

## **C-Print Captioning to Support STEM Learning of Diverse Students**

This proposal addresses two National Science Education Standards: (a) Science Content/Science as Inquiry, and (b) Science Education Program Standard E—provision of equitable opportunities. Students with diverse learning needs including those with sensory or learning disabilities and those with language differences can be shortchanged in their science classrooms. For example, deaf students often struggle in STEM classes as teachers frequently present visual information when they are talking. Deaf students cannot simultaneously attend to the visual display and the teacher’s comments, missing important information. Language deficits or learning disabilities also interfere with STEM learning. Without equal access to information, these diverse students have difficulty acquiring basic understanding of scientific concepts.

C-Print is a classroom captioning and notetaking system that was developed by researchers at the National Technical Institute for the Deaf to improve access to STEM classes for these students. Current versions of C-Print use tablet PCs to display captioning and graphical information and mobile devices to provide access in laboratory and field trip settings. This presentation will: (a) describe these two advances in the C-Print classroom captioning system, and (b) share research findings that demonstrate the benefits and challenges of these advances in STEM education at K-12 and postsecondary levels.

### **Description**

This presentation will: (a) describe advances in the C-Print classroom captioning system, and (b) share findings that demonstrate the benefits and challenges of these advances.

How session addresses national standard

Advances in C-Print classroom captioning increase accessibility to and comprehension of STEM content. This addresses (a) Science Content/Science as Inquiry, and (b) Science Education Program Standard E—provision of equitable opportunities.