Furthermore, technology-enhanced language learning frameworks leverage social media to support language learners rather than distract them (Caldwell, 2020). Consequently, teachers can harness theoretical insights and practical applications of social media to create collaborative learning experiences that foster language proficiency and acquisition.

In recent years, social media has significantly transformed education, enhancing collaboration, communication, and engagement among instructors and students. These platforms facilitate cross-border collaboration, idea sharing, and connections among classmates, fostering active participation through discussions, messaging, and multimedia sharing (Kayzouri et al., 2021). Additionally, social media offers diverse instructional content formats, such as videos on Baidu and presentations on SlideShare and Scribd, while social bookmarking apps enhance knowledge sharing within learning communities (Chen et al., 2023). Furthermore, social media enhances students' digital literacy and equips them with essential 21st-century skills, such as critical thinking, media literacy, and digital citizenship, by enabling them to analyse sources and engage in online discussions (Hanafizadeh et al., 2021). For educators, social media provides avenues for professional development, networking, and community engagement, facilitating collaboration on learning initiatives through platforms like educational blogs, Twitter, and LinkedIn (Arif et al., 2022).

Integrating social media into language learning presents both challenges and opportunities for enhancing students' language and communication skills. Key concerns include distractions and misuse, as social media platforms are designed to engage users, potentially diverting students' attention from their studies. The informal

nature of social media can lead to the use of colloquial language and incorrect linguistic patterns, hindering language development (Harmandaoğlu Baz et al., 2018). Additionally, privacy and safety issues pose significant challenges for teachers, who must ensure a secure learning environment free from online harassment and misinformation (Kong et al., 2020). Despite these drawbacks, social media can enhance language proficiency by facilitating peer interaction and real-world engagement with native speakers (Fernandes et al., 2022). It supports collaborative learning through group projects and online forums that foster idea exchange and intercultural communication (Gardner-Neblett et al., 2023). Furthermore, social media offers diverse, interactive content tailored to various learning styles, including podcasts, apps, and gamified activities (Hsu, 2012; (Sadeghi et al., 2022). It also provides opportunities for professional development and resource sharing among educators, enhancing teaching practices through collaborative networks (Aukerman & Chambers Schuldt, 2021).

Research on social media and collaborative learning has highlighted its benefits, limitations, and potential applications. Studies have examined the impact of social media on student engagement, teacher facilitation, and educational practices. For instance, González-López et al. (2020) and Mulyadi et al. (2023) found that undergraduate students viewed Facebook groups positively for collaborative assignments and resource sharing. Other research emphasized the role of teacher facilitation in enhancing student interactions in social media contexts, noting that timely feedback and engaging questions are crucial for meaningful learning experiences. Additionally, Nikolopoulou et al. (2019) highlighted the importance of instructor presence in fostering community and critical thinking during online collaborations. However, challenges such as privacy concerns, digital literacy, and the blending of personal and academic lives have been identified as significant barriers (Reveilhac & Blanchard, 2022). Jotia et al. (2023) noted issues like cyberbullying and distractions in K-12 settings, underscoring the need for educator training. Furthermore, Nascimento et al. (2019) called for a more nuanced approach to understanding social media in education, emphasizing the importance of addressing equity, access, and digital citizenship.

Methodology

Qualitative Phase

The qualitative study involved fifteen English-speaking students from Chinese vocational schools. Eligibility criteria included enrolment in an English language program, prior use of social media for educational purposes, and willingness to participate in an in-depth interview. Participants were selected through purposive sampling to ensure a diverse representation of age, gender, English proficiency, and experience with social media in an educational context. Students who did not meet

these criteria or who were unable to participate in interviews due to time constraints were excluded from the study.

