Research Article

Digital Ethnography on Students' Authentic Engagement in Social Media Platforms during the Global Online Experiment

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ABSTRACT

This article investigates the culture of the student online community of pre-service teachers relative to their engagement in social media at a state university in the Philippines. It analyzes students' engagement to facilitate authentic learning within the bounds of social media platforms during the COVID-19 pandemic. The author used a digital ethnographic design to investigate the use of social media as an emerging technology to supplement pre-service teachers' authentic learning during COVID-19. The deductive thematic analysis, which was anchored in the lens of constructivism and social media engagement theory, revealed that the use of emerging technologies such as Facebook expands students' cognitive, behavioral, and emotional engagement in the online community. Although students have difficulty identifying unofficial reports, they expressed a positive response to using social media to supplement pedagogical platforms amid the crisis. The study recommends conducting an empirical investigation into the responsiveness of Facebook as an emergency platform to supplement pedagogy during the global online experiment.

Keywords: COVID-19, online community, engagement, social media, authentic learning, digital ethnography, online ethnography

INTRODUCTION

Digital technology has mitigated for the provision of education through virtual learning and remote teaching amid the lockdowns and school closures. "Online education in its various modes has been growing steadily worldwide due to the confluence of new technologies, global adoption of the Internet" (Palvia et al., 2018, p. 233). The advent of emerging technologies provides the possibility for the implementation of education even beyond the conventional classrooms. Emergency online learning is functional depending on the accessibility of the students when it comes to technological facilities (Arasaratnam-Smith & Northcote, 2017). Hence, opportunities and challenges arise in the education sector when it comes to virtual learning. More than ever, institutions worldwide have adopted digital technology as a means for learning to not disrupt the education of the students despite the effects of the pandemic to the teaching and learning process.

Before the world was taken by a global storm, most countries, particularly developing countries such as the Philippines, relied on face-to-face education for student learning. The educational system in the Philippines is similar to that of other countries where a traditional setting requires students to attend their classes through face-to-face education (Basilaia & Kvavadze, 2020; Dutta, 2020; Lynch, 2020). Due to this conventional form of education, an immense struggle exists relative to the emergency e-learning infrastructure during the pandemic.

In higher education institutions, class suspensions and school lockdowns ensued throughout the country as the cases of COVID-19 exacerbated on the second week of March 2020. Consequently, educational institutions opted for alternative delivery modes as encouraged for all Higher Education Institutions (HEI's) in the country. However, the status of emergency online or remote education is contingent on the institutions' capability based on existing resources to implement education through digital technology. This enormous demand in instructional paradigm shift persists in other higher learning institutions worldwide (Bozkurt et al., 2020; Lynch, 2020).

Aside from this, a greater majority of the instructors nationwide did not receive training on the application of technology for digital learning before the pandemic. The Commission on Higher Education (CHED, 2020) gave an advisory that allows HEI's to consider flexibility in modifying or reducing program requirements for the academic year. Hence, some universities terminated the school semester earlier than the customary end of school term, while other

academes gave automatic passing marks or mass promotions to the students depending on the achieved conditions.

Though HEIs are given the flexibility to deploy available emergency online learning, emergency remote teaching, and other alternative modes of using technologies given the available resources, higher level institutions faced enormous difficulties in the transition to virtual environments. Due to various domineering factors such as unreliable internet connections, an unprepared curriculum for remote teaching, and difficulty of teachers and students who were in remote locations to engage through emergency distance learning (Toquero, 2020), the universities are engulfed in an educational state of emergency. As a social and psychological coping mechanism, and as a way of information dissemination of latest news and global updates, numerous teachers and students have shifted to social media during early lockdown in the Philippines.

Social media utilization has been instrumental for students to cope with the realities and impact of COVID-19 to their personal and educational life. In the Philippines, access of digital technology through Facebook has allowed the country to receive updates and news reports worldwide relative to COVID-19. However, the use of social media for emergency remote learning in the Philippines has not been studied during this pandemic. Thus, this research examined the culture of the students relative to social media platforms. The study looked into students' engagement in social media via an online community where they learn about real-world pandemic events. The result may pave the way for added scientific resource on the value of social media platforms for authentic learning in the context of the pandemic where educational emergency is inevitable.

