

1. Project SHIFT and Disability Studies Initiative

- Developed by
- Katheryne Staeger-Wilson,
- Director, Disability Resource Center
- Dr. Jamaine Abidogun
- Project SHIFT Faculty Liaison History Dept

2. Outline

- Conceptual Models of Disability.
- How we might reframe disability.
- Universal Design (UD)
- Examples of UD
- Disability Studies Socio-Political Model
- Project SHIFT (U.S. Dept. of Education grant)
- Disability Studies at Missouri State University

3. Assumptions

4. Model Comparison of Disability

- Carol J. Gill, Chicago Institute of Disability Research

5. Disability Studies

Interactional Socio-Political Model

- ❖ Disability is a difference
- ❖ Being disabled, in itself, is neutral
- ❖ Disability derives from the interaction between the

individual and society

- ❖ The remedy for disability-related problems is a change in the interaction between the individual and society

❖ The agent of remedy is the individual, an advocate,
or anyone who affects the arrangements between
the individual and society

- Carol J. Gill, Chicago Institute of Disability Research

6. Experience the Socio-Political Model

<http://www.youtube.com/watch?v=FlI676-aTQU>

7. Thoughts...

- Why do we find ourselves asking what is the minimum we have to do?
 - When working with someone who has a disability, why do we immediately think of possible accommodations rather than looking at the environmental design?
 - Would good, inclusive design benefit everyone?
8. What is Universal Design?
- 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. – Ron Mace
 - The 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.

9. Universal Design Principles

Flexibility and Multiplicity in:

1. Equitable Use
2. Flexibility in Use
3. Simple and Intuitive Use
4. Perceptible Information
5. Tolerance for Error
6. Low Physical Effort
7. Size and Space for Approach and Use

--Copyright 1997 NC State University, The Center for Universal Design

10. UD Example – Wal-Mart Entrance

11. Universal Design

- Would this enhance the accessibility of work or academic environments?
- Would it reduce the need for an accommodation?
- Would it enhance everyone's experiences?
- Might it affect employee or student retention?

12. Universal Design in Action

13. **Project SHIFT** (Shaping Inclusion through Foundational Transformation)

- Curricular change and faculty development activities will be implemented through a systemic analysis and retraining of the campus disability resource staff
- Incorporate social model thinking and universal design (UD) into practice
- Include faculty in the redesign of curriculum, the use of UD instructional strategies, and the infusion of disability into course content and beyond...

14. Where is Disability in Missouri?

15. Disability Studies at
Missouri State University

- Program Elements
- Faculty Committee
- Community Partnerships

16. Disability Studies Committee Roles

- Setting Standards for Disability Studies Program
- Monitoring Program

- Provide Instructor & Student Support
- Community Outreach
- Regular Review and Revision

17. Q & A

- Universal Design
- Disability Studies Minor

Thank you



PROJECT SHIFT AND DISABILITY STUDIES INITIATIVE

**Developed by
Katheryne Staeger-Wilson,
Director, Disability Resource Center
Dr. Jamaine Abidogun
Project ShIFT Faculty Liaison History Dept**

OUTLINE

- Conceptual Models of Disability.
- How we might reframe disability.
- Universal Design (UD)
- Examples of UD
- Disability Studies Socio-Political Model
- Project ShIFT (U.S. Dept. of Education grant)
- Disability Studies at Missouri State University



ASSUMPTIONS

- About Students
- About Employees
- About Community



MODEL COMPARISON OF DISABILITY

Medical Model (Old)	Interactional/Socio-Political Model (New)
Disability is a deficiency or abnormality	Disability is a difference
Being disabled is negative	Being disabled, in itself, is neutral
Disability resides in the individual	Disability derives from the interaction between the individual and society
The remedy for disability-related problems is cure or normalization of the individual	The remedy for disability-related problems is a change in the interaction between the individual and society
The agent of remedy is the professional	The agent of remedy is the individual, an advocate, or anyone who affects the arrangements between the individual and society

* Disability is a social construct

- Carol J. Gill, Chicago Institute of Disability Research

DISABILITY STUDIES

INTERACTIONAL SOCIO-POLITICAL MODEL

- ❖ Disability is a difference
- ❖ Being disabled, in itself, is neutral
- ❖ Disability derives from the interaction between the individual and society
- ❖ The remedy for disability-related problems is a change in the interaction between the individual and society
- ❖ The agent of remedy is the individual, an advocate, or anyone who affects the arrangements between the individual and society

- Carol J. Gill, Chicago Institute of Disability Research



EXPERIENCE THE SOCIO-POLITICAL MODEL



Autism is a Gift – Temple Grandin

<http://www.youtube.com/watch?v=F1l676-aTQU>



THOUGHTS...

