

Author: Cyndi Rowland, Ph.D.

Title: Director

Affiliation: WebAIM and the National Center on Disability and Access to Education at the Center for Persons with Disabilities, Utah State University

Abstract:

Educational web developers often do not design content with the needs of students with cognitive and learning disabilities in mind. This is unfortunate as the Web is being used more and more in the general curriculum and because these students comprise the largest group of students with disabilities in our nation. One problem is the fact that there are no widely available tools to guide web developers in their efforts to reduce the cognitive load of web designs or web content.

The Office of Special Education and Rehabilitative Services (OSERS) funded a Phase I Steppingstones of Technology Innovation program to develop such a tool. The 2-year project will incorporate a suite of cognitive tools into the popular web accessibility evaluation tool WAVE. Through an industry partnership with Adobe, the WAVE web accessibility evaluator, with the suite of cognitive tools, will be made available to the top selling web authoring tool in the nation, Dreamweaver.

The project is heavily research-based and began a few months ago with a systematic review of close to 200 books, articles, and web content. This review process identified items that experts in the field and researchers believe hold the most promise to reduce the cognitive load of a web page or other electronic interfaces. Project staff will now start the process of testing these items with students who have cognitive and learning disabilities. This will ensure that items added to the WAVE tool make real differences in effective or efficient web use for those with cognitive or learning disabilities.

Although the cognitive-specific tools are not yet part of WAVE, project staff are excited to share two elements with participants of the Coleman Institute with the aim of gathering feedback. First are the significant improvements that have gone into WAVE as it is readied to accept the cognitive suite. Second, are the content and technical specifications for the cognitive suite itself. Project staff want to solicit feedback as the tool is under early stages of development.