

University Students, Social Media, and Purposeful Use: Networked Knowledge Activities Across Contexts

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Abstract

University students are frequent users of networked environments, such as social media, in their everyday lives. Although often associated with socialization and entertainment, their social media use is multifaceted, reaching across other life activities and contexts. This exploratory, qualitative study draws upon interviews with 25 university students in the United States, considering how they use social media across learning and professional contexts, and how they view their role in this setting. During the interviews, students participated in a card sort activity that presented them with 41 potential social media tasks they might engage in as well as two different ways of categorizing social media tasks.

Findings showed that students use some social media tools, like Instagram, widely across contexts, while other tools are relegated to specialized use or contexts, largely driven by task. Instructors set the tone for using certain other tools, like X (formerly known as Twitter) or Diigo (a social bookmarking tool), whereas other tools are used to access resources but not to interact, like Pinterest and YouTube. Most students reported using social media to interact with others, but only within well-defined networks comprised of friends and classmates. Interactions with these individuals were focused on supporting friendship and accomplishing learning or extracurricular tasks, respectively. Beyond that, students reported a passive role on social media, consuming rather than producing content and leaving limited traces of their presence in the public sphere, with the exception of situations when students were leaders in extracurricular groups or using social media for their jobs. In those instances, the most common uses were related to posting event and promotional information. After engaging with the social media tasks and activity categories presented in the card sort, students offered two types of reflections. One group reflected on the limited nature of their personal social media use, whereas the other group indicated that there was a range of social media tasks and uses that they had not previously considered. The small group of students who did not offer any sort of post-activity reflection indicated that they had small networks with limited activities by design, and lacked interest in thinking further about them.

These findings have implications for higher education institutions, where students might be offered learning, extracurricular, and career support opportunities to help them develop both awareness and skills related to common networked knowledge activities and corresponding digital skills.

Keywords

Digital media literacy, networked knowledge, social media, university students

Introduction

It is well established that adolescents and young adults – age groups that include many university students – are heavy users of social media (Auxier & Anderson, 2021), a category of technology with use that ranges from passively watching videos on YouTube or TikTok to posting photographs on Instagram and engaging in debates on X (formerly known as Twitter). Prior research has found that youth have wide-ranging repertoires for social media use, with activities varying by platform (Dennen et al., 2020; Frey & Friemel, 2023). Although social use among peers remains dominant among this population, they also use it to support learning (Mpungose, 2020) – which can be classroom-based or personally driven (Greenhow & Lewin, 2016), to seek information about education options (Dennen & Bagdy, 2022), to consume news (Vázquez-Herrero et al., 2022), and to explore hobbies (Bagdy, 2022). The relationship between these different contexts, however, is unclear. Although social media is a category of tools that supports networked interactions among people and resources, not all tools will be used in the same way, and not all people will use tools similarly. In this exploratory, qualitative study, we examine the multifaceted nature of university

students' social media use, considering the interplay of platforms and actions across contexts and the implications for their continued use of social media as they mature through adulthood.

Background

Contexts of University Student Social Media Use

In the university context, social media is used broadly by undergraduate students. Using a four-category system of social networking site use, Eid and Al-Jabri (2016) found that university students more frequently engage in entertainment and chatting and discussion over content creation and file sharing. These social uses, such as chatting and discussion, can be important for students, helping them adjust to school (Yang, 2020) and develop their sense of belonging and identity (Kim & Kim, 2019). Institutions use social media to unite students and spread information, and participation in personal and institutional networks can provide students with different forms of social capital and social support (Mishra, 2020). Although some students suffer from patterns of problematic social media use (Weaver & Swank, 2021), it can nonetheless be a helpful force for many others.

Social media also supports learning and developing professionalism in a variety of ways. The use of social media as a learning tool that supports formal learning has been well established in the literature in general, but some tools and tasks remain under-researched (Manca, 2020). Additionally, the potential for social media to support not just formal, but also informal and self-regulated learning, is tremendous (Dabbagh & Kitsantas, 2012) and extends beyond the university setting to lifelong learning contexts (Dabbagh & Castaneda, 2020). During the height of pandemic-driven remote learning, social media was found to help connect learners and instructors (Greenhow & Galvin, 2020), although university students are not always enthusiastic about using the same tools for personal and learning purposes (Dennen & Burner, 2017). Still, negotiating context collapse – the experience that occurs when different parts of one's world come together, often unexpectedly – is a valuable skill, as are various other skills developed through learning-related social media interactions. These skills can later support ongoing professional and personal learning activities. In sum, social media makes frequent appearances in the lives of university students, sometimes with positive effects and sometimes with ill effects, but regardless is a tool to be reckoned with.