- Why do we find ourselves asking what is the minimum we have to do?
- When working with someone who has a disability, why do we immediately think of possible accommodations rather than looking at the environmental design?
- Would good, inclusive design benefit everyone?



WHAT IS UNIVERSAL DESIGN?

- 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. – Ron Mace
- The 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 PRINCIPLES

Flexibility and Multiplicity in:

1. Equitable Use
2. Flexibility in Use
3. Simple and Intuitive Use
4. Perceptible Information
5. Tolerance for Error
6. Low Physical Effort
7. Size and Space for Approach and Use

--Copyright 1997 NC State University, The Center for Universal Design



UD EXAMPLE — WAL-MART ENTRANCE



UNIVERSAL DESIGN

- Would this enhance the accessibility of work or academic environments?
- Would it reduce the need for an accommodation?
- Would it enhance everyone's experiences?
- Might it affect employee or student retention?



UNIVERSAL DESIGN IN ACTION



<http://www.youtube.com/watch?v=AtebZVskmms>.



PROJECT SHIFT (SHAPING INCLUSION THROUGH FOUNDATIONAL TRANSFORMATION)



- Curricular change and faculty development activities will be implemented through a systemic analysis and retraining of the campus disability resource staff
- Incorporate social model thinking and universal design (UD) into practice
- Include faculty in the redesign of curriculum, the use of UD instructional strategies, and the infusion of disability into course content and beyond...



WHERE IS DISABILITY IN MISSOURI?

PREVALENCE RATE:

The percentage of men & women, aged 16-64 who report a sensory, physical, mental, or self-care disability in Missouri in 2000.

Location	Estimate (%)	95% CI (%)	Base Population
United States	9.7	± 0.0	178,687,234
Missouri	10.6	± 0.1	3,516,489

<http://disabilitystatistics.org/>



DISABILITY STUDIES AT MISSOURI STATE UNIVERSITY

- Program Elements
- Faculty Committee
- Community Partnerships



DISABILITY STUDIES COMMITTEE ROLES

- Setting Standards for Disability Studies Program
- Monitoring Program
- Provide Instructor & Student Support
- Community Outreach
- Regular Review and Revision



Q & A

- Universal Design
- Disability Studies Minor

Thank you



Commitment to Universal Design at Missouri State University

Katheryne Staeger-Wilson, MSW, LCSW

Missouri State University
(June 11, 2009)

ACKNOWLEDGEMENT

This paper is an outcome of Katheryne Staeger-Wilson's participation in the Universal Design Leadership Institute affiliated with the Association on Higher Education and Disability (AHEAD). The information documented herein is adapted from information shared within AHEAD's Universal Design Leadership Institute and a white paper entitled, "Commitment to Universal Design in Education on University of Wisconsin-System Campuses" written by Dr. Roger Smith (UW Milwaukee), Dr. Renee Sartin-Kirby (UW Parkside), and Tim O'Connor (UW Madison). This paper was reviewed and approved by Missouri State University's Disability Services Advisory Committee.

Commitment to Universal Design at Missouri State University

Background

Missouri State University is committed to enhancing diversity and retaining a diverse community. Missouri State is also committed to providing reasonable accommodations to persons with disabilities as well as providing equal access to our programs and services. There are multiple policies within our system that support these statements. This priority is also stated within our University's long range plan.

“Commitment to diversity – The University will be inclusive and create a climate for diversity so that we can recruit excellent faculty and students from many backgrounds who enjoy the freedom to express and debate diverse viewpoints and ideas. We want to have a campus community that looks more like the world, and have our students, therefore, prepared to function well in that world”(Missouri State University, 2007).

Historically, many universities, including Missouri State, have provided people with disabilities reasonable accommodations; only providing the minimal equal access required by law on a case-by-case basis. While our University provides high quality accommodations, our faculty and staff still inquire what they “have” to do and what they are legally responsible to provide to students with disabilities. Many times, the University community does not always think in creative terms of what we could provide in order to include everyone. Many people still question the minimal access requirements. For example:

- “Do we have to hold our program in an accessible room?”
- “Do I have to make my course materials on line accessible?”
- “Why can’t Disability Services just take care of it?”

