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Developing Pedagogies to Enhance Excellence and Diversity
Seminar Facilitator: Dr. David W. Concepcion

A PEDAGOGICAL INNOVATION FOR:
Cultural-Social Issues (CSI) in Architecture – ARCH 252
Tuesdays and Thursdays (1 hour + 15 min) – Spring semester
2 sections with approximately 38 students in each section

Introduction:

I am making changes to a section of the undergraduate Cultural and Social Issues course that I teach in the Architecture department every spring semester. This course is already inclusive of diversity and social justice issues in the built environment. It serves to introduce students to these concepts in both architectural practice and in the process of design at different scales. However, I feel that the students need a more comprehensive exposure to ADA requirements and universal design principles that will enable them to incorporate them easily into their design projects in the studio. I am developing this section of the course to be inclusive of design precedence, worldviews and attitudes towards persons with disabilities, and activities (class exercises and an assignment) that connects what the students learn about ADA and universal design to design and *how to* design with these conceptualizations in mind.

Overall Pedagogical Strategies:

Bransford (2000) states, "Expert teachers know the kinds of difficulties that students are likely to face; they know how to tap into students' existing knowledge in order to make new information meaningful; and they know how to assess their students' progress" (p.45).

At the beginning of the semester, I provide the students with a detailed explanation and illustration of the path we will be on throughout this course. I introduce that, in a general sense, this course is about the connections between environment behavior and the design studio. Within the domain of environment behavior there are lived experiences and everyday life, critical inquiry and analysis, and evidence-based design and social sustainability (social justice issues). This course connects the environment behavior aspect of architecture with the design studio, and is inclusive of social agendas and visual culture.

Bransford (2000) discusses the benefits of understanding how **novices become experts** and how experts can then teach novices to be experts. One way that I help students learn to be experts are by teaching them to be critical of their own work as well as their peer's work. Learning to critique one another's work is a common skill that architecture students learn in design studio. I employ this learning strategy in this course as well. This is incorporated into class exercises throughout the course.

I will continue to employ pedagogical strategies that I have found to be useful – such as having extremely detailed instructions for each class exercise and assignment. I also provide the students with grading rubrics for each class exercise being graded as well as assignments. These are found on our Blackboard site in designate folders for class exercises and assignments.

Additionally, I have always found it to be a very successful strategy to show students examples of the class exercise or assignment that I am assigning them. One reason that this is important is because they have not taken a class like ARCH 252 before – a *hybrid* that mixes architectural analysis and many hands-on activities with clear visual representations of their work that is of high standards. This has always resulted in much better student work especially by the strongest and most motivated students in the class.

I use a mixture of teaching strategies and methods when teaching ARCH 252. I do lectures, powerpoints, have guest lecturers, employ 2 types of activity-based class exercises that lead to an assignment, student presentations and peer critiques. For the most part, ARCH 252 is an activity-based course. For some time now, I have used several patterns when teaching this class that I believe to be successful. These **patterns** are as follows:

- Generally, one week (two classes plus homework) is devoted to each topic area. Lectures are used to introduce key concepts of the material. Students are given in-class exercises during the class (part of the participation grade), and given out-of-class exercises that are done during the Thursday class with some additional time required for the homework aspect of it. Often the learning experiences provided by the class exercises lead to one of the 4 assignments done throughout the semester.
- Bransford (2000) notes the importance of providing students with time to learn which includes time for them to process information. In addition to having a pattern of building upon key concepts and illustrating an understanding of the material – I also build patterns into the way the work that they do in ARCH 252 is presented, submitted, graded, and returned to the students. Students learn how to visually represent their work in the class exercises that are submitted, so that by the time they do the assignments the students are generally familiar with the visual presentation standards for this class. Also, mistakes and problems encountered in Assignment 1 can be rectified in Assignment 2.
- A way of submitting student work is developed and students get to know how to submit electronic work in an easy and efficient manner, as well as what information is required on each assignment.

Acknowledging Cognitive Authority:
- Understanding the different types of group dynamics of architecture students in a program where for years, the students work very closely together. One type of group dynamics that frequently occurs is the tendency for certain students to dominate the discussion in the classroom with their viewpoints. For a variety of reasons, the other students remain quiet and do not challenge the dominant students or voice a counter position. Having the students submit a written response to what we are discussing in class gives voice to the other viewpoints in the class.
- Understanding the general characteristics of the typical mid-west architecture student when it comes to taking a position and arguing for it.
- There are different levels of disrespect that I have received in the classroom from young males and occasionally some young females. I continue to explore ways to deal with this disrespect and it is also important for any misogynistic attitudes to be recognized as such.
- In my experience, what works best for a professional student-teacher relationship to exist between myself and the students is to start off with them addressing me by my professional title – Dr. Keddy – in ARCH 252. As we progress through the CSI courses,