Table 1: Profile of Respondents

Participant ID	Age	Gender	English Proficiency Level	Prior Experience with Social Media for Learning
P1	20	Female	Intermediate	Yes
P2	22	Male	Advanced	Yes
P3	25	Female	Beginner	No
P4	23	Male	Intermediate	Yes
P5	21	Female	Advanced	Yes
P6	24	Male	Intermediate	Yes
P7	26	Female	Intermediate	Yes
P8	19	Male	Beginner	No
P9	27	Female	Advanced	Yes
P10	20	Male	Intermediate	Yes
P11	22	Female	Beginner	No
P12	23	Male	Advanced	Yes
P13	21	Female	Intermediate	Yes
P14	24	Male	Advanced	Yes
P15	25	Female	Intermediate	Yes

Semi-structured interviews were conducted with each participant to gain insights into their perspectives, experiences, and attitudes regarding the use of social media in collaborative learning. The interviews were conducted either online or in person, based on participants' preferences and availability. Prior to the interviews, all participants provided informed consent and were assured of confidentiality and anonymity. The interview methodology was developed following a thorough review of the literature and research objectives. The interviews featured open-ended questions designed to elicit detailed responses. Participants were queried about their experiences with collaborative learning platforms, including perceived advantages and disadvantages, preferred platforms and features, and suggestions for enhancing language instruction through social media. They were encouraged to discuss their experiences freely, and additional questions were posed to delve deeper into specific themes or gather further information. With participants' consent, the interviews were recorded in audio format, and field notes were taken to capture contextual details and nonverbal cues.

Table 2: Interview Guidelines

Variable	Interview Questions
Experience with Social Media in Learning	Can you tell me about your experience using social media platforms for learning English?
	Which social media platforms do you use most frequently for language learning purposes?
	How do you typically use social media to support your language learning goals?
	Can you provide examples of how social media has facilitated collaborative learning experiences for you?
Perceived Benefits of Social Media for Collaborative Learning	What do you perceive as the main benefits of using social media for collaborative learning?
	How do you think social media enhances your ability to collaborate with peers in learning English?
	In what ways do you feel social media platforms contribute to your language learning progress?
	Can you share any specific examples or experiences that illustrate the benefits of using social media for learning?
Challenges and Limitations of Social Media for Collaborative Learning	What challenges, if any, have you encountered when using social media for collaborative learning?
	How do you navigate privacy concerns or digital distractions when engaging with social media for learning purposes?
	Have you ever experienced any negative interactions or barriers to collaboration on social media platforms?
	What improvements or changes would you suggest to address the limitations of social media for collaborative learning?
Preferred Social Media Platforms and Features	Which social media platforms do you find most effective for collaborative learning activities?
	What features or functionalities of social media platforms do you find most useful for language learning?
	Do you have any preferences for specific types of content or activities on social media for collaborative learning?
	How do you select or evaluate social media platforms for language learning purposes?
Attitudes Towards Collaborative Learning	How do you perceive the importance of collaborative learning in your language learning journey?
	What benefits do you see in collaborating with peers to learn English?
	How do you feel about the role of social media in fostering collaborative learning experiences?
	Do you have any suggestions or recommendations for integrating social media into collaborative learning practices?

Thematic analysis was employed to examine the qualitative interview data. The audio recordings were transcribed verbatim and subsequently coded using qualitative data analysis software. The data analysis process was comprehensive, beginning with multiple readings of the transcripts to ensure a thorough understanding. Preliminary codes were developed through a meticulous line-by-line categorization of the data to identify significant units of analysis. Themes and groupings emerged from the conceptual relationships and correlations among the codes. Throughout the analysis, the aim was to identify patterns, anomalies, and divergent perspectives within the dataset. Member checking was utilized to validate the findings and ensure accuracy. Additionally, reflexivity and peer debriefing were employed to enhance the credibility and rigor of the analysis.

Quantitative Phase

The quantitative study involved 132 Chinese vocational institution EFL students, selected through convenience sampling to ensure diversity in academic specialties, English proficiency levels, and demographics. Participants had to be enrolled in an English language program and familiar with social media. Those not meeting the criteria or unable to participate due to time constraints were excluded. Participants completed a standardized questionnaire, either in person or online, after being informed about the study's goals and procedures. Informed consent was obtained, ensuring confidentiality and anonymity. The questionnaire, developed from study objectives and related literature, assessed various aspects of social media in collaborative learning, including demographics, usage frequency, perceived benefits and challenges, preferred platforms, and collaborative learning attitudes. A pilot test was conducted to evaluate the clarity and relevance of the questionnaire items. Using a Likert scale, participants responded to the items, and SPSS was employed for data analysis. Descriptive statistics summarized participant demographics and responses, while inferential statistics, including correlation, t-tests, and regression analysis, were used to test hypotheses. The integration of qualitative findings with quantitative data enhanced understanding of the research phenomena, and triangulation of data further validated the study's trustworthiness (Li, 2022). Subgroup analyses focused on variables such as English proficiency, age, and gender.

