

# Social Media's Impact on Online Graduate Active Learning

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## Abstract

As of 2019, many more students are interacting with each other in online course forums than on social media because fewer than 2.4% of faculty incorporate social media into their teaching plan. The purpose of this qualitative single-case study is to explore whether online professors are using social media to impact students with online active learning. Nine online graduate students in the United States, recruited from LinkedIn and residencies participated in this study. Five social media teaching techniques from previous research were used as the framework for the study. Data analysis process, key themes, and member checking were used, and saturation was attained. About 100% of online students use social media, and about 66.7% are on Facebook; 66.7% had professors who used social media for teaching, and 55.6% said their professor used YouTube; 33.3% used an online course platform to interact with each other, rather than social media; 66.7% felt YouTube improved their online learning experience; and 44.4% want improved security and content quality in social media.

**Keywords:** Class Facilitation, Class Management, Online Teaching, Online Education, Pedagogy.

## 1. INTRODUCTION

Social media are platforms and applications used to exchange information in order to keep participants engaged while affecting their behaviors and decisions (Aimiuwu, 2013). Despite much research on social media's effect on student education and on faculty's comfort level with using social media to teach, there is limited research on how social media impacts online active learning among online graduate students. Research shows that many faculty users of social media are reluctant to use it for academics because fewer than 15% of them use it to communicate with their students and fewer than 2.4% incorporate it into their teaching plan (Faizi, 2018). Many faculty not using social media for teaching may contribute to some students not receiving the benefit of social media as a tool for engaged learning in their coursework. Although both are effective for active learning, most students prefer interacting in an online course

forum than on social media (Dommett, 2019). Students are most likely to interact in their online course platform if social media is never included in the faculty's teaching plan from the beginning and if the use of social media is not part of the course assessment for active or engaged learning. This means that students need to be encouraged to get involved in social media as a teaching & learning tool.

Many researchers and faculty have some discomfort with social media because some believe it is not important to their career, may affect their career negatively, or does not fit their lifestyle (Greifeneder et al., 2018). Although some professors may use social media socially, many may see it as an obstacle professionally, and others may not even use social media at all because it does not fit their lifestyle or age group. Faculty also stand the risk of posting or liking something on social media that may offend a student who follows the faculty, and faculty may be reported to the school. Fewer than 50% of

instructors use social media for teaching, because they see it as a tool for quick and easy communication but worry about its security issues (Akçayır, 2017). Although faculty may communicate with students on social media, worries about security—such as of inappropriate content, use of stolen identity to illegally influence both faculty and student, and job risk—will likely negatively affect the strategic implementation of social media in teaching plan to achieve active learning.

Experience with online learning is correlated more with professional use of social media than teaching with social media, and social media use is very low among academicians (Manca & Ranieri, 2016). For professors to even consider using social media in the classroom, they first have to be users and lovers of it to understand its capabilities for their students both professionally and as a tool for active learning. Social media could be an effective and efficient teaching and learning tool, but the level of use by faculty is still very limited (Sobaih, Moustafa, Ghandforoush, & Khan, 2016). Many studies show that social media can be used in the classroom for student interaction and learning, but faculty must first know how to use it, understand its teaching and learning potentials, and include it in their teaching plan for the term. Faculty need to know that students are very open to using social media for educational and learning purposes (Neier & Zayer, 2015). Faculty knowing how to use social media for teaching and knowing that students do not mind using it can help faculty in deciding to use it for online active learning.

## 2. LITERATURE REVIEW

Active learning happens when students of diverse backgrounds and diverse experiences are engaged through the learning and understanding of their various perspectives through discussions and assessments of the subject matter (Aimiuwu, Bapna, & Ahmed, 2013). This means that online application, platforms, and forums that enable efficient interaction are needed for active learning to take place online. Social media is a good platform for active learning for students as long as the users are taught how to use it and are made aware of its security issues to increase confidence in usability (Lubua, Semlambo, & Pretorius, 2017). Social media allows both professors and students to interact, learn, and exchange knowledge, as well as increases active learning, critical thinking, and student engagement (Abella-García, Delgado-Benito, Ausín-Villaverde, & Hortigüela-Alcalá, 2018). Faculty can require students to form groups on

WhatsApp or follow faculty's Facebook, Twitter, YouTube, or LinkedIn page to respond to posts in exchange for a weekly grade. The use of social media in online teaching correlates positively with learner engagement (Haylett, 2016). Faculty need to understand that social media does increase online student interaction, learning, and engagement and should be a part of their teaching plan.

