

**Commitment to Universal Design in Education  
on  
University of Wisconsin-System Campuses**

**Part 1:**

**Conceptual White Paper on Universal Design in Education  
on UW-System Campuses**

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**BACKGROUND:**

The University of Wisconsin System (UWS) subscribes to equal opportunity in education. Historically, the UWS has expressed this commitment to include students, faculty and staff through several institution-wide policies and procedures. These include fundamental policies such as UWS 96-6 “Nondiscrimination on the Basis of Disability” and more recent implementation of technology components in education as described in the 1999 “Report of the UWS Committee on Access to Technology for Individuals with Disabilities” that was forwarded by UWS President Lyall to all campuses for implementation. Additionally, ongoing work of the UWS Office of Learning and Information Technology updates and supports UWS campuses in newer methods for assuring access to technology.

However, despite efforts to improve and assure that UWS campuses remove barriers to people with disabilities, a number of recently developed strategies related to disability and design suggest that UWS needs to embrace a new approach. Past efforts have focused on accommodating students, faculty and staff with disabilities. This is, in part, due to wording in early Federal legislation that mandated “reasonable accommodation.”

Accommodation approaches work well for many people, however, individual accommodation inherently exhibits a number of disadvantages for people with disabilities. Accommodating a person with a disability usually require one-to-one special services. This works well for individuals who have extensive or particularly complex

issues. However, for many others, individual accommodation is either impractical, fails to work, or is too costly. For example, students with mild disabilities such as those with learning disabilities, the numbers of potential students to be serviced cannot effectively and economically be provided using the time and cost expensive special services model. The accommodations model also requires that individuals with disabilities self-identify to obtain the special services. Estimates of the prevalence of people with disabilities in post-secondary environments suggest that many people hesitate to identify themselves as having a disability. Thus, many do not obtain services and put themselves as a student or worker at risk of failure. The accommodations approach is also intolerant of error. If an essential accommodation is missed by the special services team, the individual is left without it. Lastly, the need to seek out special and segregated services does not place individuals in a position of educational equality. Obtaining special services usually requires the individual to locate services, go to a special office, take additional time for this process, accept a special evaluation, and perform tasks that no mainstream student or employee needs to undertake.

### **THE UNIVERSAL DESIGN IN EDUCATION (UDE) STRATEGY:**

Inclusive approaches for people with disabilities, such as using Universal Design, try to avoid these disadvantages. An example of a Universal Design application in architecture is the use of a ramp instead of steps to navigate a short rise. This helps everyone avoid the need to step up, step down, or threaten tripping on the rise or drop. It assists the person in a wheelchair, as well as the technician pushing an audio-visual cart, and the mail delivery person. An example of universal design in the classroom, is the instructor who provides hand-outs in print and electronic form (such as via email or on the WWW). With e-hand-outs, all students can access the hand-outs from anywhere, anytime, and using a wide variety of reading methods. The student who is blind or another who has a reading disability can use speech output reader devices to access the hand-outs. The student with severe arthritis or another with hand paralysis, both with significant dexterity problems, can use the computer to access the paperwork. With electronic hand-

outs all students (if they wish) can alleviate needing to carry binders of paperwork from class to class and from home to school.

The concept of universal design has roots in architecture. The Americans with Disabilities Act profoundly improved general access for people with disabilities and at the same time demonstrated that many accessible design features helped everyone. Since then the same strategy has shown effective with computer operating system access, and most recently website accessibility. However, to date, most interventions have primarily been recognized as special design methods targeting people with disabilities. The Universal Design concept is that all designs should attempt to optimize usability for everyone, regardless of where an individual is located on the disability spectrum. Universal design is for people with no known disabilities, mild disabilities, moderate disabilities, and severe disabilities. This includes individuals with temporary (crutches) and long-term disabilities. Universal design has been described as the next phase in the evolution of better design for people with disabilities.

Historically, it appears that there are three phases of development: the three “A’s.” First individual “Advocacy” was needed. A person with a disability was the exception and needed vigilant efforts for special designs and services. Then, there was “Accommodation” where people with disabilities were accepted and special services were expected and institutionalized. Most recently, we have the era of “Accessibility.” With accessibility, proactive designs can make aspects of education more universally available. This last phase is best achieved through use of universal design strategies.

Two definitions and a list of key universal design principles from the Center for Universal Design at the University of North Carolina are helpful to understand the overall concept ([http://www.design.ncsu.edu/cud/univ\\_design/ud.htm](http://www.design.ncsu.edu/cud/univ_design/ud.htm)). **Universal Design** is, “the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.” **Intent of Universal Design** is, “to simplify life for everyone by making products, communications, and the

built environment more usable by as many people as possible at little or no extra cost. Universal design benefits people of all ages and abilities.”

Universal design experts highlight seven principles of universal design. A product, environment or service which applies universal design strategies strives to be 1) equitable in use, 2) flexibility as it is used, 3) simple and intuitive, 4) includes perceptible information, 5) tolerates error, 6) requires low physical effort, and 7) is created in a size and with space for approach and use. Specific to instruction, universal design has been described as a concept of “using teaching methods and strategies to assist students with diverse learning styles, including those with disabilities”

([www.healthsciencefaculty.org/profess\\_sucess/univ\\_design.html](http://www.healthsciencefaculty.org/profess_sucess/univ_design.html)) .

### **ACHIEVING UNIVERSAL DESIGN IN POST-SECONDARY EDUCATION:**

Applying universal design on UW-System campuses can significantly improve the access of all students to public post-secondary education in Wisconsin. However, the benefits of universal design will only occur with deliberate attempts to implement its principles system-wide and on each UW-System campus. Campuses must develop plans and allocate resources to increase the skills of faculty and staff to implement universal design across campus functions.

Areas where overt efforts must be generated to address the need for universal design are,

- a) the **built-environment and teaching spaces**,
- b) the **information environment**,
- c) and the **curricular environment**.

The built-environment includes all external campus areas such as sidewalks, routes, parking lots, building and campus signage. It also includes inside instructional areas such as lecture halls, laboratories, restrooms and furniture. The information environment includes both electronic and non-electronic information. The World Wide Web, registration processes, financial aid application forms, textbooks, university policy and

procedures, human resources documents, library journals, radio and television shows, and master's and doctoral theses all reside as part of a university informational environment. Lastly, the curricular environment includes all course materials supporting instruction. The materials an instructor provides in a power point slide show, information placed in front of a class on a white board, syllabi and class hand-outs.

Fortunately, some of these domains of accessibility are already being addressed to some extent within the UW-System due to past policies and procedures, federal and Wisconsin state law. However, many of these areas have not been addressed by proactive universal design activity. The day can be envisioned when the blind student can read and review class hand-outs as fast and conveniently as his or her sighted peers. Or the day when a graduate student in a wheelchair can find and review past thesis and dissertations in the library just as other graduate students will happen. The universal design to access these types of resources are within our reach, but only after sufficient expertise, planning and concerted design efforts have been directed.

This white paper advocates for the development of UW-System and campus resources to be made available for efforts in universal design across these domains of university activity. Specific attention should address the following areas: 1) policies and procedures to support universal design strategies, 2) planning on all levels to deliberately include universal design as a consideration, and 3) the identification and support of architectural, information, and curricular experts on each campus to serve as consultants in these respective areas.