

# Teaching Sustainability as a Professional Responsibility: Transformative Learning in Interior Design – preliminary analysis

## Introduction

In a profession that holds the power to create and modify the built environment, interior designers have an obligation and responsibility to meet the needs of the present without compromising the quality of life for future generations. A course offered in the fall semester of 2008, *ID 630 Topics in Advanced Interior Design Theory: Sustainable Design and Interiors*, was designed to help students develop greater awareness of the impact of the built environment on the natural environment and the potential of the design professions to promote a more ecologically and socially responsible future. The course used reading, writing, and discussion to help students develop an understanding of sustainability from technological and cultural points of view. One of the expectations was that each student would develop a person ethical position on issues related to sustainability that would influence his or her future as an interior designer.

## Methodology

Student anticipation and reflection writings from this course were analyzed using the frameworks of critical reflection (Hatton & Smith, 1995) and transformative learning theory (Mezirow, 1990). Seventeen students are participating in the research. For this preliminary analysis, writings from eight students were used. The data represent seventeen separate writing assignments, with 113 separate writing examples.

## A Reflection Typology

Hatton and Smith's (1995) typology outlines a progression toward critical thinking: descriptive, descriptive reflection, dialogic reflection, and critical reflection. The typology begins with a descriptive (or non-reflective) level and moves through increasingly complex stages. This typology was chosen to illuminate how students wrote about their reactions to class readings and discussions. Also, it has been utilized in past research related to interior design and sustainability in higher education settings (Gulwadi, 2009).

## Preliminary Results

Preliminary analysis of data shows the bulk of student writing examples falling in the categories of descriptive reflection (63%) and dialogic reflection (30%), as shown in Figure 1. Analysis also indicates that throughout the course, students were engaged in self-examination, critical questioning, and exploration of new options, which are all elements of critical reflection necessary for perspective transformation.

## References

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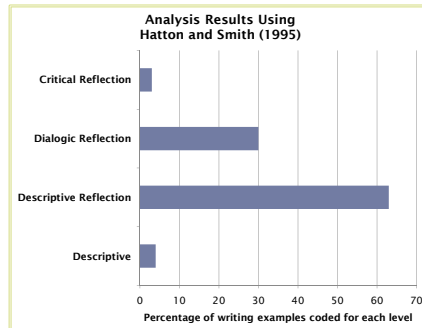


Figure 1. Results from Hatton and Smith's typology of reflection (1995).

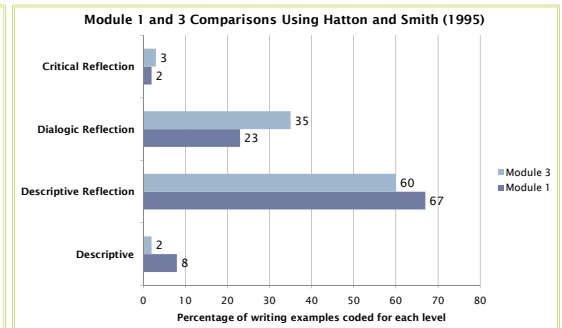


Figure 2. Results of Module 1 and 3 comparisons using Hatton and Smith's typology of reflection (1995).

By looking at differences in the percentages of writing samples coded for each level during Module 1 (first third of semester) and Module 3 (last third of semester), there is an indication that students progressed in their level of critical reflection.

Figure 2 above compares Modules 1 and 3. There are decreases in the percentages of writing examples at the descriptive and descriptive reflection levels (8% to 2% and 67% to 60%, respectively) and increases in the dialogic reflection and critical reflection levels (23% to 35% and 2% to 3%, respectively).

## Examples of Student Perspectives

### Stage 2: Self-examination

Thirty-five percent of the writing examples contained material coded for self-examination. In these examples, participants reflected on their lives and actions as individuals within the context of a society whose values they questioned. Many examples coded for the self-exploration stage are written from the perspective of exploring how "we" as a society have failed and what "we" should be doing to fix it.

*This leaves me concerned about the future: about the scenarios, about my senior year, my search for a career, my final grade, my next shift at work, my next frivolous expense at the cost of our Earth. OUR EARTH! This concept should not be contested by politicians or forgotten by predecessors of the first environmental movement. We may be quoted as the 21C Transition generation, however, we as a mass population must realize the influence of the past, the power of the present, and the capacity of the future. Student C*

*I think these actions are selfish and as humans we are depending on instant gratification. We continue to consume at rapid rates, even when we can see what is happening. This behavior has got to change. Humans today are not doing any better than the islanders of Easter Island at implementing a system that protects our resources. Student F*

*This week, I have really been weighed down by the importance of my generation making enormous changes in our thinking, our lifestyles, and our values. I fear that we may be too late in trying to change the ways we have been taught. I want to be excited about being a part of this change, but honestly, right now I am more overwhelmed by the enormity of the situation. I mean what I do with my life and who I influence has an impact on whether humans destroy themselves and/or the Earth. Student H*

### Stage 3: Critical assessment of assumptions

Thirty-three percent of the writing examples contained material coded for critical assessment of assumptions. In this stage, participants are questioning social and cultural assumptions related to economics, progress, consumerism, beauty and other values that a culture's members often take for granted.