Six factors that align with social media use in teaching are facilitation of student engagement, access to external resources, further resource discovery, instructors' teaching plans, student engagement with content, and building of practice communities (Gruzd, Haythornthwaite, Paulin, Gilbert, & Del Valle, 2018). It is essential that both faculty and student understand the value of social media as a platform for external resources and resource discovery from professional communities of the subject matter. Also, both must understand that adequate content is needed for student learning engagement and that social media needs to be part of the teaching or instructional plan. Students enjoy YouTube as a tool for learning, entertainment, and searching for information; thus, YouTube needs to be incorporated into course materials and activities by instructors (Moghavvemi, Sulaiman, Jaafar, & Kasem, 2018). Many faculty are already using YouTube at residencies and as links in both online course platforms and emails. Students enjoy using social media for education, entertainment, and communication but prefer social media's educational and information communities to others because these communities increase their learning skills (Wickramanayake & Muhammad Jika, 2018). It seems students prefer educational or professional social media communities that relate to their subject matter when the content is professional and will help increase their performance in class assessments.

Students found faculty's social media use in teaching to be acceptable, with 82.8% of them using social media for education and 68.6% preferring that faculty use social media for teaching (Osaigbovo, 2018). When faculty include professional social media in their teaching plans, thus strategically engaging students through extra resources and resource discovery, students will see the benefit and use social media, as long as they earn points toward their assessment scores. Students will share knowledge on social media if it is beneficial to their future and building a social media community for student group involvement does enhance active learning (Moghavvemi, Sharabati, Paramanathan, & Rahin, 2017). The benefit of

social media in the teaching plan must be tied to students' future and active learning in terms of grades, knowledge application in their field of study, and implementation of the knowledge in the workplace. Knowledge self-efficacy is a factor that makes students want to share their knowledge on social media, but they are not currently motivated by trust and respect (Sharabati, 2018). Since students already know how to use social media and its benefits, they will likely be willing to share their knowledge and experience with it with fellow students or the public.

### Research Questions

There are five research questions used in this study to explore whether social media impacts graduate students' online active learning:

- 1) Which social media do you use frequently and why?
- 2) Which social media do your professors use for online classes, including residency, and why?
- 3) Which social media do students use in online classes, including residency, and how is it used?
- 4) Which social media helps to enhance your online learning experience better and why?
- 5) What do you wish social media could do better to improve your online learning experience?

### 3. METHODOLOGY

I selected 20 online students I did not know on LinkedIn and requested their connection, but only 12 connected with me. Of the 12, only 8 were interested in participating in the study. I emailed one student from a past residency, which brought the total participants to 9. I invited five online professors I know on LinkedIn as expert consensus to review the quality of my five research questions, but only two participated. They helped to reword my questions and approved it for the study. I interviewed a total of 9 participants from 7 different online universities for 4–10 minutes within 18 days by phone. Saturation was reached at the seventh participant, but I decided to interview all 9.

In my study, I collected data using a digital audiotape, transcription, interview protocol, observation sheet, and NVivo 12 Plus qualitative software. Both digital audiotape and observation sheet were used to attain credibility by recording participants' responses as accurately as possible. Interview protocol contained open-ended questions, which allowed participants to express

themselves freely and provided rich and detailed content for good analysis to maintain transferability of the study. The methodology is explained clearly to show the decision-making process and how the study was conducted to ensure dependability. Member checking was used to achieve confirmability of the study by making sure all participants verified their responses by email and text. The coding and segmentation of data for analysis was done by NVivo 12 qualitative software.

