The DLESE Evaluation Services Group: A framework for evaluation within a digital library

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ABSTRACT

The Digital Library for Earth System Education (DLESE) Evaluation Services Core (ESC) team has been established to:

- Provide evaluation support for DLESE core team activities.
- Establish pilot studies with key user audiences (e.g. K-12 teachers and undergraduate faculty).
- Implement studies designed to better characterize DLESE users and user needs.
- Offer evaluation support and opportunities for the DLESE community through workshops and grant opportunities.

This poster is intended to describe the breadth and depth of our work; selected aspects of our work are described in accompanying posters.

One of the key roles for the DLESE Evaluation Services team is to provide evaluation support for major DLESE activities and initiatives. The Evaluation team focuses upon major activities such as conference-based outreach, the DLESE Ambassadors program, DLESE Data Workshops, state-based digital teaching units, and the developing scientific accuracy review process. Work within these projects allows us to not only provide needed formative evaluation information to DLESE teams, but offer study sites to better understand user needs. For example, the California pilot study to develop state-based digital teaching units provides information to support that project, but also gives us insight into how teachers choose resources, what challenges exist for teachers using digital units, and what opportunities exist for DLESE to further an Earth system perspective.

The DLESE vision is to serve a broad and diverse group of users; however, our initial pilot work is focused upon two key intended audiences: undergraduate faculty and K-12 teachers. Tom Reeves and students seek to understand the needs of undergraduate students and faculty who use DLESE. Their work has brought new immediacy to the development of hybrid search mechanisms within DLESE that will accommodate not only novice learner search terms but specialized scientific terms used by more advanced learners.

Pilot studies within K-12 classrooms are providing new understanding of the ways DLESE can contribute to K-12 teachers’ needs. In addition to the digital teaching unit study mentioned previously, the ATLAS team seeks to understand the ways in which a reviewed collection, the Digital Water Education Library (DWEL), enables instruction in Jamestown, VA classrooms and what opportunities exist to increase the utility of such collections.

For the first time, all users of the DLESE search and browse system are being asked to voluntarily state the purpose of their visit, their user role and their geographic location. Many choose to offer more detail on the nature of their search and their experiences with DLESE. Results from this survey are described in a separate poster. Over time, this survey will be used to ask different questions of users about their experiences with DLESE.

The DLESE ESC seeks to build the evaluation capacity of the DLESE community through several means. Evaluation workshops are offered at scientific conferences and DLESE meetings, team members review and comment on the evaluation components of geoscience education proposals, and the Evaluation Toolkit thematic collection for geoscience education evaluation is available in DLESE. A new minigrants program is under development, to provide seed funds for evaluation projects of interest to DLESE.

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