How can a research library support the communication of science to the general public?

Francesca Brunetti, Antonella Gasperini
INAF — Arcetri Astrophysical Observatory Library, Florence, Italy (biblio@arcetri.astro.it)

Abstract

How can an observatory library support the communication of science to the general public? We will describe how a highly specialised astronomical library can also play a key role in disseminating astronomical knowledge, making scientific results available across a wide range of levels, from professional to public to educational. This outreach activity requires several steps, ranging from the preliminary identification and scrutiny of sources to the production of new information material (e.g. maps, brochures, and DVDs). In particular, we will describe some recent experiences in the dissemination of astronomical information to the general public, especially teachers and children, analysing some results of this activity, such as a bibliography of *Italian Astronomical Books for Children*, a review of scientific books and other multimedia products.

The context

Everywhere astronomical libraries have something in common: a high level of specialisation, an international network of information resources, often remote and very skilled users: professional astronomers, researchers and graduate students.

In Italy astronomy is the most popular science: children, students, families, teachers are eager for information and anything that can deepen their knowledge about this science (events, news, trends and discoveries). Often public libraries or schools can't satisfy these information needs. This is the reason why the Library of the Arcetri Astrophysical Observatory decided to collaborate in communicating science to the public. How can we reach a public of different ages, different skills and a non-homogeneous level of education in a local context? How do we make scientific results available across a wide range of levels? This specialist library is able to distribute scientific information and as a part of a research institution it offers a clear scientific validation to the public. The use of astronomical information resources and the collaboration with schools, public libraries, educational institutions (the local context) gives the library the opportunity to reach the general public.

Some projects

During the last few years the Arcetri Library has been involved in the following projects:

- The Bibliography of Italian astronomical books for children[1] was published, using the LiBeR

[1] http://www.arcetri.astro.it/BIBLIO/edu/librib.html
[2] http://www.liberweb.it/index.php?module=CMpro&func=viewpage&pageid=7

database[2], the archive which has held editorial productions for children since 1987. The bibliography is dedicated to teachers, parents and public librarians. It consists of all Italian astronomical books for children published since 2000. It is divided into four age groups: from 3 to 5 years old; from 6 to 8 years old; from 8 to 10 years old and from 11 to 14 years old and is updated every three months.

- The library is also involved in promoting specific scientific children's books by providing book reviews on its web page: every three months an astronomer is invited to review the book selected by the library staff[3].
- The Arcetri Library also maintains a special section for the public called *Astronomy for General Public* (Astronomia per il pubblico) on its web page. It presents some national information resources in astronomy (websites of planetariums, scientific museums and other Italian information sites on science) and offers a selection of international resources (from EDU SPACE to the NASA Educational Portal). Sky maps prepared by the Arcetri astronomers can be downloaded.
- At the end of 2005 the library was involved in a project called *Gianni Rodari e le stelle* (Gianni Rodari and the stars). Gianni Rodari (1920-1980) wrote extraordinary stories and rhymes using astronomical themes. The aim of this project was to consider the astronomical aspects of Rodari's works as a way to enter into the sky and to explore the Universe[4].
- The Arcetri Library took part in a project involving Italian and Chinese children named Skies of the world. A Starlab planetarium has been used to teach about the sky, constellations and myths, both in the Mediterranean and Chinese tradition. This project was presented at the Genoa Science Festival in the October 2007[5].
- The Library staff collaborates with the Arcetri public outreach activity producing multimedia tools for science educators and for the general public[6].



Figure 1 – DVD Label of "The sky over China"



Figure 2– Postcard of "The Sky all over the world"



Figure 3 – Poster of the "Bambineide in Arcetri"

All figures courtesy of the authors.

[3] http://www.arcetri.astro.it/BIBLIO/edu/rece.html
[4] A DVD of this project is available.
[5] http://festivalscienza.it/en/programma/evento_en.php?id=127
[6] See: http://www.arcetri.astro.it/cielidelmondo