A Study of Millennial Student Learning Preferences: An Analysis of Two Interior Design Class Case Studies

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A STUDY OF MILLENNIAL STUDENT LEARNING PREFERENCES:
AN ANALYSIS OF TWO INTERIOR DESIGN CLASS CASE STUDIES

By
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ABSTRACT

The newest generation of college students, the millennials, have been shown to be vastly different than their predecessors. Born between the years 1982 and 2002, these students exhibit traits and preferences that can be linked to their unique upbringing (Howe & Strauss, 2000). Of the many differences they exhibit, millennial student learning preferences are perhaps the most notable. This thesis study seeks to determine how millennials' learning preferences and their experiences in interior design classes intersect. Understanding how students learn and prefer to learn can help educators fit their teaching style together with the needs of their students.

There are many ways to instruct students, but research has shown millennials to be selective about how they receive information. Research suggests millennial students usually prefer more hands-on or interactive instructional techniques to other more traditional techniques such as lecture. Specifically, research suggests college-age millennials generally prefer the use of these five techniques in their classrooms:

1. Moderate levels of interactive technology
2. Presence of team or group activities and/or projects
3. Presence and quick turnaround of instructor feedback
4. Presence of hands-on learning or interactivity
5. Presence of peer evaluation opportunities (Oblinger, 2003; Howe, 2005; Prensky, 2001)

This proposal reports the results of an ongoing study which examines how millennial interior design students respond to current instructional techniques employed in studio and non-studio interior design classes. Aligning educational tactics with student needs and ways they learn best is a logical goal in secondary education. It is helpful, therefore, to examine the interaction between educators and their students to identify and examine possible strengths and weaknesses of classroom learning and the teaching tactics that facilitate this learning.
For the purposes of the study, second year interior design students in classes entitled ‘Studio 1’ and ‘Social/Psychological Aspects of Interior Design’, are queried regarding their reactions to instructional techniques noted.

This study specifically provides students the unique opportunity to express their feelings about ways they prefer to learn. The intent of this study is to provide interior design educators an opportunity to see through the eyes of their students and to determine if class learning strategies used in the examined interior design courses are in fact preferable by these millennial learners.

The findings of this study in brief are that generally millennial interior design participants did respond favorably to millennial-preferred instructional techniques. They also responded favorably to the traditional techniques observed in the study. Participants seemed generally pleased with the mix of both millennial-preferred and traditional techniques used in their interior design classes.
CHAPTER 1

INTRODUCTION AND OVERVIEW

Introduction

According to a consensus of sources, the current generation of college learners can be viewed as the group born between the years of 1982 to 2002 and are often referred to as the millennials (Oblinger, 2003; Howe & Strauss, 2000). Social researchers suggest these learners may be different than other generations as a result of aspects of their upbringing. They have developed characteristics that make them somewhat different students than young people of past generations. The sources of these influences include political climate and family values. The threat (or perceived threat) of violence may have also affected their actions, and unprecedented economic success realized by many of their families have contributed to what has become an expectation of success shared by members of this generation (Howe & Strauss, 2000). These and other influences have fostered differences that prompt closer inspection of this learner group.

Aligning educational tactics with student needs and ways they learn best is a logical goal in secondary education. It is helpful, therefore, to examine the interaction between educators and their students to identify and examine possible strengths and weaknesses of classroom learning and the teaching tactics that facilitate this learning. Therefore, this study will examine educational strategies suited for millennial learners.

The purpose of this study, then, is to compare the learning strategy preferences of millennial learners identified by research sources with observed instructional techniques employed by interior design educators. This will determine whether these strategies are in fact present, and how they were received by their interior design learners. That is, this study will provide a helpful analysis of social researchers’ conclusions concerning millennial learners and
explore if these conclusions about their learning preferences are valid for a group of interior design learners as well.

**Influences on Millennials**

In order to reach the goals set forth in this study, the review of literature will begin by defining the millennial generation. Once defined, the newest generation will be further described with regard to the social and cultural forces that sources suggest have influenced their perceptions and how and why these millennial individuals feel as they do about learning and the workplace.

In recent years, interior design researchers have examined learning style characteristics of students in general and have compared these ideas specifically to interior design learners (Guerin & Thompson, 2004; Russ & Weber, 1995). However, prominent millennial research Neil Howe, bolstered by the conclusions of other social researchers, suggests that the full understanding of instructor-learner interaction is incomplete without also examining the effect of specific generational characteristics (2005). This is especially true because in almost all cases, instructors are not themselves of millennial generation age, thus naturally perceive these learners through the filter of their own world view. Thus, a 'generation X' instructor may approach their teaching with ideals different than what millennial learners prefer.

These differences between generations can be distinct. For example, Howe and Strauss suggest that millennial learners can be characterized by several descriptors, including 'special', 'sheltered', 'confident', 'team-oriented', 'achieving', '压ured' and 'conventional' (2001) and that these characteristics are in marked contrast with other generations’ approach to life and work. As introduced above, the origin of these characteristics lies with millennials’ unique family upbringing and the current social climate of the world around them.

**Research Questions**
In light of these likely differences between learner and instructor perceptions, this study will examine teacher-student interaction through the lens of predicted learner preferences for the millennial generation. The main goal is to determine if instructional methods currently used within two identified interior design classes appeal to these new and different learners. It is logical to explore the presence or absence of instructional tactics that would likely be identified as positive to this learner group because research suggests that a learning experience perceived by learners as affirming and helpful may in fact enhance the success of learning and knowledge retention (Geraci, 2005).

Specifically, the study’s research questions are described here:

1. Are instructional techniques occurring in selected interior design classes that research suggests are preferred by millennial students? Further sub-questions that actualize this topic explore the application of millennial-preferred techniques:
   a. Is interactive technology used?
      i. If so, what form(s) does this interactive technology use take?
   b. Are students provided with feedback from the instructor?
      i. What form(s) does this feedback take?
   c. Is peer evaluation included?
      i. How is it applied within the class?
   d. Are team projects used?
      i. If so, how?
   e. Are interactive or hands-on learning techniques being used?
      i. If so, how?

2. How often and in what quantities are millennial-preferred techniques used within these two classes?

3. Are millennial-preferred techniques happening with more frequency in the studio class than the non-studio class as predicted?

4. How are millennial learners in these classes reacting to the inclusion of various instructional techniques? Further sub-questions that actualize this topic are as follows:
a. “Millennial-preferred” techniques (Instructional techniques predicted to be helpful to millennial students):
   i. Did millennial participants feel the techniques are helpful?
   ii. What techniques, if any, do interior design millennial students identify as least helpful?
   iii. What quantities, if any, of interactive technology do interior design millennial students prefer in studio and non-studio classes?
   iv. Do students respond favorably to the amount and type of feedback they receive from the instructor?

b. “Traditional techniques” (Instructional techniques not specifically predicted to help millennial students):
   i. Do interior design millennial learners perceive these techniques are less helpful than those associated with millennial learner preferences from research?

5. What suggestions for improvement do millennial learners have for instructional techniques in these classes?

It is hoped that this study might offer conclusions to future learning style researchers and others. Its results may serve as a reference concerning learner perceptions and the instructor-learner exchange customized to the current generation.

**Methodology**

In order to address the identified research questions, data will be gathered using three different methods. First, the researcher will observe millennial students in two interior design classes. One of these classes will be a non-studio (or ‘lecture’ class) and the other a studio class in order to examine conditions in these two typical categories of courses often found within interior design curricula. The instructors’ teaching tactics will be reviewed and categorized into
a framework of methods sources identified as specifically preferred by millennial learners or not specifically preferred by this group.

Secondly, the researcher will have the class member participants complete several questionnaires at pre-planned points in the semester that ask them to reflect on their perceptions of the instructional techniques used by their instructor. Lastly, the researcher will conduct interviews with a select group of participants to provide further in-depth information concerning learner perceptions. Data will be analyzed to determine those instructional techniques that met with the greatest student favor. The questionnaires will take into account the students’ perception of how particular information was covered. For example, the questionnaire will ask them to respond to how content was delivered by the instructor; allowing them the opportunity to make suggestions about how the content might be delivered more effectively. The information will then be organized into descriptive statistics expressed through text, charts and/or graphs as well as summaries of qualitative/perceptual responses.

**Limitations**

The study will necessarily have several limitations that should be acknowledged. These limitations are introduced here and an expanded discussion of them is located in chapter 3.

1. Personal and unforeseen preferences of participating students which may not match those of others students not in the study
2. Personal teaching styles of participating educators which may differ from other instructors not in the study
3. Predetermined content of each class
4. Effect of study inquiry (that is, it is possible that learners will perceive the instructional techniques somewhat differently and notice them more specifically due to the fact they are being asked about these techniques).
This case study approach to learner preferences makes necessary an understanding that the resulting data will be specific to these two courses at this point in time. Generalization beyond these two courses in itself should be undertaken with appropriate caution. However, this researcher considers the observation and analysis of existing conditions sufficiently valuable to undertake it in a case study form. Its value lies in its function as a comparison device for other researchers or as a tool within future, more comprehensive studies.

Definition of Terms

**Blackboard:** online teaching/learning tool which acts as a forum for class discussion, announcements, course materials, email, grades, etc.

**feedback:** assessment from the instructor or teaching assistant which can be verbal or written, private or public

**hands-on:** for the purposes of this study; class activities which are more active than passive listening. May involve doing something by hand such as model building, drawing exercises, etc.

**information technology (IT):** the study, design, development, implementation, support or management of computer-based information systems, particularly software applications and computer hardware (The Gate Encyclopedia, 2008). In this study, IT includes the use of PowerPoint, Blackboard, and online applications such as imbedded videos and tutorials

**lecture-based:** for the purposes of this study; description of courses for which more than 50% of course material is delivered in lecture format; lectures may be digitally assisted

**Millennial:** Generation of persons born between the years of 1982 and 2002

**millennial-preferred instructional techniques:** instructional techniques which research (presented in Chapter 2) suggests millennial generation learners will prefer. For the purposes of this study, those techniques will include: group/team work, hands-on activities, abundant feedback, information technology (IT), and peer evaluation (Oblinger, 2003).
model building: the creation of 3D representations of spaces students design for project.

peer evaluation: critique or feedback from classmates which may be solicited as part of a grade and can be voluntary or mandatory

Social Psychology: An interior design course observed in this study which explores the relationships between humans and their environment and the effects of the environment on human behavior

Studio: interior design course that provides project-based learning exercises with activities that include research, inquiry and analysis, synthesis, criticism, collaboration, and communication (Ankerson & Pable, p. 142).

team-based learning: collaboration among students for in-class exercises which is either at the request of the instructor or in an impromptu meeting between classmates

traditional instructional techniques: instructional techniques suggested by McKeachie (presented in Chapter 3) that include lecture, discussion, role playing/games, simulations, case studies, technology-based learning, team learning and peer learning (2002).
CHAPTER 2

REVIEW OF LITERATURE

Introduction

This chapter will review research that has been conducted about millennial students, identifying characteristics about the millennial generation and examining how their upbringing and other variables have contributed to their distinct learning traits. This is relevant to the goals of this study so that groundwork may be laid for exploring millennial students’ learning preferences. The study will seek to establish whether instructional techniques are occurring in interior design classes that research suggests are preferred by millennial students, and if so, will establish in what forms and frequencies these techniques occur as well as the learners’ reactions.

Sources suggest these students are new and different learners from past generations and an understanding of their traits and characteristics may be helpful for educators. Millennials have been greatly shaped by their environment, and sources suggest it is likely that connections exist between environmental factors and their learning preferences. For example, as the customer service industry has grown in recent years due to advancements in technology, millennial learners have grown to expect the same level of customer service from their education. Similarly, their extensive exposure to technology has also led them to expect a moderate level of technology-based learning in their classrooms (Prensky, 2001).

These characteristics and others contribute to the following learning traits that researchers suggest millennial students generally prefer to other, more traditional instructional techniques such as lecture:

1. Moderate levels of interactive technology use
2. Presence and quick turnaround of instructor feedback
3. Presence of team or group activities and/or projects
4. Presence of hands-on learning or interactivity

Many studies contain overlapping information on the definition and characteristics of millennial learners. While this situation can serve to enhance similar conclusions’ validity, other findings and predictions about millennials at times are in contradiction. This chapter will seek to present a balance of these consensus and contrasting views as appropriate in order to better understand the students that now inhabit college classrooms.

This review will examine a selection of material on the generation of college learners called millennials so that these students’ learning preferences may be identified. This can assist in better identifying where gaps may currently exist in millennial learners’ needs and teaching techniques currently offered.

This chapter will first identify studies that discuss the millennial generation and define this sector of college age learners. Next, learning preferences for this group will be identified by examining characteristics identified by researchers. The chapter will continue with information concerning these learning traits and how they might be addressed in the classroom. Finally, these findings specific to interior design students will be addressed as well as an exploration of the teaching strategies the study will seek to observe.

Data Collection Method

The background research for this study was conducted by the researcher and was gathered primarily from professional journal articles, books and other periodicals. The original findings of Howe and Strauss’s Millennials Rising (2000) served as a helpful framework for characterizing the millennials. These authors have since added new and directed insight into the millennial generation with the emergence of more recent publications and these, too, were referenced for this chapter. Others have taken this framework and published their own
articles regarding millennials in the workplaces and the classroom. These sources proved to be, in many cases, just as helpful as the original work from Howe and Strauss. In many cases, bibliographies from these sources contained overlapping articles with new leads emerging from the most recent sources. The Journal of Interior Design was used primarily to gather information about current activities and research in interior design education. Keywords and phrases such as ‘millennials’, ‘interior design education’, and ‘generations in the workplace’ were helpful in locating information for this study.

The Millennial Generation Defined

In order to begin discussing the traits of millennials, they must first be identified and defined. The data is chronologically confusing on this point. Many studies begin with an age group, or birth year requirements for millennials. One source includes in the millennial generation all those born between the years 1977 and 1994 (“The Millennials”, 2004). This is the most chronologically generous grouping. Other sources narrow the years to begin with 1985. For the purposes of this study, the more widely accepted dates for birth years of the millennial group will be taken from widely published authors on the subject such as Diana Oblinger, author of Educating the Net Generation, and Neil Howe and William Strauss, authors of Millennials Rising. Their work in millennial studies asserts that the years of birth for the millennial generation are from 1982 to 2002, which includes the students who would have first begun to graduate high school in 2000 and concludes with those learners beginning college in 2020 (Howe & Strauss, 2000). With these dates established for this study, it is easier to pinpoint influences and forces in these students’ lives for the past eighteen years.

Influences on Millennial Learners

According to Diana Oblinger, “each generation is defined by its life experiences, giving rise to different attitudes, beliefs and sensitivities” (2003, p.
Researchers suggest that these influences differ for each generation. For example, Oblinger points out that the “Depression generation,” born between the years 1925 and 1942, saw World War II and the Cold War, while the Baby Boomers, the generation born between the years 1943 and 1960, experienced the civil rights movement, Watergate and Vietnam. The next chronological group, Generation X (often abbreviated to Gen-Xers), born between the years 1961 and 1981, saw the fall of the Berlin Wall and the stock market crash as well as the outbreak of AIDS and the beginning of the World Wide Web (Strauss, 2005; Oblinger, 2003). Table 1 summarizes these generations by their age groups. The newest generation is the millennials, born from the year 1982 to 2002. These individuals have not had nearly the amount of political “activity” in their lives as previous generations, Oblinger explains. In fact, millennials have been growing up in post-Columbine schools with security checks and cell phones. War has been all but vacant from their lives, except for the Gulf War episode of the nineties (and now the Iraq war). Most millennials have only lived to see Clintons or Bushes in the White House. In contrast to the crash of the stock market or the great depression, they have lived through what most would consider economic prosperity (Raines, 2002).

Table 1. Generations of the 20th Century (Howe & Strauss, 2000).

<table>
<thead>
<tr>
<th>Name of Generation</th>
<th>Years of Birth</th>
<th>Age as of 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silent</td>
<td>1925 – 1942</td>
<td>66 – 83</td>
</tr>
<tr>
<td>Baby Boom</td>
<td>1943 – 1960</td>
<td>48 – 65</td>
</tr>
<tr>
<td>Millennial</td>
<td>1982 – 2002</td>
<td>6 – 26</td>
</tr>
</tbody>
</table>

Table 2 compares generational values as defined by DeBard, and its content supports claims of the considerable differences that exist between the millennial generation and other generations (2004). The distinctions expressed in the table also confirm that millennial learners’ perceptions have been
significantly shaped by their close familial upbringing, which is evident when compared to past generations such as Gen-Xers and Baby Boomers. For example, in the row labeled, ‘family life’, while the boomers were indulged as children, the generation x-ers were alienated as children. In contrast to both preceding generations, millennials were protected as children. Later in this chapter research will further show how a protected family life upbringing contributed to the millennials’ sense of protection and ‘specialness’.

**Threat of Violence**

Sources suggest that the potential for violence has also shaped generational perceptions and attitudes (Raines, 2002). Raines explains that while the economy was thriving in the 1980’s and 1990’s, so was terrorism. Though millennial learners did not grow up in war times or times of depression, they watched, albeit as children, the Oklahoma City bombing, the Columbine shootings, and other subsequent school shootings approximately every three years. The biggest act of terrorism, the attacks on the United States on September 11, 2001, occurred when some of them were just beginning college (2002).

Economic prosperity of the 90’s combined with acts of terror left millennial youths with significant philanthropic tendencies, according to Howe (2005). Additionally, high school volunteerism has increased sixty-five percent from previous generations. Millennial aged persons love to volunteer and believe that everyone should be helped. As Raines describes, they are philanthropic because they were taught to think in terms of the greater good (2002). These ideals were fueled by the after-images of each terrorist attack and their observation of rescue personnel undertaking heroic acts, both of which provided significant impact. This, in turn, sparked a new sort of patriotism revived after this feeling had wavered during Vietnam and in previous years. However, millennials have an advantage in that many were too young to know patriotism had faded in the first place. This mirrors the sheltered lifestyle that permeates so many other aspects of their lives (Raines, 2002).
Table 2: Generational values of Boomers, Gen-Xers, and Millennials (DeBard, 2004).

<table>
<thead>
<tr>
<th>Views Toward</th>
<th>Boomers</th>
<th>Gen Xers</th>
<th>Millennials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of trust</td>
<td>Confident of self, not authority</td>
<td>Low toward authority</td>
<td>High toward authority</td>
</tr>
<tr>
<td>Loyalty to institutions</td>
<td>Cynical</td>
<td>Considered native</td>
<td>Committed</td>
</tr>
<tr>
<td>Most admire</td>
<td>Taking charge</td>
<td>Creating enterprise</td>
<td>Following a hero of integrity</td>
</tr>
<tr>
<td>Career goals</td>
<td>Build a stellar career</td>
<td>Build a portable career</td>
<td>Build parallel careers</td>
</tr>
<tr>
<td>Rewards</td>
<td>Title and the corner office</td>
<td>Freedom not to do</td>
<td>Meaningful work</td>
</tr>
<tr>
<td>Parent-child involvement</td>
<td>Recording</td>
<td>Distant</td>
<td>Intruding</td>
</tr>
<tr>
<td>Having children</td>
<td>Controlled</td>
<td>Doubtful</td>
<td>Defined</td>
</tr>
<tr>
<td>Family life</td>
<td>Indulged as children</td>
<td>Alienated as children</td>
<td>Protected as children</td>
</tr>
<tr>
<td>Education</td>
<td>Freedom of expression</td>
<td>Pragmatic</td>
<td>Structure of accountability</td>
</tr>
<tr>
<td>Evaluation</td>
<td>Once a year with documentation</td>
<td>“Sorry, but how am I doing?”</td>
<td>Feedback whenever I want it</td>
</tr>
<tr>
<td>Political orientation</td>
<td>Attack oppression</td>
<td>Apathetic, individual</td>
<td>Crave community</td>
</tr>
<tr>
<td>The big question</td>
<td>What does it mean?</td>
<td>Does it work?</td>
<td>How do we build it?</td>
</tr>
</tbody>
</table>
Economic Standing

Another characteristic that defines millennial learners is the financial stability in many of their homes. Millennials have grown up in homes where their parents are wealthier than parents of past generations. One report in 2003 stated that nearly half of all college freshmen were from families with incomes of $75,000 or more (“The Millennials” 2004), with many reaching over $100,000 (DeBard, 2004). One of these studies speculates that as costs of higher education continue to soar, the population of college students is shifting to students from high-income, highly educated families (“The Millennials” 2004). It is logical to conclude that as this trend continues, these numbers will only rise. The “haves” will overtake the “have-nots”.

Expectation of Success

As members of highly educated, financially successful families, the millennial students are also expected to perform extremely well. They are in schools that practice the “No Child Left Behind” initiative of the Bush administration, where oftentimes, every student purportedly gets a chance to excel (Howe, 2005). Strauss describes that Gen-X parents of millennial learners appear to be “staunch defenders” of the No Child Left Behind policy and that “Gen-X parents will tend to want the best possible education for their own children, period” (Strauss, 2005, p. 3). Further, many parents have the means to provide tutors and coaches in the event that they do not excel, which only furthers the cycle of success-driven individuals (McGlynn, 2005). The drive to excel has made these students not only more competitive but has brought them to expect success as well (DeBard, 2004). As Geraci notes, “in short, millennials expect to do it all, with aplomb” (2005, p.2). This can lead to trends in the classroom such as the students’ expectation for extra credit or partial credit on wrong answers (Wilson, 2005).

Materialism and Technology
Due to a home situation that is financially stable and the presence of rapidly advancing technology, millennials students are often inundated with ‘stuff’. Howe and Strauss offer a pointed observation of this phenomenon: “in our daily lives…they’re kids growing up in houses that contain 50 percent more things (measured by the pound) than houses did twenty years ago” (2000, p. 20). The internet was invented during these students’ lifetime and the millennial children of successful parents are the benefactors of this technology. In 2001, over 62% of all U.S. children under the age of 17 had access to a computer at home (“The Millennials,” 2004). Therefore, by the time these children enter college, they are likely fully versed in their computer skills. Diana Oblinger (2003) described a recent study that indicated 84% of college students currently own their own computer, with 25% owning more than one and 24% owning a laptop computer.

