

# Seminars on Sharing Planetary Science

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## Abstract

Since 2017, the education and public engagement team at the Lunar and Planetary Institute has conducted seminars for planetary scientists (including early career scientists and planetary engineers) interested in engaging public audiences. Sharing Planetary Science seminars address some of the challenges in effectively interacting with audiences. Seminars include current educational research and incorporate the participants' knowledge and experiences in engaging public audiences. Sessions include invited speakers with expertise in science education, science writing, journalism, communicating with policy makers, and social media. The seminars are hour-long sessions, on over a dozen topics including understanding audience needs, common planetary misconceptions, engaging culturally diverse audiences, and more. While those conducted in 2017 were limited to in-person participants, by 2019 scientists were welcome to join online. Resources, powerpoints, and recordings are available online, along with information about upcoming seminars, at [www.lpi.usra.edu/education/scientist-engagement](http://www.lpi.usra.edu/education/scientist-engagement). The number of participants has increased over the past 18 months. Post-session surveys have been conducted after each seminar; participants find the seminars useful and interesting. This poster will include further details of these professional development sessions, which topics and aspects of the seminars are most popular, and the findings of the evaluation to date.





# Seminars on Sharing Planetary Science

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Sharing Planetary Science recordings and resources are available  
[www.lpi.usra.edu/education/scientist-engagement](http://www.lpi.usra.edu/education/scientist-engagement)

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Since 2017, the education and public engagement team at the Lunar and Planetary Institute (LPI) has conducted seminars for planetary scientists interested in engaging public audiences. *Sharing Planetary Science* seminars address some of the challenges in effectively interacting with audiences. Seminars include current educational research and incorporate the participants' knowledge and experiences in engaging public audiences. While those conducted in 2017 were limited to in-person participants, by 2019 scientists were welcome to join online. Seminars are currently only online.

## Past Topics

Addressing Controversial Science Topics	Giving Successful Press Interviews
Common Planetary Misconceptions	Making Planetary Science Relevant
Communicating with Policy Makers	Measuring Your Impact
De-Jargoning Your Talks	Presenting to Culturally Diverse Audiences
Engaging Audiences with Disabilities	Sharing Science with the News Media
Engaging Audiences Virtually	Understanding Audience Goals
Engaging Children	Using Social Media
Getting the Audience's Attention	Writing Popular Science

Contact us to suggest additional topics for future seminars!

## Participation

Early in-person sessions were usually attended by fewer than 20 scientists; an exception was at conferences such as the Lunar and Planetary Science Conference, where seminars were occasionally conducted to a full room. The number of participants increased greatly as programs went entirely virtual in 2020, with some seminars including over 50 attendees. The number of attendees and popularity of recordings (below) could be related to the interest in the topic, or to how broadly each session was disseminated. A variety of videoconferencing platforms have been used over the past two years; some have been more accessible than others.

Aug 2021	298 views	Addressing Controversial Science Topics
Mar 2021	213 views	Writing for the Public
Dec 2021	151 views	Common Planetary Misconceptions
Apr 2021	134 views	Communicating with Policy Makers
Oct 2021	129 views	Engaging Children
June 2020	117 views	Engaging Audiences Virtually
May 2020	101 views	Presenting to Culturally Diverse Audiences
Sept 2020	78 views	De-Jargoning Your Talks
Nov 2020	66 views	Engaging Audiences with Disabilities
May 2020	58 views	Giving Successful Press Interviews
May 2021	42 views	Using Social Media (repeat of earlier seminar)

## Feedback and Evaluation

We collected evaluation data for each seminar but the format changed with the format of the seminar. For the first years in which the primary participation was in-person, we conducted paper surveys, which yielded a high response rate. When the seminars were conducted online using the RingCentral platform, a virtual survey yielded low response rates. For the past year, we have primarily used Zoom and have included polls (which resulted in a higher response rate) and a survey to collect open-ended feedback. Useful aspects of sessions varied depending on each topic, and included the demonstrations, the speakers, the tools and recommendations presented, the discussion, and questions and answers.

Participant responses to each seminar vary greatly with the topic and speakers. At least one aspect of each seminar has been useful to the majority of participants, and the majority have found the seminars interesting and/or enjoyable. Only one respondent has indicated in polling data that they were disappointed in a seminar or did not find it at all useful.

Examples of data:

- Engaging Children** (9 participated in concluding poll)
  - 100% of responses indicated they felt more prepared to engage children
  - 78% had new ideas on how to engage children
  - 100% found the seminar interesting
  - 78% found one or more aspect of the seminar useful
- Controversial Science Topics** (25 participated in the concluding poll)
  - 92% indicated that they found the seminar useful but only 48% selected that they found it interesting
  - 68% indicated it provided new ideas on how to address questions or comments about a controversial scientific topic
  - 1 person (4%) selected that they were disappointed in the seminar
- Writing for the Public** (22 participated in the concluding poll)
  - 68% indicated that the seminar provided new ideas for their writing
  - 64% found the seminar useful and 86% indicated they enjoyed it

Open-ended questions also collected feedback about each seminar; these were particularly useful in making small adjustments. Initial seminars were kept short (45 minutes) but based on feedback, we increased them to an hour. Some participants have requested that seminars be longer, but the majority seem to favor the current length.

Select quotes:

- Thinking about presenting to a general audience is new to me. It was great just to think about it. I had a lot of fun*
- I enjoyed how we were learning about ways to engage students while doing them ourselves. That was very clever and a proxy for how we feel about proposed methods of engagement and it was fun.*
- I got a more comprehensive picture of preparing and conducting a successful press interview, including dealing with unexpected questions and following up after the interview.*
- I learned that with virtual talks you need to make things more personable since you are not there physically to interact with the audience. ...I valued learning about the different tools the audience can use to interact during talks.*

## The Future

LPI will continue to conduct professional development for planetary scientists, with input from the community. In addition to continuing these seminars, we are leading a new NASA –funded Science Activation project, *Planetary ReaCH*, which will provide longer professional development workshops for scientists and informal educators; learn more at [www.lpi.usra.edu/planetary-reach/](http://www.lpi.usra.edu/planetary-reach/)

To learn more about engaging the public in planetary science, or provide suggestions on ways that LPI can help scientists with education and public engagement, contact Christine Shupla at [shupla@lpi.usra.edu](mailto:shupla@lpi.usra.edu).