

Handheld Signing Math and Science Dictionaries for Deaf or Hard-of-Hearing Museum Visitors Research Project

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TERC and the Museum of Science, Boston (MoS), are studying the integration—into MoS's Take a Closer Look and Science in the Park exhibits—of iPod Touch versions of the Signing Science Pictionary (SSP), Signing Science Dictionary (SSD), and the Signing Math Dictionary (SMD). Developed by TERC and Vcom3D (innovators of the SigningAvatar® technology that powers the dictionaries) with funding from the National Science Foundation (for the SSD and SMD) and the U.S. Department of Education (for the SSP), the dictionaries were originally Web-based and intended for use in classrooms. Project partners are now adding human voice to all the text-based components, developing a Flash-based movie for each dictionary to introduce its features and an accompanying activity to practice its use, and researching how two audiences, each of which includes museum visitors who are deaf or hard of hearing and whose first language is sign, use the dictionaries to access science content during visits to the exhibits. One audience is family visitors ages 5-12+; one audience is classroom visitors in grades K-8+. The partners will also begin to establish the kinds of learning gains that are possible.