Digital Skills of University Students

University students are often assumed to be technologically savvy, dubbed part of the digital native generation, although that moniker has proven to not align inherently with actual skill levels (Kirschner & De Bruyckere, 2017). Although most university students are adept at swiping the screens of their mobile phones in order to navigate apps and communicate with their peers, their digital confidence and skills in other areas, such as information literacy, digital creation, and digital research may lag behind (Martzoukou et al., 2020). Digital networking skills have been found to be related to informal learning and computational thinking skills (Mehrvarz et al., 2023), and all three are valued in the current workforce. Skills related to tagging and organizing online information remain underdeveloped among many college students (Dennen et al., 2023b), and they may not be well-prepared to use social media for job searching, professional development, and lifelong learning.

Purpose and Research Questions

This study presents findings from a larger research project focused on university student use and categorization of different social media actions (Dennen et al., 2023a). The purpose of this study was to examine and describe how university students approach social media use for networked knowledge activities across different areas of their lives, including school, personal learning and hobbies, and professional use. The Networked Knowledge Activity Framework (Dennen et al., 2020) is used to guide this study. This framework classifies online activities based on their function (collect, curate, share, broker, negotiate, construct, and the overarching category, network). Whereas this framework was initially designed to guide the design and development of learning activities in formal contexts, it has subsequently been used to describe social media activities in naturalistic settings. The research questions for this study are:

- 1 How do university students use social media tools to engage in networked knowledge activities across different life contexts?
- 2 What role do university students play in networked knowledge environments, such as on social media?

3 After engaging in an activity focused on classifying social media activities, what kinds of self-awareness do university students express while reflecting about their own engagement in networked knowledge activities? Collectively, these questions are used to depict the complex nature of social media use by this population and to promote consideration of how educational institutions might play a role in developing and supporting related digital media literacies that are useful to university graduates as they enter the workforce.

Method

Participants

Participants in this study are 25 students enrolled at a large, public research university in the United States. These participants represent a portion of the participants in a larger data set of 60 interviews. This larger dataset is still being processed, and thus this study represents work in progress. Participants were recruited from a research study participation pool. In this research pool, students can see studies that are recruiting participants and are able to opt in to participating in the studies of their choice. The study was approved by the researchers' Institutional Review Board and all participants provided informed consent.

Data Collection

Data were collected during a one-hour interview which included an embedded card sort activity with a think-aloud protocol. Interviews were conducted online via Zoom. The interview began with general questions about the student's social media use across different contexts (e.g., what platforms they use; how when, and with whom they use these platforms). Then, students were provided with a link to follow and asked to share their screens. The link led to them to the Proven by Users (<https://provenbyusers.com/>) card sort tool where they encountered three successive card sort tasks. Each card sort contained the same 41 cards, which represented different actions one might engage in within a networked environment (e.g., tag a resource, send a private message). The three sorting tasks asked students to sort the cards first by personal frequency of use, and then by two different conceptual schemes. At the end, students were asked to reflect on the card sort and think-aloud experience and to share any insights about their social media use that arose during the process.

Data Analysis

Data analysis for this study focused on the interview portion of the data set, which included student responses to the general questions at the beginning of the interview, the card sort reflection questions at the end, any substantive comments made about their impressions of social media or social media use whilst in the midst of the card sort and think-aloud. All interviews were recorded and later transcribed. To answer the research questions, two researchers mined through the interviews and coded excerpts related to different uses of social media across contexts, individual role in social media use, and self-awareness of social media use. A deductive system was used to code for context, based on findings from earlier studies (e.g., Dennen et al., 2021), and for role, based on participatory culture roles (Jenkins, 2006). After coding, the researchers developed synthetic memos on each theme, discussing and negotiating key insights.

Limitations

Findings presented in this paper are preliminary in that they report on partial analysis of the dataset. While 25 participant interviews have been analyzed for this paper, 35 additional interviews remain to be analyzed. Still, 25 is a sufficient number of interviews for identifying trends across the population, and the card sort activity providing an anchoring structure that ensured all participants considered social media use as defined by specific activities and through specific lenses.

