

STEM Education in the 21st Century: Creating a Virtual Community of Practice for STEM Learners

By Elliot, Lisa and Easton, Donna

This presentation will describe the Deaf STEM Community Alliance's virtual community of practice for students, faculty and professionals who are deaf or hard of hearing and whose interests or careers are in STEM fields. The Alliance developed the Deaf and Hard of Hearing Virtual Academic Community (DHHVAC) to address three types of critical barriers to the success of students who are D/HH: 1) student preparation; 2) socialization; and, 3) accessible media. Using an incremental and iterative model-building strategy, the community evolves in response to members' needs. Many college courses now implement some online forum to augment coursework. While this course-based forum may increase dialogue or socialization for the specific course, students who are D/HH and other students with disabilities are frequently isolated on their campuses. In their isolation, these students may not know like-minded peers who share their academic interests. Additionally, these students may be challenged academically. Through innovative use of online resources, the DHHVAC addresses these challenges. This presentation will describe the various ways that the DHHVAC reduces isolation and improves access to STEM information by increasing interaction with other students, D/HH professionals, and hearing allies. The presentation will describe features of the DHHVAC and why the components and particular tools were selected, as well as challenges faced in developing this model. This presentation will be useful for anyone who is searching for new ways to connect to students with diverse learning needs.

Biography

Lisa Elliot is PI for the Deaf STEM Community Alliance Project and Senior Research Scientist, Center on Access Technology (HRD 1127955). Since 1996, Elliot has been a researcher, co-PI or PI on more than nine federally- and privately-funded studies related to C-Print real-time captioning and other technologies.

Donna Easton is Research Assistant, Center on Access Technology, National Technical Institute for the Deaf. She has been involved in C-Print research for 16 years, and has worked as a provider of C-Print services in research studies.