Rather, we should always be thinking, “how can I make our programs and services accessible and usable to everyone?”

The Association on Higher Education and Disability summarizes best how most Disability Services offices have worked historically,

“In the past, many Disability Service providers built their service and philosophical constructs on the tenets of the medical or rehabilitation model. Although this has been effective in most cases in providing programmatic access and accommodations for individuals, one person at a time, it reinforces a “separate but equal” system rather than full inclusion within a community of peers. It does not provide an avenue for the development of self-determination or disability pride for the person receiving services. This model does not take into account that the environment and the curriculum design often limit the full participation of disabled individuals” (p. 3-4).

Through this medical model approach, people with disabilities eventually obtain equal access to University programs and services. However, obtaining the accommodation takes a great deal of time, patience, and is many times not inclusive.

This medical model approach inherently creates several disadvantages for people with disabilities:

1. It requires a special accommodation.
2. The accommodation is typically a segregated service. Examples: a student must sit in a seat different from other students, a student must wait for a copy of overheads in an alternative format, a student takes their exams in the disability services office, a student must participate in an event down on the floor rather than on the stage like everyone else.
3. Individual accommodation can be costly and is typically not sustainable. Example: a video is not purchased as a captioned video. The student receives a transcript of the video as an accommodation. The student may receive the transcript (information) later than their fellow students. Staff time and resources are used on a one time accommodation when there would have been no additional expense if it had been purchased captioned.
4. Many times an accommodation is impractical or fails to work. Example: the technology may fail to work, waiting on a textbook in an alternative format because the professor did not select a textbook until the week before the course started.
5. People have to self-identify to obtain the accommodation. People hesitate to identify themselves as having a disability which puts them at risk to fail.
6. It limits the person to work/learn/participate in the university community independently. Example: The recreation center is “accessible” but it is not usable. Programming is not designed for the disabled and the equipment is not usable to people with disabilities. Or, the professor does not keep accessibility in mind when planning a field trip.
7. It requires the person with a disability to go to a special office, allow time for the accommodation process and obtain documentation supporting the disability and need for accommodation. This is a process that other members of the university community do not have to undertake. (Smith, Sartin-Kirby, & O’Connor, p. 2, 2004)

It is the responsibility of everyone within our campus community to support and retain all students. It should not just be the responsibility of Disability Services. Everyone has the shared responsibility of making all students feel welcomed and included.

The Universal Design in Education Strategy

The socio-political model of disability promotes universal design, disability pride, self-determination, and independence of the individual. With this model, the limitation is not found within the person who has the disability, but in the design of our architecture, curriculum, policies, programs, and services.

“The socio-political model works extremely well with the principles of universal design. For the first time, true societal, environmental and learning barriers, which historically were not acknowledged by the old medical model, are now placed in their proper perspective. It is the environment as well as societal and institutional beliefs which limit people with disabilities to be successful (AHEAD, p. 3-4).”

Universal design principles were first developed in the field of architecture. Ron Mace was a leader in the creation of the Universal Design Principles. Ron Mace described universal design as the following, “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” (North Carolina State University, 2006). McGuire and Scott (2006) used Table 1 below to illustrate how the Principles of Universal Design relate to Universal Design in Education.

Table 1: Universal Design Principles applied to Universal Design in Education

Principle	Definition
Principle 1: Equitable use	Instruction is designed to be useful to and accessible by people with diverse abilities. Provide the same means of use for all students; identical whenever possible, equivalent when not.
Principle 2: Flexibility in use	Instruction is designed to accommodate a wide range of individual abilities. Provide choice in method of use.
Principle 3: Simple and intuitive	Instruction is designed in a straightforward and predictable manner, regardless of the student’s experience, knowledge, language skills, or current concentration level. Eliminate unnecessary complexity.
Principle 4: Perceptible information	Instruction is designed so that necessary information is communicated effectively to the student, regardless of ambient conditions or the student’s sensory abilities.
Principle 5: Tolerance for error	Instruction anticipates variation in individual student learning pace and prerequisite skills.
Principle 6: Low physical effort	Instruction is designed to minimize nonessential physical effort in order to allow maximum attention to learning. Note: This principle does not apply when physical effort is integral to essential requirements of a course.
Principle 7: Size and space for approach and use	Instruction is designed with consideration for appropriate size and space for approach, reach, manipulations, and use regardless of a student’s body size, posture, mobility, and communication needs.
Principle 8: A community of learners	The instructional environment promotes interaction and communication among students and between students and faculty.
Principle 9: Instructional climate	Instruction is designed to be welcoming and inclusive. High expectations are espoused for all students.

