<u>Universal Design and Disability Component of</u> Community/Campus Design Solutions (CDS)

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Introduction

This Universal Design component of CDS reports another busy year in 2004-2005. This year's activities portray a distinct theme of infusing universal design (UD) and accessibility knowledge and services into systems to promote more proactive environments that provide more equal access to all users. The information, models, and ideas about UD that result from involvement in these projects are constantly building upon each other as experience and knowledge are moved and shared between research, service, and instruction.

For example, the work on the UW-System universal design white paper has provided more fodder for initiatives to model accessible document protocols in the Occupational Therapy Department and provided the framework and collaborative buy-in for a million dollar grant proposal for a national model demonstration project. And, as the Milwaukee Idea Home was developed, students benefited from learning about the design process, while at the same time generating questions and feedback for the team.

The activities have a pervasive impact in environments that compose today's modern-day campus and the communities that surround it. These environments include the instructional and information environment, in addition to the physical environment, which is the focus of CDS. The R_2D_2 Center team hopes to be able to continue these activities related to universal design and improving both the campus and community environments.

CDS Website: <u>www.uwm.edu/MilwaukeeIdea/CDS/</u> R₂D₂ Center Website: www.r2d2.uwm.edu

Activities Overview 2004-2005

Milwaukee Idea Home

The CHS team's involvement in the Milwaukee Idea Home (MIH) project during 2004 and the first part of 2005 was more peripheral this year as construction took place. As owner and primary financier of the first home, Independence*First* handled project management responsibilities. The UD team participated in planning meetings with Independence*First*, the designers, and craftsman as designs were finalized. The team also attended the ribbon cutting ceremony and grand opening that was held October 4, 2004. Mr. Schwanke has also helped to document the UD and accessibility features throughout the progress of the construction and will be posting photos with descriptions to the website. Unfortunately, due to scheduling issues, our course on Design and Disability that is held in the fall was not able to hold a class at the Milwaukee Idea Home. It is hoped that this class in particular is able to meet there this coming fall.

Dr. Smith and Mr. Schwanke authored a presentation entitled "The Milwaukee Idea Home and Achieving Accessibility and Universal Design in a Small Footprint" that was delivered at the American Occupational Therapy Association (AOTA) Conference in Minneapolis in May 2004. The presentation highlighted the MIH and its solutions to address the implementation of UD and accessibility in home design with very limited square footage. In contrast, many of the designs that receive public attention for their universal design and accessibility have large footprints that are not often compatible with urban environments where space is limited and not practical for people with disabilities, who are often on limited or fixed incomes. This presentation generated local and national interest and awareness of the MIH among attendees, and it is the basis for an in-progress document on the R_2D_2 Center website that will document the various features of the MIH that relate to UD and accessibility.

Overview of other Activities

The UD team's projects throughout the year sought to improve the campus and community environments, where environments are broadly defined to included not only the physical environment, but also instructional and informational environments. Many of the activities impact both a primary and secondary environment types. Each item shows the environments it applies to enclosed in brackets and listed in order of relevance.

• <u>ACCESS-ED Project Proposal</u>: Broadly supported by the UW-System staff, Dr. Smith and Mr. Schwanke led the submission of a \$1M+, three year grant proposal in April 2005 to the U.S. Department of Education, Post-Secondary Programs. If funded, the ACCESS-ED Project would become a national model demonstration project that would implement a system of DARCs (Departmental Accessibility Resource Coordinators) and create/disseminate universal design information that campuses could use to transition to a universal design approach in instructional, physical, and information environments. [instructional, physical, information]