it becomes acceptable for them to address me by my first name which is a common practice in the architecture program. In the graduate course – ARCH 552 – it is acceptable for them to address me by my first name.
- When I have 75 to 80 students in this course, it is a challenge to get to know the students. A strategy that I use is to take photos of each student and produce a student directory that I will refer to often. Another strategy is to talk to the students in their small groups (to reduce the scale and to reduce the physical distances between myself and the students) that they form for several activities.
- I have to be careful about assumptions that can be made about these students, about what I believe that they have learned about people and architecture before they enrolled in my class as well as what their attitude is about it. I try to start off assuming that they are all very intrigued and interested in the person-environment relationship.

Since this course (ARCH 252) is the first CSI course that the students take and it is a course that is early in their educational path, I feel that there are some strategies that I can use at this early level that can help students learn more and experience a more fulfilling education.
- Encouraging students to develop positions about what they believe and defend them.
- Encouraging students to always have high standards in their work.
- Encouraging students to always question the mainstream positions in architecture.
- Encouraging students to go beyond their own assumptions about how people experience space and form.
- To understand that design always includes a person-environment relationship.

Transformation (for this new section of the course):
It is hoped that students will experience a transformation of their thinking about persons with disabilities as well as about design with ADA and universal design principles. Currently, there are many negative attitudes held by architecture students about incorporating these design elements into their studio projects with an attitude that it is a burden to have to do so and that it hinders the creative approach that they can take to design. Students also see meeting these requirements as separate to their design process instead of being integral to it. It is hoped that the following transformative thoughts will occur:

- Persons with physical disabilities are a diverse group of individuals with many capabilities and abilities.
- Persons with physical disabilities can and do engage in competitive sports.
- Building designs can be exciting and dynamic when implementing ADA requirements or universal design principles.
- ADA requirements and universal design principles must be integral to the design from the beginning.

Learning Objectives (for this new section of the course):
- To understand what universal design is, what the seven principles of universal design are, and how would one design with these in mind.
- To understand the difference between ADA requirements and universal design
- To ensure that students understand the relationships between stigma, design, disability, and image – social equity.
- To understand that there are two main tracts that designers can engage in when it comes to designing for the disabled:

- o **Functional / Practical** – that 'design' is part of the ways in which we can follow the 'social model' of disability and enable persons with disabilities to lead independent lives.
- o **Aesthetics** – to understand the relationship between design, stigma, and image. To enable students to see the contribution that design can make when it comes to help alter society's negative perceptions and attitudes about the disabled.

- **Transfer** to the design studio – a goal of my teaching is to enable students to *transfer* the methods of analysis, the introduction to architectural research and methods, and the new knowledge about human behavior and social justice *to* their approach to design in the studio. That is the important outcome of what I teach. As Bransford (2000) notes, transfer of learning is the ultimate purpose of school-based learning. This is especially true of a professional program such as architecture. The students need to learn how to transfer what they learn in my courses to the design studio (or thesis) as well as learning about themselves as learners because they will be forever faced with not knowing everything once they are in practice.
- To have access to a body of design work that successfully incorporates ADA requirements and/or universal design principles. This body of work serves as a set of **precedence** for future designs.

Achieving Inclusivity:
- Understanding the culture of the resistant students (Schroder, 2007)
- Understanding the different types of group dynamics of architecture students
- Strategies to encourage different types of 'participation' and engagement

Placement in the semester:
The first section of the course includes physical traces of human activities and behavior, privacy and proxemics, territoriality and crowding, and wayfinding. The 4 weeks devoted to universal design and ADA will follow the initial section in the course. I think that students need to see the direct connection between design and people with disabilities relatively early in the course.

Overview of this 4 week section of the course:

WEEK 5 - TUESDAY	THURSDAY
Lecture – **Introduction to social aspects of disability:** **Disability + Stigma + Image** People first language History of attitude towards people with disabilities and accessibility in the USA The Ugly Laws in US cities – relationship between laws and ADA Franklin D. Roosevelt – 32nd President who had a disability which he hid from the public Compare to attitude in Germany about disabled in 1930s Relationship to social justice and inclusiveness; discrimination Segregation of persons with disabilities Access to the public sphere Development of ADA – Americans with Disabilities Act of 1990 Public Transportation and disability access *Different viewpoints*: U.S. Developmental Disabilities Act – " Disability is a natural part of the human experience…" Personal tragedy / social oppression Models: Social and medical models	**Breaking Stereotypes** Show film clips, YouTube videos and internet links: BSU Power Soccer Indiana Power Soccer Diapering with her feet A park made accessible for children with disabilities Josh Blue - comedian Lazy Legs Disabled Breakdancer History of the wheelchair All terrain wheelchairs iBOT (upstairs and downstairs) Evacuation chair Film: Freedom Machines SoundAMP (iPhone app) **Homework:** Review 7 Universal Design Principles

