

Teachers' Use of Social Media-based Professional Development Deliverables by Focus Area

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Introduction

Decades of research have confirmed that the quality of the classroom teacher is the single most predictive measure for student success (Darling-Hammond & Bransford, 2005). Teacher quality comes from two sources: subject matter expertise and pedagogical content knowledge (National Research Council, 2010). Not only does professional development in these areas occur in traditional, formal settings, but there is an increased interest and value in improving teachers' skills and knowledge informally (Marcia & Garcia, 2016).

Four years ago, Owl Pellets: Tips for Ag Teachers was created to supply teachers with a social media-based professional development platform that focused on research-based pedagogy. Owl Pellets: Tips for Ag Teachers is an innovative professional development platform for SBA (School-based Agriculture) educators created to support teachers in utilizing research-based teaching strategies to train students for Food, Agricultural, Natural, and Human (FANH) careers. The Owl Pellets model sought to take complicated research manuscripts that were not making their way to classroom teachers, "pellet" them into formats teachers prefer, and then share those items in online communities where teachers engage. Since 2015, Owl Pellets has been developing social media content to disseminate research to teachers. While the engagement with teachers has been strong, the analytics haven't been studied to measure impact as it relates to frequency of access and engagement of the social media material.

Methods

The purpose of this study was to describe the frequency with which members of the Owl Pellets [group] accessed and engaged with professional development deliverables on social media focusing on the areas of classroom instruction, FFA, SAE, program management, and the whole teacher. The following objectives were created to meet this purpose:

1. Describe the frequency with which members of the Owl Pellets [group] consumed, by viewing or downloading, deliverables focusing on classroom instruction, FFA, SAE, program management, and the whole teacher.
2. Describe the frequency with which members of the Owl Pellets [group] shared with deliverables focusing on classroom instruction, FFA, SAE, program management, and the whole teacher

Data were collected via the analytics provided by Facebook, which hosts the Owl Pellets [group], and Podbean, which hosts the Owl Pellets podcast. We conducted a manual count of each of the aforementioned frequencies in order to meet the objectives. Differences between focus areas were analyzed using descriptive statistics. Because the study focused on one social media group, the findings are not generalizable beyond this group.

Findings

Data collected based on the objectives of this study are displayed in Table 1. In addition to the data reported in that table, an additional 2942 visits were made to the Owl Pellets home page, where visitors can scroll through all posts. These visits were not included in the data below.

Table 1
Engagement by posting type and category

	Infographics		Podcasts		Resource Roundups	
	<u>Posts</u>	<u>Views</u>	<u>Posts</u>	<u>Downloads</u>	<u>Posts</u>	<u>Views</u>
Classroom & Pedagogy	15	1026	10	2297	14	720
FFA	3	1177	4	1251	2	87
SAE	4	152	2	756	2	121
Total Program Mgnt.	15	1092	10	2245	11	413
Teacher Care & Identity	17	1331	10	2815	10	296
Technical Content	6	339	2	341	2	51
Other	3	118	0	0	0	0

Conclusions

On average, podcasts received the highest levels of engagement, as measured by downloads per posting. This is followed by engagement in posted infographics and finally by resource roundup postings. The total number of postings in each topic area tended to remain consistent across infographics, podcasts, and resource roundups. This was to be expected since postings follow a themed publishing schedule. Postings on the topics of Classroom and Pedagogy, Total Program Management, and Teacher Care and Identity have the highest frequency. Podcasts on the topics of FFA and SAE were found to have the highest levels of engagement per post. Similarly, infographics on FFA were found to have a much higher level of engagement per post as compared to other topics. Engagement with podcasts ranged from approximately 170 to 378 per episode.

Implications and Recommendations

Concurring with the work of Marcia and Garcia (2016), teachers appear to be looking for professional development via informal means. The engagement levels in this social media-based professional development program appear to be high and growing. It is recommended that further research be conducted to determine teacher perceptions of the quality and effectiveness of professional development delivered in this format.

References

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