Social Technologies to Jump Start Geoscience Careers

Christopher Keane, Cynthia Martinez, and Leila Gonzales
American Geological Institute, Alexandria, United States (keane@agiweb.org)

Collaborative and social technologies have been increasingly used to facilitate distributed data collection and observation in science. However, “Web 2.0” and basic social media are seeing limited coordinated use in building student and early-career geoscientists knowledge and understanding of the profession and career for which they have undertaken. The current generation of geology students and early career professionals are used to ready access to myriad of information and interaction opportunities, but they remain largely unaware about the geoscience profession, what the full scope of their opportunities are, and how to reach across institutional and subdisciplinary boundaries to build their own professional network.

The American Geological Institute Workforce Program has tracked and supported the human resources of the geosciences since 1952. With the looming retirement of Baby Boomers, increasing demand for quality geoscientists, and a continued modest supply of students entering the geosciences, AGI is working to strengthen the human resource pipeline in the geosciences globally. One aspect of this effort is the GeoConnection Network, which is an integrated set of social networking, media sharing and communication Web 2.0 applications designed to engage students in thinking about careers in the geosciences and enabling them to build their own personal professional network. Developed by the American Geological Institute (AGI), GeoConnection links practicing and prospective geoscientists in an informal setting to share information about the geoscience profession, including student and career opportunities, current events, and future trends in the geosciences. The network includes a Facebook fan page, YouTube Channel, Twitter account and GeoSpectrum blog, with the goal of helping science organizations and departments recruit future talent to the geoscience workforce.

On the social-networking platform, Facebook, the GeoConnection page is a forum for students and early career geoscientists to tune in what’s going on in the geoscience community, to meet geoscience professionals, and to find innovative career ideas. Early analysis of the page’s participants indicates that the network is reaching its intended audience, with more than two-thirds of “fans” participating in the page falling in the 18-34 age range. Twenty-seven percent of these are college-aged, or 18-24 years old. An additional 20% of the page’s fans are over age 45, providing students with access to seasoned geoscientists working in a variety of professions. GeoConnection’s YouTube Channel includes video resources for students on educational pathways and career choices. Videos on the channel have received more than 100,000 views collectively.

In addition, the AGI Workforce program has been an active participant in the YES network, and facilitated the virtual participation of both speakers and attendees for the first YES Congress, held in October 2009 in Beijing. By integrating webinar technologies and other social media, the breadth of attendees and speakers at the Congress was greatly expanded. Challenges with technology represented the minor problem for this effort, but rather human factors required the greatest focus to ensure success. Likewise, the challenge for the GeoConnection Network is not so much technology implementation, but rather remaining responsive and relevant with the ever-changing landscape of online communications. Reports show that participation in social-networking media among young people ages 16-24 has dropped (eg. Istrategy Labs, 2009, Ofcom, 2009) however, internet use among younger generations is high. Geoscience organizations must identify and participate in new online communications trends in order to continue to reach students and young professionals, but also, these individuals must also communicate with geosciences organizations so that the appropriate technologies and venues can be provided to strengthen the interconnect between individuals.