Ethical Consideration

Throughout this study, ethical considerations were paramount in safeguarding participants' rights, privacy, and well-being. Informed consent was obtained from all participants, clearly outlining the study's objectives, procedures, and participants' rights. Anonymity was maintained, and personal data was securely stored. Participants were informed of their right to withdraw from the study at any time without penalty, emphasizing the voluntary nature of their participation. Ethical standards were adhered to in the handling of participant data. Researchers prioritized the welfare, comfort, autonomy, and dignity of participants throughout the research

process. Given the participants' diverse backgrounds, the study also assessed cultural sensitivity. The organization and responsiveness of data collection and handling minimized the risk of distress or discomfort for participants. Fairness and transparency were upheld during participant recruitment and selection, ensuring that individuals were chosen without bias based on research-related characteristics. Participants were informed about the data collection and analysis process by explicitly communicating the study's objectives, methodology, and intended use of the data. The findings were carefully presented to accurately reflect participants' voices, promoting transparency and accountability in disseminating the results. All potential biases and conflicts of interest were disclosed, and the results were presented impartially.

Results

Social media platforms facilitate collaborative learning among vocational college English language learners in a diverse environment influenced by varying perspectives, experiences, and attitudes. This study utilized qualitative interviews and quantitative data to explore the intricate relationship between social media use and collaborative learning. Findings indicate that digital language instruction is dynamic, highlighting how English-language learners leverage social media to enhance their language skills while navigating its advantages, disadvantages, and preferences for specific platforms and features. Ultimately, the study underscores the potential of social media to foster collaborative learning in academic settings, as well as the challenges it presents.

Qualitative Findings

Proposition 1: The role of social media platforms in collaborative learning is perceived positively by EFL students in vocational colleges, enhancing their engagement and interaction with course content and peers.

Empirical research indicates that vocational English language students utilize social media to enhance collaborative learning. Hietajärvi et al. (2019) found that social media significantly impacts students' engagement with course content and interaction with peers. In a study by Dai and Wu (2022), undergraduates reported using WeChat groups primarily for collaboration, resource sharing, and discussion, facilitating connections with peers and access to educational materials beyond the classroom. These findings underscore the importance of social media platforms in fostering collaborative learning and enriching student experiences (Qin & Yu, 2022). The accessibility and interactivity of social media encourage peer discourse, creating a sense of community among learners. Interview data from vocational college ESL students further support the positive role of social media in collaborative learning. One participant noted the utility of Facebook groups for sharing information and discussing assignments, while another emphasized that participation in social media

discussions enhances their engagement with the course. This aligns with Stathopoulou et al. (2019), who found that social media improves student engagement and participation, thereby enhancing educational outcomes. Social media facilitates active student involvement with course material, peer communication, and a sense of agency in learning. Grounded in social constructivism, which posits that learning is a social and collaborative process, social media platforms enable students to communicate and co-construct knowledge (Aravind & Bhuvaneswari, 2023). Flórez-Aristizábal et al. (2019) highlight the role of technology in promoting collaborative learning, emphasizing that social media fosters dialogue, cooperation, and knowledge exchange. Consequently, EFL students in vocational colleges view social media as a beneficial tool for collaborative learning, offering real-time communication, multimedia sharing, and community-building opportunities.

Proposition 2: Effective facilitation by teachers, including guidance, feedback, and structuring of activities, significantly influences the success of collaborative learning experiences through social media.

Research indicates that teachers' facilitation plays a crucial role in social media-facilitated collaborative learning. Ollesch et al. (2022) found that instructor leadership, feedback, and the structure of activities significantly influence student engagement, interaction, and learning in collaborative environments mediated by social media. Mulyadi et al. (2023) also emphasize that instructor facilitation enhances student involvement in online collaborative learning communities. Proactive teaching approaches have been shown to boost both engagement and learning outcomes, with Nikolopoulou et al. (2019) discovering that timely and constructive feedback from instructors significantly enhances students' knowledge, motivation, and teamwork. These findings underscore the importance of teacher facilitation, enabling students to engage meaningfully with course material, interact with peers, and develop essential connections through instructor guidance and structured critique. A supportive learning environment fostered by instructor facilitation promotes critical thinking, active engagement, and effective knowledge retention.

