MAPPING THE LANDSCAPE OF EDUCATIONAL RESEARCH DISSEMINATION

THROUGH SOCIAL MEDIA

by

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Introduction

Social media's influence in the field of communications is broadly felt and has increased since its introduction. This influence extends to educational research contexts and includes students, faculty, the public, and other stakeholder groups. Questions exist, however, regarding the best way to disseminate information using social media tools to have the greatest impact possible on academic stakeholders. There is a lack of research that identifies the scope of social media integration across educational settings and how it relates to research in other academic disciplines (Manca et al., 2019). With multiple social media platforms available for academic stakeholders and the public to use, it can be difficult to determine which platform is most effective in a given context. Another challenge is finding which pieces of educational research an audience will grasp onto. By better understanding what elements contribute to successfully disseminating educational research to others using social media, we can help researchers make more effective use of one of communication's most powerful tools.

Literature Review

1. **Prior work regarding social media supported dissemination of educational research**

In the study titled "Beyond Disciplinary Boundaries: Mapping Educational Science in the Discourse on Social Media" researchers discovered that when investigating the educational benefit of different social media platforms, Facebook and Twitter had the most research attention while apps such as Instagram and Pinterest have less (Manca, et al., 2019). With it brings to light the fact that social media research is still in its preliminary stages. In another study titled, "Tweet for Behavior Change: Using Social Media for the Dissemination of Public Health Messages" researchers investigated the effectiveness of using different frames to disseminate information

(via Twitter) to inform and increase the public's knowledge on skin cancer (Gough et al., 2017). Through this study, they found that "shocking" messages generated the most impressions, "humorous" messages generated greater engagement, and "informative" messages had the greatest re-tweets (Gough et al., 2017). In one study, the participants found Twitter allowed them to stay up to date with relevant discipline research and allowed them to have a voice (Quan-Haase, Martin, & McCay-Peet, 2015). Another article concluded that academics use SNS (social networking sights/social media options) more so to maintain their professional image but when seeking information used OT (other technologies like websites or blogs) because those tend to provide reliable information and better address privacy concerns (Dermentzi et al., 2016). A different article discussed social media use in higher education mentions research that has found increasing levels of social media usage on platforms such as Twitter and LinkedIn were accompanied by an increased motivation to use social media to embrace networking and work opportunities with the academic and student community (Chugh, R., Grose, R. & Macht, S.A., 2020). With this information, we can better understand previous research that has focused on using social media as a way for dissemination of educational information and research.

2. Current Social Media Platforms for Dissemination Use

According to Oxford Languages, the definition for social media is websites and applications that enable users to create and share content or to participate in social networking (Oxford, n.d.). A table in Cooper (2014) article clarifies various social media tools for researchers. The three different types are communication tools, collaboration tools, and multimedia tools. Some of the communication tools are blogging and social networking such as Twitter and Facebook. The collaboration tools are used for social bookmarking, social news, etc. and consist of platforms such as Google Docs and Reddit. The multimedia tools are video and livestreaming platforms

such as YouTube, Vimeo, and Netflix. These tools are key when researchers are discovering how most effectively to share, find, and access research (Cooper, 2014). As for how best to self-present on social networking, there is not a single "best" way to do so because social media is ever changing (Hogan & Quan-Haase, 2010). With each generation comes new advances to technology as well as changes in the dynamics of social media, creating differences in the way information was and is disseminated. According to Statista, the most popular social networks in 2021 are Facebook, YouTube, and WhatsApp (Statista, 2021). This is different from popular social networks in 2010 that have now died off, examples being Friendster and MySpace (Leskin, P, 2019). However, Facebook has remained a popular social network since its debut in February 2004. Social media is a continuous cycle of change and media platforms will either continue to advance in their success or die-off as time goes on and our society changes.

3. Specific Uses of Social Media for Educational Research Dissemination

Various academic disciplines have pursued social media to disseminate their research findings. Radiologist and other physicians use social media for professional development and to promote their research or imaging services (Spieler et al., 2021). According to the research "Social Media in Radiology: Overview and Usefulness of Online Professional #SoMe Profiles", 45%–96% of health care professionals have an active Facebook profile but Twitter is a more common platform used by medical professionals and for education use (Spieler et al., 2021). Social media is also beneficial for the radiologic community for educational purposes as certain platforms allow them to post educational content, cases, and videos and result in rapid dissemination of information as well as can augment one's professional reputation as an educator (Spieler et al, 2021). One research study that focused on a public health campaign investigated how Twitter could be most effectively used to disseminate information about skin cancer

prevention (Gough et al., 2017). Another field that has focused on social media as a use for research dissemination is Urology and Urologic Health Care. Social media platforms merit huge potential for dissemination of information and professional exchange amongst stakeholders in Urology due to a 50%-70% uptake rate amongst Urologists. (Salem, J., Borgmann, H., & Murphy, D. G., 2016). A study of the European Association of Urology (EAU) Annual Congress and the American Society of Clinical Oncology (ASCO) Annual Meeting was then conducted to analyze the development in social media in congress use. The results of this research found that the number of tweets rose from 2012 to 2014 for the EAU Congress by 1601% up to 5903 and the number of impressions rose by 791% to 7.4 million, concluding that Twitter is a very powerful tool to disseminate scientific meeting content to a wide audience for a global reach (Salem, J., Borgmann, H., & Murphy, D. G., 2016).

