

Working Group on Communication Astronomy with the Public

Co-Chairs:

Lars Lindberg Christensen, Dennis R. Crabtree, and Ian Robson

Abstract. The Working Group on Communicating Astronomy with the Public is under Division XII - Union-Wide Activities. Formed in early 2004, this Working Group has been very active in establishing itself and promoting its core goals.

1. Inception

The Communicating Astronomy with the Public meeting held in October 2003 in Washington D.C. was the second international event; the first being held in Tenerife, some eighteen months earlier. The Washington meeting was very much organized along workshop themes and had specific outcomes (or charges) in mind. Two key items emerged from the meeting: the production of the “Washington Charter” and the setting up of an IAU Working Group to promote astronomy “outreach” in the global sense. Dennis Crabtree and Ian Robson were proposed as Co-Chairs for this with Lars Lindberg Christensen as the convener and Executive Secretary.

The group set themselves four early targets: promulgation to and adoption of the Washington Charter by societies, agencies etc; organization of a webpage to promote activities; organization of some form of repository for data, and the organization of a third conference in 2005.

From the outset it was considered important that this Working Group had the widest possible remit for astronomy outreach as distinct from the more specific education-focused activities of Commission 46. The guiding precept for the Working Group is that: *It is the responsibility of every practicing astronomer to play some role in explaining the interest and value of science to our real employers, the taxpayers of the world.*

The Working Group Mission statement reads:

- To encourage and enable a much larger fraction of the astronomical community to take an active role in explaining what we do (and why) to our fellow citizens.
- To act as an international, impartial coordinating entity that furthers the recognition of outreach and public communication on all levels in astronomy.
- To encourage international collaborations on outreach and public communication.
- To endorse standards, best practices and requirements for public communication.

It is widely recognized that there are a number of barriers to communicating astronomy. Firstly, a number of professional astronomers do not feel comfortable with the very concept of talking with the public. Secondly, many of the employing organizations do not regard communication and outreach as a real part of the “job description”. Hence, the time taken for public communication may not only go un-rewarded for the researchers, it may well go against the researcher in effect if outreach is not counted as a merit in the same way as grants, refereed papers, etc. The final hurdle is that a number of organizations (especially those outside the USA) have not yet integrated public communication (or “science and society”) into their own organizational structure by providing the necessary support funding, training, infrastructure, personnel, etc.

2. Activities

Setting up the web site was a very important step forward and provided a focus for the Group's activities as well as being an obvious means of promoting its existence and providing a key link for those interested in volunteering for work. The web site is hosted by ESO at <http://www.communicatingastronomy.org> and contains full details of all activities and lists members of the Organizing Committee.

One key area of future work, still very much at a preliminary stage, is the compilation of a compendium of sites and information for those who wish to have access to sites that are known to have high standards and to promote professional information. This could be looked at as some form of "one-stop" activity whereby enquirers can be passed on to other sites that have a "kite-mark" of approval in the professional sense. This would then be an aide to those who seek astronomy information but do not have the knowledge to sort out the factual from the bogus.

3. Washington Charter Progress

The Washington Charter for Communicating Astronomy with the Public, usually referred to as the "Washington Charter", has its origins in the "Communicating Astronomy to the Public" conference held at the US National Academy of Sciences in Washington, D.C., in early October, 2003. The Charter outlines *Recommendations* for individuals and organizations that conduct astronomical research that "*have a responsibility to communicate their results and efforts with the public for the benefit of all*".

The Working Group has been active in seeking endorsement of the Charter from professional Societies and other bodies. The list of Charter endorsers currently includes:

Professional Astronomical Societies

- Austrian Society for Astronomy and Astrophysics
- Der Rat Deutscher Sternwarten (RDS, Council of German Observatories)
- UK Association for Astronomy Education (AAE)
- Astronomical Society of the Pacific
- Astronomical Society of Australia
- European Astronomical Society
- British Astronomical Association
- Royal Astronomical Society
- Canadian Astronomical Society
- The International Union of Pure and Applied Physics, Commission 19 (Astrophysics)
- Danish National Astronomical Committee (Astronomisk Udvalg)
- Royal Astronomical Society of Canada
- Particle Physics and Astronomy Research Council (PPARC)

