

Social Media and Student Engagement in Online Learning in Higher Education Settings: Insights from a Case Study Approach

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ABSTRACT:

In recent years, social media has increasingly been adopted as a supplementary tool in higher education, providing new pathways to strengthen learner participation, particularly in virtual classrooms. This study investigates students' experiences with the use of social media to support their engagement during the completion of a group project in the Appreciation of Ethics and Civilization course. The course requires substantial peer collaboration and interaction with instructors, yet many students faced challenges in coordinating face-to-face meetings due to limited opportunities for in-person engagement. These constraints often led to suboptimal teamwork, weak engagement, and poor project outcomes. Employing a qualitative case study approach, this research examined two student groups enrolled in the course, exploring how social media facilitated collaboration and engagement. Thematic analysis of student reflections and group interactions revealed three core dimensions of engagement: affective, behavioural, and cognitive. The findings highlight that social media platforms can serve as effective tools to foster meaningful student engagement in collaborative academic tasks. By identifying how different forms of engagement manifest in online settings, the study offers practical insights for educators aiming to design more inclusive and interactive learning environments. These insights are essential for preparing students for the collaborative and communicative demands of professional life, thereby supporting both their academic and personal development.

Keywords: Social media, online learning, affective engagement, behavioural engagement, cognitive engagement

1.0 Introduction

The past few years have brought sweeping changes to how we live, work, and learn. For many in higher education, the shift to online teaching and learning was not just an option, but a necessity. As universities moved entire programmes online, the classroom as we knew it filled with human interactions, laughter, hesitations, and debates was replaced by screens, links, and muted microphones, altering how students and instructors interacted and collaborated. While some students adapted quickly, others struggled to remain engaged in an environment that often felt distant and impersonal.

This transformation forced educators to rethink their pedagogical approaches. In particular, many turned to social media, not as a distraction, but as a bridge. Social media platforms such as WhatsApp, Facebook, and Instagram, though often criticised for their informal nature, began to emerge as useful tools for sustaining conversation, coordinating tasks, and creating a sense of community. For students, these platforms offered more than just updates; they enabled the kind of informal, real-time collaboration that group assignments and peer-based learning demand.

At the same time, the online learning environment exposed new vulnerabilities. In many of my own observations and conversations with fellow lecturers, it became clear that certain students were merely present in class, logging in for attendance, staying silent during discussions, and rarely turning on their cameras. The usual classroom cues that help instructors gauge understanding or confusion were gone. Asking “Any questions?” often yielded only silence. And without the subtle encouragement of peer presence or eye contact, many students withdrew from active participation.

The course at the centre of this study, *Appreciation of Ethics and Civilization*, places strong emphasis on group-based projects. These projects are not just about content delivery; they

are meant to nurture critical thinking, mutual respect, and collaborative decision making. In a fully online setting, the success of such group tasks hinges on more than just internet connectivity; it relies on students’ willingness to engage, share ideas, and work through differences. When that engagement is missing, it shows, most visibly in the final group reports, which often reflect a lack of coordination and depth.

In this context, we began to ask: can social media do more than facilitate information exchange? Can it actually support the deeper forms of engagement, affective, behavioural, and cognitive, that underpin meaningful learning? While many studies have explored the technical or pedagogical aspects of online learning, fewer have focused on how students themselves experience these platforms as part of their learning journey.

There is a growing body of literature suggesting that social media can be leveraged to enhance student engagement and participation in digital learning environments. Facebook interactive posts and group activities, for instance, have been found to increase student engagement (Martin et al., 2020). WhatsApp allows for real time interaction and feedback between students and lecturers (Islam, 2020), while platforms like Instagram and Twitter have shown promise in supporting microlearning and multimedia content sharing (Karimi et al., 2020). YouTube offers access to a wide variety of educational content and its comment feature allows for peer interaction (Martin et al., 2020). Meanwhile, tools such as Zoom and Google Meet attempt to recreate the physical classroom experience through live lectures, breakout rooms, and collaborative features.

Although these tools are widely used, to our knowledge, few studies have explored how they affect the different types of student engagement in a real teaching context. This study seeks to fill that gap by examining how students enrolled in the *Appreciation of Ethics and Civilization* course experienced social media as part of their learning

process. Specifically, it explores how social media contributed to their affective, behavioural, and cognitive engagement. The findings aim to provide educators with practical insights on how to create more engaging and human centred online learning environments.

The next section outlines the relevant literature on student engagement and the use of social media in education. This is followed by the methodology, findings, discussion, and concluding reflections.

2.0 Literature Review

2.1 Social Media

Social media has become an integral part of daily life, shaping how individuals connect, communicate, and share information. It is built on internet-enabled platforms that allow users to exchange thoughts, images, videos, documents, and more through web-based software and mobile applications. With widespread access through smartphones, tablets, and computers, social media use has grown exponentially. Today, platforms like Facebook (2.74 billion users), YouTube (2.29 billion), WhatsApp (2 billion), and Instagram (1.22 billion) rank among the most heavily used worldwide.

