



## **Campus School EagleEyes, Boston College**

### **2006 Education Award Laureate**

**Laureate Country:** United States

**Project Countries:** England, Northern Ireland, Scotland, United States

**Website:** [www.bc.edu/schools/csom/eagleeyes](http://www.bc.edu/schools/csom/eagleeyes)

#### Project Overview:

The Campus School EagleEyes project uses two technologies developed at Boston College for individuals with severe physical disabilities and severe communication disorders to enable them to use a computer by simply moving their eyes or head. One system uses surface electrodes placed on the head for individuals who can only move their eyes while a second technology called camera mouse uses a video camera with individuals who possess some head control.

#### Problem Addressed:

The program offers an alternative access device to help individuals communicate and engage in formal learning that is age and developmentally appropriate. Children with severe physical disabilities and major health care needs who lack expressive language capacity are often devalued because of their inability to fully express their common humanity in ways that allow them to be understood regarding their needs, wants, desires, thoughts, and ideas. As a result, they exist as spectators of life rather than as active participants. EagleEyes provide opportunity for students who were once isolated within their bodies to communicate and realize their learning potential.

#### Technology Solution:

The Electrode EagleEyes system uses five electrodes placed on the head, around the eyes, to detect eye movements. As the person moves their eyes, the mouse pointer on the screen moves accordingly. Camera Mouse uses a video camera to track head movements and then control the mouse pointer accordingly.

### **The Tech Museum Awards**

The Tech Museum of Innovation 201 South Market Street San Jose, CA 95113  
(408) 795-6338 [techawards@thetech.org](mailto:techawards@thetech.org)

© 1994-2006 The Tech Museum of Innovation - All rights reserved.