John Taber, IRIS (Incorporated Research Institutions for Seismology)

Supporting 2 Year College geoscience education

The Incorporated Research Institutions for Seismology (IRIS) has over 100 member research universities and institutions dedicated to monitoring the Earth and exploring its interior through the collection and distribution of seismological data. There is also an Educational Affiliates (EA) membership category for institutions that teach seismology and other Earth sciences but do not necessarily share the professional research interests of the traditional consortium members. The objective of this membership category is to cultivate a base of institutions committed to excellence in geoscience education through the co-development of E&O activities designed to address their needs. By becoming an EA member of IRIS, institutions gain entrance into a community of educators that is connected to the excitement and cutting-edge results of the research community. EA members pursue their common interests and goals within the IRIS community, and enjoy benefits such as discounts on seismometers and access and input to E&O programs. For example, community college members have taken part in educational seismograph training workshops and have subsequently integrated the use of the seismographs, which are capable of recording earthquakes globally, into their teaching. Educational Affiliate members have also been sponsored to attend the bi-annual IRIS science workshop.

The IRIS Education and Outreach Program's mission is to advance awareness and understanding of seismology and geophysics while inspiring careers in Earth sciences, and providing resources for community colleges is an area we have identified for increased focus in the coming years. We have some resources available at www.iris.edu/hq/programs/education_and_outreach/resources that can be used at the 2 year college level and we are currently working on a new set of introductory level exercises and presentations that will be based on the questions posed in the Seismological Grand Challenges in Understanding Earth’s Dynamic Systems (Lay et al., 2009, www.iris.edu/hq/lrsrcs/). One of my goals for the workshop is to learn from the participants as to how IRIS can better serve community college faculty and students both by adapting existing materials and creating new products.

IRIS E&O has also been closely involved with the Earth Science Literacy Initiative, which led to the creation of a document outlining the key concepts in Earth science that a literate public should know, building on similar successful projects in the Ocean, Atmospheric and Climate science communities. The process involved considerable input from the research and education community and included two successful workshops; first an online community workshop for 150 invited scientist participants and 200 scientist and educator observers, and then a writing workshop for 35 scientists and educators from academia, K-12, and representative agencies. After two additional open review periods, the document outlining the Big Ideas and supporting concepts of Earth science was published in 2009 and is available electronically and in hard copy at www.earthscienceliteracy.org.