Findings

Social Media Use Across Contexts (RQ1)

The participants included in this preliminary analysis are four freshmen, four sophomores, seven juniors, and eight seniors, with two individuals not specifying their academic year. Of the 25 participants analyzed here, only 4 were male. Not surprisingly, most students in the sample (n = 24) used social media primarily for connecting with

family/friends and entertainment. Many also use it for educational and informational purposes, with 20 participants using it for school/schoolwork, 17 for news updates, 16 for hobbies, and 12 for meeting new people. A smaller number of participants (n = 8) reported using social media for work or seeking employment.

At the onset of our interviews, when sharing the topic of the study with participants, they first gravitated toward defining social media use through their interpersonal social interactions and personal entertainment activities. These familiar, everyday uses of social media were the ones they were most readily prepared to discuss. However, to answer our research questions, we focused on social media use that related to formal and informal learning and work. Still, we feel it is important to note that the participants were simultaneously using social media for socialization and communication within their personal networks and considered this to be their primary use of social media.

Table 1 summarizes the tools that students referenced for different contexts. This is not a comprehensive list of all potential tools, but rather a list of the tools that were mentioned conversationally, as participants shared their practices. Interestingly, while participants discussed LinkedIn, they did not use it. This statement from a male participant was typical:

I still, like, I don't use like LinkedIn or anything, but I know I should. Cause that's very, like it's a very helpful resource.

During the card sort activities, when encountering specific social media actions on the cards (e.g., bookmarking a resource to access it later or tagging a person to attract their attention) the participants referenced specific tools that they aligned with those tasks. When sorted by the contexts in which they are used, it becomes evident that while some social media tools served isolated purposes for these participants, others crossed contexts. In particular, Instagram was commonly used across contexts and to engage in varied tasks, including sharing information, consuming information, and messaging. As a point of contrast, Pinterest was relegated solely to personal learning and hobbies, and was not used for social or entertainment purposes either.

Table 1: Tools and Contexts

Contexts	Tools Mentioned
School – student initiated	Facebook, GroupMe, Instagram, Snapchat, WhatsApp, X, YouTube
School – instructor initiated	Diigo, Instagram, X, YouTube
Personal Learning / Hobbies	Instagram, Pinterest, TikTok, YouTube
Professional	Facebook, Instagram, LinkedIn (referenced, but not used)

School Context

Within the school context, instructor-initiated social media use was relatively infrequent. In some instances, it was limited to specific tools introduced during coursework (e.g., Diigo, a social bookmarking tool, and X, introduced in the context of professional networking), and students alternatively reported that “it’s strictly kept to just the course” or, in two instances, that they have continued to use X to follow professionals in their field after doing so for a course activity. In other instances, social media provided fodder for course content and discussion. YouTube was used to point students toward helpful resources like recorded lectures and tutorial videos. Another student shared that an instructor used Instagram to find material for the students to critique. Additionally, two students shared that they followed their instructors on Instagram because those instructors shared materials related to the course topic and discussed issues related to teaching and learning in that space.

Students initiated social media use independently and within peer groups, too. Independent use focused on finding relevant learning resources to help with studying. One student reported using social media as a “starting point” for finding articles for research papers. Others struggled with whether they felt they used social media to support learning. They acknowledged searching for and using online resources but differentiated that type of activity from the more socially focused sharing and interactions that they associated with social media. During the interview one participant had a realization that their use of social media was important for furthering their academic career, although it might not be supported or sanctioned by their professors:

It makes you think that even though I just say I go on my phone to mess around and relax, there's social media. Especially older professors, because that's not how they did things, are very against it,

very anti, but connection-based ... that's where the world is moving. Say I wanted to go to UCLA and work in a professor's lab there. How am I going to meet this guy? I'm going to (go) online to find this guy. And that's how I'm going to research and read articles. Because I doubt (our) library has the four papers I'm interested in from UCLA, this random guy, like I doubted that happened. So it's online. It's search engines. It's forums that you can create. That's where we are right now. That's how they need to tell you how to get where you want to be, using online for collaborations, networking, image building, anything really, you can think of.

This participant began connecting social media use more generally with a host of online activities, showing how people fluidly move across online tools in the service of accomplishing specific goals. Social media use within peer groups focused on developing communication networks that could be accessed for help. Although some students merely connected to select peers for the purpose of exchanging direct messages, others were involved in informal group formation that extended to most or all members of a class. For example, one participant shared how he used GroupMe to connect with classmates:

There's several class group chats I'm in. If someone's asking a question I know the answer, I tend to help them out. Or if I have a question, then I'll put that in there.