Millennial learners are advantaged compared to previous generations, and have technology readily available and the financial means to buy necessary components. Howe and Strauss suggest that millennials are so in touch with their parents that these children are actually driving many of the purchasing decisions in the household (“Millennials Rising,” 2000). That is, if the parents want their children to excel at all costs, they will not hold back on high ticket items such as computers, PDAs and cell phones.

Technology brings an ease of access to millions of millennial students each day. Authors of the article “How the new generation of well-wired multi-taskers is changing campus culture” observe that while these learners are wired to the internet, chances are they are also texting on their cell phone or listening to music or pod-casts on their MP3 players. They are constantly plugged into something (“How the New,” 2007). This is a luxury no other generation has ever had (Prensky, 2001).

There are various reasons for the new ubiquitous contrast of technology for these persons when compared to previous generations. First, the technology simply was not available before, and second, it was not realistic to expect parents to be able to afford such luxuries for themselves, let alone their children. The cell phones for the children come with good intentions and justifications
which can include “maybe there will be an emergency at school”, “maybe you’ll need to check in later”, and “maybe I’ll be in a meeting when you need me so now you can just send me a text message.” As a consequence, millennials are more ‘in touch’ than any other generation (“How the New,” 2007). Subsequently, the millennials have earned nicknames such as “the net generation (“How the New,” 2007)” and “digital natives” (Prensky, 2001).

It is notable, however, that the connectedness millennial learners are immersed in is not always observed by others with approval, according to some sources. Gen-Xers are particularly guilty of looking with disdain at their successors, as millennials flaunt gadgets and gizmos previous generations were not sufficiently privileged to have. Notes Strauss, “Gen-Xers were raised in an era that put the needs of children last…” while millennials have gotten the attention Gen-Xers did not (2005, p.1).

As technology “is assumed to be a natural part of the environment” for millennials, they are a generation of multi-taskers in constant connectivity (Oblinger, 2003, p. 38). They grew up with less free time than any other generation due to soccer practice, band practice, ballet lessons, homework, family activities and video games. Millennials do not know any other way to be. Some millennial learners were carrying day-timers in elementary school (Raines, 2002).

**Attitudes Toward the Workplace**

Because millennial learners are beginning to populate the ranks of the workforce, multiple sources have recently discussed how to work with millennial individuals. These writers often recognize that millennial persons are different employees than they are used to from previous generations. “Their actions and attitudes are influenced heavily by their dependence on technology and the ramifications of that dependence… The millennials are used to answers being available around-the-clock”, Burnett describes (2006, p 48). This author also notes they are less interested in traditional work hours and more interested in
what they can accomplish wirelessly on the commute to and from work, or rather what they can do from their laptop at a local coffee pub. They are accustomed to having marketers fawning all over them and, by extension, will likely expect the same in the classroom (Geraci, 2005). Millennials are capable of managing so many tasks at once that the typical office is boring to them and consequently perceive they can be more productive if they are on their own time. Burnett adds that millennial individuals are driven to get work done without supervision because of their background, but notes that all young workers, no matter how independent, need mentors (2006).

Attitude, Confidence Levels, and Family Relationships

Some suggest that millennials have the confidence to know they can do any task set before them. They have been criticized by others for the accompanying sense of ‘specialness’ many of them feel (Howe, 2005). According to Howe and Strauss (2000), this is due in large part to the rise of children’s social issues on the lists of adults’ priorities as well as on the public agenda of the government. For the first time in decades, children’s issues are becoming big ticket items in the race for the presidency. Howe calls them a “political trump card” (2005). Adults have been taking notice of children and taking action against problems such as violence, school systems, sex and drug use. Reports indicate drug use is down, test scores are up and teens are less rebellious than before (Geraci, 2005; Raines, 2002). Children feel protected and have such closeness with their parents that they can retreat to them if their ‘specialness’ is questioned. More than ninety percent of teenagers within the millennial age range report being close to and trusting of their parents (Howe, 2005).

The close relationships millennials have with their parents have led to very sheltered childhoods for many. For example, Howe and Strauss describe that parents are concerned with new safety devices on the market (2000). Ad campaigns promote car safety, band-aids, home security systems, and Nerf balls
rather than real balls. No generation has been safer (Howe, 2005). This safety net combined with the national homeland security campaign has added to the millennials’ sense of confidence. They equate good news for themselves with good news for their country (Howe & Strauss, 2000). They have confidence in their government, unlike their skeptical Gen-X predecessors.

### Unbridled Confidence and Abounding Hopefulness

The specialness that millennials are led to perceive about themselves may also flavor their post-education expectations. Millennials often expect to secure fantastic jobs right out of school. Further, they are not accustomed to being let down or taking no for an answer (Geraci, 2005). They expect their workplaces to be filled with fun, exciting challenges that require collaborative teams and are financially rewarding (Raines, 2002). In this way, millennial learners are a generation of great expectations. They have been told they are special, so they feel entitled to be hopeful.

Financial means and opportunity have in part provided millennials with families who support them and provide them with many “luxuries.” Millennials’ sense of confidence combined with their familiarity with technology makes them quite different in the classroom than educators are used to, according to Howe (2005). For example, multi-tasking often leaves millennials bored with traditional instruction techniques. As students, they are driven, but prefer teamwork and collaboration. They are easily bogged down with details and expect considerable individual attention (Howe, 2005).

### Attitudes About Assistance

Diana Oblinger (2003) has pointed out that one major expectation from millennials is customer service. They have grown up in a world with 24/7 help desks, online technicians and customer service representatives readily available. According to several sources, parents of millennial learners are also pushier and
focused on efficiency and service more than ever before. Students learn these 
traits and expect the same instant results their parents demand (Howe, 2005; 
Strauss, 2005).

Authors suggest that millennial learners and their parents are also 
applying these attitudes to their educational institutions. Specifically, millennial 
students expect the same from their educational system as they do from other 
cultural institutions and businesses. Consequently, one source concludes that 
“in many cases, customer service is more than a preference- it is a prerequisite 
to retention and effective learning” (Oblinger, 2003, p 42). University actions may 
serve to affirm this customer service stance. For example, at many universities 
and colleges, students may access their grades, class assignments, financial 
information and graduation requirements online with a secure login. Some 
classes administer quizzes or tests online. Therefore, as Oblinger observes, just 
as digital processing fulfills these requests quickly, students expect the same 
from their educators (2003).

Authors suggest that educational personnel may not always be able to 
respond to these expectations. As college enrollment is on the rise, educators 
often have more students than they are used to, and this new customer service 
expectation often can not be met (Howe, 2005). Learning to balance the demand 
of the job with the expectations of the students will be no easy task for educators, 
Howe concurs. However, he concludes that meeting the needs of millennial 
learners is possible (2005).

Governmental data has shown that the population of millennials in 
colleges and universities is growing at an unprecedented rate, as 94% of teens 
now report they intend to go to college (DeBard, 2004). This may translate into 
growing class sizes in some educational institutions until the final stages of 
millennial students graduate in approximately 2024. According to DeBard, the 
increasing demands of the classroom, if met with an increased utilization of 
technology, can likely adjust to the changing needs of today’s students (2004).

Education Strategies for Millennial Learners
Researchers have pointed out implications of the new students in today’s classroom, examining millennials learners’ expectations concerning their educational experience (Howe, 2005). Some researchers have identified suggestions for meeting the needs of the millennial students. Leslie Owen Wilson, for example, describes millennial students as “discriminating consumers [who] work hard and value volunteerism and customer service” (2005, p 3). Wilson has assembled a model for new millennial students, explaining how their basic characteristics can be translated into practices for the classroom. Key points of Wilson’s conclusions and sources are noted below.

**Feedback**

As students come with customer service expectations, they appreciate timely and plentiful feedback on their performance (Geraci, 2005). Feedback can ease their anxiety about not being perfect, giving them an early chance to see mistakes and make improvements. Geraci notes, “they are impatient and goal oriented. They hate busywork, learn by doing and are used to instant feedback” (“How the New,” 2007, p. 1). Further, millennial students are stressed with many duties and activities on their plate at one time. Keeping up with everything, while waiting long periods of time before getting helpful feedback on performance standards, could mean that several other tasks come and go before the students have an opportunity to make improvements. Therefore, timely feedback can help millennial learners stay on task and enhance their work product.

**Group Work**

Students may also prefer to work in groups, according to Wilson's study (2005). Their connectivity leads to tendencies of gregariousness. According to Geraci, millennials express their individuality but seek to fit into a group (2005). In groups, individuals can excel at their personal strengths. Added together, the group can be stronger than any one individual. Wilson describes that millennials are comfortable with their peers around them because they are used to the
constant support of their parents. In particular, millennials are most comfortable when paired with others. In contrast, a strong support network is something previous generations are unfamiliar with (Wilson, 2005).

Peer Evaluation

While every assignment can not be turned in to group work, Wilson suggests that peer evaluation may be a valuable alternative. Peer evaluation prior to handing in assignments can add the collaborative quality millennial students are looking for without sacrificing the nature of the assignment as designed by the instructor. Raines concurs that this idea is helpful and suggests that the fastest way to lose the millennials along the way is to be too rigid and inflexible (2002).

Digital Technologies and Active Instructional Techniques

In addition to customer service-like feedback and the option to work with others, another solution to accommodating these changing student needs is to find ways to actively engage them. Some studies suggest that millennials relate better to video games, an interactive media that the millennial generation has not known life without. As many of them are avid gamers, their familiarity with video games would tend to suggest that a gaming format in their educational experience would engage students more than traditional instructional techniques. Some go so far as to suggest that if class work instructions were given in a game format, the learning curve would likely be enhanced (Oblinger, 2003; Prensky 2001). In particular, Marc Prensky is a supporter of the idea that millennials, or digital natives as he calls them, relate much better to digital technology and instructional techniques that access these methods (2001). Some researchers note that video games, despite their poor reputation, can offer useful life skills. Writes Oblinger, “games often involve problem solving and decision-making. They provide rapid feedback and can adjust the level of difficulty to the expertise of the player. Speed and a sense of urgency can contribute to learner motivation” (2003, p. 44). Techniques such as online self-paced tutorials and
simulations can be great solutions for the mind of the millennial learner. Chiefly, games and simulations actively engage students rather than allowing them to be passive observers (McKeachie, 2002). As many college students already own a laptop computer, class participation might be affected in a positive manner if students could carry their notebook computers to class and use them for tutorials supervised by the instructor (Prensky, 2001).

Broadly speaking, millennial students appear to embrace the use of information technology, or IT, in the classroom. Information technology, as defined by the Information Technology Association of America (ITAA) is "the study, design, development, implementation, support or management of computer-based information systems, particularly software applications and computer hardware" (The Gate Encyclopedia, 2008). Some authors feel that utilizing information technology can produce more rapid processing due to its wireless capabilities and thus could provide capabilities that offer a wide range of solutions for users (McKeachie, 2002; Prensky, 2001).

The graph in Figure 1 shows that millennial students prefer a moderate amount of information technology (IT) used in the classroom as opposed to none at all. Kavvik further suggests these learners do not prefer online-only class formats (Kavvik, 2008). Logically, this is likely related to other millennial preferences such as connectivity and customer service.

Kavvik’s research also revealed how millennial students perceive the impact of information technology in their classes, as shown in table 3. This researcher’s data suggests that on average, the students agree that IT in the classroom enhances their learning experience. Many of the response categories are in line with what other researchers suggest are common millennial learning preferences such as feedback from instructors and interactive, hands-on learning activities (Prensky, 2001; Oblinger, 2003; McKeachie, 2002). Says McKeachie, “when used appropriately, technology can provide opportunities for students to interact with the content and with one another” (2002, p. 19)
Figure 1. Millennial students’ preferences of IT (information technology) used in the classroom (Kvavik, 2008).

Psychology and the Millennial Learner and its Connection to Active Learning

One way to get students invested in their education is to engage them in active learning. Active learning is readily achieved through techniques such as discussion methods, leading students down the path of deeper learning and a richer understanding of how they are learning (McKeachie, 2002). Some authors suggest that students might benefit from a further understanding of their own psychological learning processes in order to enhance the likelihood they will take a personal interest in their education and learn more thoroughly. According to McKeachie, “we also need to ask students not only what they think, but how they think, and if this was the most effective process for them” (2002, p. 278). This concept has been termed meta-cognition. Meta-cognition is defined by Webster’s Dictionary as “awareness or analysis of one’s own learning or thinking processes” (2009).
Table 3. Effect of IT on Class Activities (Kvavik, 2008).

<table>
<thead>
<tr>
<th>Activity</th>
<th>Mean*</th>
</tr>
</thead>
<tbody>
<tr>
<td>The use of information technology in classes has helped me to better</td>
<td>3.85</td>
</tr>
<tr>
<td>communicate with the instructor.</td>
<td></td>
</tr>
<tr>
<td>The use of information technology in courses has resulted in prompt</td>
<td>3.84</td>
</tr>
<tr>
<td>feedback from the instructor.</td>
<td></td>
</tr>
<tr>
<td>The use of information technology in courses has helped me communicate</td>
<td>3.64</td>
</tr>
<tr>
<td>and collaborate with my classmates.</td>
<td></td>
</tr>
<tr>
<td>I primarily use information technology in courses to improve the</td>
<td>3.61</td>
</tr>
<tr>
<td>presentation of my work.</td>
<td></td>
</tr>
<tr>
<td>The use of information technology in courses provides more opportunities</td>
<td>3.58</td>
</tr>
<tr>
<td>for practice and reinforcement.</td>
<td></td>
</tr>
<tr>
<td>The use of technology in my classes met my expectations.</td>
<td>3.54</td>
</tr>
<tr>
<td>Classes that use information technology allow me to take greater control</td>
<td>3.45</td>
</tr>
<tr>
<td>of my class activities.</td>
<td></td>
</tr>
<tr>
<td>The use of information technology in classes has helped me better</td>
<td>3.38</td>
</tr>
<tr>
<td>understand complex or abstract concepts.</td>
<td></td>
</tr>
<tr>
<td>The instructors’ use of technology in my classes has increased my</td>
<td>3.25</td>
</tr>
<tr>
<td>interest in the subject matter.</td>
<td></td>
</tr>
<tr>
<td>Classes that use information technology are more likely to focus on</td>
<td>3.23</td>
</tr>
<tr>
<td>real-world tasks and examples.</td>
<td></td>
</tr>
<tr>
<td>I spend more time engaged in course activities in those courses that</td>
<td>3.22</td>
</tr>
<tr>
<td>require me to use technology.</td>
<td></td>
</tr>
<tr>
<td>I get better grades in courses that use information technology.</td>
<td>3.19</td>
</tr>
<tr>
<td>Faculty members need to give us more in-class training for information</td>
<td>3.04</td>
</tr>
<tr>
<td>technology used in the class.</td>
<td></td>
</tr>
</tbody>
</table>

*Scale: 1 = strongly disagree to 5 = strongly agree

Angela McGlynn is one advocate of enhancing metacognitive skills specifically for millennial learners (2005). As McKeachie describes above, McGlynn suggests students must become aware of not only what they are thinking but also how they are thinking (2005). When students take pride in what they are learning, they are more likely to take responsibility for their learning. Once able to take responsibility for their learning, students can put it into practice, articulating what they have learned. Millennial students have been shown to be eager, persistent learners who might be more likely than other generations to take an equal role in their education to what they are demanding from their educators. Essentially, the goal is to get students to essentially think
about what they are thinking about. Meta-cognition and active learning exercises could engage students in these types of learning processes.

Millenials’ multi-tasking skills allow them to function at a different pace than others, possibly leaving room for them to engage in meta-cognition activities. These students respond well to structured class exercises that allow for creativity, says McGlynn (2005). Therefore, they need to be involved in active learning. Active learning will engage them, challenge them and allow them to make strong connections to the material they are learning the first time they are exposed to it. McKeachie suggests several opportunities for active learning. While the most common and direct method is discussion, class size could make this technique prohibitive. Other proven pathways to active learning include collaborative or team learning exercises, peer evaluations, integrating technology-based learning and the inclusions of teaching assistants to help with class size issues that might arise (2002). In his work, McKeachie shows these instructional techniques to be effective in getting students to think about what they are thinking about.

In the fast-paced world of the millennial learner, enhanced meta-cognition would require slowing down, but their multitasking minds could easily compartmentalize the process, according to McGlynn (2005). Psychologists say that the more “connections” the better in terms of the learning process. When students use meta-cognition they are more actively engaging in their learning and thereby taking a personal interest in their education.

Meta-cognition exercises may be especially suited to millennial learners. Firstly, millennials have a great sense of pride and confidence about them and have a strong ability to multi-task. Second, meta-cognition theories are suitable for millennials because these theories place the learning more on their shoulders. McGlynn has noted that meta-cognitive knowledge can compel millennial learners to respect their instructors, but be more self-reliant in the classroom. This self-reliance combined with more flexible and engaging instruction techniques will help millennials and educators connect in the classroom (2005).
According to McGlynn, the more actively engaged learners are with the subject matter, the more connections they have the opportunity to make with the material, and therefore, the more retrieval cues they have to access that information (McGlynn, 2005). Others from cognitive psychology suggest this theory is true. “Social psychology also provides strong evidence that one’s thinking patterns change depending on one’s experiences” (Prensky, 2001, p. 2).

For multitasking millennials, it is important to establish rich connections the first time they are exposed to new content. Otherwise they may not come back for seconds, so to speak. Meta-cognition is a way for millennials to accomplish this. Prensky suggests their brains are physically different, making a more engaging learning style a must in order to connect to millennial students (2001). He believes active learning can also be achieved in the gaming format as previously mentioned.

**The Opportunity and Caution of Generational Typecasting**

In recent years, much research has been conducted about millennial students. Researchers have reached similar conclusions in most cases and from a compilation of these works, a model of this new student is starting to emerge. Many have adopted the seven-characteristic model of Howe and Strauss to define a broad spectrum of millennials. Millennials are thus defined as being “special, sheltered, confident, team-oriented, achieving, pressured and conventional” (Howe and Strauss, 2000). Table 4 defines these traits more specifically. Further, the model asserts that millennial students are eager and capable of working faster and harder than previous students. This brief description has allowed others to quickly generalize the group using the Howe and Strauss model. Others describe related factors that have influenced these learners, many of which were briefly discussed above:

- world history and current events during their lifetime;
- general personality traits as a result of their parents’ influence;
- material things they have never known life without; and,
what they expect from the world around them (Oblinger, 2003; Howe, 2005; McGlynn, 2005; Raines, 2002; Strauss, 2005).

However, it is helpful to recall that statistics apply to the majority of individuals, not each person in particular. There will naturally be exceptions to the given characteristics and there may be some opposition to this characterization from members of this group, as they see a picture portrayed that they don’t agree with or don’t want to admit they identify with (Sanchez, 2003).

**Table 4:** Distinguishing traits of the millennial persona (Howe & Strauss, 2000).

| Special | From precious-baby movies of the early ’80s to the effusive rhetoric surrounding the high school Class of 2000, older generations have inculcated in millennials the same sense that they are, collectively, vital to the nations and to their parents’ sense of purpose. |
| Sheltered | Starting with the early-’80s child-abuse frenzy, continuing through the explosion of kid safety rules and devices, and now climaxing with a post-Columbine lockdown of public schools, millennials are the focus of the most sweeping youth safety movement in American history. |
| Confident | With high levels of trust and optimism- and a newly felt connection to parents and future- millennial teens are beginning to equate good news for themselves with good news for their country. They often boast about their generation’s power and potential. |
| Team-Oriented | From Barney and soccer to school uniforms and a new classroom emphasis on group learning, millennials are developing strong team instincts and tight peer bonds. |
| Achieving | With accountability and higher school standards rising to the very top of America’s political agenda, millennials are on track to become the best educated and best-behaved adults in the nation’s history. |
| Pressured | Pushed to study hard, avoid personal risks, and take full advantage of the collective opportunities adults are offering them, millennials feel a “trophy kid” pressure to excel. |
| Conventional | Taking pride in their improving behavior and more comfortable with their parents’ values than any other generation in living memory, millennials support convention— the idea that social rules can help. |

**Educational Response to the Millennials**

Reflecting on the nature of millennial learners, Marc Prensky writes, “our students have changed radically. Today’s students are no longer the people our education system was designed to teach” (2001, p. 1). The students have changed, but the educators may not have similarly transformed their approach and tactics. Prensky continues, “educators know *something* is wrong, because
they are not reaching their Digital Native students as well as they reached students in the past. So they face an important choice” (2001, p 7). That is, many educators have been in place now long enough to have seen several generations of students walk through their doors (Strauss, 2005). Millennial social researchers often agree that a change in thinking is inevitable in order to keep the pace with today’s new students (Oblinger, 2003; Wilson, 2005; Howe, 2005). For example, Oblinger suggests that in order to be competitive among applicants, colleges and universities may need to find a way to understand and meet the expectations of millennial students (2003). McGlynn stresses that faculty need to understand the many differences in learning styles in order to be an effective educator (2005). Research has been conducted in recent years that has begun to address this issue. Some specific studies will be identified below.

**Millennials in Interior Design Education**

Researchers within specialized fields are applying social research knowledge to better understand the changing and varied characteristics of their learners. For example, the interior design discipline has looked to learning style indicators among its students in order to use effective instructional techniques to enrich students’ experiences. In her 2000 study, Nussbaumer suggests a strong relationship between learning styles and visualization skills. She concludes that because interior designers solve visual problems, an emphasis on their visualization skills in the classroom could enhance their design work both in school and beyond (2000). Nussbaumer’s tactics for instruction include instructor demonstration, student sketching and three-dimensional representations. While Nussbaumer’s study does not explicitly target millennial learners, her methodology correlates to some of the aforementioned needs of this group such as group exercises, feedback and varying instructional techniques. Nussbaumer asserts that “if Interior Design educators are aware of the different learning styles of their students, they can improve students’ learning capacity in various ways” (2000, p. 7).
Similarly, other research studies in interior design suggest that learning styles are important to recognize as a tool for richer learning. Interior design educators Watson and Thompson applied learning style criteria to their students in order to increase effectiveness. These researchers conclude that “by addressing students’ learning styles and planning instruction accordingly, educators will meet more individuals’ educational needs and will be more successful in their own educational goals” (2001, p. 12). Their work suggests tuning in to more specific needs of the students produces a richer learning environment for all.