The concept of social media is not new. GENie introduced the first networked communication system in 1985, followed by The Palace in 1994, which allowed users to interact within visually designed chatrooms. However, the turning point came in 2004 with the launch of Facebook, which went global in 2006 and quickly became a household name. Since then, social media has moved beyond personal networking into more structured domains, including education. Over the past decade, higher education institutions have started integrating social media into their teaching and learning (T&L) strategies. As Seaman and Tinti-Kane (2013) noted, the use of social media among academics rose from just 10–12% in 2010 to about 30% within a few years, reflecting growing awareness of its potential to enrich learning environments.

2.1.1 YouTube

Among the various platforms, YouTube stands out as a major tool for online learning due to its wide range of educational content. It offers learners the flexibility to access tutorials, lectures, and instructional videos at their own pace. For students and educators alike, its accessibility and multimedia features make it a go-to resource. Particularly for young bilingual learners, YouTube has been shown to aid language acquisition through a combination of engaging visuals and audio (Listiani et al., 2021).

The platform encourages independent learning and supports diverse learning preferences. Students grappling with complex topics can revisit content multiple times, enhancing their comprehension and retention (Maru et al., 2021). YouTube's comment sections also allow for informal peer discussions, offering a layer of interactive engagement that supports social learning. Research further supports the idea that YouTube's rich multimedia approach accommodates a variety of learning styles and helps maintain student interest (Gopinathan et al., 2022; Yousaf, 2023; Wang, 2022). Features such as real-time feedback and chat tools have also been found to strengthen student–educator and peer communication (Rahayu & Maburroh, 2023; Alelaimat et al., 2023; Purwati, 2020).

Despite its benefits, integrating YouTube into formal learning environments is not without its challenges. One concern is content quality and credibility. Not all videos are produced with academic rigour, which may result in misinformation or a mismatch with learning objectives (Andrade-Vargas et al., 2024). Another issue is distraction. YouTube's recommendation algorithm often pushes entertainment content that can divert students away from learning (Coban & Buyuk, 2021; Siebers et al., 2022). Digital accessibility is also a concern, especially in underserved communities where students may lack reliable internet or adequate devices. Moreover, while the comment section may support discussion, it also opens up space for inappropriate interactions, including

cyberbullying (Stevens & Roy, 2023). These challenges underscore the need for educators to thoughtfully curate content, monitor student usage, and ensure equitable access to digital tools.

2.1.2 Facebook

Facebook, initially designed for social networking, has evolved into a popular platform for educational engagement. Its ability to foster a sense of online community has made it a valuable tool in virtual learning spaces. Through Facebook groups and pages, educators can share materials, post announcements, and support peer discussion. The feeling of connectedness this creates can motivate students and enhance their sense of belonging in a class (Islam, 2013).

Features such as live streaming and instant messaging allow for real-time interaction, making it suitable for virtual Q&A sessions, live discussions, and group coordination. These synchronous features support understanding and retention by allowing students to seek clarification and feedback on the spot (Dennen et al., 2007). The platform's versatility in hosting videos, links, and images caters to various learning preferences, offering an inclusive experience (Ngussa et al., 2021).

However, there are limitations to Facebook's educational use. Concerns around privacy and data security are critical, especially when students' personal information is involved (Dennen, 2020). In addition, the casual nature of Facebook can blur boundaries between social and academic spaces, potentially affecting students' study routines and focus (Islam, 2020). Nevertheless, when managed with clear guidelines and institutional support, Facebook can contribute significantly to creating a collaborative and engaging online learning environment. Its potential lies in its ability to combine community-building, real-time interaction, and multimedia in a single, familiar platform.

2.1.3 Instagram

Instagram's role in education has been growing, especially in contexts where engagement, creativity, and visual learning are key. Research shows that Instagram's interactive and visually rich features contribute positively to students' learning satisfaction and participation, particularly in online settings (Hazzam & Wilkins, 2023). With its capacity for real-time sharing and community interaction, Instagram serves as a dynamic platform for informal learning and digital expression.

More than just a photo-sharing app, Instagram supports a sense of peer belonging. It encourages students to share their ideas, celebrate each other's achievements, and form supportive learning communities, factors that are essential for motivation and course retention (Khan et al., 2021). These interactions, though informal, build the kind of engagement that traditional platforms sometimes struggle to achieve.

Moreover, Instagram contributes to the development of digital literacy and critical thinking. The nature of the platform encourages users to engage critically with content, curate their own narratives, and think visually and contextually (Malik et al., 2021). In doing so, students enhance not only their subject understanding but also their ability to communicate ideas in creative and meaningful ways. As educational institutions continue to experiment with social media in teaching, Instagram is poised to play a more central role in fostering participatory, student-driven learning environments.

2.2 Social Media Usage in Malaysia

In Malaysia, social media usage has grown steadily over the past decade. From 2016 to 2022, usage rose from 62% to nearly 90% of the population, marking an increase of 8% from the previous year alone (Digital Business Lab, 2022). This surge reflects the centrality of digital communication in everyday life and signals

growing opportunities for educational integration.

According to recent data as shown in Figure 1, WhatsApp is the most used platform in Malaysia (93.2%), followed by Facebook (88.7%) and Instagram (79.3%). Other platforms with significant user bases include Telegram, Facebook Messenger, TikTok, Twitter, WeChat, Pinterest, LinkedIn, Discord, Snapchat, and Skype.