Still, not all students avail themselves of these opportunities to connect; one student proudly declared "I normally don't join most of that stuff ... I don't like other people. (laughs)"

Personal Learning and Hobbies Context

Participants reported using social media, including YouTube, Pinterest, and TikTok, for pursuing hobbies such as cooking, arts and crafts, DIY repairs, to working out, shopping, and fishing. A male participant noted that YouTube helped him "learn how to cook a meal." Participants expressed an awareness of how their searches and interactions in these areas, which included following people, watching videos, joining groups, and curating Pinterest boards, led them to have increasingly tailored social media feeds, serving up more content in these personal interest areas. Although one participant indicated not using social media in this way, many others expressed that social media was beneficial to them for this exact purpose.

Professional Context

Professional use was defined as use to support job, volunteer, or extracurricular activity work, noting that all three of these contexts are similar in that one might use social media to engage in tasks that support an organization. Many participants, who are either working for or are members of student organizations, are often tasked or encouraged to use social media for purposes like recruiting members, promoting the organization events, and fundraising. These organizations often create groups on Facebook or have Instagram accounts that are run by students. Participants shared that they were also followers or consumers of information presented by these organizations, using social media to learn about events and opportunities to get involved.

Role in Networked Knowledge Environments (RQ 2)

Most of the participants reported taking a passive consumer role in networked knowledge environments, limiting any posting and communication activities to interactions within restricted friendship and family networks. As one participant noted, "I think it's because honestly, it's just becoming such a, like a normal part of life, that if you want to reach out to people, especially like, this generation, your best way is through social media." When engaged in use for coursework, such as learning to build social networks on X, students reported feeling a bit scared of stepping into the more public space, daunted by the number of people who might see their posts. Consumers reported feeling secure in maintaining the social media roles and rules that they had established for themselves, as these roles allowed them to comfortably use this space. Students expressed concerns about what might happen if they posted more, stating things like "it could be misconstrued" and "I don't want my future ruined because of something I said."

One participant discussed social media as a platform where people can voice their thoughts, and sorted individuals based on the size of their audience and the content they share. She indicated that people with big followings generally do not post on important topics, but they should:

I mean, like a lot of people post their voice. But the people that have big followings, and like they have very impressionable followers, aren't posting what really matters. Like they just post themselves or they post something about, like, I don't know, like sometimes it just doesn't have the deeper messaging that it should have. Especially with all of the things going on in the world at the moment. Like there's a humanitarian crisis, like so many countries, it's not even funny.

This participant recognized the potential for social media to be used to spread a meaningful message across a broad population but was disappointed that she did not often see this done. She did not identify as someone who should be taking on this responsibility herself, referring to her personal use as “conservative,” and sharing that she’s “just a nobody with, like, a few followers, 100 followers” all of whom were personal connections.

Reflections and Self-awareness (RQ 3)

As participants reflected on their social media use after engaging in the card sort activity, it was clear that being presented with a list of potential actions that they might engage in via social media along with different ways of classifying those actions led some students to new insights. Two primary themes were apparent in the data. The first theme was reflective about their personal social media use and their roles as consumers or producers. For example, one participant stated:

It's kind of interesting just to see, like, what category my online activity would fit into and like, what category I would like for it to fit into.

Presented with myriad activities that they might be engaged in, participants considered the smaller range of activities that they regularly engaged in and the reasons why they do that. Several participants realized that they were more likely to consume than share. One considered how others perceive her, stating:

I wonder, like, how much my social media affects others. Like I'm curious if people actually care what I post about. I don't post anything mean. I just (wonder if) it impacts them at all.

During the card sort activity, participants such as this one alternatively appeared to have never truly reflected on how their social media use fit into the larger sphere of social media use or had intentionally scoped their social media worlds at a small level, with minimal posting and various privacy-related actions, to maintain use within their personal comfort zones.

One participant extended her reflection to her personal network, considering how that network does not engage in the full range of possible social media use:

Well, I thought I use social media a lot, but not in the sense of like sharing news articles. And I know other people use it for that purpose. Like for the most part, but for me, I mainly use it, like for entertainment purposes, and like sharing pictures and keeping myself updated with my friends. So yeah, it made me realize that I guess they don't post a lot of like news articles.

This participant recognized that her social media experience was not solely a reflection of herself and her personal actions, but also of the people in her network and their actions.

The second theme was expanded awareness of social media functions. During the card sort activity, participants were pushed to think about activities that they personally did not engage in or, in some cases, had never really considered a part of social media use.