Source: Principles of Universal Design for Instruction, by Sally S. Scott, Joan M. McGuire, and Stan F. Shaw.

Potential Cost

Historically, most universities, like Missouri State, have operated under the medical or rehabilitation model of disability. This is a “back-end” approach to meeting the diverse needs of people with disabilities. It is inefficient and more expensive than universal design. Utilizing concepts of universal design in all aspects of campus services would be more efficient, less costly, and would include all users and learners (Smith, et. al., 2004).

Achieving Universal Design in Post-Secondary Education

Nationally, one in eleven entering college freshmen report having a disability (Henderson, 1999). Implementing this systemic change from the medical model to the socio-political model of disability will significantly improve and equalize access to the University’s programs and services. It could also be a factor in increasing our University retention rate. Knowing that one in eleven entering freshmen report having a disability, if we created our programs and services with disability in mind, these students would feel more accepted and supported within our campus community. In addition, the ways in which we proactively support and make our campus more accessible to students with disabilities can also further enhance the learning of others. These principles must be implemented by developing and allocating resources to increase the knowledge base and skills of our faculty and staff to implement universal design.

Once faculty learn how to incorporate principles of universal design within their curriculum, they are able to do so at no additional cost. It eventually becomes second nature for faculty to support and teach to a diverse group of learners. For example, Block, et. al. 2006 quotes Christopher Lanterman, a faculty member in Education as stating,

“I have worked [as a faculty member] over the last few years to implement principles of UD, UDI, and UDL into my courses, both in content and in delivery. It is my opinion that creating a course that implements principles of UD is evolutionary and dynamic in nature. I am sure I still have a long way to go, but thinking about how things can move forward, I suppose, is the exciting part of the process. I always have students bring letters from the DS to introduce the accommodations for which they are “qualified”. However, I have had no student, in the past two years, require any additional accommodations from me beyond those that are built into the courses I teach, with the exception of [sign language] interpreting” (p. 120-121).

Professionals in the disability field believe that the concepts of universal design would not only greatly enhance the equal access for people with disabilities but enhance the learning and retention of other diverse groups. The following are a couple of examples of how many (not just those with disabilities) would benefit from universal design:

- Purchasing a video with closed captioning for a classroom. This product with captioning provides equal access to a student who is deaf or hard of hearing. An international student may be better able to grasp the content of the video when receiving the information both visually and aurally (as well as any other student). In addition,

captioning would enhance learning for visual learners or anyone who may have auditory processing issues. If captioning was not thought of prior to the purchase, the student with the disability would have had to request the video be captioned (a very costly service with a month or more turn around rate) or have Disability Services staff create a transcript of the video (significantly less expensive but with a wait of approximately one week for the information).

- A professor saves his power point slides in an accessible format to his course website. There is no cost and very little time spent on this action. A student with a disability who needs to utilize a note taker may no longer need one or they can at least participate in taking their own notes. The student can create additional space and print out the document prior to class. The student can fill in information and add to their own notes. This saves time and resources. This could also be beneficial to any other student and enhance their learning. All students would have access to the PowerPoint slides. They could review it prior to class, review it after class, and use it just as students with disabilities do to enhance their own note taking.

In order for this systemic change we need to focus on the following five areas:

1. Our perception about disability. We will need to change how we perceive disability. A review of disability history and culture is helpful to understand why so many perceive disability as a negative medical malady. The ways in which disability has been portrayed historically in the media and in literature has lead to the negative stereotypes so many people have regarding disability.
2. The physical environment. The physical environment includes all campus buildings, structures, and grounds. It includes sidewalks, parking lots, campus signage, and restrooms, and campus furniture.
3. Teaching spaces and curriculum design. This would include lecture halls, laboratories, internships, field experiences, all instructional materials provided by the instructor such as power point slides, information presented on a white board, syllabi and handouts.
4. Programmatic design. Our policies, procedures, and customer service.
5. The information environment. The information environment includes web services, computers, software, online courses, and radio and television programming

Of course, the university is already addressing many of these issues due to compliance with federal and state laws. These efforts are due to meeting the minimum requirements through the medical model approach. Through universal design, we could proactively address accessibility and usability for everyone and reduce cost.