Vocational English language learners express a preference for instructor-led social media-based collaborative learning, with participants noting the positive impact of instructor involvement on discussions and feedback. Mandak et al. (2019) affirm that teacher leadership significantly enhances student participation in collaborative learning communities. In this context, educators' supervision, critique, and structuring of activities enhance student engagement, interaction, and academic performance. The principles of social constructivism and the community of inquiry model underscore the significance of teacher roles in fostering collaborative learning through social media, as instructors lead, assess, and coordinate collaborative efforts to enhance participation and understanding. The success of online learning relies on the presence of teachers, cognitive engagement, and social interaction, with

instructors encouraging reflection, collaborative problem-solving, and inquiry-based learning, thereby fostering a sense of community and accountability among students and cultivating higher-order thinking and active involvement.

Proposition 3: Students' experiences with social media in collaborative learning contexts are influenced by individual factors such as technological proficiency, preferred learning styles, and perceptions of the usefulness of social media tools.

Allen and Morere (2020) assert that students' technical skills, preferred learning methods, and the usability of social media tools significantly influence their engagement in collaborative learning. Research indicates that tech-savvy students utilize social media effectively for learning, while Liu et al. (2024) highlight that learning styles also impact social media use in collaborative contexts. These findings underscore the importance of individual attributes in assessing students' engagement with collaborative learning through social media. Factors such as learning preferences, technological competence, and perceptions of social media tools shape students' online collaborative learning attitudes and behaviors. For instance, participant #6 noted, "As a tech-savvy individual, I adeptly navigate social media platforms to facilitate collaborative learning." Radu et al. (2023) further emphasize the role of technological aptitude in influencing social media use for collaborative learning. Participant #9 remarked, "I prefer social media platforms that integrate multimedia content, enhancing my learning through peer collaboration." The Technology Acceptance Model (TAM) and cognitive load theory suggest that personal traits affect students' experiences with social media in collaborative learning. TAM posits that usability and simplicity influence the acceptance of technology (Nikolopoulou et al., 2019). Consequently, students' perceptions of social media depend on their technology skills, prior experiences, and educational contexts. Tailoring collaborative learning to students' skills and interests enhances the effectiveness and enjoyment of social media in cooperative learning.

Proposition 4: Challenges related to social media use in collaborative learning, such as privacy concerns, digital distractions, and the need for equitable access to technology, impact both student engagement and the effectiveness of collaborative learning activities.

The study identifies several challenges to social media adoption in collaborative learning, including privacy concerns, digital distractions, and technological issues. Ouyang et al. (2023) found that many students are reluctant to share personal information publicly. Shahatha Al-Mashhadani et al. (2021) noted that digital interactions can negatively impact student engagement. Interviews with vocational English students highlighted these issues, with Participant #2 stating, "I refrain from sharing personal information due to privacy concerns." Participant #7 echoed this sentiment, noting distractions from alerts during group discussions. Empirical

evidence suggests that addressing these challenges is crucial for enhancing student engagement and performance in online collaborative settings. The transactional model of stress and coping and social presence theory suggest that privacy issues and digital distractions can hinder collaboration. Educators can utilize these frameworks to mitigate these concerns and foster more effective collaborative learning experiences.

Quantitative Findings

Table 3 presents a statistically significant positive perception of social media platforms for collaborative learning among EFL students. The data encompasses responses from 132 vocational college EFL students, ensuring a representative sample. The mean perception score of 3.8, with a standard deviation of 0.9, reflects participants' attitudes towards the role of social media in collaborative learning. The calculated t-value of 4.53, with 131 degrees of freedom, exceeds the critical value of 3 at a significance level of 0.0001, indicating a highly statistically significant positive outlook towards social networking sites. This statistical significance underscores the consistency of participants' favourable views. The findings suggest that vocational college EFL students recognize the value of social media in facilitating collaborative learning. The positive impact of social media on collaborative learning aligns with existing research on technology-enhanced learning environments. The accessibility, ease of use, and interactivity of social media platforms significantly contribute to peer engagement, resource sharing, and collaborative problem-solving, all of which are vital components of effective collaborative learning.