THEORETICAL FRAMEWORK

The study is anchored on constructivism and social media engagement theory. Constructivism emphasizes for students to be given authentic learning to facilitate reflection and search for knowledge based on their own capacity to learn creatively. To supplement for lectures, "learners are provided opportunities to construct their own understanding on the basis of an interaction between what they already know" (Dagar & Yadav, 2016, p. 7). The students' experiences in the social media provide an authentic learning space for them to construct knowledge based on the pressing issues present in the society. Students are also attuned and engaged to current events through various social media platforms. They formulate knowledge when they are exposed to meaningful learning experiences, and solve real-world problems which are possible through social media platforms.

Likewise, the Social Media Engagement theory of Di Gangi and Wasko (2016, p. 1) hypothesizes that the social interaction experiences of the social media users "operationalized as personalization, transparency, access to social resources, critical mass of social acquaintances, and risk, … technical features of the social media platform" can influence the engagement and behavior of the social media users. Hence, the authors pointed out that given the nature of Facebook as a social network, social relations among the users can strongly influence the engagement and usage behavior of the users— in this case, the pre-service teachers.

Moreover, the adoption of a pedagogy is needed to encourage students to create a sense of autonomy alongside interpersonal growth. Pedagogy is relevant to articulating learning goals and promoting activities for the development of those goals. So, constructivist pedagogy can serve as an approach for the activities to be meaningful for the students, for them to be reflective and to be creative based on what they have in their minds (Dagar & Yadav, 2016).

The utilization of social media as part of the emerging technologies can spark dialogues for metacognitive and reflective thinking (Lemon & O'Brien, 2019) in teacher education. "As a result, posts on social media platforms provide digital access points to information and discussions, thus providing PSTs (pre-service teachers) with an opportunity to engage in sustained self-directed learning experiences using digital technologies" (p. 40). Hence, the students' engagement through social media can supplement learning to attain the benefits of technology for the development of their cognitive, emotional, or psychomotor domains.

METHOD

The researcher applied a qualitative approach to guide this research. The scrutiny and analysis of students' responses, shared posts, and chat messages helped to achieve the aims of the study. Through the private and exclusive Facebook Messenger online community named as Quaranteen State University (QSU), the researcher analyzed and observed the shared discussions of the students in the said online community. The researcher, as their instructor, also facilitated the daily chats. Constructivism and social media engagement theory were applied to interpret the students' social interactions and shared posts, as they use social media to acquire insight, share knowledge, and enjoy learning from their peers and instructor as members of an online community.

Research Design

This study utilized the qualitative approach specifically, digital ethnographic research to focus on the students' engagement and experiences in the virtual community during the pandemic. This article examined the students' experiences in the utilization of emerging technologies for them to learn about the COVID-19 pandemic and the benefit of using social media as platform to supplement the primary mode of instruction. To acquire a better understanding of the students' engagement in social media during the pandemic, a qualitative digital ethnographic design was considered the appropriate strategy to apply for this study. Ethnographers can use online communities to observe members' online engagement and acquire insight into previously unavailable sorts of ethnographic data, according to Murthy (2008). The qualitative data is appropriate for this study because this explored the students' experiences in Mindanao State University-General Santos City who were in a unique position. As an inevitable response to the heightening cases of COVID-19 in the Philippines, the university suspended the semester after three months of official classes. It then officially

terminated the first semester on May 2020 without alternative or remedial classes in consideration of the perplexity that the advent of COVID-19 presented to the university. As a result, the University gave the students automatic passing grades based on certain criteria. Hence, the students relied for self-regulated authentic learning in social media from Mid-March until September 2020.

Context of the Online Community

Mindanao State University-General Santos City is one of the prominent state universities in Mindanao, Philippines. It has produced top-ranking graduates in the country in state licensure examinations in different courses including the Teacher Education degree. With the arrival of COVID-19 pandemic, however, the state university was taken aback as numerous students were not able to access a formal online learning environment due to an unprepared online curriculum, intermittent connectivity, or lack of connection of students, remote and disperse areas of location, and insufficient learning resources for a virtual-based formal education. Classes were terminated eventually, and numerous students went to online social communities such as Facebook, Twitter, and the like.