Recommendations

This paper advocates for Missouri State University to make a commitment to universal design. This commitment would include resources to transition the university through this paradigm shift. Specific attention should address the following areas:

1. Provide the support necessary for campus programming to reframe disability.

2. Assess the campus climate regarding disability.
3. Consider hosting Dr. Sue Kroeger or Dr. Elizabeth Harrison, University of Arizona, to assist with this transition of philosophy. Dr. Harrison can further educate our University community on how universal design may help with retention and help with other multi-cultural groups.
4. Plan on all levels to incorporate universal design principles in all that we do.
5. Support online and workshop trainings regarding universal design for faculty, staff, and students.
6. Develop policies and procedures that support universal design.
7. Consider universal design in all university purchases.
8. Provide support and resources so that students with disabilities can exhibit Disability Pride and contribute to work on committees and as individuals on community disability issues through public affairs work.
9. Push all faculty, staff, and departments to include universal design in their planning of curriculum, programs, and services.
10. Identify and utilize architectural, informational, and curricular experts to assist Disability Services in carrying out this University wide paradigm shift.
11. Recognize faculty and staff who model the principles of universal design.
12. All significant architectural design projects shall incorporate universal design principles. These projects should exceed the Americans with Disabilities Act Accessibility Guidelines (ADAAG) and will not only be accessible but usable to people with disabilities.
13. Include the ADA Compliance Officer on all significant architectural design projects and significant retrofit projects.
14. Clarify the University's legal responsibility for abiding by the Missouri Information Technology Accessibility Standards (MITAS).
15. Address IT accessibility utilizing universal design principles.
16. Faculty notify the Bookstore as to which textbooks they have selected for their courses a month prior to classes beginning.
17. Provide instructional support so that faculty can learn how to incorporate universal design in their curricula.
18. Provide a curriculum review process for universal design principles that provides recommendations on how faculty can use universal design concepts more in their teaching.
19. Explore the possibility of creating a Disability Studies program.

WORKS CITED

- Association on Higher Education and Disability. (n.d.). *Universal design a guide for students*. [Brochure]. Waltham, MA: Author.
- Association on Higher Education and Disability. (n.d.). *Universal design for higher education*. [Brochure]. Waltham, MA: Author.
- Association on Higher Education and Disability. (n.d.) *Universal design for inclusive lectures and presentations*. [Brochure]. Waltham, MA: Author.
- Block, L. S., Loewen, G., & Kroeger, S. (2006). Acknowledging and transforming disabling environments in higher education: AHEAD's role. *Journal of Postsecondary Education and Disability*, 19(2), 117-123.
- Disability Services at Missouri State University. (n.d.) *Disability services*. [Brochure]. Springfield, MO: Author.
- Henderson, C. (1999). *College Freshmen with Disabilities, 1999: A biennial Statistical Profile. Statistical Year 1998*. Washington, D.C.: Department of Education.
- McGuire, J.M., & Scott, S. S. (2006). Universal design for instruction extending the universal design paradigm to college instruction. *Journal of Postsecondary Education and Disability*, 19(2), 124-134.
- Missouri State University. Retrieved January 22, 2007, from <http://missouristate.edu/longrangeplan/modeling.htm>.
- The Center for Universal Design. Retrieved December 7, 2006, from <http://www.design.ncsu.edu/cud/>.
- Rose, D. H., Harbour, W. S., Johnston, C. S., Daley, S.G., & Abarbanell, L. (2006). Universal design for learning in postsecondary education reflections on principles and their application. *Journal of Postsecondary Education and Disability*, 19(2), 135-151.
- Smith, R., Sartin-Kirby, R., & O'Connor, T. (2004). Commitment to Universal Design in Education on University of Wisconsin-System Campuses, 1-3.

THE PRINCIPLES OF UNIVERSAL DESIGN

Copyright 1997 NC State University, The Center for Universal Design

(Version 2.0 - 4/1/97)

Compiled by advocates of universal design, listed in alphabetical order:

Bettye Rose Connell, Mike Jones, Ron Mace, Jim Mueller, Abir Mullick, Elaine Ostroff, Jon Sanford, Ed Steinfeld, Molly Story, and Gregg Vanderheiden

Major funding provided by: The National Institute on Disability and Rehabilitation Research, U.S. Department of Education

UNIVERSAL DESIGN:

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.

The authors, a working group of architects, product designers, engineers and environmental design researchers, collaborated to establish the following Principles of Universal Design to guide a wide range of design disciplines including environments, products, and communications. These seven principles may be applied to evaluate existing designs, guide the design process and educate both designers and consumers about the characteristics of more usable products and environments.