Pinterest, LinkedIn, Snapchat, and Skype. As more educators explore how to meet students where they are, these platforms offer accessible and culturally embedded avenues for interaction, collaboration, and learning. However, their usage also requires thoughtful planning, ethical considerations, and pedagogical sensitivity, especially in managing distractions, safeguarding student privacy, and ensuring inclusive access.

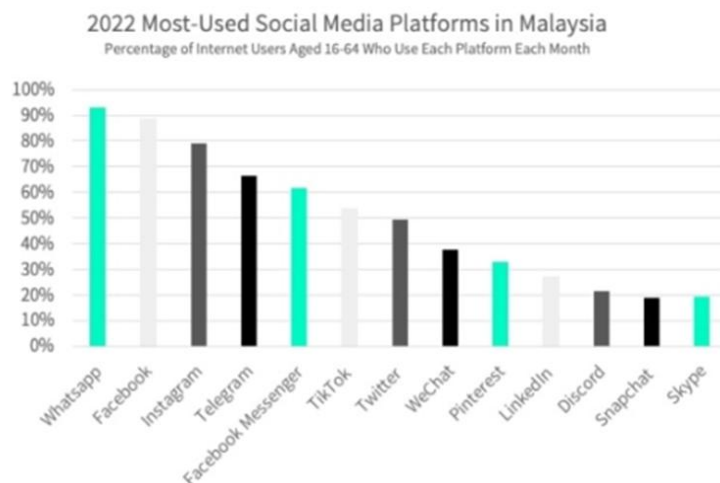


Figure 1: 2022 Most-Used Social Media Platforms in Malaysia

Source: <https://digital-business-lab.com/2022/07/%E2%91%A1-social-media-penetration-in-malaysia-research/>

Social media in Malaysia has grown rapidly as internet users have increased. There were 29.55 million internet users in Malaysia in January 2022. Most Malaysians use the internet to read news, follow current events and communicate with friends on social media. Malaysians who have moved abroad for school, training and job are in frequent contact with family and friends, which has increased the use of WhatsApp, Facebook, and Instagram. Globalisation has increased Malaysians' use of mobiles, PCs and other registering devices like tablets.

2.3 Use of Social Media in Education

For many young people and adults, social media has become part of everyday life rather than merely a source of entertainment. Its presence in education has expanded considerably, especially between 2020 and 2024 when online learning became unavoidable. During this period,

platforms such as Facebook, Twitter, and Instagram were increasingly used to maintain communication, collaboration, and resource sharing. Their multimodal features, offering a mix of text, visuals, and interactivity, help meet diverse learning styles and preferences (Rosenberg et al., 2020).

Collaboration through social media also creates opportunities for community building. By connecting students with peers, these platforms have been shown to enhance academic performance and overall satisfaction (Al-Ansi et al., 2021). Educators, too, benefit from these spaces as they provide informal avenues for professional networking, sharing best practices, and keeping up with emerging educational trends, particularly on Twitter and LinkedIn.

The role of social media became even more significant during the global pandemic, when

distance learning quickly became the default. Virtual courses, online discussions, and knowledge sharing were sustained through social platforms. Research has shown that such tools not only helped students stay connected but also motivated them to continue learning during challenging times (Al-Ansi et al., 2021).

Despite these benefits, integrating social media into education presents several challenges. Concerns about unequal access to technology, privacy risks, and potential distractions are persistent. Educators therefore need to establish clear norms for online participation while ensuring equitable access to digital tools. Even with these challenges, studies affirm that social media continues to provide valuable support for modern teaching and learning (Rosenberg et al., 2020).

A growing body of research supports the educational benefits of social media. Junco, Heiberger, and Loken (2011) as well as Blaschke, Porto, and Kurtz (2010) argue that active participation on these platforms enhances student-instructor engagement and fosters critical reflection, problem-solving, and self-regulation. McLoughlin and Lee (2010) further highlight that social connections, collaborative content creation, and knowledge sharing contribute to intellectual growth and peer learning.

Other scholars emphasise the employability and personal development dimensions of social media in education. Hovorka and Rees (2009) note that it provides opportunities to strengthen communication, teamwork, creativity, and concentration, while Tinto (2000) underscores its role in fostering learning communities, which are essential for engagement and student retention. Similarly, Rahimi and Zawawi (2005) found that Facebook makes it easier for students to access academic resources, technical knowledge, and current events. By allowing users to share academic materials such as articles and reference lists, Facebook supports the evolution of teaching and learning systems,

providing students with long-term access to useful educational content.

2.4 Student Engagement

Student engagement remains a central concern in higher education and is often defined as the time and effort invested in learning. This includes active involvement with course content, interaction with peers, and participation in meaningful academic activities (Kuh et al., 2007). Evidence consistently shows that highly engaged students perform better academically and are more motivated to achieve their learning goals (Kuh et al., 2007; Umbach & Wawrzynski, 2005).