Universities, Laboratories, Research Organizations, and Other Institutions

- European Southern Observatory
- Eugenides Foundation / Planetarium
- The Isaac Newton Group of Telescopes
- Auriga Astronomy

Several of the above Societies, while endorsing the Charter, did have some minor reservations concerning the language. A significant omission from the above list is the

American Astronomical Society (AAS). The AAS was approached in May 2004, but declined to endorse the Charter at that time. The AAS agreed wholeheartedly with the spirit of the Washington Charter and supported its goal to increase the amount and effectiveness of communication of astronomy with the public. However, the AAS felt that the broad language in the Charter effectively amounted to an “unfunded mandate” and that its endorsement of the Charter would encourage other institutions to reallocate precious resources. It also felt that the language called for outreach to be associated with every activity in astronomy whereas the AAS felt that not every individual, department, programme, or institution should necessarily be involved in outreach. Similar views were expressed by other groups, some of whom did endorse the Charter. The Working Group sees endorsement of the Charter by the AAS as critically important since the US is a world leader in efforts to communicate astronomy with the public through NASA, NSF and other programmes.

The Working Group felt that minimal changes to the language of the Charter might allay the concerns of the AAS. But who should make these changes? Who had the right to make changes? The Working Group believed that it was in the best position to make changes to the language as it was leading the efforts to have the Charter endorsed. However, we felt that the original group that produced the Charter had ownership and that until ownership was transferred to the Working Group no changes could be made in the Charter language. The original group was approached by email and all of those who responded agreed to transfer ownership of the Charter to the Working Group. Therefore, the Working Group now has “ownership” of the Charter.

The Working Group crafted a modified version of the Charter that softened the language but which kept the spirit of the Charter intact. This language was further worked on during the CAP 2005 conference to address a few remaining points. When polled about these changes several people at the conference noted that their national organizations had endorsed the original charter despite having reservations about some of the strong language, and that the new softer language eliminates the sources of those reservations.

The final revised version now sits with the AAS Council. We are hoping that they will consider it before their next Council meeting in January 2006, giving us a chance to respond to any final questions or concerns.

During a recent visit to China representations were made to invite nominations for a Chinese member of the Organizing Committee and Supporters to the Working Group.

4. The ESO/ESA/IAU conference Communicating Astronomy with the Public 2005

Over one hundred astronomers, public information officers, planetarium specialists and image processing gurus descended on ESO Garching in June for CAP2005—Communicating Astronomy with the Public 2005. This was the third international conference addressing astronomy outreach; the previous venues being La Palma and Washington D.C.. The main aim was to bring together specialists from the various strands of astronomy that undertake outreach in the broadest sense. The four day conference was a resounding success, much was achieved and the work of ESO was better appreciated (especially from the non-European perspective) through a tour of the facility. Some of the highlights of the local environs were much enjoyed including the conference dinner at the Deutsche Museum’s aviation museum “Flugwerft Schleißheim”—(with cockpit tours of an F4 Phantom) and a splendid (somewhat liquid) evening at the Augustinerkeller, one of the largest Biergartens in Munich.

There were a number of key themes for the meeting covered in the plenary sessions. Each session began with talks by invited speakers and one of the main highlights of the meeting was the extremely high level, both in terms of content and presentational style, of all the speakers.

The sessions were: Setting the Scene; The TV Broadcast Media; What Makes a Good News Story?; The Role of the Observatories; Innovations; The Role of Planetaria; Challenges and New Ideas; Keeping our Credibility—Release of News; The Education Arena; Astronomical Images—Beauty Is in the Eye of the Beholder; Cutting-edge Audiovisuals; Virtual Repositories.

A most successful discussion on credibility and the general theme of communication ethics took place in the session “Keeping our Credibility”, where we were delighted to field a star-studded panel, including the ESO Director General, Dr. Catherine Cesarsky. As a direct result of this session a project was started at University of Roskilde with the title Credibility of Modern Science Communication. The aim of the project, lead by Lars Holm Nielsen, is to investigate the question: How far can science communicators in the name of science communication keep pushing, or promoting, science results or projects in the name of science communication without damaging the individual, and thus also the collective credibility of the science communication community and the involved institutions involved? One of the planned outcomes of the project is a draft for a so-called Code of Conduct for press releases. This will outline recommended ethics and procedures for conflict resolution, analysis and retraction and be submitted to the WG for possible inclusion in an overall IAU recommendation in this area. The code of conduct will be aimed at science communicators.