Other studies, too, reinforce the need for teaching tactics to respond flexibly to changing learner needs. A study by Guerin and Asher Thompson examined contemporary practices of architecture education when considering the reformatting of interior design education (2004). Their study looked to Earnest Boyer and Lee Mitgang’s book Building Community: A new future for Architecture education and practice as a guideline for important educational strategies within their discipline. They used the seven goals from Boyer and Mitgang “as a measuring stick against which to examine interior design education” (2004, p. 2). The seven goals can be summarized as “an enriched mission, diversity with dignity, standards without standardization, a connected curriculum, a climate for learning, a more unified profession and service to the nation” (2004, p.2).

These goals for education are reminiscent of the model of millennials as outlined by Howe and Strauss in that it addresses the specific needs/traits of a specific population of students. The sources referenced above agree that as the students entering this model of education change, so should instructional strategies. However, Boyer and Mitgang’s conclusions are not directed exclusively at the specific needs of millennial learners.

Periodicals that serve the interior design practitioner are also beginning to explore the implications of the millennial learner among the ranks of practitioners. For example, interior design educators participated in an interview/ article in the International Interior Design Association’s Perspective Magazine to discuss their impressions of the new students. In the article, they identified the millennials as
different from the students of ten years ago, yet each of the educators felt many of the changed were positive. They were encouraged that today’s learners, as a result of being better students, will become a generation of better designers. Some of the millennial traits they observed in their students were millennials’ connectivity, abilities to multi-task, their caring nature, and their intense focus (Bowles, 2007). The interviewed educators acknowledged that the differences in the students will translate into differences for future employers. Similar to the changing needs of the interior design classroom, the workplaces will need to change to accommodate their new designers (2007).

The interior design studies described above indicate that there is a desire to attune teaching tactics to the specific needs of students, and that millennial learners are, in fact, different in their needs from previous generations. That is, “interior design educators are rethinking the methods by which they communicate knowledge to learners and the nature of learners’ active involvement in the educational process” (Ankerson & Pable, 2008).

**Instructional Techniques**

The intent of this study is to examine if current interior design teaching tactics do, in fact, resonate with their millennial learners, and thus meet with success in this goal. In order to do so, it is helpful to address not only the teaching tactics research suggests millennials prefer as stated earlier in this chapter, but also other instructional techniques students may encounter in their college classrooms.

Interior design course work encompasses a variety of information and a variety of delivery options for such information. As such, many instructors likely implement what some would call traditional instructional techniques to reach their students. McKeachie discusses at least eight techniques he has found to be effective and might be appropriate for use in interior design classes. Those techniques include

- lecture
• discussion
• role playing/games
• simulations
• case studies
• technology-based learning
• team learning
• peer learning

These techniques have been used by him and others since before the inception of the millennial generation into college (2002). The success of each, of course, depends on both the instructor and the students making the effort to achieve a higher level of learning.

The techniques mentioned above may or may not be preferred by millennials, according to sources cited earlier in this chapter. Several of the instructional techniques, such as role playing and games, simulation, technology-based learning and team or peer learning, have been shown by research earlier in this chapter to be preferred by millennials in general.

Chapter three will examine more closely these teaching tactics and propose, for the purposes of this study, that they fall into one of two categories of ‘millennial-preferred’ techniques, or ‘traditional techniques’. This distinction will facilitate the categorization of the observed teaching tactics in the study’s classes and provide topics for respondents to react to within questionnaires and interviews. The methodology for collecting this data will be explained in the next chapter, and several examples of possible observed teaching tactics will be provided. Research questions will also be explored in depth as they relate to the interior design millennial learner and the instruction methods this study intends to examine.
CHAPTER 3

METHODOLOGY

Introduction

The review of literature suggests that millennials are different from past generations in many ways. The previous chapter’s review of literature survey examined and identified learning traits and pedagogical preferences of millennial students. Millennial characteristics identified by Howe and Strauss (2000) are supported and reinforced by others such as Oblinger (2003), Raines (2002), and Prensky (2001).

As noted in chapter 2, millennial learners were raised by parents of ample means with the technology on demand to accomplish nearly any goal. Millennials are extremely sheltered and protected from the harsh realities of the world and have sufficient self confidence to think they can make a difference. They are plugged in and turned on in an almost constant state of connectivity. These traits can be viewed as weaknesses by other generations. Some, such as their immediate predecessors, the Gen-Xers, would call the sum of these characteristics the millennial “sense of entitlement.” Bitter onlookers can easily point out that these newcomers are making the workplace more lenient and accommodating, but for all the wrong reasons. However, it remains that the millennial generation is growing in number. For current educators, it is difficult not to interact with these types of learners. Therefore, this author suggests that education and the workplace must begin to understand and embrace them. The logical responsibility of educators is to facilitate this excellence and help students achieve the highest level of learning possible.

The purpose of this thesis study is to examine the perceptions of a group of millennial learners regarding instructional strategies used in two selected interior design classes. This case study approach has been chosen to provide a rich ‘snapshot’ of how current educators’ tactics are integrating with their
millennial learners, and to examine if these tactics are being well received by this group.

Two undergraduate interior design classes at Florida State University have been selected to participate in this case study. Both selected courses are sophomore level and share the same learners/study participants. One of the courses is Interior Design Studio 1. In this class, students develop a basic understanding of the interior design process and begin to apply this knowledge in a series of projects that harness their previous skills and introduce new strategies in the traditional Bauhaus method, which includes the concept of a harmony of form, function and aesthetics. In this method, students put their training to actual practice to further their learning. Studio classes by nature include a combination of lecture and hands-on learning exercises; thus this class was chosen because of the many instructional techniques that may be captured in observations. The second class is Social/Psychological aspects of Interior Design. ‘Social Psych’, as it is known to the students, is an exploration of the relationship between humans and their environments through the study of personal and social use of space, proxemics, special analysis, and the effects of the environment on human behavior. This course was chosen for this study because it covers course material primarily in lecture format. Other techniques have been added to the course content delivery, but it remains dissimilar in nature to Studio 1, providing a rich basis for observations.

For the purposes of this study, all observed teaching strategies in the two courses will be identified and classified into one of two categories: ‘millennial-preferred’ strategies, and ‘traditional’ strategies. Table 5 references millennial researchers’ findings on preferred techniques. This table also categorizes the anticipated teaching strategies, offering details of the forms these millennial techniques may take in the interior class observations in this study. It is anticipated that this list may evolve over the course of the study as class observations, questionnaires and interviews are completed and their results analyzed. It is expected that in addition to the millennial-preferred techniques
described in table 5, traditional instructional techniques will be observed in the study’s classes, generally taking the form of PowerPoint assisted lectures.

**Table 5.** Teaching techniques in the 'millennial-preferred' category with possible examples of their application in interior design courses by the author (Oblinge, 2003; Wilson, 2005).

<table>
<thead>
<tr>
<th>Moderate levels of IT use</th>
<th>Instructor feedback</th>
<th>Team/group projects</th>
<th>Hands-on learning/interactivity</th>
<th>Peer evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>PowerPoint presentation—students may add to content</td>
<td>Incremental review of ongoing projects or exercises</td>
<td>Group projects or presentations</td>
<td>Model building</td>
<td>Pin-up peer critique exercises</td>
</tr>
<tr>
<td>Online tutorials for computer-based programs such as Photoshop</td>
<td>Addition of teaching assistant to provide extra in-class feedback opportunities</td>
<td>Class exercises that incorporate using models or previous projects as examples</td>
<td>Putting boards and projects together</td>
<td>Informal group collaboration during class</td>
</tr>
<tr>
<td>Online syllabus, communication and course updates through university’s Blackboard system</td>
<td>Instructor critiques during presentations or pin-up exercises</td>
<td>In-class group discussion exercises</td>
<td>In-class writing exercises alone or with others</td>
<td>Providing feedback to instructor for a grade on group exercises</td>
</tr>
</tbody>
</table>

The following research questions will guide the study’s undertakings.

1) Are instructional techniques occurring in the selected interior design classes that research suggests are preferred by millennial students? Further sub-questions that actualize this topic explore the application of millennial-preferred techniques:

   a) Is interactive technology used?
      i) If so, what form(s) does this interactive technology use take?

   b) Are students provided with feedback from the instructor?
      i) What form(s) does this feedback take?

   c) Is peer evaluation included?
      i) How is it applied within the class?

   d) Are team projects used?
i) If so, how?
e) Are interactive or hands-on learning techniques being used?
   i) If so, how?
2) How often and in what quantities are millennial-preferred techniques used
   within these two classes?
3) Are millennial-preferred techniques happening with more frequency in the
   studio class than the non-studio class as predicted?

   Questions 1-3 will be answered through observations of the identified
   interior design classes’ sessions. Check sheets will enable the author to note
   with detail and consistency the presence or absence and nature of instructional
   strategies.

   Questions 4 and 5 below will be answered through administration of
   several questionnaires throughout the semester to the selected learner
   participants that are timed to permit them to reflect on recently-administrated
   instructional strategies. Follow-up individual interviews conducted with
   approximately 10 respondents will additionally broaden and enrich the
   questionnaires’ responses. The transcripts from these interviews will be provided
   in the study’s appendix.
4) How are millennial learners in these classes reacting to the inclusion of
   various instructional techniques? Further sub-questions that actualize this
   topic are as follows:
   a) “Millennial-preferred” techniques (Instructional techniques predicted to
      be helpful to millennial students):
      i) Did millennial participants feel the techniques are helpful?
      ii) What techniques, if any, do interior design millennial students identify
          as least helpful?
      iii) What quantities, if any, of interactive technology do interior design
           millennial students prefer in studio and non-studio classes?
      iv) Do students respond favorably to the amount and type of feedback
          they receive from the instructor?
b) “Traditional techniques” (Instructional techniques not specifically predicted to help millennial students):

i) Do interior design millennial learners perceive these techniques are less helpful than those associated with millennial learner preferences from research?

5) What suggestions for improvement do millennial learners have for instructional techniques in these classes?

The selected potential participants will consist of all members of the two interior design classes who were born after 1982. It is anticipated that 30 to 40 learners will make up the study’s pool. Each class will have approximately 20 participants each. These participants will be asked their opinion of the helpfulness of pre-identified millennial and non-millennial techniques via a study questionnaire. This questionnaire was pre-tested with nine interior design graduate students for its content validity. Thirdly, and as necessary through analysis of the questionnaire responses, additional follow-up interviews will be conducted with a group of no more than 10 students to gather expanded responses to the survey questions. Questions will include:

1. Do participants feel the frequency of use of these techniques observed in the classes is helpful?
2. Do participants feel the nature of the selected techniques observed in the classes is helpful?
3. What suggestions do millennial learners have for instructional techniques in these classes?

Data will thus be gathered and analyzed from three triangulated points: class observations by the researcher, participant questionnaire and participant in-depth interview. Results will be analyzed and reported in a combination of quantitative descriptive data (such as percentages and means) as well as qualitative findings drawn from themes that emerged from observations, write-in questionnaire responses and interviews.
Compiled Report and Recommendations

The data and conclusions from this study will be synthesized into a brochure that may assist interior design educators in better understanding the practical learning needs of their millennial students. Depending on study results, brief descriptions of teaching tactics social research suggests interior design millennial students may prefer will also be discussed. This brochure will be distributed to interior design educators at a future Interior Design Educator’s Council (IDEC) conference and/or via the IDEC educator listserv service.

Limitations

Limitations to this study are anticipated that cannot be entirely mitigated. They include, but are not limited to:

1. Personal and unforeseen preferences of participating students.
   It will be impossible for this study to take into account the preexisting learning preferences of participating students. Their personal preferences for interior design knowledge content may directly influence their response to the use of certain techniques in the classroom. However, the author will seek to address this issue by asking the participants to respond to their impression of instructional techniques only, separating their personal feelings about the subject matter. Students will be asked if they felt the particular instructional technique was an effective way to communicate a particular topic, thus hopefully reducing the effects of their personal preferences on the outcome of the study.

2. Personal teaching styles of participating educators.
   It will be impossible for this study to foresee and calculate for instructors’ personal teaching styles. Instructors’ teaching styles, in fact, is a somewhat indivisible component that accompanies their
chosen teaching strategies. The study’s instructors will be experienced educators who have developed their particular style over the years and will not be asked to change their styles for the purposes of this study. Similarly, the results of the study will not be revealed to the instructors along the way, thus minimizing their conscious or unconscious altering of their chosen instructional methods.

3. Predetermined content of each class.

The purpose of this study is to observe and document the classes without interference in the course materials or instruction. Therefore, similar to #2 above, instructors will not be asked to modify their course content in any way prior to any observations conducted by the researcher.

4. Effect of study inquiry.

It is also acknowledged that the incremental questioning of participants may in and of itself affect these persons’ perceptions of their learning experience. In particular, it will likely heighten their perceptions of the types of instructional tactics that are used in the classes. This is acknowledged as an unavoidable aspect of the study methodology.

To begin to come to terms with the new students, educators must first inform themselves on the changing needs of these millennial learners. With the millennials’ preferred learning styles identified and accepted into the educational system, the hope of this author is that educators can better reach these learners. In doing so, they help in assisting the largest population group in fifty years attain productive adult status in society.
CHAPTER 4

FINDINGS

Introduction

This chapter will present the findings of the triangulated data collection. The data will be summarized in charts and tables which clearly describe the results. For clarity, an extended analysis of the findings is provided in chapter 5.

Generalizability

It is important to note that this is a snapshot in time that examines an identified set of students’ responses to two specific interior design courses. Due to the variety of individual teacher styles, content and other variants, it is difficult to generalize these findings to other teaching situations. The relatively small sample sizes further complicate inferences to larger groups. However, the study’s findings can support other, similar study findings which as a whole may yield verifiable results.

Limitations

Chapter 3 identified several anticipated limitations that result from this study’s methodological structure. In addition to these, several further limitations were determined to exist as the data was collected. Other factors which may have affected the outcome of the study:

1. The classes included in this study were held back to back. The same group of 19 participants from Studio 1 was in the Social Psychology class immediately following it with only a thirty minute lunch break between. This could contribute to fatigue that may affect participants’ behavior and/or awareness in that class.
2. The observer was a teaching assistant (TA) for one section of Studio 1 but was not a TA for those classes that were observed in this study. Therefore the observer was familiar with some participants while serving as a TA for another class that participants were taking simultaneously.

**Sample Population**

The sample for this study was a group of 40 sophomore level interior design students at Florida State University. The approximate age for the study’s participants was 20 years old, although some degree of variability existed. Participants were not required to give their age, as stipulated by the Institutional Review Board’s protocol for human subjects protection. It was determined, however, that all participants were beneath the age of 27 so that the study could target millennial learners specifically. The group consisted of 35 female and 5 male students. All 40 students were enrolled in Social Psychology class. In addition, 2 graduate students were enrolled in Social Psychology but were included in the study because they fit the millennial age group. The same 40 students took two sections of Studio 1 class. One section (which is not observed in this study) had 21 students. The other observed section had 19 students. Therefore, the nineteen participants from Studio 1 also participated in this study for Social Psychology.

The study's participants were in their second year of interior design classes and had successfully passed first year review the previous semester. At Florida State University, a large quantity of freshmen students compete during their first year in college for 40 seats in the Interior Design program. Students must maintain a high degree of proficiency in their introductory classes to pass the review process to be accepted into the program. Therefore, this study targeted a group of newly accepted interior design majors. This group was readily available for observation and fit the millennial requirement. Further, this group of students had not previously been taught by either instructor from the
study, which would help keep student bias regarding the instructors to a minimum.

**Instruments**

The researcher gathered data for the study’s questions using four different methods: class observation, in-progress questionnaires, an exit questionnaire, and exit interviews. Further details on several of these tools are described below.

**Questionnaires 1-3**

The first instruments used with the participants were three questionnaires that participants answered by means of a likert scale. Participants ranked their agreement with each statement about class activities on a scale from 1 to 5 with one representing “strongly disagree” and five representing “strongly agree”. The main purpose of these instruments was to collect quantitative data regarding millennial student learning preferences while the classes were occurring for an ‘in-progress’ glimpse of attitudes. The likert scale gave a means by which to quantify such preferences. A sample of each questionnaire is included in appendices C through J.

Questionnaires were administered close to the time each instructional technique was implemented so that students would still be familiar with the activities they participated in and could recall their thoughts for the questionnaire. Further, questionnaires were placed thoughtfully throughout the semester to complement activities set forth in the course syllabus for each selected class. Questionnaires were specifically designed not to interfere with the design of the course, but to merely capture it through the students’ eyes.

Space was provided on each questionnaire for participants to write in comments. These comments were coded, are reported in this chapter, and will be used in chapter 5 to support the findings or will be saved for future study. The scope of this thesis will not allow for this data to be fully explored at this time but it will serve as a body of work to be pursued at a later time. Coded data from write-in responses is included in appendices L and M.
**Questionnaire 4**

A fourth questionnaire was used to capture learner preferences for instructional techniques in their interior design classes. The purpose of this questionnaire was to look not just at a particular event as questionnaires 1-3 did, but to gain participants’ perceptions of the course as a whole. Therefore, questionnaire 4 was administered at the end of the semester, approximately four weeks after the end of the observation period ended. This instrument was in the form of a free-response questionnaire. Every answer was written in by the participant and no answer was prompted in any way by the researcher. A sample of each questionnaire is included in appendices C through J. Responses from questionnaire 4 have been coded and reported in chapter 4. The findings are interpreted in chapter 5.

**Interviews**

The final step of data collection included interviews conducted with a selection of each class’s participants. This final interview permitted the triangulation of data with the questionnaires. The format was casual and participants were asked the same questions as in questionnaire 4. This gave participants the chance to elaborate on their preferences with the researcher. Interviews took place at the end of the semester, after final projects had been completed and students were not burdened with course work. These responses were recorded by hand by the researcher during the interview.

Data from these questionnaires and interviews were used to create the figures and tables in chapter 4, and the conclusions are summarized in chapter 5.

**General Information about Observations and Their Classification for this Study**

Because this study seeks to understand students’ attitudes toward instructional strategies that researchers suggest are preferred by millennial-aged learners, it is important to classify the observed course activities into millennial or
traditional techniques. The researcher reviewed all techniques with course instructors prior to the start of the semester. Tables 6 and 7 show how each observed instructional technique from Studio 1 and Social Psychology fall into the millennial-preferred category this study specifically examines. Millennial-preferred characteristics can be further broken down into five sub-categories which will be addressed by sub-questions within question 1. These characteristics are Feedback, Peer Evaluation, Team/Group projects, Hands-on activities and Information technology (IT).

The classification of techniques into millennial and traditional proved to be more complex than was originally anticipated. Upon close inspection of this study’s literature sources, ‘millennial-preferred techniques’ are largely a subset of the larger body of techniques tacitly identified as ‘traditional’ by McKeachie in his oft-cited reference Teaching tips: Strategies, research, and theory for college and university teachers. McKeachie’s general discussion of teaching techniques include lecture, discussion, role playing/games, simulations, case studies, technology-based learning, team learning and peer learning. Thus, for practical purposes and to identify an effective resolution between McKeachie and those strategies identified by millennial sources, ‘millennial techniques’ are specifically identified here as five techniques that millennial learners will specifically prefer to other ways of learning. Thus, several millennial-preferred techniques overlap with traditional techniques, as they are in fact selected from this pool of techniques. It is important to distinguish the two groups, however, as it is possible this study will reveal that interior design millennial learners will have learning preferences other than those research suggests millennial students will prefer. Tables 6 and 7 outline how the observed techniques break down into these classifications for each of the study’s courses.
Table 6. Activities observed in Studio 1, categorized in millennial-preferred and traditional techniques by the author based on the study’s literature review. Some activities are classified as both a millennial and traditional technique.

<table>
<thead>
<tr>
<th>Studio 1</th>
<th>Observed technique</th>
<th>Millennial technique</th>
<th>Traditional technique</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graded desk critique</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonstration</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lecture</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Group evaluation</td>
<td>*</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Hands-on activity</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presentation w/critique</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructor feedback</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peer evaluation</td>
<td>*</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Model building</td>
<td>*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7. Activities observed in Social Psychology, categorized into millennial-preferred and traditional techniques by the author based on the study’s literature review. Many activities are both a millennial and a traditional technique.

<table>
<thead>
<tr>
<th>Social Psychology</th>
<th>Observed technique</th>
<th>Millennial technique</th>
<th>Traditional technique</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extra credit opportunity</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lecture</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team-based learning</td>
<td>*</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Group project</td>
<td>*</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Peer review</td>
<td>*</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Lecture</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Group project</td>
<td>*</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Information technology</td>
<td>*</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Hands-on activity</td>
<td>*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
While it is not the intent of this study to judge the quality of a class based on its types of learner activities, it is helpful on occasion below to identify contrasts between the two observed classes (Studio I and Social Psychology) on various details in the data. These comparisons are made below for the purpose of gauging comparative frequency of these learning activities, and determining perceptions regarding class activity satisfaction by millennial students.

**Question 1**

The first question in this study seeks to generally determine whether instructional techniques preferred by millennial learners are occurring in the study’s interior design classes. Question 1 and its subsequent sub-questions are as follows:

1. Are instructional techniques occurring in selected interior design classes that research suggests are preferred by millennial students?
   a. Is interactive technology used?
      i. If so, what form(s) does this interactive technology use take?
   b. Are students provided with feedback from the instructor?
      i. What form(s) does this feedback take?
   c. Is peer evaluation included?
      i. How is it applied within the class?
   d. Are team projects used?
      i. If so, how?
   e. Are interactive or hands-on learning techniques being used?
      i. If so, how?