Engagement is typically analysed across three dimensions: cognitive, behavioural, and affective (Kuh, 2003; Handelsman, Briggs, Sullivan, & Towler, 2005; Chapman, 2003). Cognitive engagement refers to the mental strategies students apply to understand complex ideas, analyse content, and solve problems. Students who embrace intellectual challenges and value academic learning are better prepared for future tasks.

Behavioural engagement concerns visible participation such as class attendance, completing assignments, and contributing actively to discussions. According to Christenson et al. (2012), this dimension reflects the attention, effort, and persistence that students bring to academic activities.

Affective engagement, meanwhile, captures the emotional aspects of learning, including students' sense of belonging, attitudes toward peers and teachers, and feelings of interest in learning activities. When affective engagement is high, students are more likely to enjoy their studies and develop positive connections with the academic environment (Sinatra et al., 2015). In Malaysia, studies also show that strong affective engagement leads to greater enthusiasm for learning and improved attendance (Halimah et al., 2013; Zalizan et al., 2014; Hanita et al., 2018).

2.3 Media Richness Theory and Its Relevance to Students' Online Learning Engagement Through Social Media

Media Richness Theory (MRT), first introduced by Daft and Lengel (1986), evaluates communication tools based on their capacity to convey information effectively. Rich media, such as face-to-face interaction, are considered most effective because they allow immediate feedback, non-verbal cues, and personal connections. In contrast, leaner forms such as emails or written reports lack these qualities, often limiting understanding and increasing the risk of miscommunication.

Social media platforms align closely with the features of rich media, as they enable real-time interaction, incorporate visual and audio elements, and create a sense of social presence. Applications such as Facebook, Instagram, and WhatsApp allow students to exchange messages, share images and videos, and participate in live discussions. These features help learners clarify misunderstandings and engage with peers and instructors in more meaningful ways.

The objectives of this study, which focus on exploring students' experiences with social media in online learning, resonate with MRT. The theory suggests that richer communication channels encourage more productive collaboration and deeper cognitive and affective involvement in learning tasks. This perspective also helps explain students' preferences for certain platforms. Tools like Zoom and Google Meet, which allow video-based interactions, often sustain engagement more effectively than text-only discussion boards.

By combining synchronous and asynchronous communication, as well as personal and group interactions, social media platforms contribute to a more interactive and engaging environment. MRT therefore provides a valuable framework for understanding how digital tools shape student participation and motivation in online settings. By applying this lens, the present study seeks to uncover how the richness of different

media influences the quality of engagement and learning outcomes in higher education.

2.3 Use of Social Media in Education

For many young people and adults today, social media is not just a form of entertainment or diversion, it is part of daily life. Its ubiquity has naturally extended into education, especially during the years between 2020 and 2024 when online learning became a necessity. During this time, educators and students turned to platforms like Facebook, Twitter, and Instagram not only to stay connected but also to communicate, collaborate, and share resources in ways that supported the learning process. The multimodal nature of social media, offering visual, textual, and interactive elements, has made it easier to accommodate diverse student learning preferences (Rosenberg et al., 2020).

One of the key strengths of social media in education is its capacity to support collaboration and build learning communities. Platforms that facilitate two-way communication allow students to feel part of a collective experience, which in turn has been linked to improved academic performance and greater satisfaction with the learning environment (Al-Ansi et al., 2021). For educators, social media provides an informal yet effective space for professional development. Many have turned to Twitter and LinkedIn to share best practices, follow current research, and engage in pedagogical discussions.

Social media also played a significant role during the sudden pivot to distance learning brought on by the global pandemic. It became an alternative classroom, allowing for virtual lessons, discussions, and the continued exchange of ideas and support among students and educators. Al-Ansi et al. (2021) noted that during this period, social media use was instrumental in sustaining student motivation in the absence of physical classrooms.

However, as with any educational tool, social media brings challenges. The digital divide remains a persistent issue, with some students lacking reliable internet access or appropriate

devices. Privacy concerns, especially when using commercial platforms, cannot be overlooked. Additionally, the potential for distraction is ever-present. To navigate these issues, it is important for educators to establish clear expectations and provide equitable access to technology. With thoughtful implementation, the benefits of social media in modern education can still outweigh its limitations (Rosenberg et al., 2020).

Several studies have shown how the use of social media enhances learning outcomes. Junco, Heiberger, and Loken (2011) and Blaschke, Porto, and Kurtz (2010) found that students who actively use social media demonstrate stronger engagement with instructors and develop critical metacognitive skills such as reflection and the ability to manage their learning. Social media, as argued by McLoughlin and Lee (2010), enables intellectual development through social connections, collaborative content creation, and information exchange. The process of finding, creating, and sharing knowledge fosters not only academic growth but also peer learning.

Furthermore, Hovorka and Rees (2009) emphasise the potential of social media to make the learning experience more enjoyable while equipping students with relevant employability skills such as communication, collaboration, and creativity. Social media also contributes to a sense of belonging in a learning community, which Tinto (2000) highlighted as essential for university students' engagement and retention.

