Prepping Planetary Scientists to Engage Audiences

Planetary scientists engaging audiences in Solar System science and exploration face challenges, including preparation and tools to engage diverse audiences. Lunar and Planetary Institute (LPI) is providing resources and trainings to support planetary scientists in their communication efforts. LPI has developed activities and a methodology of supporting planetary scientists in their efforts to engage audiences, guided by input from an advisory board of planetary scientists.

www.lpi.usra.edu/education/scientist-engagement

Professional Development Sessions


Based on input from planetary scientists and its Education and Public Engagement advisory board, LPI is conducting short professional development sessions. Sessions include interactive activities and demonstrations to allow participants to share their insights.

Topics for 2018

February 6: Addressing Controversial Topics
March 21: Special session at LPSC: Sharing Science with the News Media
April 10: Common Planetary Misconceptions
June 12: Making Planetary Science Relevant
August 7: Getting the Audience’s Attention
October 9: Understanding Audience Goals
December 4: Gathering Useful Audience Feedback

Each 45-minute session begins at 2pm Central (3pm Eastern/1pm Mountain/12pm Pacific). Planetary scientists are invited to attend in person, at LPI, or virtually on WebEx.

Conference Workshops

LPI has led sessions for planetary scientists at the LPSC on communicating with the press, the public, and on giving clear conference presentations.

At the 2015 LPSC, LPI presented "Communicating with Your Audience" for planetary scientists and education specialists. This day-long workshop included strategies for communicating with the press and the public, and on conference presentations. Activities, resources, and presentations are available online at http://smdepo.org/post/7856.

LPI has partnered with education specialists from NASA Goddard and from Planetary Science Institute to conduct conference sessions at LPSC and at the Division for Planetary Science for students and early career scientists, including:

- opportunities for participants to practice their conference presentations and receive feedback, such as the Early Career Presenters Review;
- panel sessions with information about planetary science careers and career preparation, such as the YSS Undergraduate Research Conference;
- and mixers connecting students with mentors, such as the LPSC InSights.

Each of these activities relies heavily upon experienced planetary scientists to provide feedback and insights into ways to communicate effectively at a professional science conference.

Coaching

LPI staff are happy to provide coaching to scientists in advance of their public presentations. LPI scientists may practice their presentations and receive feedback from education specialists, members of the target audience, and from other scientists.

Resources

LPI is creating and posting resources for planetary scientists at https://www.lpi.usra.edu/education/scientist-engagement, including recommendations for public engagement techniques, addressing controversial topics, preparing for the audience’s current understanding of planetary science, and upcoming public engagement opportunities.

Public Engagement Techniques

Make It Personal

Audiences are interested in personal stories, which can capture the excitement, joy, and challenges that planetary scientists experience in their research. These stories can not only make presentations compelling, but increase the audiences’ understanding of how and why science is done.

Share Relevant Connections

Most audiences enjoy learning about those factors that they can see in person, or that connect to their culture or local community.

Demonstrate Concepts

Demonstrations that are messy, loud, or that yield surprising results are particularly good at capturing an audience’s attention.

Give Them a Role

Inviting audience participation should start early in a presentation, so that the change in flow isn’t too abrupt for the audience.

Facilitate an Activity

Enable the audience to conduct an activity. People learn best by doing and by teaching others.

Demonstrations and Activities

LPI will be revising a selection of planetary science demonstrations easily adapted to different audiences, for use by planetary scientists in public engagement.

Current repositories for planetary science activities include

- NASA Wavelength: nasawavelength.org
- LPI’s Explore program: www.lpi.usra.edu/education/explore
- Fast Lesson Finder (Solar System Exploration): solarsystem.nasa.gov/educ/lessons
- Exploring Planets in the Classroom (Hawaiian Space Grant): www.spacegrant.hawaii.edu/class_actcs
- Mars NGSS STEM Lesson Plans (ASU): marsed.asu.edu/stem-lesson-plans
- Resources and Activities (JSC ARES): ares.jsc.nasa.gov/interaction/lmdp/educationresources.html

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.

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