

IPS Vision 2020: Professional Development

Working Group Goal from Vision 2020 Strategic Planning Process

“Improve and increase **professional development** efforts that are based on research and best practices (e.g. summer schools, KAVLI Institute)”

Current Team Members (as of October 17, 2014):

- Karrie Berglund (Chair), Digitalis
- Kaoru Kimura, Japan Science Foundation
- Karen Klamczynski, Evans and Sutherland
- Waylena McCully, Parkland College
- Martin Ratcliffe, Sky-Skan
- Kim Small, Upper Dublin School District
- Jaap Vreeling, NOVA, Dutch Research School
- Christi Whitworth, Pisgah Astronomical Research Institute (PARI)
- Ryan Wyatt, California Academy of Sciences

Mission (IPS)

- IPS offers resources, professional development opportunities, and networking opportunities to create stronger planetariums and planetarians around the world. IPS encourages the teaching of astronomy and science education in any domed environment using a wealth of tools and technology.

Mission (PD Team)

- To offer meaningful, valuable, and unique professional development opportunities of interest to all types of planetarium teachers around the world.

Vision (IPS)

- Attract members from planetariums of all types and from around the world.
- Offer a variety of opportunities to network in person, in print, and online.
- Increase membership benefits in order to attract new members; poll members and non-members to determine what benefits are missing.
- Attract and encourage the next generation of planetarians.
- Help planetarians make sense of and communicate new astronomy discoveries and data to the public.
- Keep informed about new technologies in both the planetarium world and peripheral to it (Oculus Rift, other virtual reality, cell phone apps, etc.). Consider means of integrating these new technologies into the dome experience or as part of a pre- or post-visit.

Vision/Goals (PD Team)

- Identify what professional development opportunities/topics people want:
 - Opportunities could relate to skill sets (teaching techniques for live shows, fulldome content production) or to astronomy topics (exoplanets, cosmology)
 - Peripheral skills/processes/content could also be targeted:
 - Fundraising
 - Marketing
 - Technology (both inside and outside of the dome)
 - Research projects (possible topics, how to organize, etc.)
 - Management/supervision of staff and programs

- Means of collecting suggestions will be discussed by the PD team but are likely to include online surveys, in person discussions at planetarium and other astronomy-related meetings (AAS, ASP, etc.), discussions on listservs such as Dome-L and Fulldome
 - Collect a “wish list” of topics to have presented at IPS conferences, then determine resources (people, online content, etc.) for presenting those topics.
 - Should contact people who are NOT members of IPS as well as those who are. Ask planetarians who are not members of IPS what opportunities/offerings/benefits would make them join IPS.
- Explore PD opportunities provided by IMERSA, LIPS, KAVLI Institute, system-specific user groups, etc.
 - Consider inviting those groups to work with IPS and to hold some sessions at IPS conferences. (This is already happening with live programming.)
- Research feasibility of offering PD as distance-learning/online courses/webinars to expand the reach.
- Work with other astronomy education groups to cross-pollinate, for example:
 - Offer planetarium-specific sessions at the American Astronomical Society meetings, Astronomical Society of the Pacific meetings, ECSITE, etc. Can IPS offset the cost of a member attending these in order to present?
 - Ask the above organizations to participate in IPS, through leading sessions at IPS conferences, writing articles for the “Planetarian,” etc.
- Work closely with other V2020 groups to achieve mutual goals:
 - Science and Data Visualization: How to effectively use data, communicate the meaning/relevance of the data
 - Where is a list of the other committees...?
- Organize/create a planetarian training program outline that could be used around the world. Could include:
 - Ideas for communicating common astronomical concepts (reasons for seasons, moon phases, celestial mechanics, etc.) with digital systems and star balls
 - Classroom management strategies for working with different age groups
 - Age-appropriate activities and vocabulary
 - Techniques for interacting with the audience
 - Sample hands-on activities under the dome
 - Resources to keep up with current astronomy/cosmology
 - Customer service
 - **NOTE:** The above list is more geared toward live shows, which are far more demanding of the presenter than a prerecorded program.
- Ensure that PD opportunities are offered for users of all types of planetaria:
 - Fixed or portable
 - Digital or star ball
 - Museum/science center-based
 - School-based
 - College/university-based
 - International: Target/be sensitive to planetarians of all different cultures, not just Western. (This one will be tricky...)
- Encourage research on best practices in the planetarium. Provide training on how to structure an effective research project.

Values (IPS)

- IPS welcomes members from every country around the world.

- IPS encourages planetarians using any type of equipment to share their knowledge and experience with others.
- IPS facilitates communication and connections between planetariums through publications (print and online), meetings, and discussion groups.

Values (PD Team)

- IPS needs to focus on PD opportunities for ALL sizes and types of planetariums in order to be sustainable and successful.
 - Need to be careful not to pigeonhole content—i.e., just because a presenter usually does a particular activity in a portable dome, it does not follow that that activity can ONLY be done in a portable dome.
- PD opportunities should be available in a wide range of formats:
 - Articles in the “Planetarian” journal
 - At biennial IPS meetings and IPS-sanctioned events other than the biennial meeting
 - Online—via live and archived webinars
 - Others?

Miscellaneous Thoughts

- Is it time for IPS to consider form an international non-profit organization with at least a few paid staff? Other organizations (Association of Children's Museums, for example) have found that transitioning to a structure with paid staff actually reduced their expenses.
- Is IPS already a non-profit? Is it a corporation? What is the structure?
- IPS needs to reach out to developing countries. Right now IPS conferences are far too expensive for most developing countries to send any staff.
- IPS needs to become truly international:
 - Needs to offer experiences that are valuable for many different cultures, not just Western.
 - Are there translators available for non-English speakers at IPS conferences?
 - Need to make it possible for members to participate in IPS conferences online in real time. It will never be possible to find a conference time that works for everyone anywhere in the world, and there will never be enough of a budget to fund the entire cost for all members who cannot pay their own way.
 - Also need to create an archive of webinars that can be watched at any time.
- Current membership benefits do not match the cost—i.e., membership is not seen as a good value.
- IPS should consider creating a means for members to contribute to a shared knowledge base of best practices, successful activities, training techniques, etc.
- IPS should be transparent about its financial situation. A quarterly financial report should be published on the website and in the “Planetarian.”
- Need to make it easy to see all of the various task forces and who is leading each committee.