The Utilization of Social Media in the Classroom

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Abstract

Many of today’s high school educators are working tirelessly to find effective and inexpensive ways to increase student participation and involvement within their classrooms. In light of this, a study was executed to see how technology and social media platforms impact student participation and involvement within today’s agricultural education classroom.

Two identical, 50 minute workshops about agricultural communication were presented at the Minnesota FFA State Convention and each session attracted around 30 seventh through twelfth grade students, for a total of 57 students. To obtain our results, we checked student understanding using educational technologies and polling softwares and assessed the knowledge and skills students gained via a pre- and post-survey. Our results provide valuable insight for high school educators so that they can better assist in facilitating student learning opportunities in their classroom and maximize student learning potential.

Materials & Methods

In order to examine the objectives and answer the research questions, I conducted survey research that was integrated into a classroom lesson. My research proposal was approved by the IRB committee on April 18, 2016. Because this research was focused on awareness of and engagement with agricultural communication principles and career options before students are exposed to college-level content, the sample used for research was comprised of junior high school and high school students. I created the curriculum for a 50-minute workshop that is focused around the importance of agricultural communication and some basic principles of agricultural communication relevant and appropriate for high school agriculture students. Content was highly relatable to students and applicable to their daily lives. Participants completed pre-survey and post-survey to gauge what they know about agricultural communication prior to the workshop and what they learned after the workshop is complete.

My research mentor and I facilitated the workshop and delivered the same curriculum to two groups of FFA students. When students entered, they were given the pre-survey and research consent form immediately. Once all pre-surveys were completed, we facilitated the workshop. At the conclusion of the workshop, all students completed the post-survey. On both surveys, we included four scalar “common questions” (1 to 5 scale where 1 indicates they strongly disagree and 5 indicates they strongly agree) to address the first objective by gauging student growth in the workshop.

Q1: I understand how communication and agriculture relate.
Q2: I am likely to utilize ag. communication skills in the future.
Q3: I am interested in a career in agricultural communication.
Q4: I can influence the ag. industry through communication.

Results

The following data has been collected based on the 57 participants. Short answer responses are also available in the logbook.

Common Questions Results (at 95% Confidence Intervals)

<table>
<thead>
<tr>
<th>Trial</th>
<th>Question 1</th>
<th>Question 2</th>
<th>Question 3</th>
<th>Question 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Survey</td>
<td>3.68421053 ± 0.26</td>
<td>2.92102692 ± 0.29</td>
<td>3.701754386 ± 0.21</td>
<td>3.991122 ± 0.21</td>
</tr>
<tr>
<td>Post-Survey</td>
<td>3.839561 ± 0.3</td>
<td>3.035087719 ± 0.28</td>
<td>3.992849 ± 0.28</td>
<td>4.403508772 ± 0.24</td>
</tr>
</tbody>
</table>

Conclusion & Acknowledgements

According to the data gathered, student perceptions, as they relate to social media and agricultural communication, were enhanced during the workshop and a positive classroom environment was achieved due to the use of media tools in the classroom. One limitation of this study is simply the fact that it is so challenging to evaluate a classroom environment and student perceptions and thoughts cannot all be measured using a scale or a couple of short answer questions. In the future, I hope to implement the results I found in my classroom by utilizing media in my classroom activities. Then, students will not only learn, but more importantly, they will feel valued and comfortable in the classroom.

I would like to extend my gratitude and appreciation to the following individuals and groups:

- Dr. Rebecca Swenson for serving as my research mentor.
- Bill Ganzlinn for leading the Research Apprenticeship Program.
- Minnesota FFA for allowing us to facilitate our workshop.
- My family for their continuous support and encouragement.


Figure 1: This table shows the 95% confidence interval (CI) values based on the survey results for the pre- and post-surveys based on the common questions listed above (using the 1-5 scale).

Figure 2: This graph indicates the raw average rating on the 1-5 scale obtained from each common question listed previously.

Figure 3: In the post-survey, five scalar questions (1-5 scale) were asked to address the first objective of determining social media’s role in the classroom. Here are the five questions and the data:
Q1: The workshop environment and atmosphere was excellent.
Q2: I felt comfortable sharing my thoughts in this workshop.
Q3: I worked effectively with others through this workshop.
Q4: I improved my own teamwork skills through this workshop.