The Impact of Grey Literature in Advancing Global Karst Research: An Information Needs Assessment for a Globally Distributed Interdisciplinary Community

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Abstract
A survey of the global karst community was conducted in 2006. The survey was distributed via the World Wide Web to known karst researchers. The instrument was designed to generate an initial inventory of core grey information types, to assess levels of usage of grey information by the respondents, and to gauge the karst community’s willingness to participate in building and expanding both this collection and the associated controlled vocabularies.

Background
In 2005, an interdisciplinary work group of faculty, librarians, and graduate students was convened under the auspices of the Dr. Kiran C. Patel Center for Global Solutions at the University of South Florida to discuss global information needs. The group quickly focused upon water issues and then more specifically karst, a very complex and vulnerable type of geologic landform (Drew and Hotzl). Following these deliberations, the group initiated a study to determine the feasibility of constructing a global information portal to be hosted and maintained by the libraries in collaboration with the Patel Center and related academic departments.

In January 2006, a group of 29 scientists, information specialists, and policy makers representing 18 organizations from across the globe met in Carlsbad, New Mexico to explore development of the Karst Information Portal (KIP) to serve as a repository for karst information, to advance collaboration among the international community of karst researchers, and to promote knowledge discovery through innovative applications of metadata. Figure 1 depicts the architecture of the proposed portal.

Figure 1. Graphic Representation of the Karst Information Portal.

The Context
Karst is a globally-distributed terrain resulting from the dissolution of soluble rocks such as limestone and dolomite. This dissolution occurs when rain water infused with carbon dioxide passes through layers of soil and bedrock (see Figure 2). Karst regions contain aquifers and common geological structures such as sinkholes, springs, and caves. The relationship between karst landscapes and water resources evokes the need for greater understanding of the issues underlying these formations.