Methods

The research questions for this study focused on, "what ways do academic disciplines within educational research communicate their findings to others" and "what elements contribute to successful dissemination". This research also had a focus as to what elements East Carolina University's College of Education should implement to their social media strategies to increase engagement and effectively disseminate information.

To conduct this research, seventeen schools that had a College of Education and are a part of the UNC system were analyzed. Twitter, Instagram, and Facebook were the social media platforms of choice. LinkedIn was an option, but not analyzed due to majority of the schools not having a LinkedIn account for the College of Education and there was not a way to look up exact dates for posts. To find the College of Education social media accounts for each school, each school's name was typed into Google and attached the words "school of education" to it. If the

specific school's College of Education website appeared, the website was selected and then searched to try and obtain a link to their social media platforms. If the social media platforms were not linked to the homepage, then a second google search was conducted with the original google search but included the addition of "Instagram" or whichever social media platform was being investigated to the end of it. In the situation with the two schools ECSU and WSSU, a phone call was made to each school's College of Education directors to ask if they had social media platforms due to a lack of results on Google. While ESCU never responded to call or email, WSSU confirmed that they did not have any social media platforms for the School of Education.

For data collection, the researcher scrolled down each school's College of Education social media account until the first post in October 2021 was found. This was the process for all three platforms being analyzed. Then from the first post in October 2021, the number of likes, if the post was research or non-research based, the shares (Facebook), the retweets (Twitter), and views (if the post was a video, mostly found videos on Facebook) were recorded. Examples of non-research posts are student spotlights (non-research related focus), school events, quotes, Instagram student/staff takeover, recognitions for awards that are not research related, staff spotlight (non-research related focus), and fellowships that are not research focused. Examples of research-based posts are if the caption highlights a researcher & their research project, it mentions research in it, or highlights an award related to research.

This was conducted for each of the posts for the month of October 2021, including if there were multiple posts in one day. The number zero was reported in the chart if the school did not have any posts and N/A was used if the school did not have a certain social media platform. A few of the schools were not active on their social media platforms (such as UNC Asheville and

their Instagram), meaning that the school had social media accounts, but had not posted on it recently.

Once all the data was collected for each of the seventeen schools, a file was created for each variable, the variable being the school in the UNC system. Each file focused on the different data that was collected, such as comparing Instagram total likes, Facebook total likes, total retweets, total number of research and non-research posts, etc. When conducting inter-rater reliability for research and non-research-based posts, two researchers reviewed 10% of the total sample from each platform (i.e., Instagram, Twitter, and Facebook) and achieved 100% agreement.

Results

Graphs and conclusions were created from the data. Once graphs were created, it was concluded that Appalachian State University had the highest total number of posts for all platforms, highest amount of non-research-based posts, and highest total number of likes for Instagram, Twitter, and Facebook. Out of the seventeen schools in the UNC system, ECU ranked 6th/7th for the total number of posts for the month of October 2021. ECU ranked 4th in ranking for total likes on all platforms. UNC Chapel Hill ranked 1st for total number of research posts, while NC State University ranked 2nd and ECU ranked 3rd. ECU also ranked second for the highest number of total shares on Facebook post, UNC Pembroke ranking 1st. Overall, research posts received less likes than non-research posts. The number of non-research posts for all the social media platforms combined far outnumbered the research-based posts, the total number of non-research posts being 743 compared to the research-based posts totaling forty-four. It was also found that Instagram and Facebook received the highest number of likes on posts out of the three platforms.

Implications and Conclusion

The present study analyzed the ways in which various UNC system schools used social media and discovered which platforms and types of posts yielded the greatest amount of engagement in terms of the highest number of likes, retweets, and views. It also analyzed which schools ranked the highest in number of posts and total number of likes, posts, retweets, etc. This leads to the conclusion that the ECU College of Education needs to increase the amount of content they are posting to increase the level of visibility and keep up with the top posting institutions, such as Appalachian State University. The level of engagement with posts is related to the number of followers a school has, but the quality of the content the school is posting is what leads to the most engagement. Audiences are seemingly not as interested in research related content as they are with non-research related content, such as student take-overs or events being conducted within the College of Education. In general, the more an account posts the more amount of total likes the account will receive. The ECU College of Education needs to increase the amount of content that is posted and specifically post more non-research related content, such as daily activities in the College of Education or student take overs. As for increased connection with a school's community, the public, and donors, there are a few findings to consider. Sharing the perspectives of students in a school's College of Education, such as their daily life and experiences since being in the College of Education, creates more intriguing content that can increase the number of likes, visibility, and engagement for an account. To increase an account's number of alumni followers and obtain successful dissemination of information to a school's alumni audience, highlighting what alumni have accomplished in the post-graduate years is a beneficial tactic. For visibility and engagement purposes, having the College of Education social media platforms linked and visible on the College of Education homepage can lead to increased

engagement and visibility for the social media accounts. The study indicates that for most of the schools that had their social media accounts linked to the College of Education homepage, such as NC State University, the overall number of followers and likes on the account's posts were higher than the schools who did not. In conclusion, posting social media content that features students and staff within the College of Education has an overall trend of having higher likes and engagement. When considering research dissemination by using social media , incorporating the specific researcher in a social media post about a research project could encourage higher engagement with the post and create more awareness as to the research project being highlighted.

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