The Principles of Universal Design are presented here, in the following format: name of the principle, intended to be a concise and easily remembered statement of the key concept embodied in the principle; definition of the principle, a brief description of the principle's primary directive for design; and guidelines, a list of the key elements that should be present in a design which adheres to the principle. (Note: all guidelines may not be relevant to all designs.)

PRINCIPLE ONE: Equitable Use

The design is useful and marketable to people with diverse abilities.

Guidelines:

- 1a.** Provide the same means of use for all users: identical whenever possible; equivalent when not.
- 1b.** Avoid segregating or stigmatizing any users.
- 1c.** Provisions for privacy, security, and safety should be equally available to all users.
- 1d.** Make the design appealing to all users.

PRINCIPLE TWO: Flexibility in Use

The design accommodates a wide range of individual preferences and abilities.

Guidelines:

- 2a.** Provide choice in methods of use.
- 2b.** Accommodate right- or left-handed access and use.
- 2c.** Facilitate the user's accuracy and precision.
- 2d.** Provide adaptability to the user's pace.

PRINCIPLE THREE: Simple and Intuitive Use

Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.

Guidelines:

- 3a.** Eliminate unnecessary complexity.
- 3b.** Be consistent with user expectations and intuition.
- 3c.** Accommodate a wide range of literacy and language skills.
- 3d.** Arrange information consistent with its importance.
- 3e.** Provide effective prompting and feedback during and after task completion.

PRINCIPLE FOUR: Perceptible Information

The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.

Guidelines:

- 4a.** Use different modes (pictorial, verbal, tactile) for redundant presentation of essential information.
- 4b.** Provide adequate contrast between essential information and its surroundings.
- 4c.** Maximize "legibility" of essential information.
- 4d.** Differentiate elements in ways that can be described (i.e., make it easy to give instructions or directions).
- 4e.** Provide compatibility with a variety of techniques or devices used by people with sensory limitations.

PRINCIPLE FIVE: Tolerance for Error

The design minimizes hazards and the adverse consequences of accidental or unintended actions.

Guidelines:

- 5a.** Arrange elements to minimize hazards and errors: most used elements, most accessible; hazardous elements eliminated, isolated, or shielded.
- 5b.** Provide warnings of hazards and errors.
- 5c.** Provide fail safe features.
- 5d.** Discourage unconscious action in tasks that require vigilance.

PRINCIPLE SIX: Low Physical Effort

The design can be used efficiently and comfortably and with a minimum of fatigue.

Guidelines:

- 6a.** Allow user to maintain a neutral body position.
- 6b.** Use reasonable operating forces.
- 6c.** Minimize repetitive actions.
- 6d.** Minimize sustained physical effort.

PRINCIPLE SEVEN: Size and Space for Approach and Use

Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.

Guidelines:

- 7a.** Provide a clear line of sight to important elements for any seated or standing user.
- 7b.** Make reach to all components comfortable for any seated or standing user.
- 7c.** Accommodate variations in hand and grip size.
- 7d.** Provide adequate space for the use of assistive devices or personal assistance.

Please note that the Principles of Universal Design address only universally usable design, while the practice of design involves more than consideration for usability. Designers must also incorporate other considerations such as economic, engineering, cultural, gender, and environmental concerns in their design processes. These Principles offer designers guidance to better integrate features that meet the needs of as many users as possible.

Copyright 1997 *NC State University, The Center for Universal Design*

“Why Autism is a Gift”

Temple Grandin, Professor of Animal Science
Colorado State University

Temple Grandin: Well, if you got rid of all the autistic genetics, you'd have no future generation for Silicon Valley, it would be just that simple. I mean, in today's educational system, Einstein, Tesla – who invented the power plant, and Mozart would all be labeled autistic or Asperger's today.

My name is Temple Grandin, I am a Professor of Animal Science at Colorado State University.

I find that a lot of so-called 'normal' people are fuzzy in their thinking. I like the detailed way that I think. In fact, when I was young I didn't know that I thought differently, and then I did my book *Thinking in Pictures*, I interviewed people about how they think and was shocked to find out that most people didn't have the detailed visual images that I have. They tended to have more vague images.

You know back in the Fifties, they kind of didn't tell kids that, you know, it was very different back then. A lot of doctors wanted to put me in an institution and my mother was going to have nothing to do with that.

Well, the worst part of my life was high school. I was in a large girls' school. I got teased and that was the worst part of my life, being a teenager.