**Question 1.a.**
This first sub-question addressed the use of information technology (IT) in the two interior design classes. Question 1.a asks, “is information technology used?” A second sub-question, question 1.a.i, asks, “if so, what form(s) does this information technology use take?” This question is pertinent to the study because researchers suggest that millennial learners prefer moderate use of IT in their classes. As described above, this study identifies the implementation of computer-based information systems as information technology. Information technology observed in this study includes software programs such as PowerPoint and InDesign, and hardware such as an opaque overhead projector. On occasion, online video links were also imbedded in PowerPoint lectures.

In order to record this information, the two classes were observed over a period of ten weeks and daily class activities were recorded on a check sheet during 18 class periods. Both observations track the various forms interactive technology took in each class as well as the number of occurrences. Observations were tabulated for each class and are summarized in Table 8 and 9 below. The data for question 2 (how often and in what quantities are millennial-preferred techniques used within these two classes?) is also included here, as it targets the frequency of each millennial preferred technique in the observed classes.
Table 8. Type and frequency of interactive technology used in Studio 1 and its context. A total of 18 class sessions were observed. If the same technique was used more than once during a class session, it was counted as only one occurrence.

* This activity occurred in the class on a day the observer was not present. Course schedule information and instructor discussion ensured that it occurred.

<table>
<thead>
<tr>
<th>Interactive Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Studio 1</strong></td>
</tr>
<tr>
<td><strong>Form of IT</strong></td>
</tr>
<tr>
<td>PowerPoint-assisted discussion</td>
</tr>
<tr>
<td>Opaque overhead projector-assisted discussion</td>
</tr>
<tr>
<td>InDesign computer software demonstration</td>
</tr>
<tr>
<td>Blackboard</td>
</tr>
</tbody>
</table>

Table 9. Type and frequency of interactive technology used in Social Psych and its context. A total of 18 class sessions were observed. If a technique was used more than once during a class session, it was counted as only 1 occurrence.

<table>
<thead>
<tr>
<th>Interactive Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social/Psychology</strong></td>
</tr>
<tr>
<td><strong>Form of IT</strong></td>
</tr>
<tr>
<td>PowerPoint-assisted discussion</td>
</tr>
<tr>
<td>PowerPoint-embedded videos</td>
</tr>
<tr>
<td>Blackboard</td>
</tr>
</tbody>
</table>
It was expected that each class would contain at least a moderate amount of IT, but would differ in type. Studio 1 was expected to have a greater diversity of IT applications, as the nature of the course includes a variety of class activities and needs. As a lecture based course, Social Psychology was expected to have a greater quantity of IT but limited in variety. Its primary use was expected to be frequently in conjunction with class lecture.

**Studio 1 class.** The observational data showed that the Studio 1 course included four different IT applications including PowerPoint presentations, use of an opaque projector, InDesign computer software and Blackboard online teaching/learning application. These applications occurred on a nearly daily basis during the observational period. Students had the Blackboard application available for their use on a round-the-clock basis, although it was outside the study’s scope to track actual student usage. For the purposes of this study, however, it is included as IT because many class assignments and references are posted there by the instructor for easy access, and it was shown on a projector in the classroom.

**Social Psychology class.** The Social Psychology course included three different IT applications which were occurring on a daily basis. Activities included PowerPoint presentations, videos embedded in PowerPoint presentations and Blackboard access. On several occasions the instructor conducted demonstrations or gave examples from material on the course’s Blackboard site. Observations showed that every class period contained IT except for days on which students or groups were giving presentations. The findings for both courses were generally in line with expectations.

**Question 1.b**

This question asks about the presence and pervasiveness of feedback that occurred in the study’s observed classes. This is because feedback is an identified technique sources suggest millennial students favor (Howe and Strauss 2000, Oblinger, 2003). Specifically, question 1b asks, “Are students provided with feedback from the instructor?” The sub-question (1.b.i) to this query asks, “what form(s) does this feedback take?”
Class session observations were the primary means to obtain this information and frequencies of the events were noted for each class. The researcher noted that some forms of feedback, recorded as ‘unobserved’ in the data, took place outside of class or during a time when she was not present. As they were built into the course, were verified to have occurred, and did provide legitimate forms of instructor feedback, these feedback opportunities are included in this data collection. Course syllabi, found in appendices A and B, supported the likely occurrence of these activities.

**Studio 1 class.** Figure 2 shows the forms that instructor feedback took in Studio 1. During the ten week observation period, nineteen occurrences of feedback were observed. These nineteen instances of feedback took place within eighteen class sessions. On several occasions more than one instance of feedback took place during a single class session. The quantities of different forms the feedback took are described in figure 2. Here, “extended grade sheets” refers to hand-written grade sheets for class projects given to each student by the instructor. The instructor and teaching assistant worked together to give students an in-depth analysis of their project in addition to their letter grade. Further, “private in-class meeting” differs from an individual desk critique in that in this activity the instructor pulled each student aside individually to give project critique rather than moving about in the classroom from desk to desk as in individual desk critiques.

**Social Psychology class.** Figure 3 shows the forms that instructor feedback took in Social Psychology. During the ten week observation period, nine occurrences of feedback were observed. The quantities of different forms the feedback took are described in figure 3. Figure 3 includes IGA activities which were “Individual and Group Assessments”. These were class assignments in which students took a quiz on class material alone and then with a group. Students were given an individual as well as a group grade for IGA assignments.
Figure 2. Forms learner feedback took in Studio 1. Nineteen total feedback activities were observed over 18 class observations, and the proportion of each is reported as a percentage of the total observed here. *A portion of this activity was unobserved.

Figure 3. Forms learner feedback took in Social Psych. Nine total feedback activities were observed. *A portion of this activity was unobserved.

It was expected that Studio 1 would provide more instructor feedback than Social Psychology as Studio 1 generally involves more one-on-one contact with the instructor on a regular basis while Social Psychology is primarily a lecture class. Further, the Studio 1 class had a graduate teaching assistant (TA). It was
expected that the additional instructor would allow for more individual attention to the students in Studio 1. Social Psychology also had twice the number of students as Studio 1, so it was expected that it would be more difficult for that instructor to give feedback equal in quantity and quality to that of the Studio 1 instructor.

The data supported these expectations. In Studio 1 the TA was able to conduct desk critiques along with the instructor, creating a smaller actual student-teacher ratio and allowing a greater number of students to gain individual feedback during each class meeting. Studio 1 also provided the students with extended grade sheets with elaborate project comments and, on one occasion, individual in-class meetings with the instructor which were more private than individual desk critiques. As expected, Studio 1 had more feedback to offer relative to the quantity and nature of the course’s assignments than Social Psychology. Studio 1, having more hands-on assignments by nature, generated projects which required more than a letter or number grade than did assignments typical to a lecture-based class such as Social Psychology. Further, as depicted in Figures 2 and 3, feedback opportunities in Social Psychology were more often related to group projects or assignments rather than individual critique as seen in Studio 1.

**Question 1.c**

Question 1.c asks about the presence of peer evaluation. The sub-question, 1.c.i, asks how is peer evaluation applied within the class? This question is pertinent to the study as peer evaluation, like feedback, is identified by education sources as a millennial-preferred learning activity.

Class periods for both courses were observed to obtain this information. Peer activities were recorded for Studio 1 and Social Psychology separately and tabulated with frequencies in Tables 10 and 11.

It was expected that while Studio 1 might use peer evaluation techniques, Social Psychology would not. Studio 1 was expected to contain a small to moderate amount of peer evaluation. This was because while projects are usually individual, students are always welcome to offer critique to their peers.
during project presentations. Social Psychology is a lecture-based class with fewer assigned projects than Studio 1. Therefore, it is logical to assume that there would be fewer occasions where peer evaluation techniques would be appropriate in Social Psychology, if at all.

**Studio 1 class.** The actual findings showed Studio 1 had more instances of peer evaluation than expected. The total number of instances over the ten week, eighteen class, observation period, was fifteen. Further, five different varieties of peer evaluation were observed, which was more than was expected, given that it was assumed peer evaluation would likely only take place during project presentations. The findings are listed in Table 10. For the paired in-class activities and peer critiques, the instructor paired students together either deliberately or randomly. Impromptu in-class collaboration involved students grouping together on their own to work on their projects or brainstorm. Peer critique during presentations was an open forum format where students were encouraged to comment and critique at will. Students were not required to comment on the work of their peers but all students received comments from their peers. It was observed that a small group of students provided the majority of the critique comments while other students did not speak at all.

**Table 10.** Type and number of peer evaluation techniques used in Studio 1 over a ten week, eighteen class period observation period.

<table>
<thead>
<tr>
<th>Peer Evaluation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Studio 1</strong></td>
<td>2</td>
</tr>
<tr>
<td>Small group discussion</td>
<td>2</td>
</tr>
<tr>
<td>Impromptu in-class collaboration</td>
<td>5</td>
</tr>
<tr>
<td>Evaluation during presentations</td>
<td>4</td>
</tr>
<tr>
<td>Paired in-class activities</td>
<td>2</td>
</tr>
<tr>
<td>Paired in-class peer critique</td>
<td>2</td>
</tr>
</tbody>
</table>
**Social Psychology class.** The findings also showed that Social Psychology contained two instances of peer evaluation. The peer evaluation took place in conjunction with a group project where team members evaluated each other as part of their grade for the project. The researcher was not present when the evaluations were completed; however, the syllabus supported that the activities did occur. The other instance involved an anonymous peer critique in which the students formed groups and gave anonymous written comments to randomly selected projects from class members. Peer comments the students received were made a part of their grades and were returned to them with the instructor’s grade for their own reflection.

**Table 11.** Type and number of peer evaluation in Social Psych over a ten week, eighteen class session observation period. *(This activity was not observed by the researcher.)*

<table>
<thead>
<tr>
<th>Peer Evaluation</th>
<th>Social Psych</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group project team evaluation</td>
<td>1*</td>
</tr>
<tr>
<td>Written anonymous peer critique</td>
<td>1</td>
</tr>
</tbody>
</table>

**Question 1.d**

Much like peer evaluation and feedback, team learning opportunities are also identified as millennial-preferred in chapter 3. Therefore, question 1.d asks if team projects were used. The sub-question, 1.d.i, seeks to understand the nature of this team learning.

Classes were observed by the researcher to obtain this information. It was expected that a moderate amount of team or group projects would be utilized in each class. This is because the nature of the interior design field often
dictates that professionals work as teams and it is assumed that instructors would utilize group work to prepare students for this reality. In fact, Standard 1 set forth by the Council for Interior Design Accreditation Program (CIDA) states that “curriculum structure” must include teaching and learning methods that incorporate “the experience of team approaches to design solutions” (Council for Interior Design Accreditation Program Standards, p. II.8).

**Studio 1 class.** Observations revealed that in Studio 1 two different types of team projects were used. The students were assigned one team project that required work to be done outside of class. On five other occasions the students were assigned in-class team activities. For all of the projects the instructor paired team members together.

**Social Psychology class.** For Social Psychology two types of team projects were observed. The first type of team activity observed was an IGA, or individual and group assignment, part of a team-based learning approach. For these team-based activities, students were assigned a reading to be read prior to class. The goal of this type of assignment is to put more of the responsibility for preparing for class on the students (Michaelsen, Knight and Fink, 2002). Once in class, group members answered questions on a quiz individually and then together with their team for an additional component to their grade. Students received both the individual grade and the team grade. Team grades are typically higher as students can call on the expertise and knowledge of team members. Four IGAs were assigned over the course of the semester. Students were assembled into teams of 5-6 students by the instructor for these assignments and remained with the same group the entire semester. The second type of team activity came later in the observation period when the preexisting teams were assigned a group sustainability project that was formally presented to the class. For this project the students were allowed on two observed occasions to work on their project in class in addition to the time it would require outside of class.

**Question 1.e**
As identified by research in Chapter 3, interactive learning is also a millennial-preferred strategy. For this reason, question 1.e asks, “are interactive or hands-on learning techniques being used”? The sub-question, 1.e.i, seeks to determine the nature of these activities.

For the purposes of this study, and in accord with research presented in Chapter 3, active learning is defined as any time students are actively interacting with the class material. Active learning, as described in Chapter 3, refers to actively engaging students with their learning material in order to establish richer, longer lasting connections to what they have learned. Examples of hands-on or active learning for this study include a number of activities spanning from students literally using their hands to having small group discussions in class. Activities are such that students are not merely hearing the information presented in class or reading it from the course material, but further interacting with the material in a less formal but more engaging way. Class activities not classified as interactive or hands-on are techniques which are primarily one-way communications, such as lecture where students are only listening to the material.

Both courses were observed over a ten week period to determine the presence and frequency of hands-on learning techniques. Hands-on activities were recorded any time students were interacting with their course work in an active, engaging manner that moved beyond passive listening or watching a PowerPoint presentation.

It was expected that Studio 1 would contain more hands-on activities than Social Psych because Social Psychology was lecture-based and expected to have less available opportunities for activities other than lecture. Studio 1 was a project generating class and was therefore expected to include more hands-on activities by necessity.

**Studio 1 class.** Actual findings showed that Studio 1 in fact included substantial amounts of hands-on activities in the course. As Figure 4 shows, over the ten week observation period which covered 18 class periods, students had a total of 21 hands-on learning opportunities. It is possible that more than
one hands-on activity could occur in the same class period. Five different types of hands-on activities were observed where students were interacting with their learning material either alone or in a small group. These activities ranged in time span from a few minutes for a hands-on demonstration to the entire class period for model building. Figure 4 shows that students had an equal number of in-class lab time and small group discussion opportunities which on several occasions accounted for students working on their projects in class. Feedback opportunities coincided with lab time in Studio 1 as this was the time the instructor is available to move about the class and provide the students with individual desk critique. It was observed that hands-on activities were often accompanied by same-day instructor feedback. Figure 4 shows the type and frequency of hands-on activities observed in Studio 1.

![Hands-on Activities in Studio 1](chart.png)

**Figure 4.** Type and frequency of hands-on activities observed in Studio 1. Activities were recorded by type and may have occurred during the same class period.

**Social Psychology class.** Findings for Social Psychology reveal that although it is primarily a lecture-based class, the instructor made room in the course for hands-on activities. There were significantly fewer occasions of hands-on activities than were observed in Studio 1 as expected, but in total eight hands-on activities were observed in Social Psychology. In addition to the eight observed instances of hands-on activities, several assignments (as seen on the
syllabus) which were to be completed outside of class time also required hands-on activity of the students. Activities completed outside of class were not included in the data report below because they took place outside of the observation place/period. Three types of hands-on activities were observed during class time and were classified as such because they were opportunities for students to interact with their learning material in an active, engaging way. Figure 5 shows these three types of hands-on activities observed in Social Psychology as well as the number of times each activity was observed. In-class lab time refers to time during class the instructor allowed students to work on their group projects. Small group discussions were instances where students were grouped together to discuss class material. The personality test occurred in the beginning of the semester to help the students identify traits about themselves and their classmates in an effort to foster stronger group collaboration.

![Bar Chart]

**Figure 5.** Types and frequencies of hands-on activities in Social Psych. Activities were recorded by type and may have occurred during the same class period.

**Question 3**
Question 3 asks, “are millennial-preferred techniques happening with more frequency in the studio class than the non-studio class as predicted?” This question is relevant to the study because as the two courses are different in nature, Studio 1 was expected to have more millennial-preferred learning activities than Social Psychology. The nature of each course prompted this expectation. Studio 1 is a project-generating class while Social Psychology is a lecture-based class; therefore, Studio 1 was expected to offer significantly more millennial-preferred learning opportunities than Social Psychology.

The study’s purpose is not to make rulings about a course’s worth based on the number of millennial techniques, but simply to observe the frequency by which various course types may be naturally inclined to include these types of techniques.

To make this determination, data gathered by observation from each class was compared by frequency side by side. Total occurrences of each millennial-preferred technique are listed by category and compared in Figure 6.

The actual findings showed that while overall Studio 1 utilized more millennial-preferred techniques in general, Social Psychology did utilize more team projects and IT than Studio 1. This was unexpected, as it was assumed that by its nature a lecture based class would include fewer millennial-preferred techniques in all categories. Figure 6 shows the class comparisons of each millennial-associated activity. Studio 1 clearly surpasses Social Psychology in number of hands-on activities and feedback opportunities as expected. The activity with the largest disparity was peer evaluation.

While questions 1 through 3 used the researcher’s observations to determine the presence and frequency of activities that were occurring in the study’s interior design courses, the study’s questions 4 and 5 look to student responses to understand learner perceptions of instructional techniques used in these classes.
Figure 6. Comparison of the frequency of millennial-preferred instructional techniques in Studio 1 and Social Psychology classes.

Question 4

As the purpose of this study is to understand student learning preferences, it is important to obtain student perceptions of the activities included in their classes. Therefore, question 4 addresses this information broadly by asking, “how are millennial learners in these classes reacting to the inclusion of various instructional techniques?” A variety of sub-questions helped answer this question:

a. “Millennial-preferred” techniques (Instructional techniques predicted to be helpful to millennial students):
   i. Did millennial participants feel the techniques are helpful?
   ii. What techniques, if any, do interior design millennial students identify as least helpful?
   iii. What quantites, if any, of interactive technology do interior design millennial students prefer in studio and non-studio classes?
iv. Do students respond favorably to the amount and type of feedback they receive from the instructor?

For question 4, students completed four questionnaires that asked if they found certain identified class instructional techniques helpful. In Studio 1 a total of nineteen students were asked to respond to questionnaires. In Social Psych a total of forty-two students were given questionnaires. As participation in the study was voluntary, students did not respond to every question or even every questionnaire in some cases. Therefore, the number of students responding varies from questionnaire to questionnaire. The number of responses for each questionnaire for each class is summarized in Table 12. Missing data is not interpolated, and tables convey only that information that was actually gathered.

Table 12. Number of students who responded to questionnaires in selected classes.

<table>
<thead>
<tr>
<th>(N)</th>
<th>Studio 1</th>
<th>Social/Psych</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>19</td>
<td>42</td>
</tr>
<tr>
<td>Q2</td>
<td>13</td>
<td>38</td>
</tr>
<tr>
<td>Q3</td>
<td>13</td>
<td>27</td>
</tr>
<tr>
<td>Q4</td>
<td>14</td>
<td>37</td>
</tr>
<tr>
<td>Total responding/possible</td>
<td>59/76</td>
<td>144/168</td>
</tr>
</tbody>
</table>

Participants were given three questionnaires which asked them to respond to the instructional techniques they had experienced in their class by means of a likert scale, rating their answers from strongly agree to strongly disagree. Five choices permitted students to choose the number 3 'neutral' choice if they were
indifferent to the helpfulness of the technique. Each questionnaire asked students to respond to three instructional techniques. A fourth final questionnaire used a free response format where students could respond in any way they chose. Some students responded with minimal answers or no answers at all while others elaborated greatly on their response. The questionnaire template for the first three administrations is shown in appendices C, D, and E for Studio 1 and G, H, and I for Social Psychology. The forth questionnaire template is shown in appendix F for Studio 1 and J for Social Psychology.

These four questionnaires were distributed in the Social Psychology class and the Studio I class. The questionnaire distribution was timed so that it occurred soon after an instructional technique for students to have recall about their attitude concerning its use (usually within 8 days of the instructional technique’s use). Questionnaires were planned in coordination with each course’s syllabus and schedule and specifically targeted a variety of instructional techniques and activities so as to cover as many potential techniques as possible.

These questionnaires asked students to respond to the use of millennial-preferred and traditional instructional techniques in order to determine their attitudes towards a variety of activities. Figures 7 and 8 summarize participants’ responses to the statement, “I felt that this instructional technique was an effective way for me to learn this content” for a variety of learning techniques. By quizzing participants about both millennial and traditional techniques, the intent was to avoid predisposing them to respond positively only to the millennial-preferred techniques. The responses are collapsed over the first three administrations of the questionnaire for each class and summarized in Figures 7 and 8 as a general response to question 4. This is helpful to see overall tendencies for participant responses in each class. In Figure 8 several of the techniques repeat because these techniques were duplicated on two different questionnaires in Social Psychology. Some variability was observed in response on the same technique. For example, the two lectures in Figure 8 were viewed with varying levels of enthusiasm, as were the two group projects.
**Figure 7.** Participant degree of agreement to the statement “I felt that this instructional technique was an effective way for me to learn this content” in Studio 1 over 3 questionnaire administrations.
Figure 8. Participant degree of agreement to the statement “I felt that this instructional technique was an effective way for me to learn this content” in Social Psychology over 3 questionnaire administrations.
4a. “Millennial-preferred” techniques (Instructional techniques predicted to be helpful to millennial students):

   i. Did millennial participants feel the techniques are helpful?
   ii. What techniques, if any, do interior design millennial students identify as least helpful?
   iii. What quantities, if any, of interactive technology do interior design millennial students prefer in studio and non-studio classes?
   iv. Do students respond favorably to the amount and type of feedback they receive from the instructor?

The first set of sub-questions, 4.a.1-iv, is in response to millennial-preferred techniques, or instructional techniques research suggests millennial students will prefer. The second sub-question, question 4.b.i, is in response to traditional instructional techniques, or techniques not specifically predicted to help millennial students.

**Question 4.a.i**

As the purpose here is to determine student learning preferences in selected interior design classes, learner attitudes concerning ‘millennial’ instructional techniques were examined. For these identified “millennial-preferred” techniques, participants were asked if they felt the techniques were helpful both in the first three questionnaires as well as the fourth free-response questionnaire. Results are separated into charts based on the format of the response. Likert responses are calculated in Figures 9 and 10. Free-response answers are coded and shown in Figure 11, which combines responses for both Studio 1 and Social Psychology.

Figures 9 and 10 show an average of all student responses for each class with the standard deviation. All techniques scored 3.92 or higher on a scale of 5, suggesting that on average participants seem to be pleased with the instructional techniques used in the study’s interior design classes. The least enthusiasm was
expressed for desk critique. Lecture and demonstration revealed the highest variability in participants’ responses, however.