In a study by Rahimi and Zawawi (2005), the use of Facebook among students was found to enhance access to current affairs, technical knowledge, and academic information. Its ease of use and multimedia capabilities appeal to younger audiences. The researchers suggested that by enabling users to share academic materials such as articles and references, Facebook can support evolving teaching and learning systems. Students who follow a curated Facebook page, for example, may enjoy long-term access to a stream of relevant educational resources. This ease of access and content flow

can contribute to improving the overall quality of teaching and learning.

2.4 Student Engagement

Student engagement, a central concern in any learning environment, refers to the time and energy students invest in meaningful educational activities. This includes not only their interaction with course material but also their participation in social and intellectual exchanges with peers and instructors (Kuh et al., 2007). Research consistently shows that students who are actively engaged are more motivated and achieve better academic outcomes (Kuh et al., 2007; Umbach & Wawrzynski, 2005).

Kuh (2003) describes engagement as encompassing three interrelated dimensions: cognitive, emotional (affective), and behavioural. These components are often used in empirical studies to assess student participation in educational settings (Handelsman, Briggs, Sullivan, & Towler, 2005; Chapman, 2003).

Cognitive engagement refers to how students apply their intellectual abilities to understand content, solve problems, and build meaningful connections between concepts. It includes deep learning strategies, such as critical thinking and analysis. Students who are cognitively engaged typically see value in learning and approach academic tasks with purpose and curiosity.

Behavioural engagement, meanwhile, captures the observable aspects of student participation, such as class attendance, completing assignments, and contributing to discussions. According to Christenson et al. (2012), this form of engagement is reflected in students' attention, effort, and persistence in learning activities. It is often the most visible indicator of how students are responding to instructional approaches.

Affective engagement, the third dimension, involves students' emotional connection to the learning experience. It includes their sense of belonging, attitudes toward school, and feelings about teachers, peers, and learning tasks (Sinatra et al., 2015). When students experience positive

emotions toward learning, they are more likely to feel motivated, supported, and satisfied with their educational journey. Research in the Malaysian context has shown that students with high levels of affective engagement express enjoyment and enthusiasm for learning, contributing to improved attendance and academic motivation (Halimah et al., 2013; Zalizan et al., 2014; Hanita et al., 2018).

2.5 Media Richness Theory and Its Relevance to Students' Online Learning Engagement Through Social Media

Media Richness Theory (MRT), introduced by Daft and Lengel (1986), offers a useful lens for understanding how students engage with different communication technologies in an online learning environment. According to MRT, communication channels differ in how much contextual information they can convey. Platforms offering visuals, sound, and instant feedback are considered 'richer,' making them more effective for collaborative learning. Richer media, such as face-to-face conversation, allow for immediate feedback, multiple cues (such as tone and facial expressions), and a personal focus, making them more effective for complex or emotionally nuanced exchanges. Leaner media, like text messages or emails, lack these features and are often less effective for promoting engagement or clarifying misunderstandings.

Social media platforms, by design, offer many of the elements that MRT identifies as features of rich media. Platforms like Facebook, Instagram, and WhatsApp enable real-time interaction, support the exchange of images and videos, and allow for both synchronous and asynchronous communication. Students can ask questions, clarify misunderstandings, and receive immediate feedback from peers or instructors, which helps in sustaining engagement in ways that are difficult to replicate through email or learning management systems.

The aim of this study which is exploring students' experiences of social media's influence on online learning engagement aligns well with

the assumptions of MRT. The theory suggests that when students use communication channels that are rich in feedback and context, their learning experience is more interactive, personal, and meaningful. This study builds on that idea by examining how specific features of social media platforms support affective, behavioural, and cognitive engagement in online learning.

MRT also helps explain why students gravitate toward certain platforms over others. Tools such as Zoom and Google Meet, which support video and audio communication, offer richer interaction than text-based discussion boards. Social media platforms combine this richness with familiarity and ease of use, making them especially powerful in maintaining motivation and participation in online settings.

Hence, Media Richness Theory sheds light on how social media supports student engagement in virtual classrooms. By examining students' preferences and behaviours through the MRT framework, this study hopes to uncover how different platforms shape the quality of interaction and learning in an increasingly digital education landscape.

3.0 Methodology

This research was conducted with undergraduate students enrolled in the core university course *Appreciation of Ethics and Civilisation*. The participants were drawn from two large teaching groups, each consisting of approximately 100 to 120 students. The course was chosen because of its deliberate integration of digital platforms, particularly Facebook and YouTube, as part of the teaching and learning process. One of the major group assignments required students to rely on these tools for communication, collaboration, and sharing of resources. The structured use of such platforms provided an appropriate context for examining how technology influences student engagement in an online learning environment.

To capture the complexity of these experiences, a qualitative case study approach was employed. Case studies are particularly useful for

investigating contemporary issues within authentic contexts, allowing for a deeper exploration of how students engaged with digital tools in a university setting where online learning was central. This approach made it possible to document the lived experiences of learners and to understand the nuances of their collaborative practices in a digital space.

Ethical protocols were strictly adhered to in this research. Approval was granted by the Universiti Utara Malaysia (UUM) Ethics Committee, and all procedures followed recognised standards for studies involving human participants. Prior to taking part, students received clear explanations of the study's aims, scope, and process, and their informed consent was obtained. To safeguard privacy, anonymity and confidentiality were maintained, and all records were securely managed in accordance with the Personal Data Protection Act (PDPA) 2010. Participation was voluntary, with students reminded of their right to withdraw at any point without consequence.