Well, you know, I wasn't real social.

Well, we need to be working on using the different kinds of thinkers. Visual thinkers are good at one kind of thing. The pattern kind of thinkers, they're going to be super good at programming. The word thinkers know lots of facts. You know, we need to be developing kid's strengths so they can end up doing great jobs in Silicon Valley because one of the things that worries me is you've got some of these smart kinda Aspergers kinda geeky kids, and the teachers don't know what to do with them. Because they've lost all the good science teachers, and one of the things that saved me in high school when I was fooling around and not studying was my science teacher. He got me interested in becoming a scientist.

Kids on the autism spectrum, dyslexic kids, a lot of these kids they're going to do really well in a lot of hands on classes and I think it's a real shame the schools have taken out auto shop, wood shop, welding, art, music; because sometimes it's that welding teacher or that shop teacher

that gets one of these boys turned around that would be just getting in trouble otherwise. You know, out here on the west coast, you've got a lot of tech industry, you know, these kids can get into. You've got kids out in the Midwest, a lot of teachers don't know what to do with the geeky, nerdy kid. They say well there's nothing interesting in the middle of Iowa or Kansas. Well, yes there is, there's Feat Arts. That was the door to opportunity for me.

I get most excited when things that I do work. You know, a mother of an autistic kid says their kid went to college because of me. You know I've, I've seen the slaughterhouses really improve. A rancher tells me that, you know, one of my system's really works well. You know, making improvements on the ground, actual real things, real change on the ground in the real world. I'm not in the abstraction.

Well, there's always things that need to be improved and we'd probably better save that for another interview because I've got to go to the airport. Okay, I'm sorry, but I do.

Catalog Description: Disability Studies Minor (DRAFT)

College of Humanities and Public Affairs

Area Studies Programs

Disability Studies

All undergraduate degree programs

Administration of the program. Courses must be approved by the faculty of the Disabilities Studies Committee for inclusion in the minor. The administrator of the program must approve the course of study for each student who wishes to complete a Disability Studies minor.

The minor includes DAS 100, plus at least 15 hours of additional course work for a total of at least 18 hours with a minimum grade point average of 2.50 in all courses counted toward the minor. It is recommended that DAS 100 be taken prior to undertaking all other courses included as options in the Disabilities Studies minor.

A student cannot take more than six hours in a particular discipline to complete the minor; exceptions must have the permission of the Administrator. A student can petition to apply a variable content/special topics course or special section of a course not listed below to the minor, with the approval of the Administrator. Such variable content/special topics courses might include: ANT 330(1-3); HST 397(1-3) or 597(1-3); or REL 397(1-3).

- A. DAS 100 (3) required; DAS 397(1-3) Repeatable to 6 hours and DAS 497 (1-3) Repeatable to 6 hours. Must take an additional 3 hours and may take up to 9 hours total including DAS 100 with no more than 6 hours total from either DAS 397 or DAS 497 courses.
- B. Complete 9 - 12 hours with at least three hours from 3 of the 4 areas with no more than six hours from each discipline (course prefix);
 1. Arts and Letters: ART 366(3), 401(3); COM 360(3); 507(3); ENG 287(3)*, 563(3); THE 515(3), 506/606(3);
 2. Humanities and Public Affairs: ANT 365(3); SOC 420(3)
 3. Health and Human Services and Natural and Applied Sciences: CSD 330(3), 331(3), 380(3); GER 320/PSY354(3); KIN 130(1), 468(4); PLN 505(3); REC 205(3); SWK 219(3);
 4. Business and Education: BUS 307(3), CFD 305(3), 353(3); EDC 345(3); RDG 560(3); SPE 507(3), 560(3).
*when applicable
- C. Attain a minimum GPA of 2.50 in all courses counted toward the minor.

DAS 100 Introduction to Disability Studies

The course provides a multidisciplinary introduction to the many dimensions of Disability Studies, including the history, social, cultural, political, legal, and economic perspectives on disability in American society. 3(3-0) F, S

DAS 397 Topics Disability Studies

Prerequisite: permission. Topics of general interest in the area of Disability Studies. Examples: *Disability Cultures*, *Disability Rights Movement*, *Deaf Culture*, *Disability & the Law*. May be repeated as topics change to a maximum of 6 hours. Variable Content Course. 1-3 D

DAS 497 Directed Readings

Prerequisite: permission. Analysis of various topics in Disability Studies not covered in regular courses. May be repeated for a maximum of 6 hours, provided that the topic is different. 1-3 D