Figure 9 shows the average student preference of instructional techniques in Studio 1 and the variability in each of the participants’ responses for these seven techniques. Preferences were rated on a scale of 1 to 5 where five is the highest rating. A total of nineteen students had the opportunity to respond in Studio 1.

Figure 9 reports on all instructional techniques students were asked to respond to in Studio 1. Some traditional instructional techniques overlap millennial-preferred techniques, as shown in Table 6 repeated below.

**Figure 9.** Preferences for instructional techniques of participants in Studio 1. Likert scale of 1 represents ‘Strongly disagree’ and 5 represents ‘Strongly agree’ in response to the question, “I feel this instructional technique was an effective way for me to learn course material”. Response variability (expressed as standard deviation) is provided next to each technique’s name.
Table 6. This chart translates the activities observed in Studio 1, categorizing them into millennial-preferred and traditional techniques based on the study’s literature review, denoted by an asterisk.

<table>
<thead>
<tr>
<th>Studio 1</th>
<th>Observed technique</th>
<th>Millennial technique</th>
<th>Traditional technique</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graded desk critique</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonstration</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lecture</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group evaluation</td>
<td>*</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Hands-on activity</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presentation w/critique</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructor feedback</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peer evaluation</td>
<td>*</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Model building</td>
<td>*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 10. Student preferences for instructional techniques in Social Psych. Likert scale of 1 represents ‘Strongly disagree’ and 5 represents ‘Strongly agree’ in response to the question, “I feel this instructional technique was an effective way for me to learn course material”. Response variability (expressed as standard deviation) is provided next to each technique’s name.
Figure 10 shows students’ average preference for techniques used in Social Psychology. Preferences are rated on a scale of 1 to 5 where 5 is the highest rating. The total number of students who had the opportunity to respond in Social Psych was forty-two. Table 7 repeated below describes the breakdown of instructional techniques as either millennial-preferred, traditional, or both.

**Table 7.** This chart translates the activities observed in Social Psychology, categorizing them into millennial-preferred and traditional techniques based on the study’s literature review, denoted by an asterisk.

<table>
<thead>
<tr>
<th>Social Psychology</th>
<th>Observed technique</th>
<th>Millennial technique</th>
<th>Traditional technique</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extra credit opportunity</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lecture</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Team-based learning</td>
<td>*</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Group project</td>
<td>*</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Peer review</td>
<td>*</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Lecture</td>
<td></td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Group project</td>
<td>*</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Information technology</td>
<td>*</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Hands-on activity</td>
<td>*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figures 11 and 12 detail coded participant responses to the free-response question, “which of the instructional techniques used in this class were most effective?”. These responses were not prompted by the researcher and thus are not identical for both courses. Students were allowed to write in their responses, and for this reason, the total responses for each class are greater than the total number of respondents. Some students stated they found more than one instructional technique to be helpful. This questionnaire was helpful as it may represent those qualities of instructional techniques that were likely foremost in these respondent’s memory.
Figure 11. Participant feelings about helpfulness of instructional techniques in Studio. 14 participants responded.

Figure 12. Participant feelings about helpfulness of instructional techniques in Social Psychology. 37 participants responded.
Question 4.a.ii

As a follow up question to the techniques participants found most helpful in their interior design classes, question 4.a.ii asks participants what techniques they found least helpful. The researcher determined that it was important to give students the opportunity to express the instructional techniques they disliked as a means of supporting the findings about techniques they preferred. Not every participant listed a technique they found to be least helpful; thus, the numbers are much lower than the data in Figures 11 and 12. In order to obtain this information, participants were asked to write in their response on the free-response (fourth) questionnaire. Study participants’ answers were not prompted by the researcher, and thus may offer a helpful glimpse of those techniques most on the minds of respondents. The data was coded and compiled into a graph for each class in Figures 13 and 14.

**Studio 1 class.** In Studio 1, fourteen participants completed the questionnaire that asked them to identify those instructional techniques they found to be least helpful. Of these fourteen, eight responses (a 57% response rate) listed a response for this question. Participants identified four instructional techniques of peer review, model building, lecture, and group activities as least helpful. Of these, peer review had the highest incidence of being noted as least helpful.
**Figure 13.** Technique students found least helpful in Studio 1. Eight of the fourteen respondents identified a technique as least helpful.

**Social Psychology class.** In Social Psychology, thirty-seven participants completed the questionnaire. Of these, twenty-nine responses (78% response rate) identified instructional techniques they found to be least helpful. Participants were permitted to identify multiple techniques as they saw fit. Response rate here was greater than that of Studio 1. Participants in Social Psychology identified eight instructional techniques as least helpful. Of the identified techniques, lecture far surpassed any other technique with thirteen incidences of being least helpful. Group work was next after lecture in frequency with six incidences, which itself was higher than the other identified techniques.
Figure 14. Technique students found to be least helpful in Social Psychology. Of the thirty-seven respondents, twenty-nine identified techniques deemed least helpful.

Question 4.a.iii

After the study’s participants were polled regarding their general attitudes toward instructional techniques used in their interior design classes, respondents were asked specifically about the millennial-preferred technique information technology. The study question 4.a.iii specifically targeted the quantity of information technology participants preferred.

To answer this question, class observation was used to calculate how many times information technology was used during the eighteen observed classes. Information technology was observed fifteen times in Studio 1 and twenty times in Social Psychology. More than one incidence occurred in one class period on several occasions.

With the presence of information technology use confirmed by observation, participants were asked to remark on their attitudes toward the
amount of information technology used in the two classes throughout the semester. This was done using the fourth questionnaire, which was a free response format. This final questionnaire was administered at the end of the semester. The observation period had ended previously so students had the opportunity to reflect on their experiences throughout the semester, to include incidences that occurred outside the observation period and not observed by the researcher.

**Studio 1 class.** As noted in Table 6 above, four forms of information technology were observed in Studio 1. Those activities were PowerPoint aided lecture, use of an opaque overhead projector for demonstrations and the computer software program, INDesign. The fourth type of information technology used was the participants’ access to the “Blackboard” online teaching and learning site. The frequency of participant use of the “Blackboard” site could not be tracked as it could be used outside of class, but was noted as information.

![Student IT preference in Studio](image)

**Figure 15.** Student preference for the frequency of use of information technology in Studio 1.
technology for the purposes of generating a thorough profile of instruction strategies for the class. When participants reflected on the fifteen times IT was used in Studio I class, they most frequently noted preference for the same amount of IT or more to be used in Studio 1. Figure 14 details these findings.

**Social Psychology class.** As noted in Table 7, three types of information technology were observed in Social Psychology. These activities were PowerPoint assisted discussion/lecture, PowerPoint imbedded videos, and “Blackboard” online teaching/learning site. “Blackboard” is the same application for Social Psychology as for Studio 1. Again, it was not feasible to track participants’ use of “Blackboard” outside of class, but it is noted as part of the observed information technology for the purposes of this study. Figure 15 shows that when participants reflected on the twenty incidences of information technology observed in Social Psychology, they remarked overwhelmingly that they would have preferred the same or more IT in their class.

![Student IT preference in Social Psychology](image)

**Figure 16.** Student preference for information technology in Social Psychology.
Question 4.a.iv

It is important to look beyond the participants’ general preferences to those instructional techniques research suggests millennials prefer. One such technique is instructor feedback. Therefore question 4.a.iv asks if participants respond favorably to the amount and type of feedback they receive from their instructor.

To answer this question, class observation was used to count the occurrences of instructor feedback in each class. In Studio 1, feedback was observed nineteen times, as shown in Figure 2 above. In Social Psychology, feedback was observed nine times as detailed in Figure 3 above. If more than one incidence of feedback occurred during the same class period, these events were counted separately. Participants were asked to respond to the amount of feedback present in their class. The vehicle of these responses was questionnaire #4. This questionnaire was a write-in response format and participants were not prompted by the researcher.

**Studio 1 class.** Participants reported that they would prefer the same amount of feedback or more in Studio 1. No participants reported they would prefer less feedback. Fourteen study participants answered questionnaire 4 in Studio 1. Figure 16 shows the distribution of responses.

![Amount of Feedback preferred in Studio](image)

**Figure 17.** Amount of instructor feedback preferred by participants in Studio 1.
**Social Psychology class.** Participants reported that they would prefer the same amount of feedback or more in Social Psychology. No participants reported they would prefer less feedback. Thirty-seven study participants answered questionnaire 4 in Social Psychology. Figure 17 shows the distribution of responses.

![Graph](image)

**Figure 18.** Amount of instructor feedback preferred by participants in Social Psychology.

**Question 4.b.i**

The first part of question 4 specifically addressed millennial-preferred instructional techniques. The second part, question 4.b.i, asks if interior design millennial learners perceive traditional techniques, or those that are not specifically associated with millennial learners, to be less helpful than what this study’s literature review sources have attributed to millennial-preferred techniques. That is, it is important to examine not only what millennial learners are *supposed* to prefer, but also those instructional techniques they *actually do* prefer. This helps determine one of the main objectives of this study-- are interior
design millennial learner preferences are in line with general millennial preferences?

Tables 6 and 7 above outline how observed millennial-preferred instructional techniques overlap with traditional instructional techniques in the study’s classes. This means that several observed activities were both millennial-preferred and traditional instructional techniques. This information was repeated in Figures 9 and 10 which show average participant preferences for instructional techniques in Studio 1 and Social Psychology respectively. In Figures 9 and 10, techniques that are highlighted in yellow are both millennial-preferred and traditional.

**Studio 1 class.** In Studio 1, three of the nine observed techniques were both traditional and millennial-preferred. The three overlapping techniques fell in the middle range for preference. The total difference between the highest preferred and lowest preferred techniques was .85, showing little difference between student preferences. The margins between millennial-preferred and traditional techniques were very small. Therefore, the answer to this question for Studio 1 is likely no, millennial learners in this study do not perceive traditional instructional techniques to be less helpful than millennial-preferred techniques.
Figure 9. Preferences for instructional techniques of participants in Studio 1. Likert scale of 1 represents ‘Strongly disagree’ and 5 represents ‘Strongly agree’ in response to the question, “I feel this instructional technique was an effective way for me to learn course material”. Response variability (expressed as standard deviation) is provided next to each technique’s name.

Figure 10. Student preferences for instructional techniques in Social Psych. Likert scale of 1 represents 'Strongly disagree' and 5 represents 'Strongly agree' in response to the question, “I feel this instructional technique was an effective way for me to learn course material”. Response variability (expressed as standard deviation) is provided next to each technique’s name.
Social Psychology class. In Social Psychology, seven of the nine observed techniques were both traditional and millennial-preferred techniques. These seven techniques took up the entire span of preferences. The total difference between the highest preferred and lowest preferred techniques was 1.09 on a total scale of 5, showing little difference between student preferences. Like in Studio 1, the margins between millennial-preferred and traditional techniques were very small. Therefore, the answer to this question for Social Psychology is likely no, millennial learners in this study do not perceive traditional instructional techniques to be less helpful than millennial-preferred techniques.

Question 5

Another way to understand perceptions of the millennial learner is to simply ask them to put it in their own words. Question 5 of this study asked millennial learner participants to identify improvements the instructor could make to more effectively communicate course material. Participants were given the chance to respond with suggestions on every questionnaire, including the free response. They were asked again to give suggestions in their final interviews. This is relevant to the study in that this study seeks to specifically identify millennial-learner preferences of interior design students. Gathering their perceptions and suggestions can help create a better model of their learning preferences if their ideas are included in addition to those techniques research has suggested they will prefer. Interior design students are very creative and it is therefore assumed by the researcher that participants are capable of providing helpful insight about their learning preferences or possibly suggesting a new approach to an old topic.

Questionnaires 1 through 3 allowed a space for participants to write in their suggestions in response to instructional techniques included on each questionnaire. Those responses, although limited, were coded and a complete list of these responses is provided in appendices C through E and G through I. Participants generally did not make broad statements about millennial-preferred
techniques as a whole. Rather, many of the write-in responses were singular in nature, and related specifically to the assignment covered under the instructional technique addressed in the questionnaire.

Study participants were also given a chance to write in suggestions on questionnaire 4. Unlike the previous questionnaires, questionnaire 4 asked participants to respond to their perceptions of the entire course, not just a few selected instructional techniques. Responses to this question were much less varied than those of the first three questionnaires. There were also fewer suggestions from each class of participants. Figures 18 and 19 show the responses to participant suggestions for improved instructional techniques in Studio 1 and Social Psychology.

**Studio 1 Class**

Although in questionnaires 1 through 3 participants generally addressed specific class activities rather than general millennial-preferred techniques, an overarching theme did emerge among responses. Of the 36 responses provided over 3 questionnaires, 12 of those responses suggested “more examples” would improve instructional techniques in Studio 1. Thirty-three percent of responses were dedicated to this suggestion, which was the only consistent response among participants.

Responses for questionnaire 4 were much more limited. Perhaps this is due to the fact that questionnaire 4 referred to students’ overall perceptions of the class and it was administered at the end of the semester. Of the fourteen respondents for questionnaire 4, only five comments were provided that indicated suggestions for improvement in Studio 1. Two of these five suggestions were also dedicated to “more examples”. This 40% response rate is relatively in line with the 33% response rate found in the first three questionnaires. Participant suggestions are listed below in Figure 19.
Figure 19. Suggestions by participants for improvement in Studio 1.

Social Psychology Class

Although in questionnaires 1 through 3 participants generally addressed specific class activities rather than general millennial-preferred techniques, an overarching theme did emerge among responses. Of the 66 responses provided in 3 questionnaires, 18 of those responses suggested “more interactivity” would improve instructional techniques in Social Psychology. Participant suggestions for interactivity included lecture notes with a fill-in-the-blank format and more class discussion during the lecture. Twenty-seven percent of responses were dedicated to this suggestion, which was the only consistent response among participants.

Responses with suggestions for instructional techniques were much clearer in questionnaire 4 as compared to the first three questionnaires. For thirty-seven questionnaires, fifteen suggestions were listed as improvements for Social Psychology. Those fifteen suggestions were distributed over 6 different improvements. The suggestions for improvement are shown in Figure 19.
Several suggestions are similar in frequency of response and thus there is no clear leader amongst the group.

**Figure 20.** Suggestions by participants for improvement in Social Psychology.

**Summary**

Findings from this chapter have confirmed the presence of millennial-preferred and traditional instructional techniques in the study’s interior design classes. Both of the study’s courses had at least one incidence of each pre-identified millennial-preferred technique during the observation period. Study participants responded favorably to the inclusion of these techniques according to the data presented in this chapter.

It has been difficult, however, to make a clear distinction between millennial-preferred and traditional instructional techniques in this study. Many of these techniques overlap. Perhaps the literature presented in chapter 2 does not account for students’ (and possibly instructors’) misinterpretation of available
instructional techniques. That is, it is possible that researchers whose works are cited in chapter two believe that millennial techniques and traditional techniques typically differ. Conversely, it is possible that many ‘traditional’ techniques such as lecture and group evaluation may often satisfy learning preferences of millennial students, as this study’s results support. In order to recognize this overlap in instructional techniques, tables 6 and 7 show the many activities that were observed in each class. Students also responded to each of these techniques on questionnaires. Tables 6 and 7 show that several techniques in Studio 1, and in most techniques in Social Psychology were both millennial-preferred and traditional. It would seem that this degree of overlap diminishes the distinction between the use of millennial-preferred and traditional instructional techniques in these classes to some degree. On this note, it is possible that the term ‘lecture class’ seems to have become an over-generalized term and will be addressed in more depth in chapter 5.

Participants also responded favorably to the presence and amount of both instructor feedback and information technology. Most participants reported they desired the same quantity or more instructor feedback. They reported in Studio 1 that desk critique was the most helpful instructional technique while in Social Psychology participants reported evenly that lecture and group activities were the most helpful. These findings as well as emergent themes from this data will be analyzed in chapter 5. Suggestions will also be given for further research.
CHAPTER 5

CONCLUSIONS

Introduction

This chapter provides an analysis of the information presented in chapter 4 and makes suggestions for future research. Over the course of ten weeks of observations and a series of interviews with study participants, several themes emerged and certain millennial traits became evident in the study’s participants’ responses. This chapter will discuss these themes and traits as they relate to general millennial-learner expectations. The small population of interior design students this study includes does not necessarily account for the attitudes for the greater population of interior design students at Florida State University or other educational institutions. However, it is the hope of the researcher that the results of this study may provide insight to similar groups of students at other institutions.

Intent of the Study

The intent of this study was to examine student learning preferences of millennial interior design students. This study was meant to be a snapshot of the learning exchange that takes place within an interior design curriculum. In order to achieve this goal, the study was conducted with two classes of sophomore-level interior design students at Florida State University. Sophomores were chosen because they had just been accepted into the interior design program and thus offered fresh perspectives of the courses and instructors. Participants had not previously taken a course from either instructor. Two courses, Studio 1 and Social Psychology (a non-studio course), were observed over the span of ten weeks and data collection followed a triangulated pattern to capture the attitudes and preferences of the study's millennial learners.

Key Findings
**Emergent Millennial Traits**

It was expected that the participants in the study would exhibit characteristics common to the millennial generation as defined in chapter 3. Not until the observation period began did it become clear which of these traits the sample group would possess. Several millennial traits from the Howe and Strauss model began to emerge. Table 13 outlines this author's conclusions about the study's respondents when considered with the Howe and Strauss framework. Comments in Table 13 were taken from observation sheets.

**Table 13.** Emergent millennial traits as captured through observations.

<table>
<thead>
<tr>
<th>Millennial Trait</th>
<th>Class Observed</th>
<th>Date Observed</th>
<th>Comment from Observation Check List</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preference for hands-on and interactivity</td>
<td>Studio 1</td>
<td>10/5/08</td>
<td>Desk critique on model: students were very excited about working in 3-D. They seem much more actively engaged when speaking to the instructor about their work as compared to when they spoke about drawings.</td>
</tr>
<tr>
<td>Feeling of specialness and sheltered background</td>
<td>Social Psychology</td>
<td>Multiple occasions</td>
<td>Students were very eager to share about personal experiences during class discussion. Most examples they gave dealt with their own family.</td>
</tr>
<tr>
<td>Feeling of specialness and family-oriented/conventional nature</td>
<td>Social Psychology</td>
<td>9/22/08</td>
<td>Influence map* assignment: projects were all about themselves. Most everyone put something in their project about family, support and values.</td>
</tr>
<tr>
<td>Patriotic and philanthropic tendencies</td>
<td>Social Psychology</td>
<td>10/13/08</td>
<td>LEED Video: students asked many questions and seemed very interested in sustainability.</td>
</tr>
<tr>
<td>Patriotic and philanthropic tendencies</td>
<td>Social Psychology</td>
<td>10/15/08</td>
<td>McDonough and Braungard Video: students had lots of opinions; they were concerned.</td>
</tr>
</tbody>
</table>
*Influence map was a self-awareness assignment in Social Psychology in which students created a graphical representation of themselves using a variety of mediums.

**Perceptions Concerning Participant Responses**

Information from the early research of this thesis was presented at the Interior Design Educator’s Council South Region Conference prior to its completion. Educators generally seemed very interested and even concerned about how to reach millennial students. The topic of millennials in interior design education stimulated ample discussion among participating educators. It is the author’s hope that this study might in fact offer some reassurance that the natural procedures and teaching strategies of interior design classes inherently engage these students in preferred ways of learning.

**Inclusion of Millennial-Preferred Techniques.**

In addition to the emergent millennial traits listed in Table 13, other key findings emerged from observations. The first surprising discovery was that millennial-preferred techniques were occurring in selected classes much more frequently than expected. As a student of the interior design discipline, this author should have been able to foresee this outcome, but even the numbers weren’t expected to be so high. Nor was it expected that so many traditional techniques would overlap with millennial-preferred techniques. In Social Psychology, nearly every instructional technique was both traditional and millennial-preferred. This was partly due to the instructor’s dedication to a variety of delivery methods for her lecture material. The students responded very favorably to most of the instructional methods as well for both courses. Average student responses on the likert scale were well above average (neutral). Even with the standard deviation taken into account, student perceptions of both the millennial-preferred techniques as well as the traditional techniques were very high.

The only technique that had a questionable favorability was the extra credit opportunities in Social Psychology. Students didn’t respond as favorably
to this technique as research would have led me to believe they would. Research presented in chapter 2 about the sense of entitlement and expectations of customer service millennials might expect led me to expect that millennial participants would greatly value a chance for extra credit. However, as it turned out, not only did they want extra credit, but they also wanted it on their own terms. The overwhelming write-in response about the extra credit was that it should have pertained to course, not general current events information that did not directly pertain to the class. In this author’s opinion, the information in fact did relate well to Social Psychology—and pointed out that designers need to be aware of how their actions and decisions affect the world around them. Despite the fact that the students were displeased with the extra credit (unlike millennial stereotypes), they conformed to that stereotype by being so particular regarding how they wanted the extra points to be offered to them.

Response to millennial-preferred techniques. Questionnaire 4 and interviews provided a forum for students to voice their response about techniques used in their classes. Table 14 outlines several responses to the write in questions, “Which of the instructional techniques used in this class were most effective? What made them stand out?” Responses are included from Studio 1 as well as Social Psychology. Participant responses are for techniques they identified as most helpful; therefore, no negative comments are reported here. This table is helpful for the justification of the inclusion of millennial-preferred instructional techniques in one’s interior design classes.
Table 14. Quotes from study participants about instructional techniques.

