

Chapter 12

Planetariums

Discussion of planetariums was centered around a panel organized by Joseph Chamberlain, Director of the Adler Planetarium in Chicago. The presentations consider first general philosophy, then the role of the planetarium in schools and for teaching teachers, and next how to attract the public to planetariums first in general and then in developing countries. Further, independent papers dealt with planetariums in schools and colleges.

PANEL DISCUSSION: THE ROLE OF THE PLANETARIUM

Philosophy and Directions in Planetarium Programming

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1. Introduction

I am going to start with the premise that planetariums serve several roles in their communities:

1. They are popularizers of astronomy and space science
2. They support and enhance the teaching of astronomy and related subjects within the formal education system
3. They provide a community resource for astronomical information

Not all planetariums incorporate all of these roles or do so to the same degree.

Planetariums, as facilities, come in a variety of forms. At one extreme might be a space theater with its wide-format films. A major public facility would have a strong emphasis on public shows and school programming. A college or school facility would emphasize programming for the education system at some or all levels with some or no public programs. At the other extreme would be the small portable planetariums with 100 per cent use for school activities.

2. Popularizers of Astronomy

Others on the panel will speak more directly to school or course issues. I will direct the balance of my remarks to public programming, which is the primary means by which planetariums act as “popularizers of astronomy.”

In many major facilities that emphasize public programs, the trend is one of greater sophistication in presentation. This sophistication involves greater use of projection technology but more importantly a better knowledge of the audience and its needs, more effective development of show concepts, a good writing style, and high production values.

Such planetarium programming responds to what we perceive the audience is looking for or expecting. Good communications (and, as we have heard in this colloquium, good education as well) starts with knowing your audience. I submit that the audiences in many cases want to hear about and see the results of new discoveries, new theories, and current speculations. They respond less favorably to historical programs and sky lore. I suggest that we should not be surprised at this trend for what we are seeing is part of the cultural dimension of astronomy. Astronomy is perceived as new, futuristic, high-tech, *etc.*, to such an extent that commercial advertising readily uses astronomy to sell products. Likewise, film and television raise in our audiences high expectations in visual presentation.

In short, if you are big, visible, and invite an audience in at a significant fee, you had better be good at what you offer. In terms of astronomy content, you should not expect a lot of hard in-depth science. A public show in a planetarium is not a classroom nor does it speak to a homogeneous audience.

To become more effective popularizers of astronomy, planetariums need some or all of the following:

1. to have access to good, up-to-date information and materials;
 2. to have good communication skills to interpret that information;
 3. to know the needs and expectations of their audience;
 4. to exploit and to use the knowledge of learning processes and new technologies of presentation;
 5. a staff that combines a good knowledge of astronomy, including concepts and processes, and good communications skills. In these requirements planetariums share a common need with science museums and schools, and one wonders if the 80 per cent of astronomy majors who, it has been said, do not pursue a career in astronomy research or formal teaching, might be better served by an education that gives them the other skills with which to pursue these other careers.
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