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Agricultural Leadership, Education & Communications

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THE MENTOR'S LENS: EVALUATING THE PREPAREDNESS AND PERFORMANCE OF THE SCIENCE INFLUENCERS PROGRAM

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SCIENCE INFLUENCERS

WHAT IS THE SCIENCE INFLUENCERS PROGRAM?

- Research indicates a leaky pipeline in science communications, including:
  - Absence of formal science communications programs (Brownell et al., 2013).
  - Limited transparency between scientists and the public (Lyon, 2016).
  - Insufficient training in communication skills (Brownell et al., 2013).
  - Poor selection of science communication channels and ineffective message framing (Nisbet & Scheufele, 2009).
- A five-year-long USDA-funded program to equip undergraduates in agricultural and science-related fields with effective science communication skills for public engagement (Science Influencers, n.d.)

WHAT WE ASKED

Has Science Influencers effectively trained participants in science communications?

METHODS

- We used a formative evaluation (Rossi et al., 2018).
- Data were collected through mentor reports (n = 14) from 2022 and 2023 Science Influencer cohorts:
  a. Conduct a deductive thematic analysis to determine emerging themes for open-ended questions.
  b. Categorize the themes into two groups: 1) adequately prepared, and 2) inadequately prepared.
  c. Participate in peer debrief to discuss similarities and differences in coding.
  d. Ran descriptive statistics on scale questions.

RESULTS

- Interns adequately prepared were frequently praised for their:
  - Motivation (e.g., "High level of motivation, professional working attitude")
  - Knowledge (e.g., "Solid grasp of science")
  - Proficiency in social media (e.g., "Skilled in producing social media")
  - Research abilities (e.g., "Careful with each experimental step")
  - Writing skills (e.g., "Addressing comments in writing")
  - Networking capabilities (e.g., "Found ways to connect with diverse audiences")
  - Punctuality (e.g., "Always prompt for meetings").
- Those inadequately prepared often met expectations but lacked initiative and needed improvement in:
  - Writing and editing skills(e. g., "AP style, basic understanding of news and feature stories")
  - Emotional intelligence (e.g., "As a whole it would be, emotional intelligence")
  - Note-taking (e.g., "Getting much better over time")
- Personal characteristics were rated positively with high scores in cooperation, teamwork, work ethic, dependability, honesty, initiative, appearance, personality, motivation, acceptance of supervision, constructive criticism, punctuality, and professional attitude.
- Skills in leadership, communication, writing, learning new activities, and adaptability were assessed positively. Most interns were seen as deserving A grades (78.6%) compared to B grades (21.4%).

> "He was always prompt for meetings and timely for conducting research."

> "Doesn't take initiative with some tasks but is improving."

> "Professional working attitude and ability to take constructive feedback."

CONCLUSIONS

- The Science Influencers program has met its goals with mentor reports indicating positive feedback on students' personal characteristics, skills, and career potential.
- Although some areas like writing and emotional intelligence needed improvement, these issues were addressed by the end of the program.
- The mentor/mentee relationship was positive, helping students apply their communication skills in real-world settings.

RECOMMENDATIONS

- We recommend program directors customize mentorship to meet students' needs, request more frequent feedback, and develop lesson plans for teaching writing skills.
- Emotional intelligence and note-taking training is needed.
- Continuous evaluation of program effectiveness

REFERENCES