<table>
<thead>
<tr>
<th>Millennial-Preferred Technique</th>
<th>Participant Response to Millennial-Preferred Technique</th>
</tr>
</thead>
</table>
| Feedback                       | “I feel we had just enough, but there’s no such thing as too much!”  
                                | “The individual desk critique allowed me to receive immediate feedback and answer any of my questions.” |
| IT                             | “I’m a visual learner so they (videos in PowerPoint presentation) relate.”  
                                | “I learned so much from the videos- I would have liked more.” |
| Hands-on                       | “The model-building helped with the design because we could actually see it laid out in 3D.”  
                                | “(It) just helped me understand better.” |
| Peer review                    | “I liked getting feedback to reassure myself that I was on the right track.” |
| Team-based learning            | “We were able (in our groups) to look more in-depth at topics and hear other views.”  
                                | “You got several chances to learn material. It’s easier to get info from classmates if you don’t know.” |

Suggestions for interior design educators. This study is only a small population of the courses offered at this institution and does not take into account the many interior design programs around the country. It is meant to serve as a guideline for other classes which may exhibit similar characteristics to the observed classes. Based on the results of this limited study, the author suggests
that the following are good rules of thumb for interior design curricula serving millennial learners.

- Include a variety of instructional techniques within one course
- Vary course structures within one discipline
- Mix both traditional and millennial-preferred instructional techniques in each course
- Communicate with students in the form of feedback
- Recognize that students prefer to be asked what they prefer

**Interior design millennial differences.** With so many students reporting their satisfaction with the instructional methods used in the study’s classes, it became immediately clear that the study’s participants had the potential to be much more satisfied with their classes than perhaps millennial students in other disciplines might be. Research has suggested that millennials in general will prefer the five techniques this study has focused on (team-based learning, IT, hands-on activities, instructor feedback, peer evaluation). This study observed the inclusion of these techniques as well as several traditional instructional methods, and the students were largely in favor of all of the techniques that were included. While participants at times showed a slight preference for one technique over another, differences were fairly small and imperceptible in most instances.

The findings from this study seem to be at times contrary to the research that has driven the study. This leads this researcher to believe not that the research is in error, but that interior design students are different. At least, it is clear that these interior design courses were more satisfying to their students than other courses research has pointed to. The following are conclusions regarding why this might be the case:

- Interior design courses require both passive and active learning in order to complete projects. For example, while one class might deliver information in lecture format, the next class asks them to build something with their hands. Students must use several skill sets and
methods just to complete one task in many interior design classes, keeping their need for hands-on learning satisfied.

- Interior design students almost always have a studio (project-generating) course which keeps them actively engaged with their work. Studio classes, as seen in this study, can include lecture, model-building, IT, group work, feedback, peer review, etc., which is so diverse students are often engaged in the many activities research suggests they crave.

- Interior design students almost always have a studio course, therefore they do not necessarily need or want as many different activities happening in other classes. One project-generating (and therefore hands-on) class may be enough to keep them busy, leading students to be grateful for the relief of a PowerPoint-assisted lecture. Over-stimulation may burn students out if they experience it in every class.

- Interior design students generally have liberal studies course requirements to fulfill in addition to their interior design classes. Therefore, there will be times outside of the interior design department when these students may be very unsatisfied with their classes. It may be much more difficult to actively engage students in a literature or mathematics course the way a studio course can. When these millennial students return to the department for their interior design classes they may be craving the mental stimulation interior design classes provide. They are in essence predisposed to be content and satisfied with their interior design classes in the context of their entire university curricula.

Reconsideration of Lecture

Another important discovery this study has lead to is the realization that students (including this researcher, as a recent student herself), and perhaps
educators, misunderstand what is meant by the term “lecture” and perhaps unnecessarily dismiss it as a negative tactic. However, McKeachie’s detailed definition of lecture types is worth understanding. McKeachie (2002) distinguishes between “passive lecture”, or “a lecture using few devices to get students to think actively about the content of the lecture” (p. 62) from lectures with ‘additives’. When students are not engaged in their learning, it is easy to get distracted and turned off from that instructional method and this defines the passive lecture. However, not all lectures are created equal. McKeachie writes that “the best advice for maintaining attention is to break up the lecture rather than trying to hold attention for an hour or more” (p.63). He goes continues that instructors should include a variety of activities along with the lecture such as discussion, small-group activities or problem posting to keep students attention during a lecture (2002). In fact, many of McKeachie’s suggested additives to lecture are in line with millennial-preferred techniques.

These lecture additives were used in this study’s Social Psychology class, which thus far has been termed a lecture-based class. Re-classification of the class as something other than lecture-based was at first considered, but upon revisiting the issue, it has been determined by this researcher that a better solution would be to revisit the way interior design educators think of lecture. McKeachie suggests it should be much more than reading from a book, yet students seem to associate this “reading” stigma with it. It is therefore the challenge of interior design educators to make the most out of lecture opportunities. Lecture is often the best way to disseminate certain information and is therefore necessary in many programs. With the addition of activities to keep the students actively engaged, as was done in Social Psychology and as McKeachie suggests, it may be possible to change students’ perceptions of a lecture. This study’s participants were an example of how that is possible.

Suggestions for Further Study
Reflecting on the work that has been undertaken over the past year in service to this thesis study, it is now easy to identify a few areas of research this researcher would like to pursue, or see others pursue.

In an effort to detect statistically significant differences among student preferences, it would be helpful to repeat or expand this study to a larger population of students. With a larger sample size, it would have been possible to conduct an ANOVA statistical test on differences in preferences to see if differences are statistically significant. This study was too small to complete an ANOVA, thus if expanded, more conclusive data may have been discovered.

If this study were repeated or revisited, it would also be interesting to interview each instructor of the participating courses. For example, do instructor perceptions match those of their students concerning their instructional methods? The university offers an instructor evaluation for each course, but it has been my experience that students are reluctant to share as much as they would like in these course evaluations. For this study, several students seemed open about their perceptions of the instructional methods used in their class. Body language and sidebar comments would also suggest candor in the responses to the study’s questionnaires and interviews. To first know what the instructor hypothesized would happen and then compare that with student responses could be an enriching experience for the rookie or veteran instructor.

Another interesting avenue might be to follow up this study by examining those university sponsored course evaluations for this study’s classes. It would be interesting and potentially revealing to compare the responses from university evaluations to what the students wrote in this study. As such, it might offer a commentary on the accuracy and by extension, worth of these official evaluations.

Summary

In conclusion, this study has revealed interesting information both about the study participants as well as the interior design classes it
examined. This researcher has learned that no matter what the stereotype of the millennial learner, interior design is likely a sufficiently unique discipline that its students seem much more satisfied than what research would suggest. This could be attributed to the presence and effect of many factors for which this study does not take into account. That is, the researcher acknowledges that certain variables were unforeseeable and uncontrollable in this case study. Nonetheless, it is pleasing to see such positive responses to instructional techniques used in this study’s courses. When student preferences align with instructional techniques, the stage is set for true learning. This is heart of the matter. The goal of every post-secondary institution is to achieve higher learning. With such satisfied students, this interior design program may be able to achieve that goal.

At the conclusion of this study this researcher found herself of the overwhelming opinion that in interior design education instructors should be singularly focused on students acquiring and retaining knowledge, and not worrying about their generational differences. In this author’s opinion, the nature of this discipline and the skills that need learning will take care of the generational preferences. Interior design educators simply need to keep doing what we are doing. It is the humble opinion of this researcher that the nature of interior design + the talent of the students + the passion of its educators = an enriched learning experience.
APPENDIX A

SYLLABUS FOR SOCIAL PSYCHOLOGY CLASS SHOWING THE INSTRUCTOR’S APPROACH TO THE COURSE, OBJECTIVES, PROJECT OVERVIEWS AND COURSE SCHEDULE.

**Department of Interior Design**

**IND 4601 Social Psychological Aspects of Design**

**Fall, 2008**

<table>
<thead>
<tr>
<th>Class Time</th>
<th>Monday/Wednesday 12:00-1:30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom</td>
<td>228 William Johnston Building</td>
</tr>
<tr>
<td>Instructor</td>
<td>Lisa K. Waxman, Ph.D., Associate Professor</td>
</tr>
<tr>
<td>Office</td>
<td>William Johnson Building, Room 311</td>
</tr>
<tr>
<td>Office Hours</td>
<td>Monday/Wednesdays 9:30-10:30, but please stop by or email to set up an appointment if these times do not work for you.</td>
</tr>
<tr>
<td>Office Phone</td>
<td>644-8326</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:lwaxman@fsu.edu">lwaxman@fsu.edu</a></td>
</tr>
</tbody>
</table>

**COURSE DESCRIPTION**

An exploration of the relationship between humans and their environments through the study of personal and social use of space, proxemics, spatial analysis, and the effects of the environment on human behavior.

**COURSE GOAL**

The information in this course is part of the core interior design curriculum that provides a knowledge base for the student as they proceed into upper level studios in the interior design program. Upon successful completion of this class, students will know how to gather relevant information regarding the social and psychological aspects of design, as well as discuss and incorporate this information into designs that show consideration for the needs of the people who will live, work, and play in those environments.

**LEARNING OBJECTIVES**

- Students will be able to discuss and utilize knowledge regarding the social and psychological aspects of design that impact the users of designed environments.
- Students will be able to access and utilize research on the design of the built environment as it impacts the needs of the user.
- Students will be able to access and utilize research on the design of the built environment as it impacts children, elderly, those with different abilities, and others with special needs.
Students will be able explain the role of the interior designer in creating user-friendly environments meeting a variety of human needs.

Students will be able to explain the role of the interior design in utilizing sustainable (green) design to lessen the burden of design on the environment.

**TEXTBOOKS**


**MY TEACHING PHILOSOPHY for IND 4601**

The topics covered in this class are of great interest to me. I feel it is very important for interior design students to understand that they are designing places that people will inhabit. People will live, work, and play in these spaces, as well as give birth, receive an education, meet new friends, build careers, recover from illness, grow old, and eventually die in the places we design. Our responsibility to the public is huge and should not be taken lightly. We have all experienced spaces that have been well-designed and accommodate our needs at various times in our lives. However, it is likely we can all recall spaces that have been poorly designed and hindered our ability to get a task accomplished, made the experience very unpleasant, or even created a dangerous situation. My hope is that this class will encourage you to approach every design, both in school and after graduation, with that responsibility at the forefront of your mind. I hope you will approach every project always thinking about who will use the space, what their needs will be, and how you can best design to accommodate them. I feel everyone deserves good design and I hope you will leave knowing the impact you can have as a designer.

**CLASSROOM ENVIRONMENT**

Most class sessions will include a lecture with visuals along with class discussion. I feel that class discussion greatly enhances your ability to learn and become engaged with the subject matter. Therefore, I encourage students to add to the discussion and encourage everyone to participate.

**EMAIL CORRESPONDENCE**

Email is a wonderful method for corresponding and students are welcome to email the teacher. I check my email often and try to respond quickly. However, to better understand how email will work for this class, please note some guidelines listed here. I typically respond to email Monday-Friday between 8:00 and 5:00. Also- please make sure to note the class you are taking and be sure to sign your name. Remember, email sent via the university includes only your email address, not your name, (i.e. lwk567@fsu.edu), which makes it hard to identify you. In addition, I prefer that
students discuss concerns regarding grades or class performance in person (unless an emergency makes this impossible). I am happy to set up a time to meet with you.

**BLACKBOARD WEB SITE**

To take advantage of the web supported portion of the class, all students must have an email account through FSU. If you have an existing email address through another provider such as Comcast or AOL, please have your FSU garnet email forwarded to this account (although some non-university email providers block FSU email- so check it out). You should be able to receive email from the course web site and it can only be sent via your FSU email.

The course web site is available through: campus.fsu.edu
You will be asked for your FSU garnet account login and password.

**GRADING STANDARDS AND EVALUATION CRITERIA**

See the Assignment Section of the Blackboard Web page for details and requirements regarding the course assignments.

<table>
<thead>
<tr>
<th>PROJECT</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tests: 3 @ 50 pts. each</td>
<td>150 pts.</td>
</tr>
<tr>
<td>Influence Map</td>
<td>50 pts.</td>
</tr>
<tr>
<td>Individual Assessments: 10 pts. each x 4 (part of IGA)</td>
<td>40 pts</td>
</tr>
<tr>
<td>Group Assessments: 10 pts each x 4 (part of IGA)</td>
<td>40 pts</td>
</tr>
<tr>
<td>Group Presentation- Sustainable Design</td>
<td>50 pts.</td>
</tr>
<tr>
<td>Spatial Awareness Board</td>
<td>50 pts.</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>380 pts.</strong></td>
</tr>
</tbody>
</table>

The **Grading Scale** for the Department of Interior Design is as follows. To calculate your grade, take the total number of points you have earned and divide by the total points possible, and use the scale below.

95 - 100 = A*  
90 - 94 = A-  
87 - 89 = B+  
83 - 86 = B-  
73 - 76 = C  
70 - 72 = C-  
67 - 69 = D+  
63 - 66 = D  
60 - 62 = D-  
Below 60 = F

*i will assign a grade of A for students making a 94 or over.

**CURRENT EVENTS EXTRA CREDIT QUIZZES**

Since this is a social and psychological aspects of design class, I want you to develop a habit of tuning in to what is going on in the world. Therefore, I will occasionally give an extra credit pop quiz at the start of class that will cover events in the news. These events can be anything going on anywhere in the world, and are not necessarily directly design-related. So, be prepared by watching the news, reading the paper, or checking the news online. I try to address events that I have seen covered on TV, in the paper, and in other news venues…basically the bigger news stories. Each quiz is worth 1 point and you may earn up to 10 points extra credit. Since these
quizzes are extra credit, you may not make them up, nor may you take a quiz if you arrive late, after the quiz has been distributed to the class.

**ATTENDANCE**
Attendance is required in this class. Students will be responsible for signing their names to the role sheet.

Each student is allowed two (2) unexcused absences. Following the second absence, a 1/3 of a letter grade reduction off the final grade will result for each additional unexcused absence. Up to 6 absences may be excused with a doctor’s note or other official documentation of an emergency. Students with more than 6 absences will automatically fail the class. Any student arriving more than 15 minutes late is considered absent for that day (although you are still encouraged to come to class).

**ABSENCE ON A TEST DAY**
Students who are absent on the day a test is given will be given a make-up test only if they have a doctor’s note excusing them from class or other official documentation of an emergency.

**LATE ASSIGNMENT POLICY**
All projects and/or papers from any assignment are due at the start of the class period identified as the due date. Late work will receive a letter grade deduction for each day late, calculated from the start of the student’s class period. Projects cannot be turned in over the weekend, and thus an automatic two-letter grade reduction for the weekend will be deducted. Although computer-related problems occasionally occur, there will be no excuses accepted for computer problems…even those beyond your control.

As projects are due at the start of a class period, please note that no further work may be done on a project (minor gluing, rendering, etc.) during the presentation process of other students. Students working on projects during presentations will receive a letter grade reduction on the project.

It is important to note that **ALL PROJECTS** must be turned in to have a passing grade assigned in any interior design course. Students must receive a “C” **or better in all studio courses** in order to move forward in the program.

Students may turn in late assignments by putting them in the mailboxes in the main office or under our office doors. Please note the date and time the late project is turned in or we will assume it was turned in when we find it. If Deb Alexander is available in the main office, please have her verify the time your project was turned in.

**DEPARTMENT POLICIES**
The following are policies that will be observed in all interior design classes. Attendance is required in all classes unless otherwise specified by the instructor. You may be required to drop a class if you do not attend the first class meeting or make prior arrangements with
the instructor. Unless otherwise written in class materials, the grade for the course will be reduced one-third letter grade for each unexcused absence in excess of one week's equivalent class meetings.

Students habitually arriving late, or leaving class early without prior permission, may be counted absent for the class. Information missed due to tardiness or absence is the responsibility of the student. No information will be repeated.

Students are expected to report to class prepared. Any student attending class without completing previous assignments or without the necessary working materials shall be counted absent for the class.

Attendance at the project critiques, practicums, and presentations is required even if they are held outside of the usual class meeting times. But, you must be given at least two weeks notice.

Incompletes will be given only in cases of serious illness or hospitalization (written notification from doctors is required), or in cases of death in the immediate family. It is YOUR responsibility (not the instructor's) to make sure that any incompletes are removed. This must be done NO LATER than the first week of classes of the following semester unless other arrangements have been made between you and the instructor.

Office hours in the main office of Interior Design are 8:00 AM-12:00 Noon-1 PM-3:00 PM. The office also may close early on Friday afternoons, depending on the secretary's schedule. The phone number is 644-1436. Resources and equipment room policies are posted outside the room and must be followed.

NO SMOKING, FOOD, DRINKS, OR PETS IN THE OFFICE OR CLASSROOMS. We love children, but please do not bring them to class or to the computer lab.

**ACADEMIC HONOR CODE**
Students are expected to uphold the Academic Honor Code. The Academic Honor System of The Florida State University is based on the premise that each student has the responsibility to:

1. Uphold the highest standards of academic integrity in the student's own work,
2. Refuse to tolerate violations of academic integrity in the University community, and
   Foster a high sense of integrity and social responsibility on the part of the University community.

**FLORIDA STATE ACADEMIC HONOR POLICY**
The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their
pledge to “...be honest and truthful and...[to] strive for personal and institutional integrity at Florida State University.” (Academic Honor Policy at: http://www.fsu.edu/~dof/honorpolicy.htm

Department of Interior Design addition to FSU Honor Policy: Although all designers are inspired and influenced by the work of other artists and designers; their ideas, concepts and images MUST NOT be directly or recognizably be utilized in student work without written or verbal attribution. Penalties for plagiarism range from failing a course to dismissal from the program and/or the University.

**ADA REQUIREMENTS**

*NOTE: IF THERE IS ANYONE WHO NEEDS AN ACCOMMODATION DUE TO A DISABILITY, PLEASE BRING IT TO THE INSTRUCTOR'S ATTENTION:*

Students with disabilities needing academic accommodations should:

1. Register with and provide documentation to the Student Disability Resource Center (SDRC).
2. Bring a letter to the instructor form the SDRC indicating you need academic accommodations. This should be done within the first week of class. (This syllabus and other class materials are available in alternative format upon request.)

For more information about services available to FSU students with disabilities, contact the Assistant Dean of Students:

sdrc@admin.fsu.edu, Disabled Student Services, (850) 644-9566.
<table>
<thead>
<tr>
<th>Date</th>
<th><strong>Class Lecture &amp; Activity</strong></th>
<th><strong>Reading/Homework</strong></th>
</tr>
</thead>
</table>
| Monday August 25 | Welcome/Introduction/Overview of Course  
Questionnaire | Buy book; check out Blackboard site |
| Wednesday August 27 | Lecture: Overview of Environmental Psychology  
Groups Assignments Announced  
*Influence Map Project Assigned* | Chapters 1 in Kopec |
| Monday September 1 | **No Class**- Labor Day | |
| Wednesday September 3 | Lecture: Foundation Theories of Environmental Psychology  
*Take Keirsey Temperament Test in Class* | Chapter 2 in Kopec |
| Monday September 8 | Lecture: Human Factors Affecting Behavior  
*IGA #1: Chapter 3* | Chapter 3 in Kopec |
| Wednesday September 10 | Lecture: Psychology of Behavior and Human Considerations in Design | Chapter 4 in Kopec |
| Monday September 15 | Lecture: Psychology of Behavior and Human Considerations in Design cont… | Chapter 4 in Kopec |
| Wednesday September 17 | Lecture: Human Perception and Environmental Design & Lighting, Color & Behavior | Chapter 5 in Kopec |
| Monday September 22 | Lecture: Ergonomics and Anthropometric  
*Influence Map Project Due- In-Class Pin-Up*  
*Group Sustainability Projects Assigned* | Course Notes |
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 24</td>
<td>Lecture: Community Environments</td>
<td>Chapter 15 in Kopec</td>
</tr>
<tr>
<td>September 29</td>
<td>Lecture: Third Places</td>
<td>Course Notes</td>
</tr>
<tr>
<td></td>
<td>Lecture: New Urbanism</td>
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<tr>
<td></td>
<td><strong>IGA #2: New Urbanism Article</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Sustainability Presentations Confirmed &amp; Dates Selected</strong></td>
<td></td>
</tr>
<tr>
<td>October 1</td>
<td><strong>Test 1</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Group Meeting Time- Groups should gather after test</em></td>
<td></td>
</tr>
<tr>
<td>October 6</td>
<td>Lecture: Environmental Issues</td>
<td>Chapter 6- Kopec &amp; Cradle to Cradle</td>
</tr>
<tr>
<td>October 8</td>
<td>Lecture: Environmental Issues</td>
<td>Chapter 6- Kopec &amp; Cradle to Crade</td>
</tr>
<tr>
<td>October 13</td>
<td>Lecture: Environmental Issues</td>
<td>Chapter 6- Kopec &amp; Cradle to Crade</td>
</tr>
<tr>
<td>October 15</td>
<td>Movie: The Next Industrial Revolution</td>
<td>Cradle to Cradle</td>
</tr>
<tr>
<td>October 20</td>
<td><strong>Group Presentations: Sustainable Design</strong></td>
<td>Cradle to Cradle</td>
</tr>
<tr>
<td>October 22</td>
<td><strong>Group Presentations: Sustainable Design</strong></td>
<td>Cradle to Cradle</td>
</tr>
<tr>
<td>October 27</td>
<td><strong>Group Presentations: Sustainable Design</strong></td>
<td>Cradle to Cradle</td>
</tr>
<tr>
<td>October 29</td>
<td><strong>Test # 2 (Includes Cradle to Crade Reading)</strong></td>
<td></td>
</tr>
<tr>
<td>November 3</td>
<td>Lecture: Residential Environments</td>
<td>Chapter 7 in Kopec</td>
</tr>
<tr>
<td></td>
<td>Lecture: Housing Issues</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Spatial Awareness Project Assigned</strong></td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Lecture: Environment</td>
<td>Reference</td>
</tr>
<tr>
<td>----------------------</td>
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<td>----------------------</td>
</tr>
<tr>
<td>Wednesday November 5</td>
<td>Lecture: Environments for Youth</td>
<td>Chapter 8 in Kopec</td>
</tr>
<tr>
<td>Monday November 10</td>
<td>Lecture: Environments for the Disabled &amp; Issues Surrounding ADA</td>
<td>Chapter 9 in Kopec</td>
</tr>
<tr>
<td>Wednesday November 12</td>
<td>Lecture: Environments for Elderly</td>
<td>Chapter 9 in Kopec</td>
</tr>
<tr>
<td>Monday November 17</td>
<td>Lecture: Environments for the Memory Impaired</td>
<td>Chapter 9 in Kopec</td>
</tr>
<tr>
<td></td>
<td>IGA #3- Article on Designing for Elderly</td>
<td></td>
</tr>
<tr>
<td>Wednesday November 19</td>
<td>Lecture: Healthcare Environments</td>
<td>Chapter 11 in Kopec</td>
</tr>
<tr>
<td>Monday November 24</td>
<td>Lecture: Workplace Environments</td>
<td>Chapter 12 in Kopec</td>
</tr>
<tr>
<td></td>
<td>Spatial Awareness Boards Due- Class Pin-Up and Casual Presentations</td>
<td></td>
</tr>
<tr>
<td>Wednesday November 26</td>
<td>Lecture: Workplace Environments continued; Generational Differences in the Workplace</td>
<td>Chapter 12 in Kopec</td>
</tr>
<tr>
<td></td>
<td>IGA # 4- Generational Differences in the Workplace</td>
<td></td>
</tr>
<tr>
<td>Monday December 1</td>
<td>Lecture: Meeting Places Lecture: Corporate Art Collecting</td>
<td></td>
</tr>
<tr>
<td>Wednesday December 3</td>
<td>Lecture: Hospitality Environments</td>
<td>Chapter 13 in Kopec</td>
</tr>
<tr>
<td>Friday December 12</td>
<td>Final Exam 8:00 AM</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX B

SYLLABUS FOR STUDIO I CLASS SHOWING THE INSTRUCTOR’S APPROACH TO THE COURSE, OBJECTIVES, PROJECT OVERIEWS AND COURSE SCHEDULE.