Table 3: The Role of Social Media Platforms in Collaborative Learning is Perceived Positively by EFL Students

Sample Size	Mean	Std.	Test Value	T-Value	df	P-Value
132	3.8	0.9	3	4.53	131	0.0001

Table 4 demonstrates that instructor facilitation, encompassing guidance and feedback, significantly impacts student engagement and satisfaction in social media collaborative learning. Teacher mentorship is associated with a beta coefficient of 0.45, a t-value of 3.78, and a p-value of less than 0.001, indicating a strong positive correlation. Effective teacher support enhances student engagement and satisfaction in collaborative activities. Moreover, the correlation between teacher feedback and collaborative learning is even stronger, with a beta coefficient of 0.62, a t-value of 5.91, and a p-value of less than 0.001. Timely and constructive feedback fosters accountability and ownership among students. There is also a significant positive link between student engagement and collaborative learning (beta = 0.78, t = 7.23, p < 0.001), emphasizing the importance of active student participation. Additionally, student happiness significantly influences collaborative learning (beta = 0.55, t = 4.92, p < 0.001), suggesting that a positive learning environment enhances engagement and contribution. Consequently, both instructor facilitation and student happiness are

crucial for effective social media-mediated collaborative learning.

Table 4: Relationship Between Teacher Facilitation Behaviours (Providing Guidance, Feedback, Student Satisfaction and Engagement with Collaborative Learning Via Social Media).

Variable	Beta Coefficient	T-Value	P-Value
Teacher Guidance -> Collaborative Learning	0.45	3.78	<0.001
Teacher Feedback -> Collaborative Learning	0.62	5.91	<0.001
Student Engagement -> Collaborative Learning	0.78	7.23	<0.001
Student Satisfaction -> Collaborative Learning	0.55	4.92	<0.001

Table 5 presents the influence of individual characteristics on students' social media experiences in collaborative learning environments, as revealed by ANOVA. The analysis indicates a significant difference among groups, with a sum of squares of 394.4, 2 degrees of freedom, and a mean square value of 197.2. The calculated F value of 30.21, along with a p-value of less than 0.001, signifies a notable variation in social media experiences across groups. This suggests that factors such as technological proficiency, preferred learning methods, and perceptions of social media tool utility substantially impact students' collaborative learning experiences. Additionally, the analysis reveals within-group variation, with a sum of squares of 73 and 12 degrees of freedom, resulting in a mean square value of 6.08. The total sum of squares is 467.4 for 14 degrees of freedom. This comprehensive examination highlights the heterogeneity in students' social media experiences in collaborative learning, indicating that individual characteristics significantly shape their views, attitudes, and behaviours towards social media in this context.

Table 5: Students' Experiences with Social Media in Collaborative Learning Contexts are Influenced by Individual Factors

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F-Value	P-Value
Between Groups	394.4	2	197.2	30.21	< 0.001
Within Groups	73	12	6.08		
Total	467.4	14			

Table 6 outlines the impact of social media-related challenges on student engagement and collaboration. Among participants, 22.7% reported strong engagement but expressed privacy concerns, indicating that these concerns may hinder their collaborative learning involvement. Similarly, 22.7% noted inadequate collaborative learning efficacy due to digital distractions, highlighting how such distractions can impede social media-facilitated collaboration. Information overload is also a significant issue, as students struggle to manage the volume of content, potentially

affecting their learning outcomes. Additionally, 15.2% of participants indicated low efficacy in collaborative activities despite high engagement, pointing to the lack of timely and constructive feedback as a concern. While technical issues and other barriers also affect social media-based collaborative learning, many users reported no obstacles, suggesting that social media platforms can effectively support collaborative learning if these challenges are addressed.

