

An Assessment of Undergraduate Research Skills in Agricultural Communications

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Introduction / Need for Research

- A multitude of benefits stem from undergraduate research experiences:
 - Helps students prepare for graduate studies (Crane et al., 2011).
 - Promotes gains in understanding concepts within a field, interpreting data, and communicating results (Kardash, 2000).
 - Valued by employers (Hart Research Associates, 2015).
- Agricultural communications has traditionally lacked assessments of undergraduate research.

Theoretical Framework

- Learning is a process of constructing meaning, and constructivism explains how learners make sense of their experiences (Doolittle & Camp, 1999; Savery & Duffy, 1995).
- Knowledge is gained when individuals take ownership in creating it (Driscoll, 2000).
- Undergraduate research allows the learner to create knowledge and take ownership of an authentic learning task (Splan, Porr, & Broyles, 2011).

Methodology

Purpose

Provide students with a research opportunity and determine undergraduate research project experiences

Population

Undergraduates in a senior-level agricultural communications capstone course

Research Teams

Students were placed into small teams and assigned an agricultural organization to research. Students were charged to formulate research objectives and set a timeframe to investigate.

The Task

Using Meltwater, an online social media monitoring platform, research teams searched for relevant content and produced detailed reports.

Results

Some students expressed **frustration** with the **lack of content** from organizations they were tasked to research, but indicated they **enjoyed researching** and monitoring their assigned organization on social media.

Despite some challenges in using the social media monitoring program, students **appreciated the opportunity to synthesize and collect data.**

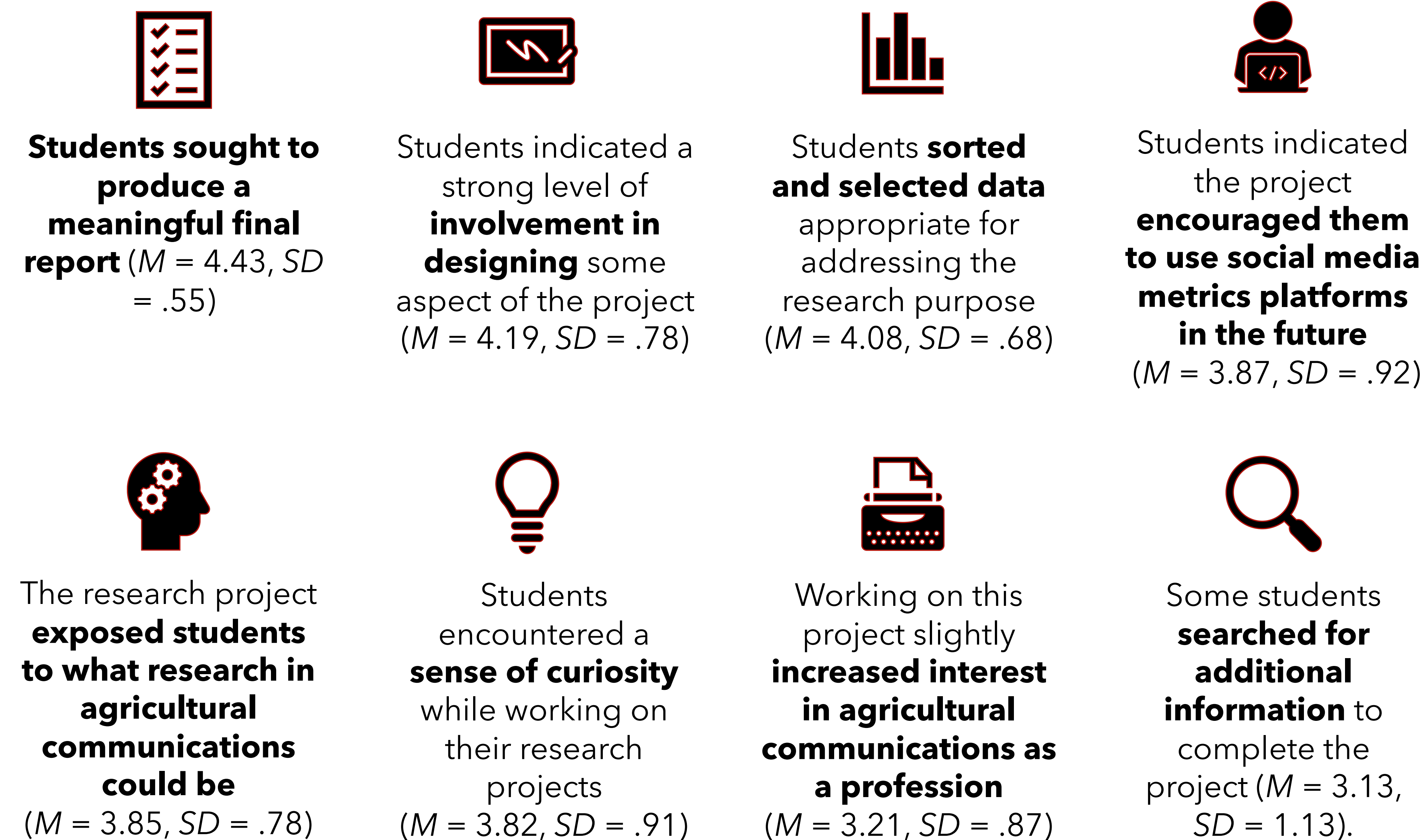


Figure 1: Students ($n = 77$) completed a questionnaire with eight Likert-type items to determine the impacts of the research project on research skills and benefits of the research process (Hunter et al., 2007; Lopatto, 2003; Trosset, Lopatto, & Elgin, 2008). 1 = *strongly disagree*, 5 = *strongly agree*.

Conclusions & Implications

Frustration with Ambiguity

While the research opportunity provided the chance to take ownership of a learning task (Splan et al., 2011) based upon a real-world issue (Doolittle & Camp, 1999), many expressed frustration with the ambiguous nature of the project.

Student Reflections Suggest Learning

Despite frustration, the majority of students expressed agreement with statements about research skills and benefits.

Increase Flexibility in Research Topics

Allowing more flexibility in the topic may lessen frustrations with the process, as topics of mutual interest for student and teacher are hallmarks of meaningful undergraduate research experiences (Hunter et al., 2007).

Integrate Undergraduate Research Opportunities into Class Curriculum

Agricultural communications instructors are encouraged to create opportunities for research and actively engage with students throughout the projects.

Look to the Tenants of Constructivism

Instructors should refer to the tenants of constructivism to create meaningful undergraduate research opportunities.

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