DEPARTMENT OF INTERIOR DESIGN
Florida State University

IND 3217 Interior Design Studio I
3 Credits
Fall 2008

Instructors:  Jill Pable, Ph.D.
Stephanie Sickler, Department of Interior Design MFA Candidate
Elizabeth Smallwood, Interior Designer, FSU Facilities Department

Office:
Dr. Pable: 318 William Johnston Building
Ms. Sickler: the ‘grad garette’ (enter from ID Café; go up stairs)
Ms. Smallwood: see email below.

Office Hours: posted by semester on office door and as announced in class
Phone: 645-6831 (Dr. Pable)
Email:
Dr. Pable:  jpable@fsu.edu
Ms. Sickler:  sms06v@fsu.edu
Ms. Smallwood:

Course Time and Place

<table>
<thead>
<tr>
<th>M</th>
<th>W</th>
<th>9:00 – 11:30</th>
<th>M</th>
<th>W</th>
<th>2:00 – 4:30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room 206 Johnston Bldg</td>
<td>Room 206 Johnston Bldg</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Welcome to Studio 1!
We are glad you are here. Congratulations on your acceptance to the Interior Design program stemming from your hard work in your Design Foundations and Technical Design classes. Studio I will now put your new skills to work within interior design-based projects. Your dedicated and diligent work is required to do well in this course. You should apply the work ethic you developed in your Design Foundations classes to succeed in this class. Be hard-working, thoughtful, detail-oriented, and open to new ideas, and your design skills will thrive and grow. It’s our goal to see you succeed—please call or come see me, Ms. Sickler or Ms. Smallwood at any time with questions or comments.

Course Description and Purpose
A combination of class lectures and studio lab sessions intended to provide entering majors with a basic understanding of the design process. This will include project research, project programming, creative problem solving (with emphasis on the
fundamental elements and principles of design), space planning, the selection of interior
design products, and the fundamentals of visual and oral project presentation.

**Course Goals**
To develop a basic understanding of the interior design process including
- Project research
- Project programming
- Visualization
- Space planning
- Volumetric design
- Design creativity
- Application of design theories
- Project visual and oral presentation

**Course Objectives**
Upon the satisfactory completion of this course, the student will:
- Apply the principles and elements of design to a project, creating a solution that provides an appropriate aesthetic expression.
- Use visual notation to create a design solution quickly and communicate that design through supportive, understandable graphics.
- Apply the fundamentals of interior space planning including bubble flows, circulation guidelines, psychology of interior environments, and furniture layout to the design of a given space.
- Design volumetrically, using depth, width and height effectively in a design solution.
- Develop an interior design solution from a concept, providing a unified expression that complements the design’s functional aspects.

Required Textbooks
These textbooks are available at Bill’s Bookstore:


Also,
3. (1) **Target Packet**: Target Copy Center, 635 W. Tennessee Street

4. A course **Blackboard site** has been set up and has additional resources you will need to access. Go to campus.fsu.edu to access this course site, listed under IND3217 Studio I. The site has a selection of the required readings on it. Persons enrolled in the course will be provided access to the site within the first week of class. If you cannot access the site, please check on your course enrollment with Deb Alexander in the Interior Design main office. **Note that Blackboard sends messages to your campus email address**- be sure to check this email regularly. **You will be accountable for changes to course schedules or activities sent to this email address.**
5. You will also need to purchase the software called Adobe Creative Suite (CS3). This is because you will use InDesign to start creating your graduating portfolio this semester. Future semesters will also put Photoshop and Acrobat to use as well. Adobe CS3 is available from the campus bookstore for a reasonable student price.

6. Other resources as announced in class.

Materials and Equipment

- *A 9” x 12” sketchbook for project development.
- *Drafting equipment and supplies from your Tech class
- *Draft dots for affixing components to presentation boards
- *Roll of 18” wide white trash paper
- *Metal 12” ruler and exacto knife with extra #1 blades
- *8” x 12” Alvin or similar brand cutting and measuring pad
- *Gray value markers and pencils, as required in Graphics class
- *A set of colored pencils
- *A pad of ¼” quadrille ruled graph paper for layouts.
- A traditional or digital camera for model photos. A style that permits closeup photos is preferable. Several students can share a camera if desired.
- Other materials per project requirements, including model-building materials, flashlights or holiday lights,

NOTE: It is critical that you are prepared each day for in-class work. Plan to bring those items with an * above with you to class every time. Also bring your Ching textbook and your course packet to class every day. Your instructor will inform you of other needed in-class materials as projects require.

Color printer

You will start to assemble your graduating portfolio this semester. A highly recommended purchase is a color printer that handles 11 x 17” paper. This solves the problem of long waits using the department printers—which can get pretty stressful at project due dates (there are 40 people in Studio 1 at one time…). You will use this printer for your future studio courses beyond Studio I. We recommend this specific printer for its paper size capabilities and reasonable price:

Epson Stylus Photo 1400.
Approximate cost: $280.00
We recommend shopping online sources for the best price and availability.

Course Requirements

Grades will be determined on the basis of completion of five design projects, one quiz, attendance/participation, and the meeting of deadlines. The requirements and their respective weights are as follows:

- 10% Project 1 Visual Notation
- 10% Project 2 Daycare Center
• 20%  Project 3  Student Single Resident Occupancy Unit
• 10%  Project 4  Make a Difference Project
• 30%  Project 5  Translating Nature
• 10%  Portfolio  Indesign Portfolio page
• 5%   Quiz    Elements and Principles of Design
• 5%   Attendance, Attitude & Participation

**Student Responsibilities**
• Attend all class meetings, field trips and other events
• Come prepared to every session with necessary equipment and supplies
• Read assigned resources
• Meet assignment and project deadlines
• Participate in oral presentations, class discussions and critiques

**Grading Standards**
The **Grading Scale** for the Department of Interior Design is as follows. When a letter grade is issued, it is equal to the bold number listed below.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>95 - 100</td>
</tr>
<tr>
<td>A-</td>
<td>90 - 94.99</td>
</tr>
<tr>
<td>B+</td>
<td>87 - 89.99</td>
</tr>
<tr>
<td>B</td>
<td>83 - 86.99</td>
</tr>
<tr>
<td>C+</td>
<td>77 - 79.99</td>
</tr>
<tr>
<td>C</td>
<td>73 - 76.99</td>
</tr>
<tr>
<td>D+</td>
<td>67 - 69.99</td>
</tr>
<tr>
<td>D</td>
<td>63 - 66.99</td>
</tr>
<tr>
<td>F</td>
<td>Below 59.99</td>
</tr>
</tbody>
</table>

It is helpful to keep in mind the following letter grade descriptors.

A = Outstanding  
A- = Very good  
B = Good  
C = Satisfactory  
D = Weak  
F = Unacceptable

**Late or Missing Project Policy**
• In-class assignments
  In-class exercises must be completed together as a group. Therefore, they cannot be made up at a later date. Other arrangements will be considered in the case of a medically excused absence/death in the family. The simplest way to avoid problems is to never miss or be late to class.

• Incremental Class Reviews
  Pinup and desk critique review dates will be announced in class or in the schedule. It is your responsibility to know when these reviews will occur. It is possible they will change depending on how the class is proceeding. **The class participation grade will be based in part on providing and presenting the required materials at reviews in class or with outside critics. Note there is no opportunity for late submittals.**
Compliance or non-compliance with review dates can mean the difference of a letter grade or more.

- **Final Due Dates and Presentations**
  Presentations of projects are a vital part of the project grade. All final projects and/or papers from any assignment are due at the start of the class period identified as the due date. All projects MUST be presented on the due date. If a project is not 100% complete, it must still be presented. Failure to present the project as required will have serious consequences on the course grade.

- **Late Project Policy**
  You may elect to submit a project late; however, recognize there are serious results for this choice. You will be allowed to complete and submit the project with a one letter grade reduction for every 24 hour period the project is late (calculated from the start of the class period in which the project is due.) Projects cannot be turned in over the weekend, and thus an automatic two-letter grade reduction would result. (While incomplete papers are not expected to be turned in, the same grade reduction is incurred for late work as with design projects.) This requirement for on-time projects is in place to reinforce the critical need in the profession for the sanctity of due dates.

  Late submittals may be turned in to the instructor’s box in the office. To ensure as much letter grade credit as possible, have office staff mark a late submittal project with the date and time it was turned in. It is your responsibility to know the operation hours of the Interior Design Department main office. Note that late submitted projects forfeit grades associated with their verbal presentation. The final opportunity for late submittal of the final project is the exam day/time for the class or as established by the instructor. Projects will not be accepted after this date.

  As projects are due at the start of a class period, please note that no further work may be done on a project (minor gluing, titling, etc.) during the jurying process of other students.

  It is important to note that **ALL PROJECTS** must be turned in to have a passing grade assigned in any interior design course. Students must receive a “C” or better in all **studio courses** in order to move forward in the program.

**Class Work Time**
You are expected to be prepared to work in class every day unless the instructor informs you otherwise. Students not prepared to work will be considered absent. Working in class is an important part of the studio class experience. Ideas are exchanged and questions raised by one student benefits all students. Exercise and projects will span longevities of a few days to several weeks, followed by a class critique or presentation, as suitable to the project.
Policy for retaining student work

As you may know, the department is NASAD (National Association of Schools of Art and Design) and CIDA (Council for Interior Design Accreditation) accredited, and this process makes it necessary to retain examples of student work. Therefore, the department has the right to retain student work for these or for teaching or research purposes for a period of time. Your work will be returned to you as quickly as possible. The Department also retains the right to photodocument and show your work to others without your name for these purposes.

INTERIOR DESIGN DEPARTMENT POLICIES
YOU ARE RESPONSIBLE FOR FOLLOWING THE SYLLABUS SCHEDULE.
Ignorance of any necessary changes made in class, through absence or inattention, is not an acceptable excuse. Classroom availability and demands of the course (such as presentations, field trips, etc.) may require certain time changes with at least one week’s notice when possible.

AMERICANS WITH DISABILITIES ACT (ADA)
If you need accommodation due to a disability, please bring it to the instructor's attention. Students with disabilities needing academic accommodation should: (1) register with and provide documentation to the Student Disability Resource Center; (2) bring a letter to the instructor indicating the need for accommodation and what type. This should be done during the first week of class.

For more information about services available to FSU students with disabilities, contact the Student Disability Resource Center 97 Woodward Avenue, South Florida State University Tallahassee, FL 32306-4167 (850) 644-9566 (voice) (850) 644-8504 (TDD) sdrc@admin.fsu.edu http://www.fsu.edu/~staffair/dean/StudentDisability/ (This syllabus and other class materials are available in alternative format upon request.)

ACADEMIC HONOR CODE
Students are expected to uphold the Academic Honor Code published in The Florida State University Bulletin and the Student Handbook. The Academic Honor System of The Florida State University is based on the premise that each student has the responsibility (1) to uphold the highest standards of academic integrity in the student's own work, (2) to refuse to tolerate violations of academic integrity in the university community, and (3) to foster a high sense of integrity and social responsibility on the part of the university community. Please see the following web site for a complete explanation of the Academic Honor Code. http://www.fsu.edu/Books/Student-Handbook/codes/honor.html http://www.fsu.edu/Books/Student-Handbook/

PLAGIARISM
Definition: To take and use as one’s own the concepts, ideas or writings of another. Although all designers are inspired and influenced by the work of other artists and designers; their ideas, concepts and images MUST NOT be directly or recognizably be utilized in student work without written or verbal attribution. Penalties for plagiarism range from failing the course to dismissal from the program and/or the University.

LAB FEES
You are assessed a lab fee for most courses in the program. The lab fee of $10.00 for lecture courses helps defray the costs of supplying and maintaining the library with resources and consumable supplies. You will not be charged for making copies from the resources held in the department library. Studio based courses and courses involving the use of CAD for instruction or individual study are assessed a fee of $15.00.

These fees do not, in fact, cover those expenses and your cooperation is appreciated in keeping those costs to a minimum. Certain CAD courses may restrict the amount of duplicating or plotting per student. If equipment is broken or off-line for any reason you may need to seek duplicating and plotting services elsewhere. Every effort will be made to resolve such problems within a reasonable amount of time.

**ATTENDANCE**

Success in this class requires attendance. Each student is allowed two (2) unexcused absences; a grade reduction will result for each subsequent absence. Note there may be penalties for missing a project pinup, critique or final presentation. Four other absences may be excused with a doctor’s note or other documentation of an emergency. Students with six or more absences will fail the class. Unless otherwise written in a class handout, the grade for a course will be reduced by one-third grade level for each unexcused absence in excess of two class meetings (for example from A- to B+ is one third of a letter grade). This does not apply to absences due to documented illness or family emergency.

**ATTENDANCE IS REQUIRED IN ALL CLASSES** unless otherwise specified by the instructor. You may be required to drop a course if you do not attend the first class meeting or make prior arrangements with the instructor. A student habitually arriving late, or leaving class early without prior permission, may be counted absent for the class. Information missed due to tardiness or absence is the responsibility of the student. No information will be repeated. **Class will start promptly on time. Necessary lecture and assignment submittals will occur at the start of class, and there is insufficient time to bring late-arriving students ‘up to speed’ on content.**

Students are expected to report to class PREPARED. Any student attending class without completing previous assignments or with the necessary working materials may be counted absent for the class.

Attendance at project critiques, practicums and presentations is required even if they are held outside of the usual class meeting times. In these cases you must be given at least two weeks notice.

Incompletes will be given only in classes of serious illness or hospitalization (written notification from doctor is required), or in cases of death in the immediate family. It is YOUR responsibility (not the instructor’s) to make sure that any incompletes are removed. This must be done NO LATER than the first week of classes of the following semester unless other arrangements have been made between you and the instructor.

**INTERIOR DESIGN DEPARTMENT MAIN OFFICE HOURS**

225 William Johnston Building: 8:00 AM – 4:00 PM Monday-Friday (644-1436)
RESOURCE AND EQUIPMENT ROOMS: Policies and procedures for use of the Resource and Equipment rooms are posted in the room and must be followed!

THE CAD COMPUTER LAB (Room 230) is available only to students enrolled in CAD classes or CAD D.I.S. courses. Students may use the CAD lab to check e-mail when classes are not in session. Other computers are available in main floor library for word processing. **To avoid viruses, students must never load any software on to any department computers.** NO SMOKING, FOOD, DRINK OR PETS IN THE OFFICE OR CLASSROOMS.
Grading Rubric
General Descriptions of Grade Assignments for Presentation Projects

The following are general descriptions of an example project that would receive a grade of A, B, C, or D. Each project you will complete will have its own specific set of requirements. Every student’s project and in fact, every student’s situation, is, of course, different as well. Therefore, chances are good that your project and actions will not exactly correspond to any of the following descriptions—they are not supposed to. Instead, the following descriptions are offered to you as a general documentation of an imaginary project’s successes and failures and the grade resulting from it.

In GENERAL, a project receiving an A for a grade might possess the following characteristics:
Student proposes a uniquely creative and functional solution and fully takes into consideration program requirements. Graphic conventions are effectively manipulated to produce an easily understood interior solution, either in blackline or with renderings as required. Text is easily readable and accurate in content. Color palette is balanced and realistic and a knowledge of focus and contrast is demonstrated in the case of either line quality and/or color. Student took initiative to exceed the required minimum guidelines through extra drawings, renderings, or other means. Presentation is consistent and in keeping with the approach of the solution. All required elements are included. The verbal presentation is obviously rehearsed and the student, while perhaps nervous, is knowledgeable in the project solution and can justify decisions made. Student has consistently attended and interacted in class and has taken constructive criticism into account. Project is handed in on time or ahead of due date. The project represents the student exceedingly well in a portfolio and would likely be assessed as the work of a beginning professional by a client or design employer.

In GENERAL, a project receiving a B for a grade might possess the following characteristics:
Student has clear grasp of project parameters and other impacting elements. Resulting space planning shows this knowledge, with a few minor flaws in some areas. There is evidence of creativity in the solution. Graphic conventions are basically sound, but lack fine-tuned refinement. Small notations may be missing, inadequate, or incorrect. Project in its final presentation form shows clear thinking as it evolved into its final form, but may possess small flaws that are distracting in minor ways to the overall design communication. The verbal presentation shows competence in the overall solution, but a short or incomplete explanation in the project shows little rehearsal. Student has consistently attended class and interacted with others. Project is handed in on time. The project represents the student fairly well in a portfolio and would likely be assessed as a competent and adequate student project by clients and design employers.
In GENERAL, a project receiving a C for a grade might possess the following characteristics:
Student has been attentive in class to lecture, but lacks a definitive grasp of space planning and/or program requirements. The project may lack creativity. Elements of the given program may be missing, ignored or underestimated. Interior elements are not drawn to scale and space planning traffic flow presents some major problems to the project’s overall success. Adjacencies and clearances are insufficient. Final drawings may appear ordinary or even boring through repetitive use of the same ideas, line weight or lack of value variety. Some lines may appear to have been ‘free-handed’ in inappropriately. Text is inconsistent and distracting. Notations such as scale are missing. Presentation lacks consistency and rendering shows lack of time investment. Verbal presentation is marked with stammering or presentation is missed altogether. Project is handed in on time. *The project does not represent the student particularly well in a portfolio and would likely be assessed as a beginning student project by clients and design employers.*

In GENERAL, a project receiving a D for a grade might possess the following characteristics:
Through absences from class or aversion to reading, listening, or studying, student has not grasped the project requirements. The project clearly lacks a direction and space planning is inconsistent. Requirements are largely ignored or incorrectly applied. Some of the drawings, through lack of time, may appear to be quickly free-hand drawn. Text is inconsistent or entirely unreadable. Elements of the project are missing. Prior constructive criticism is either received with hostility or ignored. The verbal presentation is obviously hurriedly assembled with little or no prior rehearsal. Class attendance is spotty and missed handouts are frequently requested of fellow students. Project is handed in late, resulting in a lowered grade. *The project does not represent the student well in a portfolio and should not be included as an indicator of their work.*
### Studio 1
Fall 2008 Tentative Schedule
Draft 8/11/08

<table>
<thead>
<tr>
<th>Meeting #</th>
<th>Day of wk</th>
<th>Month</th>
<th>Date</th>
<th>Project</th>
<th>Prj meeting #</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>M</td>
<td>Aug</td>
<td>25</td>
<td>Course Introduction</td>
<td></td>
<td>Orientation, texts, supplies, references, Blackboard</td>
</tr>
<tr>
<td>2</td>
<td>W</td>
<td>27</td>
<td>Visual Notation</td>
<td>1</td>
<td>Vis pages; sketch people; CDD's; problem/solutions. Elements &amp; Principles lecture.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>M</td>
<td>Sept</td>
<td>1</td>
<td>Visual Notation</td>
<td>2</td>
<td>No class: Labor Day.</td>
</tr>
<tr>
<td>4</td>
<td>W</td>
<td>3</td>
<td>Visual Notation</td>
<td>3</td>
<td>lab</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>M</td>
<td>8</td>
<td>Visual Notation due</td>
<td>4</td>
<td>presentations; Elements &amp; Principles quiz.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>W</td>
<td>10</td>
<td>Daycare</td>
<td>1</td>
<td>Design process.ppt; criteria matrix; space typicals; problem stmt.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>M</td>
<td>15</td>
<td>Daycare</td>
<td>2</td>
<td>bubble flow</td>
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</tr>
<tr>
<td>8</td>
<td>W</td>
<td>17</td>
<td>Daycare</td>
<td>3</td>
<td>concept stmts; lab</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>M</td>
<td>22</td>
<td>Daycare</td>
<td>4</td>
<td>lab</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>W</td>
<td>24</td>
<td>Daycare due</td>
<td>5</td>
<td>presentations.</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Day</td>
<td>Time</td>
<td>Activity</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>11 M</td>
<td>29</td>
<td>SRO</td>
<td>discuss readings; prj orientation; anthropometrics; model how-to.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 W</td>
<td>Oct 1</td>
<td>SRO</td>
<td>lab: study model</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 M</td>
<td>6</td>
<td>SRO</td>
<td>lab: study model</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 W</td>
<td>8</td>
<td>SRO</td>
<td>study model desk crit</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>15 M</td>
<td>13</td>
<td>SRO</td>
<td>presentation models; concept statements. Introduce Make a Difference Project</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 W</td>
<td>15</td>
<td>SRO</td>
<td>anthropometric sketch due; concept stmt due</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 M</td>
<td>20</td>
<td>SRO due</td>
<td>presentations.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 W</td>
<td>22</td>
<td>Make a difference</td>
<td>introduce project: brainstorming ideas.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19 M</td>
<td>27</td>
<td>Make a difference</td>
<td>Lab: desk crits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Day</td>
<td>Week</td>
<td>Nature</td>
<td>Activity</td>
<td></td>
<td></td>
</tr>
<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>W</td>
<td>29</td>
<td></td>
<td>Make a Difference due presentations.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>M</td>
<td>Nov</td>
<td>3</td>
<td>Nature introduce project; concept; discuss readings.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>W</td>
<td>5</td>
<td>Nature</td>
<td>integrating lighting; geometrical collision spatial experience narratives; lab. InDesign 1: Portfolio-- scanning images; InDesign basics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>M</td>
<td>10</td>
<td>Nature</td>
<td>3 concept boards due: presentations discuss furnishings psychology/proxemics. InDesign 2: Portfolio</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>W</td>
<td>12</td>
<td>Nature</td>
<td>4 lab</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>M</td>
<td>17</td>
<td>Nature</td>
<td>5 floor plan &amp; preliminary model due: desk crit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>W</td>
<td>19</td>
<td>Nature</td>
<td>6 lab</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>M</td>
<td>24</td>
<td>Nature</td>
<td>7 lab</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>W</td>
<td>26</td>
<td>Nature</td>
<td>8 lab</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Day</td>
<td>Week</td>
<td>Activity</td>
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<td>29</td>
<td>M</td>
<td>1</td>
<td>Nature</td>
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<tr>
<td>30</td>
<td>W</td>
<td>3</td>
<td>Nature</td>
<td></td>
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<tr>
<td></td>
<td>M</td>
<td>8</td>
<td>Portfolio Page</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wed</td>
<td></td>
<td>Optional help session: InDesign Portfolio Page</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Dec</td>
<td></td>
<td>Portfolio page due: Submit via Digital Dropbox at Blackboard site.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exam Week</td>
<td>Noon</td>
<td>Portfolio Page</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dec 10</td>
<td></td>
<td></td>
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<tr>
<td>9</td>
<td></td>
<td></td>
<td>lab &amp; final model crit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td>presentations</td>
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</tr>
</tbody>
</table>
APPENDIX C

FIRST QUESTIONNAIRE ADMINISTERED TO PARTICIPANTS IN STUDIO 1.