Technology and the power of the web were much to the fore. All the PowerPoint presentations were posted online on the conference web site on the same day as the talk took place. The conference was also broadcast as a live Webcast and thus available worldwide. If some of the speakers clearly forgot this on occasion and made controversial statements, there were some hasty interjections of the words “WEBCAST, WEBCAST” from the front row to much amusement from the audience.

The “Hands-on” workshop sessions that ran in parallel in the afternoons were a huge success and a number were over-subscribed. This had been anticipated in the planning and so the more popular ones were repeated on subsequent days. The workshops were woven around the themes of image processing, interactions with the media and a communications toolkit.

The conference was summed up by Professor Paul Murdin (Cambridge) who brought together the various themes, tensions and links of the four days and also suggested a possible theme for the next conference which will be in 2007.

The meeting was organized by Ian Robson and Lars Lindberg Christensen, supported by Scientific and Local Organizing Committees. The work of the “FITS Liberator” team was enormous in making the conference both successful and right up to the minute in terms of technology.

It has been agreed that CAP 2007 will be held in Victoria, BC, Canada in September 2007. We expect a turnout on the order of 150–200 participants and that the meeting will be very successful.

The organizers wish to acknowledge financial and infrastructure support from ESO, as well as support from ESA and IAU.

5. Virtual Repository Programme Group

The so-called Virtual Repository Programme Group was set up during 2004 and business meetings were held at AAS in January 2005 and at CAP 2005 in June 2005. The purpose of the group is: *“To construct the framework for a virtual repository to allow outreach resources across projects and country borders to be “cataloged” in a virtual repository and accessed by educators, press, students and public through specialized visual tools combined with search engines.”*

Here repository is used in the meaning of a “place” where outreach and education resources are “collected”, and “virtual” in the sense that no physical movement of data should take place—only a framework whereby the data can be accessed seamlessly in a sort of “Virtual Observatory-style” is required.

So far progress has been made in three different areas:

(a) Concept: The concept of the Virtual Repository has been thought out, discussed and improved to a degree where real implementation can start.

(b) International collaboration: Ties have been made with the group at STScI, lead by Frank Summers, working on metadata tagging the outreach images from the Hubble Space Telescope.

(c) Funding: A proposal for the EC is currently under preparation. The total budget is on the order of 1-3 MEUR. The proposal has the goal to give *“European-wide access to the treasure trove of celestial images from anywhere, anytime, moving the astronomical images into the 21st Century”*. And in slightly more detail: *“The Virtual Repository project is dedicated to improve accessibility and usability of astronomical digital material in a multilingual environment. The Virtual Repository will make an EU-wide co-ordination of collections in astronomical audiovisual archives and enhance the quality of the audiovisual material well-defined metadata. The project will reinforce cooperation between digital content stakeholders. The aim is to give access to unique resources as the sky is a vast unique laboratory of science. Always in operation, accessible at all times to everybody.”* The duration of the project is 24-30 months hopefully starting in 2006.

(d) Implementation: A student from the University of Copenhagen, Kasper Nielsen, will in the Autumn 2005 start working on the practical issues of how the Virtual Repository could be realized. Virtual Repository is in its essence a framework consisting of four components, namely 1) metadata, 2) a centralized organizer / controller, 3) a list (database) containing the data and 4) a definition of a protocol. The project will give an overview and description of the Virtual Repository solution and its components, as well as how some of these are actually implemented. The project is expected to finish in January 2006.

The Programme Group’s web page is

http://www.communicatingastronomy.org/repository/virtual_repository.html

Background material can be found here, as well as a list of the members.

6. Plans for the IAU General Assembly 2006

All three officers of the Working Group plan on attending the GA in Prague. We have requested a 2-hour business session and a 4-hour scientific session for the Prague meeting.