Woods Hole Oceanographic Institution
Women's Committee

WHOI Educational Outreach – What Can I Do?

Approaching Education and Public Outreach

- Andrea Thorrold

For many scientists, developing education and public outreach (EPO) activities may seem like a foreign concept. In fact, the process that educators use to plan, implement, and evaluate EPO activities is very similar to the process that scientists use in their own endeavors.

In science, a new project often begins with an observation that suggests a question to pursue. Observations in education can come from data collected through audience needs assessments. Learning about your audience before expending resources on a project helps to increase both the likeliness of success and the impact of the activity.

A new scientific idea doesn't go forward (or get funded!) without a review of the literature. There is also a body of literature related to EPO, including evaluation results and information on effective practices. Remember, most EPO project ideas are not novel! Chances are, someone has already piloted an EPO activity similar to the one you are proposing. It is important to learn from the experiences of others before starting from scratch.

While a scientist develops a hypothesis to frame the question in a way that can be tested, educators start by determining the goal of the project. Without the goal explicitly stated, it won't be possible to evaluate for success. Once the need and the goal for a particular program have been established, the planning and development process begins.

The actual "experiment" in the realm of EPO is the implementation of the project. As in scientific research, a significant amount of resources, including collaborators with specific skills, are often dedicated to this step.

The data collection and analysis in EPO is done through the process of evaluation. Often a professional evaluator performs this task. Once the project has been evaluated, it is equally important to disseminate the results so that others may learn from the experience.

Exploring ways to fund projects that develop from the current work is one more parallel that science draws with EPO. For educators, sustainability of the project or activity is an important consideration that should be discussed during the program planning phase.

Keeping these ideas in mind while planning your education and outreach efforts will help to both increase the likelihood of success as well as make the most effective use of your time and money.

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Relevant Links

COSEE – Centers for Ocean Sciences Education Excellence
http://www.cosee.net/
http://necosee.net/

WHSTEP – Woods Hole Science and Technology Education Partnership
http://www.whoi.edu/community/whstep/

WHOI Sea Grant Education & Outreach
http://www.whoi.edu/seagrant/education/

WHOI Support for NSF Broader Impacts Activities
http://www.whoi.edu/sbl/liteSite.do?litesiteid=3351&articleId=9486

MIT/WHOI Joint Program Course Communicating Ocean Sciences (7.433)
http://www.whoi.edu/science/B/COS/index.html

Ocean Instruments
http://www.whoi.edu/science/instruments/

Dive and Discover
http://www.divediscover.whoi.edu/

National Ocean Sciences Bowl
http://www.nosb.org/