Consequently, the researcher as a faculty of the College of Education initiated an alternative way to reach the students and make them learn through social media platforms. The lessons were anchored on real-life events and particularly focused on the COVID-19 pandemic instead of the structured curriculum standards since this was not possible due to the suspension of the face-to-face classes nationwide. As a result, Quaranteen State University (QSU) was created as an informal online community to exchange chat messages exclusive for the researcher and the students. The student members are from different cultural affiliations who have been acquainted with one another before the pandemic.

Moreover, Quaranteen State University as an online community has been existing for a year prior to the start of the pandemic and student members of this online community continue to update and share educational information and related events until this time. The original purpose of the online community was the dissemination of latest educational information that concerns the student citizenry. During the early lockdown, the online community served as informal learning platform to continue educational conversations among a group of students and an instructor. The continuous exchange of information in the online community heightened during the early pandemic months.

Selection of Participants

The criteria for participant selection were considered prior to the conduct of the study (see **Figure 1**). The students who partake in QSU are within the specific age range between 18 to 20 years old. They are from the College of Education of Mindanao State University-General Santos City, Philippines. Students were chosen to participate in this study based on the inclusion criteria such as internet connectivity, voluntary participation, constant interaction, and active engagement in Facebook posts about COVID-19.
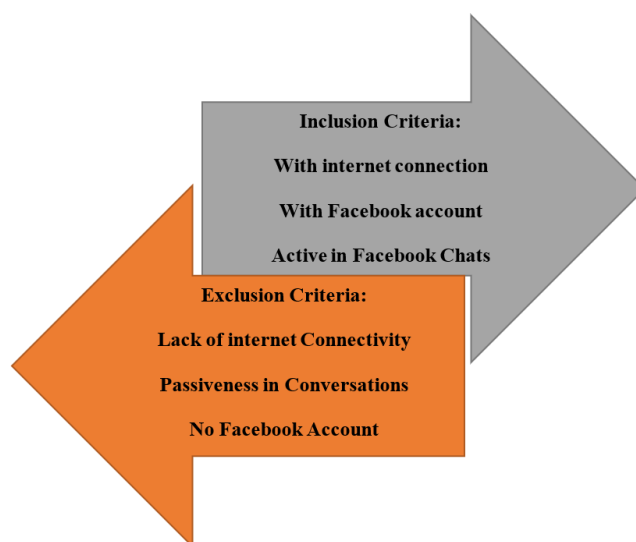

Figure 1. Criteria for participant selection

Some students lack internet connectivity and are located in remote areas so they were not able to access this unofficial and unstructured education through the utilization of social media such as Facebook, Messenger, Youtube, etc. Only six students managed to voluntarily join the study.

Ethical Procedures

Students were informed of the nature of the study so that their participation would be based on their willingness to maintain ethical protocol. Likewise, the student educators who were included as participants were given consent forms prior to the conduct of the study and were interviewed through real-time personal messages. Quaranteen State University is also a private and exclusive online community that practices a shared culture of educational concerns and interests. Personal details, religious affiliations, and sensitive topics were not included during the individual chats. Shared posts were also excluded from the presentation to maintain anonymity, and other related online materials that may identify or direct to the participants. The researcher messaged the participants personally for confidentiality of their responses. The researcher also asked the participants of their consent to study the posts of the participants to which they agreed and accepted the "add friend" notification of the researcher. Based on scrutiny, some posts were set to "friends" visibility, while other posts were set to "public" visibility.

Materials and Data Collection

Through Facebook Messenger, students extended pertinent information related to COVID-19 and engaged in different topical conversations such as Science, English, religion, laws, politics, and environmental issues. The researcher also included recent news events to update the students and educate them about fake news. This self-initiated formation of group network through digital technology was a way to cater to the students during home quarantine since formal online learning was not possible at the time of writing.

A written questionnaire was developed along with an interview guide. The researcher designed a qualitative guide with questions related to their experiences in the use of social media. The researcher gave consent forms to the students for them to decide based on their willingness to participate in the

study. Chat messages was done through Messenger and also took place as part of the communication exchange between the teacher as the researcher and the rest of the students. The researcher also obtained permission to scrutinize the participants' public posts and shared messages, including relevant posts related to COVID-19 and current events. The pre-service teachers were asked a follow up interview in private message through their respective Messenger accounts.