- <u>UW-System UD White Paper</u>: Dr. Smith, as a member of the UW-System President's Advisory Committee on Disability, has been a leader in writing and promoting the UW-System White Paper on Universal Design. This spring, the Chair of the President's Advisory Committee and Dr. Smith met with the UW-System Provost's and the UW-System Faculty Representatives to discuss the white paper. The Committee as a whole met with President Reilly and also highlighted the white paper. This document was well received and helped develop support for the multi-campus ACCESS-ED Project proposal previously described. [instructional, physical, and information]
- <u>Web Accessibility Short Course:</u> Mr. Schwanke taught a short course for I&MT each semester called "Accessibility and Universal Design in Web Pages" that educates faculty, staff, and student workers about how to proactively design websites that inherently provide universal accessibility. CDS support helps to add and update materials for this field, where technology and techniques are constantly changing. [information]
- <u>Web Accessibility for All HiSoftware Training</u>: Mr. Schwanke led an ad-hoc team consisting of the campus webmaster (Michael Hostad), the director of the Student Accessibility Center (Vicki Groser), and a workshop instructor from the Learning Technology Center (Sharon McCarragher) that did the coordinating and ground work to host a one-day training session, given by the Web Accessibility for All Project from Madison, and repeated on back-to-back days. The training provided approximately 35 key campus web staff from UW-Milwaukee and MATC with a basic foundation of web accessibility knowledge and skills to use the UW-System licensed HiSoftware web accessibility products to improve the accessibility of current and future websites. Establishing the list of key web staff was in itself a significant accomplishment of this collaborative effort due to the distributed model UWM uses. Mr. Schwanke, working in conjunction with I&MT, provided the local technical expertise to configure the lab with specialized software and hardware to host this training. [information]
- Design and Disability (OCCTHPY625): Mr. Schwanke taught the Design & Disability course this year in conjunction with Dr. Bertram Ezenwa. Seven students completed this course this year, including five occupational therapy students, one architecture student, and one education student. This unique course focuses on and educates current and future professionals about universal design and the findings and experiences of these activities. [physical, information, instructional]
- <u>UWM ADAAC Involvement:</u> Mr. Schwanke is active as a colleague member on the Chancellor's ADA Advisory Committee. While the ADA is often equated with retrofitting and individual accommodation, this is a natural forum for introducing universal design approaches to campus issues. As a result of the ADAAC meetings, Mr. Schwanke has documented several accessibility issues and encouraged campus to develop UD solutions that will benefit all users. [physical, information, instructional]

- <u>UWM Physical Environment Committee (PEC)</u>: Mr. Schwanke served the third year of his term on the PEC as an academic staff representative. While contributing in other areas, Mr. Schwanke raised accessibility concerns and tracked/edited accessibility through planning documents that the PEC reviews. [physical]
- <u>Content Management System (CMS) Core Team</u>: Mr. Schwanke served and is continuing to serve on the CMS Core team to provide accessibility and UD expertise as the team works to develops specifications and a product recommendation for a system that would manage UWM's web-based content. [information]
- <u>WUWM Interview:</u> Dr. Smith was a guest on the WUWM Today show, hosted by UWM Vice Chancellor Tom Luljak, and discussed the variety of research and service projects he is involved in, including CDS and the Milwaukee Idea Home.
- <u>Accessibility and UD Photo Library:</u> Mr. Schwanke is accumulating a library of photos that is used for presentations and classes to demonstrate a variety of accessibility issues, accommodation/retrofit solutions, and universal design approaches. This library is often a valuable resource as universal design can be relatively difficult for people to grasp. Though mainly used for internal uses at this time, plans are being made to select a set of photos to be made public in the coming year. A quiz may be included that prompts users to consider the difference between universal access, accessibility, accommodation, and inaccessibility. [physical, information, instructional]
- <u>Restaurant Accessibility Guide for the AHEAD Conference:</u> The Student Accessibility Center is involved in the planning of the AHEAD's (<u>www.ahead.org</u>, an organization that promotes accessibility in higher education) annual national conference, which is to be held in Milwaukee in August 2005. Dr. Smith and Mr. Schwanke met with SAC staff to help guide the development of a tool that could be used to survey restaurants for physical, sensory, and cognitive accessibility to produce a restaurant accessibility guide for conference attendees, many of whom have disabilities. Occupational Therapy and Architecture students are evaluating area restaurants for this event. [physical, information]
- Website Design:
 - Mr. Schwanke is a leading expert on web accessibility on the UWM campus. He provided technical assistance on web accessibility to a variety of departments and designers on campus. [information, instructional]
 - Provided I&MT development staff with web accessibility resources and associated feedback to make the CHS Productivity Matrix an exemplar of accessibility and universal design. They have also used that knowledge in other web design work they do for campus.
 - Responded to questions related to information provided in the web accessibility short course.
 - Provided a brief analysis of some of the accessibility issues in the web-based PantherCal application.

- Provided a listing of web-accessibility and software accessibility resources for a SARUP faculty submitting a grant proposal related to interactive, web-based design curriculum.
- Attended a D2L training course and provided some preliminary feedback on accessibility issues related to the D2L shell and content that is put into it.
- Expressed ongoing concerns about the accessibility of the PeopleSoft products via I&MT.
- Attended the Xythos file sharing system informational session to review and ask questions about the accessibility of the product.
- Made a request to be included as part of the UWM portal pilot, in order to be able to examine potential accessibility issues.

