Engaging the Public to Fight the Spread of Scientific Misinformation

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About Me

- Colorado School of Mines
  Senior in Engineering Physics
  Interest in Space and Planetary Science
  Master’s in Materials Science
- Born and raised in the Pacific Northwest
- The daughter of two high school video production teachers
  Interest/Experience in Media and Communications
- Heavily involved in service
- SPS, SWiP, Undergraduate Research
Overview

Why does misinformation spread?

What engages our members?

How can we train our members to be better communicators?

How effective is this type of campaign?
Methodology

Analysis
- Interest
- Involvement
- Motivation
- Social media engagement

Research
- Survey
- Goals
- Possible Paths
- Motivations
- Previous and ongoing attempts

Strategy
Combined the analysis of the survey and research to develop a proposal
Survey Findings

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>1</td>
<td>96.6%</td>
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<tr>
<td>2</td>
<td>62.5%</td>
</tr>
<tr>
<td>3</td>
<td>55.7%</td>
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<tr>
<td>4</td>
<td>54.5%</td>
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Member Responses
1. I see the topic of combating scientific mistrust and misinformation as important
2. I want to become more involved in public engagement
3. I see this training as applicable to my social endeavors
4. I see this training as applicable to my professional endeavors

External Findings

- 76% to 88% of anti-vaccination websites leverage emotional appeals
- Anti-vaccination groups have a much more prevalent presence on social media than pro-vaccination groups
Analysis: Identifying our Audience

Relevance

- Understanding potential participation
- Understanding member motivations
- Understanding possible issues
- Identifying possible thought leaders

Member Profiles
Strategy: Outlining a Clear Path Forward

Example: I suggested using a non-partnered approach to vaccine hesitancy...

To teach people how to have productive, meaningful conversations about controversial science topics in order to help combat the spread of misinformation in their own neighborhoods, also teaching our members valuable communication skills they can bring into the workplace.

Audience members are interested in this initiative.
Audience of members is trained with the skills to communicate effectively.
These members are motivated to engage in these discussions.
Members have productive community discussions.

Keep It Simple
Results: Concerns and What I’ve Learned

Social Media Usage

Implications:

- It may be more difficult to motivate and mobilize people to adjust these habits
- We may run into issues of discomfortability even with Critica training
Questions