Analytic Method

The researcher explored the students' perspectives and experiences on the use of the social media as a means of informal virtual education amid COVID-19. A deductive thematic analysis of students' responses was done alongside archival review based on the chat messages and Facebook posts. Because of a pre-determined framework, the researcher interpreted the results as anchored on the lens of constructivism and social media engagement theory. Document analysis was also carried out on the Facebook posts, pictures, and shared messages of the online community members. Document analysis was suitable for the study since the researcher needed to conduct a review of the documents, whether printed or electronic materials, with the end goal of eliciting an empirical interpretation (Bowen, 2009).

This article analyzed the students' posts on their Facebook accounts with permission. To secure the trustworthiness of the study, the researcher triangulated the online interview with the shared postings and chat messages of the students. The researcher also did an audit trail of the transcripts and did a follow up interview among the students to obtain clarifications of their answers. While the researcher actively participated in the online community, in which bias may occur, the researcher served as the instructor of the students which was advantageous having gained deeper insights about the culture of the student online community.

RESULTS

In the Philippines, there were 73, 170,000 users of Facebook as of January 2020 (NapoleonCat, 2020). This accounted for 66.4% of the entire population who owns a Facebook account. The women accounted for 53% of the Facebook users while the largest group users were between aged 18 to 24 years old comprised of 24,000,000. The highest difference between men and women occurs in the said specific age group where women lead by 2,000,000. Consequently, Facebook served as a platform for the students to exchange ideas, experiences, and conversations while pursuing their educational interests through social media amid the COVID-19 pandemic.

Behavioral Engagement. The students in this study have expressed that the use of emerging technologies such as Facebook have offered to them relevant updates from the COVID-19 and created beneficial experiences for them amid the home quarantine boredom (**Figure 2**). In the absence of a formal education due to the suspension during Mid-March 2020, the instructor found ways to continue the learning of the students through the use of social media which was the only way possible during the suspension of classes. Although in this study, the students have also made use of other social media platforms such as Tik tok and YouTube which they shared on the Facebook platform for other students to give their perspectives.

> *Rachel:* "… But I would continue to find facts about COVID-19. I actually saw news yesterday about COVID-19 but it was deleted, and I can surely say that that news is factual but I was not able to save it. I hope ma'am that I can make a research about COVID-19 soon."

> *Lynn:* "I locate for scholarship information of foreign schools in Facebook Pages… I also use social media to chat about lesson plans with my classmates, or research about lessons, but they also share videos and tag me in posts."

The students research and shared information and news updates related to COVID-19 by taking the latest news taken from the websites and posting those in the QSU group chat. The social media platform gave them the freedom to voice out their concerns, reactions, feelings, and worries that come along with the trends of the coronavirus and similar circumstances. Students shared photos and videos from Facebook posts or news websites they read relative to topics discussed in the online group. They are highly active in social media such that one student has shared more than 50 newsfeed messages related to political issues, while others shared 20 to 30 health news and educational memes in less than a month.

Cognitive Engagement. The guidelines on how to prevent COVID-19 were also given to the students taken from the World Health Organization. YouTube was also useful as students watched videos that discussed COVID-19 topics after which the instructor had facilitated critical thinking questions to engage the students. Some examples of their insights are given below:

> *Shane:* "In our discussion, I also learned that over a century, HIV/AIDS is still a virus which doesn't have any vaccine to cure that said disease."

> *Clara:* This QSU taught us to be a student who's socially aware that we should barely assure that the facts which are given to us are legible. We can enhance our critical thinking and intelligence due to these platforms because every discussion gives us the wisdom to express ourselves as well as the ideas in our mind that we need to talk about.

> *Julia:* "In our discussion in Quaranteen State University one of the learnings that I gain is about the coronavirus disease (COVID-19) how it could be transmitted to human beings and how people could avoid it, where the virus originated."

> *Danny:* "We also discussed about the reality in life that simple living means contentment not poor living. In our discussion, I also find out that according to Ma'am Cathy, critical thinking is not intelligence, but it refers to the collection of cognitive skills."