Data collection was conducted through semi-structured interviews, which were designed to elicit students' reflections on their use of social media for academic purposes. This method provided both flexibility and depth, enabling participants to describe their experiences in their own words while allowing the researcher to follow up with probing questions. Examples of guiding questions included: *"How do you feel about using social media in your learning process?"* and *"What skills have you gained through using social media to complete your assignments or tasks?"* These questions encouraged students to consider both the affective and practical dimensions of their engagement.

Thematic analysis was applied to interpret the interview data, following the principles outlined by Patton (2002) and Braun and Clarke (2013). This method is well-suited for identifying patterns across qualitative data and for generating meaningful themes. The process began with repeated readings of the transcripts to ensure familiarity, followed by the development of initial codes that captured

recurring elements. These codes were then grouped and cross-checked to identify emerging themes, which were refined through iterative cycles of analysis.

The analysis followed Braun and Clarke's (2013) six-phase framework. In the first stage, the researcher immersed herself in the data through close reading. During the second stage, initial codes were manually developed from both participants' accounts and the conceptual focus of the study. In the third stage, the codes were organised into potential themes. The fourth stage involved reviewing these themes to ensure internal coherence and alignment with the study's objectives and existing literature. In the fifth stage, themes were defined and named, while the final stage focused on producing the research report, integrating the findings with previous scholarship, and highlighting their implications for understanding student engagement in online learning through social media.

Through this rigorous process, the study sought to provide a detailed and layered understanding of how digital platforms shape students' affective, behavioural, and cognitive engagement within collaborative academic settings.

4.0 Findings

4.1 Profile of respondents

The study respondents consisted of 14 students of the Appreciation of Ethics and Civilization course from Group O and P, Universiti Utara Malaysia. As this course is a core course of the university, the students are from various programs. All of them are between 20 and 23 years old and almost all of them are in the second semester of their studies except for one student who is in the sixth semester. Thirteen of them were female and only one of the respondents was male.

4.2 Student engagement

Theme 1: Affective (Interest, Motivation, Confidence)

Affective engagement relates to the emotional dimension of learning, encompassing students' sense of interest, belonging, and confidence during their academic experience. These emotions play a central role in shaping motivation and overall satisfaction with the learning process. Digital platforms, particularly social media, have been found to enhance affective engagement by fostering connections with peers and instructors, providing encouragement, and enabling constructive feedback.

Interactions conducted through social media often make the learning process more dynamic and less formal, thereby reducing the pressure commonly associated with traditional classroom settings. This more relaxed environment gives students the confidence to voice their thoughts and ideas openly, which, in turn, increases their level of interest and active participation. Social media also provides avenues for peer-to-peer

Table 1 presents the sub-categories of affective engagement, interest, motivation, and confidence, along with illustrative student responses.

support, where students can exchange encouragement and feedback, helping to sustain motivation and making the learning journey more enjoyable.

Importantly, these interactions also help mitigate the sense of isolation that many students experience in online learning. For instance, students who actively engage with classmates through WhatsApp or Instagram often report feeling more connected and motivated, as such exchanges allow them to share both academic progress and personal experiences. This creates a more inclusive and fulfilling learning atmosphere.

Another key outcome is the development of confidence. By offering a less intimidating platform for dialogue, social media enables students to articulate ideas, ask questions, and participate without the immediate social pressure of face-to-face interactions. For students who may be introverted or hesitant to speak in class, this flexibility can encourage greater involvement and nurture a stronger sense of self-assurance in expressing opinions.

Table 1: The Sub-Categories for the Affective

Category	Sub-categories	Responses
Affective	Interest	• "I was really looking forward to attending online classes because it turned out to be different from my physical classes. Sometimes I feel like there is a surprise when learning online". (R2) • "For me, my interest increased because I could see how other students made learning posts on the internet. This can indirectly foster my interest because the students have shown an interesting and fun way of learning in terms of writing notes and so on". (R5) • "When I am not clear or understand, usually I will send a private message through the WhatsApp application to the lecturer involved. I will ask about something I am not sure about." (R1)
	Motivation	• "If I don't understand the content, first of all if the lecturer records the video, I will watch the lecturer's video again. I will study the notes from the lecturer involved. Lastly, when you don't understand a topic, the easiest way is to find related videos from YouTube" (R2)

		• "We can watch the video over and over again. In real class, we had to really pay attention, but with YouTube we can watch the video whenever we want, so if we forget or don't understand, we can watch it again. This way, we are more motivated to study" (R4) • "I watch the video and pause whenever I want so that I can take notes. This makes me more eager to learn" (R8)
	Confidence	• "When communicating online, every form of opinion I throw has trained me to be more capable in expressing any opinion or view. Indirectly, it trained me to have confidence and courage when arguing in public." (R5) • "I feel more open in giving opinions. This is because when I don't meet other fellow students, the feeling of shyness will decrease. This makes me more confident in giving any opinion" (R4) • "I am an introvert, but social media give me the opportunity to share my thoughts and idea without thinking what people would think about me" (R3)

Theme 2: Behaviour (Time Management, Communication)

Behavioural engagement encompasses the visible actions that indicate students' participation and commitment to their learning. This includes joining virtual classes, completing assignments on time, managing schedules effectively, and interacting with course materials. In online and blended contexts, such behaviours demonstrate how students structure their learning efforts and contribute to the academic process.