### 4. RESULTS

In this study, it is assumed that 4 or more participants out of 9 and over 40% of similar responses from each participant represents saturation to each research question. Of the five research questions, four of them (80%) had saturated responses, and one had varying responses, but response to all questions showed that social media does impact online active learning for graduate students. NVivo 12 Plus qualitative software was used to code the data.

The "Word Frequency Query" in NVivo was used to find the top key themes within the responses to each question and their relative frequency (count). The "Text Search Query" in NVivo was then used to find the number of participants that used each of the top key themes for each question in their responses (Query Summary) as well as the string of words that connected to each key theme (Query Word Tree), which resulted in a valuable transcribed verbatim for each response. Below is the analysis of the study:

- 1) Which social media do you use frequently and why?

As seen in Table 1 in the appendix, almost 100% of online students used social media, but 6 of 9 (66.7%) participants used the key theme "Facebook"; 5 of 9 (55.6%) participants used "LinkedIn"; 4 of 9 (44.4%) participants used "YouTube"; and 4 of 9 (44.4%) participants used "Use." Facebook was the most popular social media used by online students for both pleasure and education, which was followed by LinkedIn and then YouTube. Facebook was used for relaxation and to know what was going on with friends and relatives. LinkedIn was used more for connecting professionally and networking to build careers, whereas YouTube was used academically to watch and learn from videos about any subject matter. A couple of students mentioned Twitter, but it was not a saturated response.

- 2) Which social media do your professors use for online classes, including residency, and why?

Regarding professors using social media to teach online classes (Table 2 in appendix), 6 of 9 (66.7%) participants used the key theme "Used," and 5 of 9 (55.6%) used "YouTube." Social media was used both at residencies and within the online platform for the course but was not popular at the doctoral level. Social media is used by online professors to help students find more resources and to organize and plan activities. YouTube was the social media most used by professors to record short lectures, make presentations at residencies, and send as links to students within the course platform.

- 3) Which social media do students use in online classes, including residency, and how is it used?

This research question was the only one that did not achieve saturation. Concerning student use of social media for coursework (Table 3 in appendix), 3 of 9 (33.3%) participants used the key theme "Platform," which involved using their online platform for class to interact with other students. It seems many online students did not use social media much to organize meetings, form study groups, or do team assignments. It also seems most of their interactions with other students were done in the comfort or convenience of the course's online platform. This shows that faculty needs to include social media in their teaching plans in addition to the weekly grades.

- 4) Which social media helps to enhance your online learning experience better and why?

Concerning social media use that enhances online learning experience (Table 4 in appendix), 6 of 9 (66.7%) participants used the key theme "YouTube." In this study, YouTube was the undisputed academic social media platform of choice for both professor and student. YouTube was appreciated the most by online students as the social media platform used by professors at residencies and provided as links in their online platforms to help them learn about and understand the subject matter. Also, YouTube searches provided a vast number of videos and illustrations as resources about almost any subject and was a valuable supplement to the information in textbooks.

- 5) What do you wish social media could do better to improve your online learning experience?

In terms of what social media could improve (Table 5 in appendix), only 4 of 9 (44.4%) participants used the key theme "Need." Students felt that some social media platforms need third-party services and solutions to help verify content quality and improve security for users. Other students wanted more group video conferencing functions and wanted the content to be more credible. Some students mentioned Russia's involvement in the United States' 2016 election as a security concern, and others are concerned about too much false and unverified information presented as fact on social media. Social media platforms need to improve their content verification processes and user security to become a credible and dependable tool for students in online active learning.

## 5. DISCUSSION

According to this study, although Facebook is the most popular and most used social media among online graduate students, followed by LinkedIn and YouTube, YouTube is clearly the most useful to graduate students for online active learning. This is because YouTube is the platform most used by professors at residencies and the most shared by professors as links in their online platform, its searches result has many options to learn any subject matter for school, and it acts as a helpful resource supplement to their textbooks.

Many students may use social media to relax, socialize with friends and family, network with others to build their careers, and see what others are doing online, but many other students depend on their online course platforms to interact with professors and other students instead of using social media. Security and false content on social media are concerns for many students. It seems social media would become more valuable to online students and online active learning if social media platforms provided adequate security to protect user identity and information from illegal and unwanted intruders, as well as a verification process of social media content.