I didn't realize there are so many different things you could do with social media, because I thought most people just get on social media just to... in their idle time, but you can use it for different for gathering resources and creating things that I didn't think of before. It's more than just posting about pictures, it's like there's everything has like a purpose to it I guess and like in a way you can use social media to your advantage and, like, share resources as you know stuff about them, sharing your opinion or your expertise, or finding other stuff. Even emailing, I feel like

people don't really use email like unless it's for school. But yeah, I think (the activity) definitely did (give me a new perspective). I have a new take on social media and what it can be used for. It definitely made me think more about like organization of social media and like tagging specific things in order to make it easily accessible.

Regarding the last quote, the card sort included actions related to using tags and organizing resources, and few students were familiar with the concept of tags used for organizational purposes. Those who were familiar had either been introduced to the concept in a class, such as the students referenced above who mentioned using Diigo, or were familiar with some form of performative hashtagging and commented on how they were different.

The cards were not the only part of the activity that offered new ideas to some students. When presented with categories for sorting cards during the second and third card sorts, students were pushed to consider varied reasons why people might use social media. One student shared, "I guess I never thought about how using social media could involve management or networking." Others indicated that identifying social media actions that aligned with categories like management and networking was challenging for them because they do not typically think about social media as a tool to accomplish such tasks.

Four of the students did not offer any insights that were initiated by the activity. One of these students elaborated, attributing her lack of insight to her limited, structured social media use, which suits her needs and disposition:

Not totally. I have to say that I do feel like I'm not someone who uses social media to like the full extent of it. Like I said before, like, I don't want to post much. For me, it's more so my own self interests like, oh, are there any new like recipes I can find or stuff like that rather than let me publicly put this out there for someone else to see.

For this student, and others like her, a general disinterest in social media carried throughout their experience of the card sort. They were secure in the ways that they use social media, and not curious about expanding their thoughts and experiences.

Discussion and Implications

These preliminary findings document the multifaceted nature of social media use among university students, with contexts ranging from socialization to all manner of learning and performance, with the caveat that tasks and activity levels are often limited. The first research question investigated the varied contexts of use and the networked knowledge activities associated with these contexts. Whereas collecting and curating resources for both school and personal learning were common, knowledge sharing occurred in extracurricular contexts, and knowledge sharing and negotiation were major activities among social media-based study groups, knowledge construction and sharing of personal creations was limited. Additionally, students infrequently engaged in tasks related to tagging and organization, confirming earlier studies that suggest these are unfamiliar activities for college students (Dennen et al., 2018).

Other studies have produced findings that challenge the idea that university students consider social media as a learning tool (Koranteng et al., 2018). This study appears to provide additional evidence in this vein. Students indicated using social media to contact classmates and frequently accessed learning resources via YouTube, but the former was merely a means of communication and the latter was a passive activity. Some students even indicated that they did not view YouTube as a social media platform. Thus, while learning support occurred, students often did not think about these activities as ones sitting at the intersection of social media and learning. This issue reflects perception, not action, but perceptions are important because they may drive future activities.

In response to the second research question about student roles on social media, students engaged in more consumption than production, and tended to be passive in public social media spaces. Discussion and chatting among known parties were common, supporting the findings of Eid and Al-Jabri (2016), but these students clearly were not interested in or prepared to interact in online knowledge activity networks in the broader sense. This finding is not problematic – it is natural for consumption to outpace production, and university students are generally not content creators (López-

Meneses et al., 2020) – but nonetheless it is important to develop the skills and dispositions that will allow one to be effective as an active participant in diverse online spaces. This area remains an area of potential for higher education. Finally, the third research question asked about student self-awareness of their level of networked knowledge activity use. Findings in this area suggests that many students have viewed social media use through a narrow lens, mostly navigating it as immediate needs demand. In other words, many university students are highly experienced and competent with using social media for social and entertainment purposes, as well as the consumption and networking associated with coursework, but have limited awareness and experience with a host of other networked knowledge activities.

As data analysis on this project continues, we anticipate elucidating additional nuances of how university students use and perceive social media to participate in networked knowledge activities across contexts. Future research might investigate more directly the degree to which university students believe they need to develop networked knowledge activities in the less used areas, as well as explore potential areas for integrating these networked knowledge activities into the curriculum. Professional disciplines in particular seem likely to offer opportunities for such curricular integration, although developing graduates who are effective lifelong learners and who can engage in social media-based professional development would be an appropriate aim for higher education in general.

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