Digital platforms, particularly social media, play a significant role in supporting behavioural engagement. Interactive features such as comments, likes, and sharing provide avenues for students to contribute to discussions, while group chats and collaborative spaces encourage teamwork in coordinating assignments and projects. These tools create structured opportunities for active participation, helping students remain consistently involved in their academic tasks.

Time management also benefits from the use of social media. Platforms often provide functions

for reminders, real-time notifications, and updates from peers or instructors, which enable students to prioritise tasks and manage deadlines more efficiently. Beyond organisation, these technologies improve communication by allowing continuous interaction between students and lecturers. This flexibility makes it easier to clarify instructions, exchange ideas, and maintain progress in group work.

For example, learners can participate in synchronous discussions via Zoom, coordinate group projects through WhatsApp, or exchange resources and class-related content in dedicated Facebook groups. Each of these tools supports effective communication while simultaneously reinforcing students' ability to manage their academic workload.

Table 2 summarises the behavioural engagement theme, highlighting its sub-categories, time management and communication, together with students' illustrative responses.

Table 2: The Sub-Categories for the Behaviour

Category	Sub-categories	Responses
Behaviour	Time management	• "When I do any task, first of all I will put my mobile phone away from me because it tends to disturb me when I am doing a task, for example such as notifications from social media such as Instagram. Usually in a day when 6 hours are used for online classes, I will use a total of 4 hours to do any task while the rest of the time I use for social media such as Instagram and YouTube" (R2) • "Normally I put away your phone and have a book with me when class starts because we have to pay attention to the lecturer. If not, I fear of missing something. That means there must always be a book and a pen to write" (R8) • "I have my own schedule. I follow the schedule every day. I like to study at night, that's when I can focus more on studying" (R6)
	Communication	• "When doing any task, it becomes easy because of the ability to communicate easily between group mates or with lecturers for example through applications available in WhatsApp and Telegram" (R2) • "I feel that communication is easier with the presence of social media because it is possible to have discussions with group members even if they are not on campus" (R12) • "I think, I prefer interaction with friends using social media because I'm a shy person, so without feeling shy, I can ask questions or voice any opinion" (R10)

Theme 3: Cognitive (Problem solving)

Cognitive engagement captures the intellectual effort and dedication that students apply to comprehend and master learning materials. It requires deeper processing of information, critical reflection, and the ability to apply knowledge in meaningful contexts. In online learning, digital platforms, particularly social media, play a vital role in supporting this form of engagement by providing access to diverse resources such as videos, infographics, and textual content. The availability of multiple formats caters to varied learning preferences and enables students to revisit materials at their own pace, thereby strengthening comprehension.

Beyond access to content, peer-to-peer interaction on social media further enriches

cognitive engagement. Through discussions, students can exchange perspectives, clarify areas of confusion, and share relevant resources. These exchanges not only stimulate critical thinking but also encourage collaborative problem-solving, which helps consolidate learning. The immediacy of feedback from peers and instructors is another important factor, as it enables students to resolve misunderstandings quickly and refine their grasp of concepts.

In practice, students frequently rely on social media groups for academic purposes, whether to participate in Q&A sessions, exchange study materials, or work collectively on projects. For example, brainstorming in Facebook groups or discussing content through WhatsApp chats

allows learners to process ideas more deeply and apply them effectively to their coursework.

of problem-solving and illustrating it with student responses.

Table 3 provides an overview of the cognitive engagement theme, outlining the sub-category

Table 3: The Sub-Categories for the Cognitive (Problem Solving)

Category	Sub-categories	Responses
Cognitive	Problem solving	• "If I have any problems, social media is usually able to help me. For example, when I am faced with an assignment that requires the public's opinion, I often use social media to ask for help or ask for opinions from my classmates"(R1) • "The use of social media includes a wide scope where I am able to find various information and use it to solve any problem related to the assignment given by the lecturer. Another thing is that the ability to make video calls using WhatsApp turns out to be very helpful in solving problems faster" (R4)

5.0 Discussion

The findings of this study provide deeper insight into how students utilise social media in their academic activities and the extent to which it shapes their engagement in online learning. Three distinct yet interrelated forms of engagement emerged, cognitive, affective, and behavioural. These outcomes align with earlier work, such as Chiu (2020), who reported that social media positively influences students' learning experiences by supporting collaboration, problem-solving, and communication. Interview data from this study showed that students consistently associated social media with greater ease of interaction, opportunities for live discussions, and more efficient approaches to addressing challenges. Many also indicated that they felt more comfortable sharing ideas online compared to face-to-face settings, as the digital environment reduced anxiety and encouraged freer expression.

