Evaluation Report: USGS/NSTA Earth Science Materials – Increasing Effectiveness of Regional Earth Science Education

The report and associated products are available on the UW Extension, Environmental Resources Center Web site, http://www.uwex.edu/erc/usgsnsta2.html

Contact: Elaine Andrews
University of Wisconsin – Environmental Resources Center
445 Henry Mall, room 202
Madison, WI 53706-1289
Ph: 608-262-0020
eandrews@wisc.edu

Program Profile

Program Description:
The United States Geological Survey (USGS) has been developing and promoting youth education about water for several decades. USGS Water Resources Education Initiative products and programs include the water poster series (including educational activities on wetlands, water use, wastewater treatment, navigation, groundwater, water quality, oceans, watersheds, and hazardous waste), Water Resources Professional’s Outreach Notebooks, Children’s Water Festivals, Groundwater Guardian, and curriculum materials. The National Science Teachers Association (NSTA) works in cooperation with USGS to disseminate the water posters to teachers and has developed a teacher’s guide series to accompany the posters.

Program Goals:
The USGS is the primary United States organization responsible for developing and managing data about earth science. In this role, the USGS has a responsibility and goal of making their information available to educators and to the general public.

Program Funding:
Federal governmental funds support this program.

Program Links:
UW Extension, Environmental Resources Center Web site, http://www.uwex.edu/erc/usgsnsta2.html

Evaluation Profile

Evaluation Goals & Questions:
This evaluation was undertaken to provide an assessment of the USGS water posters, other USGS earth science education materials, and future education resource needs.

There were two groups of participants in this study, people who received bulk orders of USGS water posters and educators who used USGS and NSTA water education and earth science resources. The questions asked of these two groups differed, Some example survey and focus group questions included:

1. Can you use the USGS water posters to support your public education initiatives?
2. Why did you order the USGS water posters?
3. Have you attempted to gather feedback about poster use or satisfaction?
4. What earth science subject would you like addressed?
5. What formats would you prefer?
**Evaluation Methods:**
Data for this evaluation were collected through questionnaires and focus groups. Survey participants included USGS State Representatives and customers who ordered 50 or more posters at one time. There were two focus groups for middle school educators. One consisted entirely of formal educators and the second consisted entirely of nonformal educators.

**Evaluation Instruments:**
A complete set of evaluation instruments is available in the report.

**How were results used?**
As a result of the evaluation, the USGS extensively modified its Web site and modified its poster distribution strategies.

**Evaluation Cost:**
Funds for the evaluation consisted of $12,500 which covered survey postage and staff time, including a $500 contribution to the County Extension office water education program. The funds did not include evaluator’s salary for survey and focus group procedure development, testing, implementation, and analysis (about 2 months FTE).

**Evaluation Insights:**

**What worked well?**
Participants enjoyed the focus group experience. Many felt that participation in the group was a good way to learn more about education materials and learn about or meet others who could help them with their job. Almost all participants felt that the two hour focus group meeting was an appropriate length of time.

**What were important evaluation “lessons learned”?**
One lesson learned was that developing and confirming the participant list for the focus groups was very time consuming. Environmental education program evaluators considering this approach will need to allow considerable time for this aspect of the project.

**What could have been done differently?**
The report should have documented validity/reliability procedures. The study design was developed to do the most possible with the available funds.

**Profile information provided by:**
Elaine Andrews  
University of Wisconsin Environmental Resources Center

**Profile prepared by:**
Dr. Beth Covitt  
Michigan State University

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