

BioSci Education Network (BEN) Collaborative

Linda Akli
AAAS
1200 New York Ave, NW
Washington, DC 20005
(202) 326-6671
lakli@aaas.org

Cal T. Collins
e-guana.net, Inc.
56 John F. Kennedy St., 3rd Floor
Cambridge, MA 02138
(617) 868-9669
cal@e-guana.net

Jason Smith
AAAS
1200 New York Ave, NW
Washington, DC 20005
(202) 326-8972
jsmith@aaas.org

Ron Butler
American Society for Microbiology

Amy Chang
American Society for Microbiology

Yolanda George
AAAS

Nancy Gough
AAAS/Science's STKE

Melinda Lowy
American Physiological Society

Marsha Matyas
American Physiological Society

Brandon Muramatsu
SMETE Open Federation

Susan Musante
American Society for Microbiology

Jason Taylor
Ecological Society of America

The BEN Collaborative, spearheaded by the American Association for the Advancement of Science (AAAS) and composed of professional societies and coalitions for biology education, is developing a revolutionary approach for transforming biology teaching and learning in undergraduate and graduate institutions, as well as professional schools. Through the development of a BEN portal site, the BEN Collaborative is providing users with searchable and seamless access to BEN Collaborators' digital library collections of accurate and reliable biology education resources.

Materials in the digital library are designed primarily for undergraduate biology educators, including ones that prepare K – 12 faculty members. Also, materials are useful for graduate and medical school educators. The materials are collected and maintained by respected professional societies representing a broad spectrum of biological sciences.

Currently there are fourteen BEN collaborators with over 1000 resources catalogued; covering fifty-one biological sciences disciplines and thirty-eight different types of resources ranging from articles and papers to images, animations, and simulations. The BEN Collaborative collection is anticipated to grow to more than 3,000 resources by 2004. Currently, there are 830 registered BEN users.

There are many challenges to collaboratively developing a portal site and digital collection that BEN has been able to meet, including:

1. Creating common resource descriptions using metadata and metadata vocabularies for collections that are in the same broad discipline but were originally developed for substantially different audiences and purposes.
2. Developing technical specifications that support a wide range of technical capabilities and infrastructures, and allow flexibility for adding new partners, collections, and resources.
3. Evaluating the metadata specification and vocabularies against the variety of approaches and vocabularies faculty use to locate resources and updating the specification with minimal impact to current metadata catalogs.
4. Addressing issues such as the implementation of metadata harvesting software on multiple hardware/software platforms, compatibility with a universal character set that represents all languages and symbols, and search engine scalability as the user base increases.