WEEK 6 - TUESDAY	THURSDAY
Lecture – **Universal Design Principles** DESIGN – CASE STUDIES: Case Studies – the design of ramps in buildings Case Study: Sensory Garden, Oizumi Ryokuchi Park, Osaka, Japan Case Study: MCCormick Tribune Student Center at IIT – Rem Koolhaus with OMA Case Study: 2007 Indian Community School of Milwaukee – Antoine Predock 2008 Barrier-Free America Award from Paralyzed Veterans of America CSI blog built designs collection	**In-Class exercise:** Make changes to designs that already have ADA requirements – using the 7 principles of universal design –explaining each one.

WEEK 7 - TUESDAY	THURSDAY
Guest lecturer – Representative from BSU Disabled Student Development Center RESEARCH - CASE STUDIES: Case Study: Research study – "Do People with Disabilities believe that the ADA has served their consumer interests?" by Carol Kaufman-Scarborough Case Study: Research study – "Separate but Equal? Reasonable Accommodation in the Information Age" by Jennifer S. Light Comparison of methods to learn about the lived experiences of people with disabilities in the built environment - Simulation versus interviews of people with disabilities	**Class exercise** Analysis of David Letterman Communications and Media Building Campus assessment using the ADA checklist

WEEK 8 - TUESDAY	THURSDAY
S2S Assignment introduced Review of stigma, design, and image STIGMA + DESIGN - CASE STUDIES: Case Study: Relationship between hearing, hearing impairment, the design of hearing aids concealment Case Study: John Hockenberry – Moving Violations (citizenship, worldviews, public sphere)	**Class exercise** Campus assessment From last week's class exercise campus assessment - design a disability audit – for assessing ADA requirements and 7 principles of universal design

WEEK 10 - TUESDAY	THURSDAY
New material in the course	**Assignment 2 -** Design and Disability: From Stigmatized to Stylized (S2S) Student Presentations

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Class exercise: ADA vs Universal Design

"Accessibility is a mandate; universal design is a movement."

You will work in pairs. Take your partner's ICMA competition design and analyze it according to:
1) ADA requirements
2) Universal Design requirements

List the following:
1) Which requirements does the project have?
2) Which requirements would the project benefit from?

ADA Requirements:
See pdf "ADA checklist"

Useful websites:
http://www.access-board.gov/adaag/html/adaag.htm
http://www.access-board.gov/adaag/ADAAG.pdf

Overview:
http://www.adata.org/adaportal/Summary_Documents/ADA_Summary_TOC.html

Universal Design (also called Inclusive Design):
Definition:
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.

Seven Principles:
http://www.adaptenv.org/index.php?option=Content&Itemid=25

Universal Design Principles:
http://www.design.ncsu.edu/cud/about_ud/udprincipleshtmlformat.html#top

Accessibility Regulations and a Universal Design Philosophy inspire the Design Process
http://www.adaptenv.org/index.php?option=Resource&articleid=356&topicid=30

History:
http://www.design.ncsu.edu/cud/about_ud/udhistory.htm

MORE sites:
http://www.universaldesign.com/
http://onmuseums.com/conference/
http://onmuseums.com/ideas/scope-concerns/

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ASSIGNMENT 2: Design and Disability: From Stigmatized to Stylized (S2S)
(worth 20% of final grade)

DUE DATE:
Week 16: Presentation
This assignment is done in pairs – you will each receive the same grade

Panel Requirements:

Do a visual representation of a design intervention or programmatic change WITH explanatory notes on the same sheet (jpg).

Give your design solution a **title** that reflects the topic you choose.

In your notes, clearly state:

1) Identify the **design issue** (design problem) – that directly contributes to stigma and discrimination. State how the current design (or lack of) contributes to stigma.
2) State what your design intervention or **design solution** is.
3) Explain how your design solution changes a stigmatized situation to a stylized situation (how you are changing the **image**).
4) Include on the front of the panel: names, ARCH 252, Section x, Spring 2011, Dr. Karen Keddy,

Keywords: inclusive, equity, persons with disabilities, accessible, independence, representative, discrimination, dignity, social justice, restricted growth, accessible parking, safety and security, social model of disability

Submission:
- Bring to class – TWO color print-outs on heavy 8 ½ x 11 paper – one for each of you.
- Before class – email me your S2S assignment or an ilocker link OR bring it on a CD or thumbdrive. Your panel must be a **jpg file**.
  - *Label:* NameName_Stigma.jpg

Presentation:
We will split the class into 2 groups. Each pair has a representative in each of the two groups. Each member of the pair will present the project to their group.