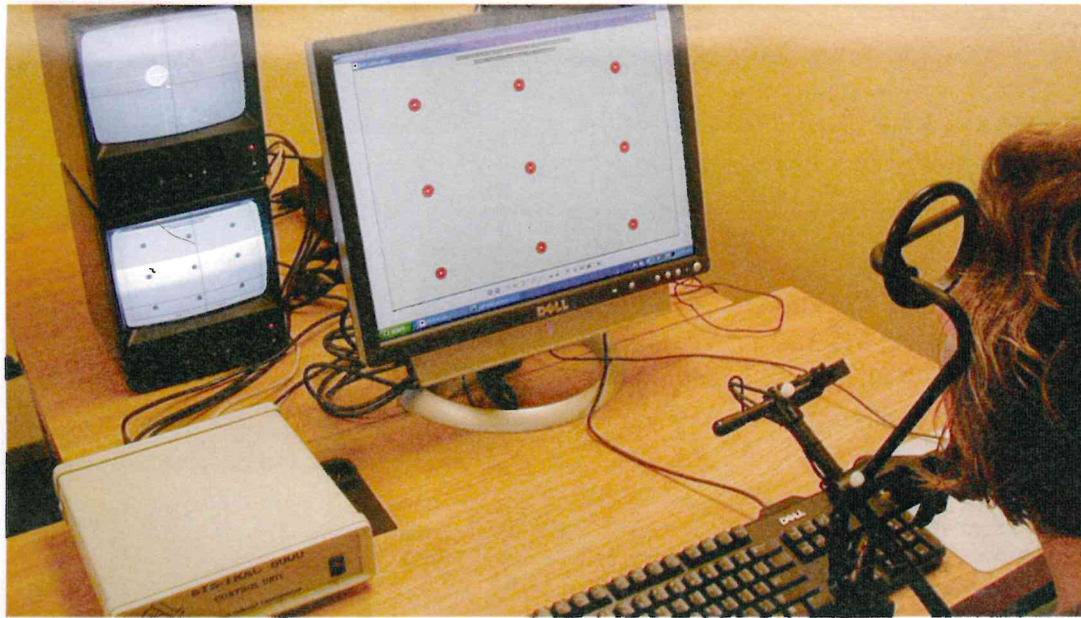


LCIRT Grants Update A Review of Our Pending Grants and Recent Grant Awards

By Kelly Fadden,
Director of Grants
and Sponsored
Projects



Eye-tracking systems (such as these systems from Applied Science Labs) show researchers where people are looking as they perform tasks such as reading and navigating websites

The Landmark College Institute for Research and Training (LCIRT) submitted a grant in February entitled **USABLE SOFTWARE AND BENEFICIAL LEARNING EXPERIENCES IN MATH (USABLE MATH): EVALUATING USABILITY OF MATH LEARNING RESOURCES FOR COLLEGE STUDENTS WITH LEARNING DISABILITIES** to the National Science Foundation's Research in Disabilities Education grant program. Dr. Steve Fadden and Julie Strothman led the effort and will work on this project if funded. The purpose of the project is to evaluate the accessibility and usability of online math learning resources (including websites, applets, software applications, and interactive tools) for independent learning by postsecondary students with learning disabilities (LD).

Unusable learning resources are a roadblock to full inclusion in science, technology, engineering, and math (STEM) by persons with LD. We chose math as the focus of the project because math is a challenging subject for students to master, and mastering mathematical concepts is critical to learning other STEM disciplines. A lack of usability can lead to negative student experiences with STEM content, resulting in decreased motivation to pursue STEM education, reduced desire to investigate and independently explore STEM concepts, and a reduced desire to pursue STEM education and careers.

The goals of our project are: to increase the usability and accessibility of math learning resources for our students; to involve our students in the evaluation and design of math resources; and to increase awareness of the needs of students with LD in relation to their participation in STEM courses and careers. Funding decisions should be made by October. In July, LCIRT won seed funding from the Eastern Alliance in Science, Technology,

Engineering, and Mathematics (EAST) to purchase and incorporate an eye-tracking system into our Universal Design and Usability Lab (UD Lab). The eye tracker will be used in combination with our usability testing hardware and software to give us detailed information about where people look as they perceive and use information.

Eye-tracking systems offer multiple benefits for researchers, including a "live" indication of where participants are looking at any moment, a superimposed recording of the eye's position on the environment (such as on a computer screen or a textbook), and a noninvasive means for recording eye position without requiring verbal feedback from the participant. LCIRT hopes to have the eye-tracking system fully implemented in the UD Lab by mid-October. If you would like to learn more about the UD Lab or the eye-tracking system, or would like to participate in tours or demonstrations of the facility, please contact Dr. Steve Fadden, the Principal Investigator for the UD Lab, at 802-387-1642.

Save the Date!
Landmark College's
Fall Parents' Weekend
Friday,
November 3, 2006 -
Sunday,
November 5, 2006