## 6. LIMITATIONS

The research of this study could have been a quantitative method, but a qualitative single-case study was used because the views of online graduate students about social media were the basis of the study. The study could have been another form of qualitative study, but a case study was used to explore how online students felt about the impact of social media on the effectiveness and efficiency of their online active learning.

The participants in this study could have been undergraduate online students or a mixture of both undergraduate and graduate online students, but this study was based on the online students using LinkedIn who wanted to participate in the study freely. Most of the online students who were comfortable enough on LinkedIn to participate in the study were graduate online students. Readers of this study may derive a different conclusion if they recruited a different group of online graduate students, but the students in this study participated freely and represented their views openly in response to each research question.

Also, triangulation would have been useful—that is, reviewing the policies of the students' schools and institutions and how much support their institutions gave both professors and students toward the use of social media to engage students in online active learning.

## 7. CONCLUSION

In summary, online students can use videos from YouTube to broaden their knowledge about any topic being discussed in class as a supplement to their textbook. I have seen some students use WhatsApp in residencies to connect with their team members throughout the academic term to meet, discuss ideas, and work on projects for submission. Skype is also very useful for group meetings or group video conferencing, such as for student teams working a project or meeting with professors as a group to discuss issues, ideas, or concerns. Other online students have informed me about Facebook's Rooms app, which they use to form study groups and to connect with each other.

Professors can find professional organizations or personalities who are experts in their field on Instagram, Twitter, LinkedIn, Facebook, and YouTube and follow their pages as well as encourage students to follow them. Students can view different posts on these professional social media pages that may inspire them to think differently about the subject matter being learned in class. Students can also post questions like they do on their discussion board in their online course platform, and other followers of the page or the owners can respond to their questions. These professional social media pages can be used to complement textbooks and, in some cases, their professors when they need more information or content for their research, assignment, case studies, or quiz preparation.

Before social media can gain respectability in academics as an adequate source or venue for

online active learning, social media needs to do more to prevent intruders from getting the identity and habits of users and thus prevent cyber warfare from alien governments, terrorist groups, or mischievous individuals who would wish to manipulate users' will or views against their own interests or sabotage their finances or identity. Also, more professional pages with factual and reliable content are needed for both professors and students to use in their study or research; then, they can unfollow these pages when the academic term ends or when they no longer need these social media services for their learning.

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## Appendices and Annexures

Table 1  
*Most-Used Social Media by Students*

Key Theme	Count	Transcribed Verbatim
Facebook	7	Facebook socially; Facebook to know; Facebook to relax; Facebook & Twitter; Facebook & LinkedIn
LinkedIn	6	LinkedIn connects me; LinkedIn for career; LinkedIn professionally; LinkedIn to keep in touch;
YouTube	6	YouTube to watch; YouTube has videos; YouTube & Instagram; LinkedIn & YouTube
Use	4	Use LinkedIn & YouTube; Use them to network; Use Twitter; Use frequently

Table 2  
*Most-Used Social Media by Professors*

Key Theme	Count	Transcribed Verbatim
Used	7	Used at residencies; Used in residency; Used in online course; Not used in my doctoral course; Used to organize & plan; Used to obtain resources
YouTube	5	YouTube for recording short lectures; In online courses; At residencies; In residency; Professors also send YouTube

Table 3  
*Most-Used Social Media for Classwork*

Key Theme	Count	Transcribed Verbatim
Platform	3	BrightSpace Platform; Blackboard platform; Platform or call each other

Table 4  
*Helps to Enhance Online Learning*

Key Theme	Count	Transcribed Verbatim
YouTube	8	YouTube was used in residency; Helps me learn; Helps my learning; For videos; Its searches gives; You learn from

Table 5  
*What Social Media Can Do Better*

Key Theme	Count	Transcribed Verbatim
Need	4	Need third-party solution; more group video conferencing; To improve security & content quality; To learn whatever