• <u>Campus, Instruction, and Services Design:</u>

- Provided feedback to UWM's Resource Analysis and Environmental Health, Safety, and Risk Management (EHSRM) on the (in)accessibility of the classroom emergency procedure signs that were put in classrooms. [information, physical]
- Provided various consultations on assistive technology and software accessibility to support campus employees with disabilities. Until universal access is the norm, there will still be a need for such individual accommodation services. [information, physical, instructional]
- Worked with the Student Accessibility Center's Panthercom staff to review some alternative computer video cameras that had the potential to improve the quality of video transmissions used for sign language interpreting over the internet. [information]
- Participated in the Project Access/MCPO/SAC training, which focused on universal design and universal access approaches for meeting the needs of visual learners. [instructional, information]
- Met with SAC staff to discuss possibilities for improving the microphone dictation masks that are used by SAC staff for speech-recognition based captioning in classroom environments. [instructional, information]

Publications, Presentations, and Media

Schwanke, T. D. & Smith, R. O. (2004, May 23). The Milwaukee Idea Home and Achieving Accessibility and Universal Access in a Small Footprint. Presented at the American Occupational Therapy Association (AOTA) Annual Conference, Minneapolis, MN.

Smith, R. O. (2005). WUWM Today. Radio Interview. January 27 & 29, 2005.

UW-System President's Advisory Committee on Disability White Paper on Universal Design in Education. (2004, 2005)

Planned Activities for 2005-2006

A full set of new and continuing activities are anticipated for the coming year. To select a set of activities from the long slate of potential activities and to guide the year ahead, the UD team will meet with CDS staff during late summer 2005 (after hearing from the U.S. Department of Education about the ACCESS-ED Project proposal) to finalize a specific plan for 2005-2006. Besides helping to plan and define activities, the purpose of the meeting will also be to encourage collaborative activities among architecture and the health sciences teams.

Continuing and ongoing activities:

- ADAAC Schwanke [physical, information, instructional]
- CMS Core Team Schwanke [information]
- Design & Disability Course Schwanke [physical, information, instructional]
- UWS UD White Paper Smith & Schwanke [instructional, physical, and information]
- Web accessibility short course Schwanke [information]

New activities:

- Campus Design:
 - \circ Establish a list/database of UWM campus accessibility and UD issues on the R₂D₂ Center website that can be used to prompt campus planners when planning/budgeting and supply students with project ideas. If successful, consider expanding the list to include Milwaukee community needs and issues.
 - Propose that the following issues be considered as CDS consultation or student course projects to supply the campus and state with ideas for replacing or retrofitting the following campus features.
 - Maryland Ave bridge accessibility and signage issues
 - Safety and accessibility issues related to the Union parking structure exit.

• Community Design:

- Explore possibility of including a UD component as a standard part of all CDS community design consultation projects.
- Explore possibility of integrating UD language into city of Milwaukee planning documents

Grant Proposals:

• Explore submitting at least one collaborative grant with CDS/SARUP/ R₂D₂. Ideas for a proposal include a technical assistance project that funds staff and students to provide consultation and information sessions for people with disabilities in the UWM community (possibly targeting veterans or families of children with disabilities). The consultation and information sessions would focus on providing universal design resources and customized design ideas for remodeling and new home construction. Another idea for a proposal focuses on a design tool/database that integrates universal design concepts and examples of existing solutions that could be used by campuses as they design and remodel classrooms.

- Instruction and training
 - Conduct training on universal design in higher education at UW-Platteville in August 2005.
 - Establish a UWM web developers idea exchange group that includes universal design, accessibility, and usability as a core topic of discussion and training.
- **Milwaukee Idea Home (MIH) Procedures and Agreement:** Establish a formal relationship between UWM's College of Health Science and Independence*First* regarding use of the Milwaukee Idea Home (MIH).
 - Define UWM and Independence*First* roles and interactions.
 - Establish regular learning opportunities to use the MIH for course work, including for *Design and Disability* (OCCTHPY 625) and *Introduction to Occupational Therapy* (OCCTHPY 201).
 - Explore previous ideas about UWM students assisting with staffing of the MIH for open house, demonstration, and educational activities.

• Website and Software Accessibility Analyses:

- Review the CDS website and provide assistance in improving its accessibility.
- Review the Milwaukee Idea website accessibility and propose accessibility improvements as appropriate.
- Analyze the CDS promotional DVD and provide resources for including accessibility features on the next version, including closed captioning (CC).

• Website Content:

- $\circ~$ Include an overview of the team's CDS work on either the CDS or R_2D_2 Center website.
- Reestablish a MIH presence on the CDS website and coordinate content and hyperlinks with Independence*First*.
- Highlight the UD and accessibility features of the MIH through a Today@UWM article (lead article at top of <u>www.uwm.edu</u>) on the UWM website to raise campus awareness about the home and its features.
- \circ Include this team's work in a list on the R₂D₂ Center website that provides an overview of the UD initiatives at UWM.