Students read online sources and engage themselves in the conversation with the faculty. They critically expressed their learning in social media about COVID-19. They also discussed topics along with the instructor in different field areas. For example, in legal matters, when they watched a local news about a teacher and her son who were arrested due to an alleged sedition while the son was obstructing the arrest, the students expressed their thoughts, opinions, arguments, and sentiments in the online community whether the arrest was justifiable based on the grounds of the teacher's emotional post in Facebook.

> *Rachel:* What irritates me is that the arrest is made without a warrant, which is against the law... but power has more weight than following an order. And one thing... she was automatically arrested, despite the fact that others had done the same thing... I sense her anguish and pain, but she lacks the ability to express it.

Consequently, they analyzed the posts and gave their opinions about the arrest. Because of this, they concluded that they need caution in posting their comments or views on social networks. Likewise, the instructor constantly reminds them to think a couple of times before they post their sentiments on Facebook. On the contrary, some of the posts shared by students are considered unscrupulous news because they are not fully aware of the distinction between fake news and real news. Consequently, the instructor shared some ways to determine whether that news is official or unofficial.

It can be inferred from the students' statements and posts that, in terms of cognitive engagement, they apply critical thinking and evaluate sources. These skills are deemed as a repertoire of their cognitive abilities, which are useful for them to determine factual news from fake news and to make better decisions about sharing online information.

Emotional Engagement. Other students were asked to examine the meaning of COVID-19 related pictures that the instructor had taken from Facebook. The students gave their comments and they were given feedback after scrutiny. It is critical to give students feedback so that they can identify areas for improvement and gain a thorough understanding of any material. Students also shared photos, some of which were unrelated to COVID-19, while others illustrated the political and scientific efforts to combat COVID-19, as well as the community and volunteer activities of some organizations. The students expressed their gratitude for the provision of health-related guidelines through social media platforms.

> *Lynn:* "Despite the current pandemic, we can still learn how to strengthen our immune system to avoid illnesses, as well as our faith that everything happens at the right time."

Other students use social media to share their emotional experiences, whether they were positive or negative. Some of the students' posts express their dissatisfaction with the state of their learning, while others express their gratitude for still being able to cope with their education through self-paced education. They also engage in social media to rid themselves of boredom and emotional baggage due pandemic fatigue.

> *Shane:* Social media is one way to pass the time when bored. Tik-tok has become well-known, and, whether one is a celebrity or a regular person, Tik-tok is useful. Another example is Facebook, where we may see on the newsfeed that some of our friends are sharing positive content such as memes, humorous videos, and encouraging remarks.

> *Clara:* I really like the discussion we had in Quaranteen State University because as a quarantine-student, it saves me from boredom and my brain is still exercising due to the topic given. It really helps me to enjoy education while we're still on our home.

This statement indicates that Filipino students are intimately engaged in using Facebook especially during the early phases of the pandemic. Students expressed disappointment, anxiety, and excitement and mixed with emotional happiness, and state of exhaustion due to the unending questions and puzzles surrounding the novel coronavirus. Nevertheless, after more than a month of unofficial daily and free lessons, the instructor gave the students the option to assess their learning of COVID-19 through QSU. Students gave positive feedback to QSU. One student, Rachel, endeavors to research COVID-19.

Students shared their insights, feelings, worries, and outlooks about having to experience the pandemic and undergo social distancing, home quarantine, and community lockdown which interfered with their studies. Despite the discouragement due to the lack of an official remote learning platform in early 2020, they were thankful that they could still learn real-life lessons through Quaranteen State University, an online community in their own homes.

DISCUSSION

Numerous students in higher learning institutions are on social media during this pandemic (Dutta, 2020). An opportunity has arisen to research, curate, generate content, reflect, collaborate, and share (Lemon & O'Brien, 2019) through social networks. The use of social media in higher education for teaching and learning has had an impact on social or pedagogical practices for teachers and students to engage with one another via the platform. Schindler et al. (2017) reported that learning through technology has a positive impact on student engagement and the most effective thing to use is Facebook.