This sense of openness is particularly important for students who might otherwise remain silent

in traditional classroom environments. Social media offers them a platform to participate actively without the fear of judgment. Similar patterns were identified by Diraditsile and Samakabadi (2018), who found that 64% of students preferred social media for collaboration and self-expression. Viewed through the lens of connectivism, this preference reflects the appeal of digital tools over conventional approaches when students are required to coordinate and cooperate on shared academic tasks. Social media simplifies group work by facilitating communication on task allocation, progress tracking, and decision-making. Such interactions not only improve collaboration but can also foster leadership skills.

Another key advantage noted by participants is the accessibility of information. Students reported that social media allowed them to locate and share relevant resources quickly, echoing Poore's (2012) assertion that digital platforms serve as valuable sources of learning. This ease of access reinforces the idea that a student without a phone or computer is increasingly rare in the modern educational

landscape. In fact, most students in this study acknowledged that social media was an indispensable part of their academic experience. The ability to cooperate and exchange knowledge in digital spaces aligns with Liccardi et al. (2007), who argued that students are socially connected to one another in ways that encourage the ongoing sharing of daily learning experiences.

Taken together, the results highlight the essential role of social media in sustaining student engagement across the three dimensions. On an affective level, students benefit from the motivation, encouragement,

and sense of belonging that come from online connections. Behaviourally, they are more inclined to engage in discussions, collaborate on assignments, and participate actively in their learning communities. Cognitively, access to diverse learning materials and opportunities for critical exchanges with peers contribute to deeper understanding and more reflective learning practices.

Table 4 illustrates the relationship between social media use and the three engagement dimensions, presenting key examples and their expected impact on students' online learning experiences.

Table 4: Framework – Students' Experiences of Social Media in Online Learning Engagement

Key Elements	Cognitive Engagement	Affective Engagement	Behavioural Engagement
Definition	Intellectual effort devoted to understanding and applying learning content.	Emotional aspects of learning, including belonging, enthusiasm, and motivation.	Observable actions that reflect active participation in online learning tasks.
Role of Social Media	• Provides access to varied content (videos, text, visuals). • Encourages knowledge exchange, peer discussion, and critical thinking. • Enables quick feedback from lecturers and classmates.	• Creates a sense of connection and peer/lecturer support. • Strengthens motivation through recognition and positive reinforcement. • Reduces isolation by fostering shared learning spaces.	• Stimulates participation via likes, comments, and content sharing. • Supports teamwork with tools such as chats and video conferencing. • Public interaction boosts accountability and involvement.
Examples of Engagement	• Students clarify difficult concepts through social platforms. • Participation in Facebook study groups to deepen understanding. • Use of peer feedback to refine learning.	• Exchanging encouragement and recognition in WhatsApp/Facebook groups. • Motivation enhanced through positive peer interactions. • Building supportive relationships online.	• Collaborating on assignments using WhatsApp or Google Meet. • Joining live online discussions and study groups. • Sharing and posting course-related resources.

Expected Outcomes	Improved comprehension, deeper analysis, and critical reflection through richer media.	Stronger emotional investment and sustained interest in learning activities.	Greater consistency in participation and active involvement in online learning.
Contribution to Overall Engagement	Strengthens understanding and information processing.	Enhances sense of community, belonging, and support.	Promotes regular interaction

6.0 Conclusion

Today, much of communication and study takes place via digital devices, reducing reliance on traditional settings such as libraries or in-person consultations. Tasks that once required extensive library visits or formal meetings can now be completed with just a few clicks. For students, the widespread use of social media has transformed access to knowledge, making it faster, more interactive, and more collaborative, particularly in the context of online learning. The findings of this study confirm that social media makes a meaningful contribution to student engagement by shaping how learners search for, share, and interact with information.

At the same time, the research highlights the dual nature of social media in education. While these platforms support learning and collaboration, they also present risks of distraction. Many participants acknowledged that time management was a significant challenge when using social media for academic purposes. Constant notifications, trending content, and endless scrolling often diverted attention from academic goals. As Andersson et al. (2013) caution, the unstructured and sometimes overwhelming environment of social media can undermine instructors' efforts to keep students focused and on task.

Nonetheless, the potential of social media as a learning tool remains considerable. Its accessibility, familiarity, and dynamic features make it a valuable medium for promoting participation, collaboration, and critical thinking. The study demonstrates that when applied with

careful planning and pedagogical structure, platforms such as Facebook, WhatsApp, YouTube, and Instagram can create meaningful spaces for peer interaction, reflective discussion, and knowledge co-creation.

It is also important to note that the successful integration of these tools into education is not automatic. As Dyson et al. (2015) argue, the effectiveness of social media depends on how students perceive its relevance and contribution to their learning experiences. Educators must therefore be sensitive to students' digital behaviours, preferences, and challenges when embedding such platforms into their teaching strategies.

In summary, while social media cannot replace traditional teaching practices, it can serve as a valuable complement. The purposeful design of these platforms has the potential to cultivate deeper engagement and support students in becoming more connected, active, and reflective learners. Moving forward, educators, institutions, and policymakers must carefully consider how social media can be strategically integrated into teaching and learning to align with the needs of a digitally fluent generation.

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