Disability Studies

Abbreviated Bibliography

Websites:

Mouth: Voice of the Disability Nation. <http://www.mouthmag.com/>

The Ragged Edge, PO Box 145, Louisville, KY 40201. <http://www.raggededgemagazine.com>

Disability Studies Quarterly. <http://www.dsq-sds.org/>

Disability History Museum. <http://www.disabilitymuseum.org/>

Disability Social History Project. <http://www.disabilityhistory.org/>

Disability Studies in Education. http://www.aera.net/Default.aspx?menu_id=162&id=1297

Society for Disability Studies. <http://www.museumofdisability.org/>

Books:

Baird, Robert M., Stuart E. Rosenbaum, and S. Kay Toombs, Eds. (2009). *Disability: the Social, Political, and Ethical Debate*. Amherst, NY: Prometheus Books.

Barnes, Mercer, & Shakespeare. (1999). *Exploring disability: A sociological approach*. Polity.

Danforth & Gabel, eds. (2007). *Vital questions facing disability studies in education*. Peter Lang Publishing.

Callahan, J. (1989). *Don't worry, he won't get far on foot*. New York.

Condeluci, A. (1996). *Beyond difference*. St. Lucie Press.

Condeluci, A. (1995). *Interdependence*. GR Press, Inc.

Davis, Lennard J., Ed. 2013. *The Disability Studies Reader*, 4th edition. New York: Routledge.

Finger, A. (2006). *Elegy for a disease: a personal and cultural history of polio*. St. Martin's Press.

Fleischer and Zames. (2001). *The disability rights movement: from charity to confrontation*. Temple University Press.

Fries, K. (ed.) (1997). *Staring back: An anthology of writers with disabilities*. Dutton.

Gabel & Danforth, (eds.). (2008). *Disability and the politics of education: An International reader*. Peter Lang Publishing.

Garland-Thomson, R. (2009). *Staring How We Look*. Oxford University Press.

Hockenberry, J. (1995). *Moving violations: war zones, wheelchairs, and declarations of independence*. Hyperion.

- Linton, S. (1998). *Claiming disability: knowledge and identity*. NY: New York University Press.
- Longmore, Paul. (2003). *Why I burned my book and other essays on disability*. Temple University Press.
- Mairs, N. (1997). *Waist-high in the world: A life among the nondisabled*. Beacon Press.
- Padden, C., & Humphires, T. (2005). *Inside Deaf Culture*. Cambridge: Harvard University Press.
- Scott, R.A. (1969). *The making of blind men: A study of adult socialization*. Russell Sage Foundation.
- Shakespeare, Tom. (2006). *Disability rights and wrongs*. Routledge.
- Swain, French, and Cameron. (2003). *Controversial issues in a disabling society*. Open University Press.
- Swain & French (2008). *Disability on equal terms*. Sage Publications.
- Umansky, L., & Longmore, P. (eds.). (2001). *The new disability history*. New York: University Press.
- Vaughn, Edwin. (1993). *The struggle of blind people for self-determination*. Charles Thomas Publishers.

Articles

- Cory, R.; White, J.; and Stuckey, Z. (2010). *Using disability studies theory to change disability services: A case study in student activism*. *Journal of Postsecondary Education and Disabilities*. 23(1).
- Fox, A. (2010). *How to crip the undergraduate classroom: Lessons from performance, pedagogy, and possibility*. *Journal of Postsecondary Education and Disabilities*. 23(1).
- Gabel, S. (2010). *A Disability Studies Framework for Policy Activism in Postsecondary Education*. *Journal of Postsecondary Education and Disabilities*. 23(1).
- Guzman, A. & Bacazar, F. (2010). *Disability service's standards and the worldviews guiding their implementation*. *Journal of Postsecondary Education and Disabilities*. 23(1).
- Loewen, G. & Pollard, B. (2010). *The Social justice perspective*. *Journal of Postsecondary Education and Disabilities*. 23(1).
- Rembis, M. (2010). *Yes we can change: disability studies—enabling equality*. *Journal of Postsecondary Education and Disabilities*. 23(1).
- Straus, A. & Sales, A. (2010). *Bridging the gap between disability studies and disability services in higher education: A model center on disability*. *Journal of Postsecondary Education and Disabilities*. 23(1).
- Thornton, M. & Downs, S. (2010). *Walking the walk: Social model and universal design in the disabilities office*. *Journal of Postsecondary Education and Disabilities*. 23(1).