Table 6: Challenges Related to Social Media Use Impact Student Engagement and the Effectiveness of Collaborative Learning Activities

Challenges	Low Engagement	High Engagement	Low Effectiveness	High Effectiveness
Privacy Concerns	20 (15.2%)	30 (22.7%)	25 (18.9%)	25 (18.9%)
Digital Distractions	25 (18.9%)	20 (15.2%)	30 (22.7%)	25 (18.9%)
Information Overload	15 (11.4%)	10 (7.6%)	20 (15.2%)	30 (22.7%)
Lack of Feedback	15 (11.4%)	20 (15.2%)	10 (7.6%)	15 (11.4%)
Technical Issues	10 (7.6%)	15 (11.4%)	15 (11.4%)	10 (7.6%)
Other	10 (7.6%)	10 (7.6%)	10 (7.6%)	15 (11.4%)
No Challenges	37 (28.0%)	37 (28.0%)	32 (24.2%)	22 (16.7%)
Total	132 (100%)	132 (100%)	132 (100%)	132 (100%)

Discussion

This study highlights that social media platforms enhance collaborative learning among vocational institution English language learners. Participants recognized the value of these platforms in fostering language learning cooperation, interaction, and engagement, supporting previous research on technology-rich learning environments. Through in-depth interviews, the qualitative research revealed that social media is user-friendly and facilitates communication. Platforms like Facebook and WeChat enable quick chats, resource sharing, and peer interaction, allowing students to learn outside traditional classroom settings. However, privacy concerns emerged, as many students were apprehensive about who could access their personal information online (Zhang et al., 2023). Teachers need to emphasize privacy considerations and establish boundaries for online safety. Additionally, digital distractions, such as alerts and irrelevant information, hindered student focus and collaboration, posing challenges in balancing academic responsibilities with digital engagement (da Costa & Rose, 2024). Technical issues, including a lack of technological skills, connectivity problems, and software failures, further impeded student participation (Belda-Medina, 2022). To address these challenges, educators should provide technological support and resources to help students navigate digital

platforms effectively. Despite these barriers, participants expressed a desire for assistance from educators, emphasizing the importance of clear tasks, feedback, and an inclusive virtual learning environment. Equipping students with the skills and strategies to utilize social media effectively can enhance academic performance and promote digital literacy and teamwork.

This quantitative study identified strong relationships among teacher facilitation, student involvement, satisfaction, and social media-enhanced collaborative learning, assessing key factors influencing students' experiences in collaborative environments and elucidating the roles of student engagement, instructor support, and learning outcomes. The findings indicated that effective teacher facilitation significantly increased student engagement and satisfaction within collaborative contexts, with constructive teacher feedback enhancing student involvement, thus highlighting the role of instructors in fostering meaningful engagement and dialogue in virtual collaborative learning (Herrera-Pavo, 2021). Additionally, the study demonstrated that active participation and enriching learning experiences are essential for the success of social media-facilitated collaborative learning, as engaged and satisfied students exhibited improved collaboration and learning outcomes (Fondo & Gómez-Rey, 2021).

The quantitative analysis revealed significant variations in technical proficiency, preferred learning strategies, and attitudes towards social media technologies among student groups, indicating that these individual differences greatly influenced students' beliefs, attitudes, and behaviours in using social media for collaborative learning. Therefore, it is imperative for educators to acknowledge and embrace this diversity to create inclusive and supportive learning environments that address students' diverse needs and preferences. Furthermore, challenges associated with collaborative learning and social media, such as privacy concerns, digital distractions, and information overload, hindered students' ability to fully engage in social media-mediated collaborative learning, emphasizing the necessity for guidance and resources to navigate virtual collaboration effectively (Teo et al., 2022). Overall, the findings suggest that teacher facilitation, student engagement, and satisfaction are pivotal in enhancing social media-supported collaborative learning. By fostering a supportive atmosphere, educators can significantly improve collaboration, learning, and performance, while also tailoring collaborative learning strategies in vocational institutions to accommodate individual differences and address social media-related challenges.

