

Who Posts the Most? A Descriptive Analysis of the Prolific Authors of a Closed Facebook Group for School-Based Agricultural Education Teachers in California

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Introduction

Social Networking sites are gaining traction as a venue for information exchange. Ellison et al., (2013) stated, social networking sites, like Facebook, are increasingly being “employed as social search engines because they enable people to target questions to those that know them” (p. 156). Social media users turn to social networking sites to get useful information including recommendations, opinions, and factual knowledge (Morris et al., 2010). The California Ag Ed Discussion Lab was created as “a resource to help teachers navigate challenges, seek advice, share successes, and share resources” (*California Ag Ed Discussion Lab*, n.d.). With nearly 700 group members, the California Ag Ed Discussion Lab provides opportunity for school-based agricultural education teachers in California to seek in the moment advice from individuals within the same career and social network.

The purpose of this descriptive study was to describe characteristics of the most prolific authors for the California Ag Ed Discussion Lab. The objectives were to: (a) identify members who contribute the most posts to the California Ag Ed Discussion Lab, (b) identify which member contributed the most posts in each of the communicative functions defined by Ellison et al., (2013) and Saxton and Waters (2014), and (c) compare the author ratings of the top posting members.

Conceptual Framework

Technological capital identifies the potential contributions of information and communication technologies to build social and cultural capital in a social network (Carlson & Isaacs, 2018). Within a social network, especially social media, information can be identified for its intent to the audience. Ellison et al. (2013), Lampe et al., (2014), and Saxton and Waters (2014) identified communicative functions of social media which were used as the conceptual framework for this study. They contend, social media posts can be split into one of four categories, *community building*, *information sharing*, *mobilization* and *promotion*. Using the communicative functions of social media to examine the posts of the California Ag Ed Discussion Lab could provide insight into the contributions made by members.

Methodology

This descriptive study used quantitative content analysis (Riffe et al., 1998) to collect data from posts of the California Ag Ed Discussion Lab. Posts were downloaded using Sociograph, which recorded the posts’ timestamp, text, reactions, shares, comments, and rating. The authors for each post were identified by cross referencing the live Facebook posts with an indexed member list. Members were given a pseudonym for anonymity. The posts were coded for their communicative function by two independent coders. Frequencies and descriptive statistics were calculated using Microsoft Excel pivot tables during data analysis.

Results/findings

A total of 419 posts from January 1, 2019 to December 31, 2019 were authored by 182 unique authors, with the most prolific author posting 20 posts. More than half of authors ($n = 104$, 56.83%) only posted once during the time frame examined. The eleven members with the most posts accounted for 113 of the 419 posts (26.97%). The top posters for each of the four communicative functions were also included in the 11 most prolific authors, as shown in Table 1. Four of the top authors’ only posted into one communicative function category. Cam, Nora, and

Avery posted only *information sharing* posts and Jill only authored *mobilization* posts. The other 11 top authors posted in at least two categories. In order of frequency, Cam made the most *information sharing* posts ($n = 13$), Amy made the most *mobilization* posts ($n = 9$), Stan made the most *promotion* posts ($n = 6$), and Coral made the most *community building* posts ($n = 2$). The mean rating for the 419 posts was 28.587 ($SD = 34.35$). Five of the 11 authors with the most posts had an author rating greater than the mean rating.

Table 1

Frequency of Posts and Mean Descriptive Statistics of Members with Most Posts by Communicative Function in the California Ag Ed Discussion Lab

Communicative Function	Author										
	<u>Brynn</u>	<u>Cam</u>	<u>Amy</u>	<u>Coral</u>	<u>Nora</u>	<u>Avery</u>	<u>Deb</u>	<u>Jess</u>	<u>Kate</u>	<u>Jill</u>	<u>Stan</u>
Com bldg.	0	0	1	<u>2</u>	0	0	0	0	0	0	0
Info sharing	12	<u>13</u>	1	2	10	9	5	3	2	0	1
Mobilization	8	0	<u>9</u>	6	0	0	4	6	5	7	0
Promotion	0	0	0	0	0	0	0	0	1	0	<u>6</u>
Total	20	13	11	10	10	9	9	9	8	7	7
Author rating ^a	31.75	17.38	21.55	44.10	28.20	55.67	33.78	10.00	28.50	47.86	14.00

Note ^aAuthor rating calculated by dividing the sum of authors' posts ratings by number of posts.

Conclusions/Implications/Recommendations

Six of the members with the most posts had an average post rating that was lower than the average of all authors indicating the authors with the most posts do not necessarily have the most interaction with their posts.

The authors who posted the most in each communicative function were all amongst the top 11 posting authors. Identifying the top contributors by each communicative function could be used to help identify conversation starters for the California Ag Ed Discussion Lab Facebook group. Members posting *information sharing* posts could also serve a key role in identifying in-service opportunities and resources for school-based agricultural education in California.

Although this exploratory descriptive study identified 182 unique authors of Facebook posts across communicative functions of posts in the California Ag Ed Discussion Lab Facebook group, it does not examine the authors of comments made on posts. An analysis of comments authors would paint a better picture of the activity of members as opposed to just those who authored unique posts. Further analysis of authors of comments could also identify "experts" in areas for future in-service opportunities.

The California Ag Ed Discussion Lab Facebook group as well as school-based agricultural education teacher Facebook groups in other states provide a wealth of information and opportunities for teacher educators to have conversations about the questions being asked by teachers in the profession. An analysis of these groups further provides an opportunity for teacher educators to provide just-in-time training for the in-service needs in school-based agricultural education.

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