This study found that when students in an online community are guided in learning through authentic exploration of real-life lessons from news and events in social media, they can engage themselves behaviorally, cognitively, and emotionally in social networks. The theory of constructivism supports the result as it asserts the value of authentic or real-life settings for students to acquire knowledge to solve problems in the real-world. Likewise, social engagement theory also supports this result, since the pre-service teachers displayed behavioral, cognitive, and emotional engagement as they shared their insights and experiences on social media during their online community conversations. The result shows that Facebook may offer the

potential for students in the Philippines to thrive in their construction of knowledge and emotional experience as the social network is used as a supplementary tool to pedagogical platforms during an emergency. Similarly, studies (Chugh & Ruhi, 2019; Dutta, 2020; Lad et al., 2020) have pointed out that social media can revolutionize tertiary education due to its potential to increase academic performance, collaboration, communication, and pedagogical activities.

However, the disadvantages of using social media include the difficulty of students not being able to decipher official news from fake news. Students can share their emotional experiences, but they also need to sharpen their critical thinking and decision-making skills when it comes to disseminating relevant information. Fake news can cause widespread panic (Lad et al., 2020). The diffusion of misinformation on Facebook is a potential threat to institutions that have become part of societal issues (Allcott et al., 2019; Figueira & Oliveira, 2017). Students are not immune to this fake news, since the intriguing headlines are made to attract the attention of audiences and sell information. This online disinformation has proliferated throughout the history including social networking websites, where fake news can just plague social media in such "a fast pace, that distorted, inaccurate or false information acquires a tremendous potential to cause real impacts, within minutes, for millions of users" (Figueira & Oliveira, 2017, p. 818). The students are susceptible to the spread of unofficial news, so teachers should educate them on how to distinguish official news from false stories circulating in social media. Likewise, a legal provision is essential to regulate measures in social media to mitigate the spread of fake news (Kadam & Atre, 2020).

On a positive argumentation, social media such as Facebook can serve as a platform for the students to acquire authentic learning based on real-life events and to supplement the structured emergency online learning system during this global health crisis. "Social media such as blogs, wikis, Skype or Google Hangout, Facebook; and even mobile apps, such as WhatsApp; could facilitate deep learning and the creation of knowledge…at higher educational institutions" (Mnkandla & Minnaar, 2017, p. 227).

The qualitative analysis highlights that the use of digital technology in higher education can also facilitate learning, "inherently affecting all aspects of the student experience. It has also been linked to an increase in behavioral, affective, and cognitive student engagement, the facilitation of which is a central concern of educators" (Bond et al., 2020, p. 1). The schools can maximize the pedagogical, technological, and social benefits incorporated in the social network as supplementary to their emergency remote teaching (Bozkurt & Sharma, 2020; Dutta, 2020) during this global health crisis.

Despite this positive result, it remains a challenge for the instructor to actively engage all the students in social technology, since they are not obliged to do so, considering that it is an unofficial learning community used for emergency learning purposes amid the crisis. A study revealed that teachers face challenges in building connections and engaging students in tertiary education (Duncan & Young, 2020). Another limitation was the insufficient qualitative data available for analysis and a lack of quantitative measurements. The researcher mainly relied on the students' data based on their experience of the use of social media as a platform for learning. Likewise, the article primarily focused on the analysis of one social network—Facebook, but a difference may exist in the students' experiences on other popular social networks, such as Twitter, Insta Gram, among others. Nonetheless, this article provides information and perspectives from a few Philippine pre-service teachers, demonstrating how social media can be integral to students' authentic learning during an educational emergency.

FUTURE DIRECTIONS

Higher education must innovate in emergency remote teaching to provide students with learning experiences comparable to traditional classrooms. Educational institutions can make use of social media for students to continue their prospects for learning and supplement them with emergency remote education or other pandemic pedagogy strategies. The author is not arguing that the results would be as effective since this study only made use of anecdotal records, online accounts, and the self-reported experiences of the students. However, the use of social networks as an alternative learning platform may supplement the primary modality for learning since there are benefits to the utilization of the said emerging technologies to help students cognitively, behaviorally, and emotionally engage in authentic settings offered in the virtual domain of social media as real-world problems. A need has arisen for academia to take full advantage of the potential of emerging technologies as avenues for students' authentic learning. Further empirical research should be conducted to supplement qualitative findings (via the Netnography design, which has a more systematic process than the one used in this study) with quantitative research on the responsiveness of Facebook and other social networks as a means of an emergency remote virtual classroom during this pandemic. More research is needed that focuses on effective and prospective strategies to motivate and sustain students' emotional engagement in emergency online learning and social technologies amid this emergency and the post-coronavirus society.

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