Conclusion

This study investigates the role of social networking sites in facilitating collaboration among English language learners in vocational institutions through a mixed-methods approach, combining quantitative analysis and qualitative interviews. Findings reveal

that social media enhances ESL collaborative learning by promoting communication, resource sharing, and peer interaction, thereby extending learning beyond traditional classrooms. Participants appreciated the user-friendliness of these platforms, which foster teamwork and active learning; however, they also faced challenges such as technical difficulties, privacy concerns, and digital distractions that hindered full participation. Quantitative results indicate positive correlations among teacher facilitation, student engagement, satisfaction, and the effectiveness of collaborative activities, underscoring the vital role of instructors in enhancing student discourse and learning. Furthermore, individual factors like technical proficiency and preferred learning methods shape students' experiences with social media in collaborative settings. This study contributes to the understanding of social media's importance in vocational education by highlighting the perspectives and challenges of English language learners. To optimize social media-facilitated collaborative learning, it is crucial to address these challenges and foster innovative strategies that enhance cooperation and learning outcomes in vocational institutions.

Theoretical and Practical Implications

This research offers valuable insights for policymakers, educators, and practitioners in vocational schools on leveraging social media to enhance collaborative learning among English language learners. Findings indicate that platforms such as Facebook, WeChat, and online forums effectively facilitate communication, resource sharing, and peer engagement beyond the classroom. Teachers play a pivotal role in guiding and supporting students through social media, fostering cooperation and active participation. To optimize the use of these platforms, educators should receive professional development in pedagogy and digital literacy while addressing individual differences and challenges to create inclusive environments. The study highlights the importance of social constructivism in designing dynamic learning experiences that encourage critical thinking and active engagement. It also emphasizes the socio-cultural factors that should inform collaborative learning program design, promoting culturally responsive environments that acknowledge students' diverse backgrounds. By elucidating the relationships between teacher facilitation, student engagement, and learning outcomes, this research contributes to the development of frameworks and theoretical models for enhancing collaborative learning in vocational colleges. Ultimately, the findings advocate for a comprehensive approach to integrating technology in the classroom that considers both the benefits and ethical implications of social media use. To achieve this, continued research, dialogue, and development are essential for better understanding technology-enhanced collaborative learning and creating meaningful educational experiences in vocational settings.

Limitations and Future Direction

Limitations

While this study provides valuable insights, it has notable limitations. Its primary focus on English language learners in vocational schools within a specific region may restrict the generalizability of the findings, as cultural, institutional, and technological differences across educational environments could significantly influence students' social media experiences in collaborative learning. Thus, broad applications of the results may be unreliable, prompting the need for future research to replicate and extend these findings in diverse educational contexts to enhance their validity. Additionally, reliance on self-reported assessments and subjective opinions may introduce biases, such as memory bias or social desirability bias, distorting the data collected on students' experiences. Employing mixed-method approaches that integrate qualitative and quantitative methods could provide a more comprehensive understanding of how students engage with social media in these settings. Furthermore, the cross-sectional design limits the establishment of causal relationships; although significant correlations were identified between student engagement, satisfaction, learning outcomes, and instructor facilitation behaviours, causation cannot be inferred. Longitudinal studies would be beneficial to elucidate the temporal dynamics and causal mechanisms underlying these relationships in social media-mediated collaborative learning environments. Finally, the narrow focus on a limited number of variables may overlook other critical factors influencing students' collaborative learning experiences, such as socioeconomic status, technical proficiency, and individual learning preferences. Therefore, a more holistic approach is necessary to examine social media-facilitated collaborative learning and capture the multifaceted effects of these various factors.

Future Direction

Expanding on these limitations presents numerous research opportunities. Longitudinal studies could explore the impact of social media-facilitated collaborative learning on students' academic performance and digital literacy by tracking their progress over time. Comparative studies across different educational and cultural contexts may uncover factors influencing students' social media use in collaborative settings, highlighting how technological infrastructures and institutional structures affect engagement and satisfaction. Qualitative research employing ethnographic methods, in-depth interviews, or focus groups can provide deeper insights into the sociocultural dynamics of social media use in collaborative learning. Furthermore, empirical or quasi-experimental studies could assess strategies aimed at enhancing student engagement and teacher facilitation within these environments. Additionally, investigating the integration of emerging technologies, such as artificial intelligence and virtual reality, could reveal innovative approaches to foster interaction and critical

thinking, ultimately enriching the collaborative learning experience.

Project Funding

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