*We have defined progress as a tool established by economists to measure and quantify our level of growth. I do not see growth when we are exploiting and depleting the land and extracting valuable resources; how do we quantify natural capital? Why do we yield to industries that strip humanity and our individuality as a means to boost the Gross Domestic Product? I find it funny that we equate progress with consumption. Student C*

*There is a great variance in the issues of consumer culture. There are many reasons why people spend their money. I personally feel that a lot of us were not raised to know any better. We are part of a culture driven by making money and spending money either for necessity or to make us happy. Student G*

*Reflecting on our discussions from this week, I have been thinking a lot about Americans and our concept of hard work. Because we have been known for working hard and working long hours, we don't value leisure enough. I think that in some ways we have become ashamed to value leisure—we think it makes us seem lazy. As a society that has had so much pressure to live up to the hard working class expectations, I think that part of the reasons we value materials so much is because we feel the need to show our rewarding efforts towards our hard work. Student F*

### Stage 5: Exploration of options

Thirty-seven percent of the writing examples contained material coded for exploration of options. At this stage, participants discussed the role of the interior design field in sustainability and their potential roles in their chosen field.

*This week I anticipate learning about ways I can make a difference as an interior designer for the future of our civilization. I want to learn more about the importance of my role and what I can do for the future. Student F*

*We need a more universal optimistic vision of the future, so that we have a goal in which to work towards. We need people who are willing to think outside of the constraints our current world has and to dream up what life could be like. It needs to be realistic enough that others will catch on, but different enough to be truly inspiring. Student H*

*I learned that Interior Design has a vital role in the future of sustainable design. In some past discussions that I have had with professionals in the related fields, [they] told me that I was in the wrong profession if I wanted to pursue sustainable design. They seemed to think that Interior Designers' only role in the sustainability movement was to specify VOC free paint and environmentally friendly finishes. Now I'll have some additional reckoning power! Student B*

## Transformative Learning Theory

Transformative learning theory (TLT) is the process by which the worldviews of individuals, groups, and organizations are changed as a result of educational activities. The outcome of transformative learning is perspective transformation. Research findings indicate the potential of a range of educational experiences involving engagement in real world sustainability and natural resources issues to be facilitative of perspective transformation (Lange, 2004; Sims & Sinclair, 2008). This indicates that transformative learning theory (Mezirow, 1990) is an appropriate guiding framework for inquiry into the effects of this course on student's perspectives.

While transformative learning is not a neat, linear process, several key phases have been delineated. They are:

1. A disorienting dilemma;
2. Self-examination with feelings of shame or guilt;
3. A critical assessment of epistemological, sociocultural, or psychological assumptions;

4. Recognition that one's discontent and the process of transformation are shared and that others have negotiated a similar change;
5. Exploration of options for new roles, relationships, and actions;
6. Planning a course of action;
7. Acquisition of knowledge and skills for implementing one's plans;
8. Provisional trying of new roles;
9. Building of competence and self-confidence in new roles and relationships; and
10. A reintegration into one's life on the basis of conditions dictated by one's new perspective (Mezirow, 1990).

Figure 3 below shows the percentages of writing examples coded for each of Mezirow's 10 stages of transformative learning. The stages with the highest percentages are stage 2: self-examination (35%), stage 3: critical assessment of assumptions (33%), and stage 5: exploration of options (37%).

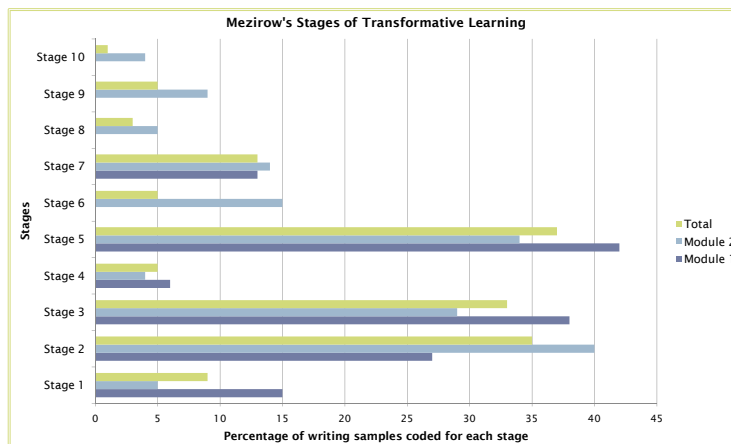


Figure 3. Percentages of writing examples coded for each of Mezirow's ten stages of transformative learning.

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