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Assessing and Improving Science Student #SciComm Skills

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Assessing and Improving Science Student #SciComm Skills

Abstract

As the population becomes increasingly connected online, there is a growing need for effective science communication on social media platforms (referred to here as #SciComm). We deployed a survey to all FHSU undergraduate and graduate science students to gauge their experiences with #SciComm. Questions included what training students already receive on communicating science to non-scientists and which classes incorporate building these skills. Our survey found that a majority of students have not received any formal training in online science communication. However, many students reported that they wanted more hands-on #SciComm training. Results were used to develop and implement a workshop for FHSU students to provide a primer on #SciComm during the Spring 2023 semester. Ultimately, we hope to encourage more classroom- and workshop-based activities to better prepare the next generation of scientists for science communication in a digital world.

Introduction

Resources for students to get training or experience with online science communication are minimal, hindering science communication in this technological era. We are investigating what #SciComm-related skills students are already exposed to through coursework and then developing methods to train science majors on communicating scientific ideas to the public using popular social media platforms.

Methods

- A survey was sent to Fort Hays State University (FHSU) undergraduate and graduate science students to gauge their experiences with #SciComm.
- Questions were designed to collect data on what #SciComm content students consume on social media and what skills they want to develop.

YES NO

WRITING A PLAIN-TEXT SUMMARY **CREATING AN INFOGRAPHIC CREATING A SCIENCE-BASED EXHIBIT** WRITING A BLOG POST USING SOCIAL MEDIA **GIVING A FORMAL PRESENTATION TO A..** COMMUNITY SERVICE OR OUTREACH I HAVE RECEIVED PRACTICE OTHER THAT I...

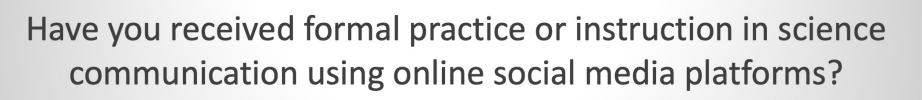
Many students are building key science communication skills, but the relevance towards #SciComm is not always clear.

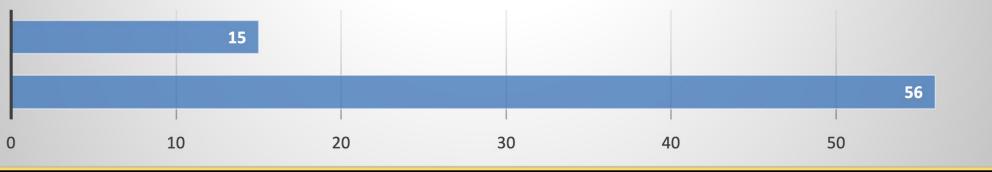
YES NO

> 68% of students surveyed report an interest in gaining science communication skills.

Kale Link, Kaiden O'Dell, Dr. Laura Wilson, Dr. Todd Moore Department of Geosciences, Fort Hays State University

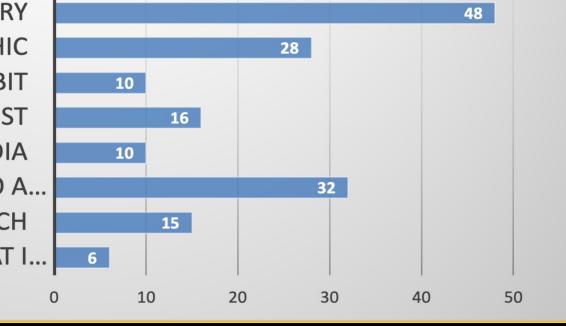


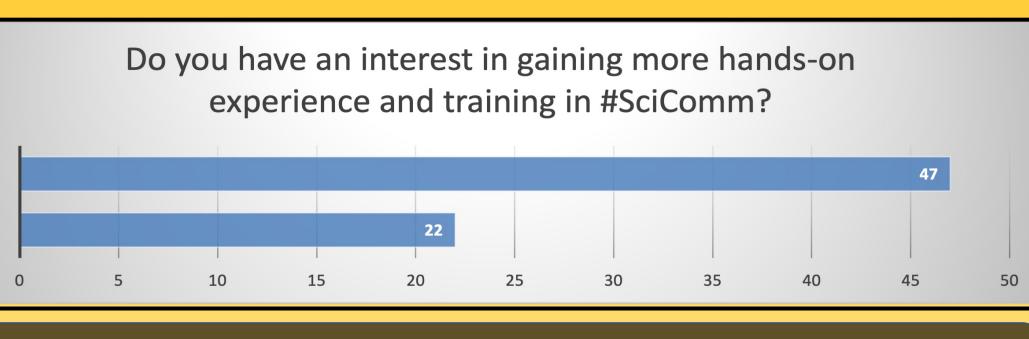




78% of students surveyed report not receiving any formal training in online science communication.

Have you received any practice or instruction in the following skills as part of a class activity or assignment?





Take Away Points

Word cloud generated from text responses to the question "What [science communication] skills would you be interested in developing?"

Next Steps

Survey results included useful finding on what science communication skills social students are most interested in developing and social medial platforms they want to use. Subsequently, we developed a workshop to help students gain #SciComm skills to further their professional development. The workshop focused on #SciComm topics such as identifying your audience, practice breaking down technical terms, crafting a story-telling style narrative, and how these communication skills are adapted to social media platforms.



Students are being trained to communicate scientific concepts to non-scientists but often do not connect the experiences with SciComm.

Most students are interested in gaining more experience in science communication—suggesting they think SciComm is useful for future careers.



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