Data Gathering Tools
Stephanie Sickler
Questionnaire 1, Studio 1

Student Questionnaire Administrations 1 & 2

Recently, the following instructional techniques were used in this class:

<table>
<thead>
<tr>
<th>Technique</th>
<th>Content it dealt with</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Group Evaluations</td>
<td>Peer Design Fundamentals revisit</td>
</tr>
<tr>
<td>2. Lecture</td>
<td>Elements and Principles PowerPoint</td>
</tr>
<tr>
<td>3. Hands-on Activity</td>
<td>In-class sketching exercises</td>
</tr>
</tbody>
</table>

**Instructional Technique 1: Group Evaluations**

1. I felt that this instructional technique was an effective way for me to learn this content.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

   2. This instructional technique challenged me to think deeply about this subject matter.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   3. What was helpful or not helpful about this technique?

   _______________________________________________________

   4. Are there other techniques that would have helped you better understand this content?

   _______________________________________________________

   _______________________________________________________
Instructional Technique 2: Lecture

1. I felt that this instructional technique was an effective way for me to learn this content.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

2. This instructional technique challenged me to think deeply about this subject matter.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

3. What was helpful or not helpful about this technique?

__________________________________________________________________________
__________________________________________________________________________

4. Are there other techniques that would have helped you better understand this content?

__________________________________________________________________________
__________________________________________________________________________

Instructional Technique 3: Hands-on Activity

1. I felt that this instructional technique was an effective way for me to learn this content.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

2. This instructional technique challenged me to think deeply about this subject matter.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructional Technique 3, cont.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>3. What was helpful or not helpful about this technique?</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Are there other techniques that would have helped you better understand this content?</td>
<td></td>
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</tr>
</tbody>
</table>
APPENDIX D

SECOND QUESTIONNAIRE ADMINISTERED TO PARTICIPANTS IN STUDIO 1.

Data Gathering Tools
Stephanie Sickler
Questionnaire 2, Studio 1

Student Questionnaire Administrations 1 & 2

Recently, the following instructional techniques were used in this class:

<table>
<thead>
<tr>
<th>Technique</th>
<th>Content it dealt with</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Instructor Feedback</td>
<td>Desk critique for Daycare project</td>
</tr>
<tr>
<td>2. Presentation with critique</td>
<td>Daycare Center Project</td>
</tr>
<tr>
<td>3. Demonstration</td>
<td>Space typicals</td>
</tr>
</tbody>
</table>

**Instructional Technique 1: Instructor Feedback**

1. I felt that this instructional technique was an effective way for me to learn this content.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. This instructional technique challenged me to think deeply about this subject matter.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

3. What was helpful or not helpful about this technique?

   __________________________________________________________
   __________________________________________________________

4. Are there other techniques that would have helped you better understand this content?

   __________________________________________________________
   __________________________________________________________
### Instructional Technique 2: Presentation with Critique

1. I felt that this instructional technique was an effective way for me to learn this content.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

2. This instructional technique challenged me to think deeply about this subject matter.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

3. What was helpful or not helpful about this technique?

   __________________________________________________________

4. Are there other techniques that would have helped you better understand this content?

   __________________________________________________________

### Instructional Technique 3: Demonstration

1. I felt that this instructional technique was an effective way for me to learn this content.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
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<tbody>
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</tbody>
</table>

2. This instructional technique challenged me to think deeply about this subject matter.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
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</tr>
</tbody>
</table>
Instructional Technique 3, cont.

3. What was helpful or not helpful about this technique?

4. Are there other techniques that would have helped you better understand this content?
APPENDIX E

THIRD QUESTIONNAIRE ADMINISTERED TO PARTICIPANTS IN STUDIO 1.

Data Gathering Tools
Stephanie Sickler
Questionnaire 3, Studio 1

Student Questionnaire Administration 3

Recently, the following instructional techniques were used in this class:

<table>
<thead>
<tr>
<th>Technique</th>
<th>Content it dealt with</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Peer Evaluations</td>
<td>Three Hats of Critique exercise</td>
</tr>
<tr>
<td>2. Model Building</td>
<td>SRO project models</td>
</tr>
<tr>
<td>3. Graded Desk Critique</td>
<td>SRO Mock-up evaluation</td>
</tr>
</tbody>
</table>

**Instructional Technique 1: Peer Evaluations**

1. I felt that this instructional technique was an effective way for me to learn this content.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
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</table>

2. This instructional technique challenged me to think deeply about this subject matter.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

3. What was helpful or not helpful about this technique?

________________________________________________________________________

4. Are there other techniques that would have helped you better understand this content?

________________________________________________________________________
**Instructional Technique 2: Model Building**

1. I felt that this instructional technique was an effective way for me to learn this content.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
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</thead>
<tbody>
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</tbody>
</table>

2. This instructional technique challenged me to think deeply about this subject matter.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
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</table>

3. What was helpful or not helpful about this technique?

   ____________________________________________________________

4. Are there other techniques that would have helped you better understand this content?

   ____________________________________________________________

**Instructional Technique 3: Graded Desk Critique**

1. I felt that this instructional technique was an effective way for me to learn this content.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
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</table>

2. This instructional technique challenged me to think deeply about this subject matter.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
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</thead>
<tbody>
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</tbody>
</table>
Instructional Technique 3, cont.

3. What was helpful or not helpful about this technique?


4. Are there other techniques that would have helped you better understand this content?


Data Gathering Tools
Stephanie Sickler
Questionnaire 4, Studio 1

Student Questionnaire Administration 4

1. Which of the instructional techniques used in this class were most effective?
   (For example: lecture, demonstration, group activities, peer review, desk critique, model building, etc.)
   ____________________________________________________________
   ____________________________________________________________
   a) What made them stand out?
      ____________________________________________________________
      ____________________________________________________________

2. Are there other techniques that you would have preferred or found more helpful?
   ____________________________________________________________
   ____________________________________________________________

3. What techniques or activities did you find the least helpful in this class?
   ____________________________________________________________
   a) Why?
      ____________________________________________________________
      ____________________________________________________________
   b) What do you think could have been changed to make them more helpful?
      ____________________________________________________________
      ____________________________________________________________

4. Would you have preferred more or less information technology (IT) in this class?
   ____________________________________________________________
5. Would you have preferred more or less feedback from your instructor in this class?
APPENDIX G

FIRST QUESTIONNAIRE ADMINISTERED TO PARTICIPANTS IN SOCIAL PSYCHOLOGY.

Data Gathering Tools
Stephanie Sickler
Questionnaire 1, Social/Psych

Student Questionnaire Administrations 1 & 2

Recently, the following instructional techniques were used in this class:

<table>
<thead>
<tr>
<th>Technique</th>
<th>Content it dealt with</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Hands-on Activity</td>
<td>Keirsey Temperment test</td>
</tr>
<tr>
<td>2. Lecture w/PowerPoint</td>
<td>Environmental Psychology</td>
</tr>
<tr>
<td>3. Team-based Learning</td>
<td>IGA #1 (individual and group assessment)</td>
</tr>
</tbody>
</table>

**Instructional Technique 1: Hands-on Activity**

1. I felt that this instructional technique was an effective way for me to learn this content.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

2. This instructional technique challenged me to think deeply about this subject matter.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. What was helpful or not helpful about this technique?

________________________________________________________________________________________

4. Are there other techniques that would have helped you better understand this content?

________________________________________________________________________________________
**Instructional Technique 2: Lecture w/PowerPoint**

1. I felt that this instructional technique was an effective way for me to learn this content.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. This instructional technique challenged me to think deeply about this subject matter.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. What was helpful or not helpful about this technique?

________________________________________________________________________________________

4. Are there other techniques that would have helped you better understand this content?

________________________________________________________________________________________

---

**Instructional Technique 3: Team-based learning**

1. I felt that this instructional technique was an effective way for me to learn this content.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. This instructional technique challenged me to think deeply about this subject matter.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Instructional Technique 3, cont.

3. What was helpful or not helpful about this technique?
   __________________________________________________________
   __________________________________________________________

4. Are there other techniques that would have helped you better understand this content?
   __________________________________________________________
   __________________________________________________________
APPENDIX H

SECOND QUESTIONNAIRE ADMINISTERED TO PARTICIPANTS IN SOCIAL PSYCHOLOGY.

Data Gathering Tools
Stephanie Sickler
Questionnaire 2, Soc/Psych

Student Questionnaire Administration 2

Recently, the following instructional techniques were used in this class:

<table>
<thead>
<tr>
<th>Technique</th>
<th>Content it dealt with</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Extra Credit opportunity</td>
<td>Current events quiz</td>
</tr>
<tr>
<td>2. Group Project</td>
<td>IGA #2 New Urbanism Article</td>
</tr>
<tr>
<td>3. Peer Review</td>
<td>Influence map critique</td>
</tr>
</tbody>
</table>

**Instructional Technique 1:** Extra Credit opportunity

1. I felt that this instructional technique was an effective way for me to learn this content.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. This instructional technique challenged me to think deeply about this subject matter.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. What was helpful or not helpful about this technique?

   __________________________________________________________

4. Are there other techniques that would have helped you better understand this content?

   __________________________________________________________
Instructional Technique 2: Group Project

1. I felt that this instructional technique was an effective way for me to learn this content.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. This instructional technique challenged me to think deeply about this subject matter.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. What was helpful or not helpful about this technique?

__________________________________________________________________

__________________________________________________________________

4. Are there other techniques that would have helped you better understand this content?

__________________________________________________________________

__________________________________________________________________

Instructional Technique 3: Peer Review

1. I felt that this instructional technique was an effective way for me to learn this content.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. This instructional technique challenged me to think deeply about this subject matter.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Instructional Technique 3, cont.

3. What was helpful or not helpful about this technique?
   ____________________________________________________________
   ____________________________________________________________

4. Are there other techniques that would have helped you better understand this content?
   ____________________________________________________________
   ____________________________________________________________
APPENDIX I

THIRD QUESTIONNAIRE ADMINISTERED TO STUDENTS IN SOCIAL PSYCHOLOGY.

Data Gathering Tools
Stephanie Sickler
Questionnaire 3, Soc/Psych

Student Questionnaire Administration 3

Recently, the following instructional techniques were used in this class:

<table>
<thead>
<tr>
<th>Technique</th>
<th>Content it dealt with</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Lecture w/PowerPoint</td>
<td>Environmental Issues</td>
</tr>
<tr>
<td>2. Information Technology (IT)</td>
<td>Online Videos- Sustainability</td>
</tr>
<tr>
<td>3. Group Project</td>
<td>Group Sustainability Project</td>
</tr>
</tbody>
</table>

**Instructional Technique 1: Lecture w/PowerPoint**

1. I felt that this instructional technique was an effective way for me to learn this content.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. This instructional technique challenged me to think deeply about this subject matter.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. What was helpful or not helpful about this technique?

   __________________________________________________________________________

4. Are there other techniques that would have helped you better understand this content?

   __________________________________________________________________________
**Instructional Technique 2: Information Technology (IT)**

1. I felt that this instructional technique was an effective way for me to learn this content.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>❌</td>
<td></td>
<td>✅</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. This instructional technique challenged me to think deeply about this subject matter.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>❌</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. What was helpful or not helpful about this technique?

   ______________________________________________________

4. Are there other techniques that would have helped you better understand this content?

   ______________________________________________________

**Instructional Technique 3: Group Project**

1. I felt that this instructional technique was an effective way for me to learn this content.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>❌</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. This instructional technique challenged me to think deeply about this subject matter.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>❌</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Instructional Technique 3, cont.

3. What was helpful or not helpful about this technique?

________________________________________________________________________

________________________________________________________________________

4. Are there other techniques that would have helped you better understand this content?

________________________________________________________________________

________________________________________________________________________
APPENDIX J

FORTH QUESTIONNAIRE (FREE RESPONSE) ADMINISTERED TO PARTICIPANTS IN SOCIAL PSYCHOLOGY.

Data Gathering Tools
Stephanie Sickler
Questionnaire 4, Soc/Psych

Student Questionnaire Administration 4

1. Which of the instructional techniques used in this class were most effective?
   (For example: lecture, demonstration, group activities, peer review, desk critique, model building, etc.)
   __________________________________________________________
   __________________________________________________________
   a) What made them stand out?
      __________________________________________________________
      __________________________________________________________
      __________________________________________________________

2. Are there other techniques that you would have preferred or found more helpful?
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

3. What techniques or activities did you find the least helpful in this class?
   __________________________________________________________
   a) Why?
      __________________________________________________________
      __________________________________________________________
      __________________________________________________________
   b) What do you think could have been changed to make them more helpful?
      __________________________________________________________
      __________________________________________________________
      __________________________________________________________

4. Would you have preferred more or less information technology (IT) in this class?
   __________________________________________________________
   __________________________________________________________
5. Would you have preferred more or less feedback from your instructor in this class?

________________________________________________________________________

________________________________________________________________________
APPENDIX K

INTERVIEW SHEET USED FOR BOTH CLASSES (DUPLICATE OF QUESTIONS IN FORTH QUESTIONNAIRE).

Data Gathering Tools
Stephanie Sickler
Final Interview

Student Random Final Questionnaire

1. Which of the instructional techniques used in this class were most effective? (For example: lecture, demonstration, group activities, peer review, desk critique, model building, etc.)

2. Are there other techniques that you would have preferred or found more helpful?

3. What techniques or activities did you find the least helpful in this class?
   a) Why?
   b) What do you think could have been changed to make them more helpful?

4. Would you have preferred more or less information technology (IT) in this class?
5. Would you have preferred more or less feedback from your instructor in this class?
APPENDIX L

DATA CODING SHEETS FROM WRITE-IN RESPONSES ON QUESTIONNAIRES 1-3 FOR STUDIO 1. INSTRUCTIONAL TECHNIQUES ARE SEPARATED BY COLOR. SOME TECHNIQUES ARE REPEATED.

### Studio 1

#### Q1
**Group Evaluation**-helpful or not?
- offered good support 7
- some didn't participate 2
- informative of expectations 1
- peer feedback 9
- good format 1
- vague instructions 1

**Group Evaluation**-improvements
- example of solution 2
- more explanation 1

#### Q2
**Instructor Feedback**-helpful or not?
- very helpful 7
- allowed for improvements 2
- gives you expectations 2
- Q & A with instructor 1

**Instructor Feedback**-improvements
- more examples 1

**Presentation w/critique**-helpful or not?
- too long-difficulty focusing 1
- good feedback 10
- no time to make corrections 1
- good practice 1
- can't defend your work 1
- can evaluate others 1

**Presentation w/critique**-improvements
- checklist 1
- better set up 1

**Demonstration**-helpful or not?
- misunderstood assignment 1
- good format 3
- very helpful 4
- gives expectations 1
- good practice 1
- a waste of time 1
- visual learning 1

**Demonstration**-improvements
- handout 2
- more examples w/explanation 3
- more practice 1

#### Q3
**Peer Evaluation**-helpful or not?
- get others' opinions 8
- some more helpful than others 2
- made me think deeply 2
- make me see things differently 2

**Model Building**-improvements
- more critiquers 2
- group brainstorming at start 1

**Graded Desk Critique**-helpful or not?
- keeps me from procrastinating 2
- good feedback 2
- keeps me ahead of deadlines 3
- difficult to complete while still making changes 1
- early deadlines problematic 2
- keeps me on task 2

**Graded Desk Critique**-improvements
- no early deadlines 1
<table>
<thead>
<tr>
<th>more practice</th>
<th>1</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>instruction</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>varied feedback</td>
<td>1</td>
</tr>
<tr>
<td>worth smaller % of grade</td>
<td>1</td>
</tr>
<tr>
<td>should be optional</td>
<td>1</td>
</tr>
</tbody>
</table>
APPENDIX M

DATA CODING SHEETS FROM WRITE-IN RESPONSES ON QUESTIONNAIRES 1-3 FOR SOCIAL PSYCHOLOGY. INSTRUCTIONAL TECHNIQUES ARE SEPARATED BY COLOR. SOME TECHNIQUES ARE REPEATED.

<table>
<thead>
<tr>
<th>SOC/PSYCH</th>
<th>Q1 Hands-On-helpful or not?</th>
<th></th>
<th>Q2 Extra Credit-helpful or not?</th>
<th></th>
<th>Q3 Lecture- what was helpful or not?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>gain understanding of peers</td>
<td>10</td>
<td>extra points good</td>
<td>3</td>
<td>pictures and visuals</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>understanding of self</td>
<td>18</td>
<td>gets you to pay more attention</td>
<td>3</td>
<td>good format</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>group discussion good</td>
<td>4</td>
<td>to current events</td>
<td>5</td>
<td>poor seating arrangement</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>less feedback</td>
<td>1</td>
<td>content good</td>
<td>5</td>
<td>good explanation</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>interactivity</td>
<td>6</td>
<td>content not good</td>
<td>5</td>
<td>class discussion</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>repetitive and boring</td>
<td>2</td>
<td></td>
<td></td>
<td>ppt. is boring</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>guidelines were helpful</td>
<td>1</td>
<td></td>
<td></td>
<td>instructor error</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>support material good</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hands-On- improvements</td>
<td>4</td>
<td>Extra Credit- improvements</td>
<td></td>
<td>Lecture- improvements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>more info</td>
<td>4</td>
<td>clues to question</td>
<td>1</td>
<td>better topics</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>more interactivity</td>
<td>2</td>
<td>should relate to class material</td>
<td>4</td>
<td>slower slides</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>more guidelines</td>
<td>1</td>
<td>discussion abt answers</td>
<td>1</td>
<td>hands-on/ interactive</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lecture- helpful or not liked notes and examples</th>
<th>3</th>
<th>Group Project- helpful or not?</th>
<th></th>
<th>Information Technology- was it helpful or not?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>slow it down</td>
<td>1</td>
<td>enjoy working in group</td>
<td>8</td>
<td>visual aids</td>
<td>4</td>
</tr>
<tr>
<td>liked interactivity with class</td>
<td>15</td>
<td>group input and diversity</td>
<td>6</td>
<td>good explanation</td>
<td>5</td>
</tr>
<tr>
<td>notes are printable</td>
<td>4</td>
<td>learn about classmates</td>
<td>1</td>
<td>showed practicality of info</td>
<td>1</td>
</tr>
<tr>
<td>discussion gets class distracted</td>
<td>3</td>
<td>don't like group work</td>
<td>1</td>
<td>videos too long or boring</td>
<td>3</td>
</tr>
<tr>
<td>good visuals/content</td>
<td>9</td>
<td>group work helps grade</td>
<td>4</td>
<td>engaging</td>
<td>1</td>
</tr>
<tr>
<td>notes are printable- bad no challenge/boring don't learn from lectures</td>
<td>2</td>
<td>content good problems b/c of group members</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group Project- improvements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Information Technology- improvements</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>better videos</td>
<td>2</td>
<td>discussion at end</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
### Lecture- improvements

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>go slower</td>
<td>2</td>
</tr>
<tr>
<td>more to the point</td>
<td>1</td>
</tr>
<tr>
<td>more notes</td>
<td>1</td>
</tr>
<tr>
<td>interactivity (fill in blank/discussion)</td>
<td>9</td>
</tr>
<tr>
<td>more info on slides</td>
<td>1</td>
</tr>
<tr>
<td>more audio visual</td>
<td>1</td>
</tr>
<tr>
<td>shorter lectures</td>
<td>1</td>
</tr>
<tr>
<td>more examples</td>
<td>1</td>
</tr>
<tr>
<td>in-class computer research</td>
<td>1</td>
</tr>
<tr>
<td>more in class group time</td>
<td>2</td>
</tr>
<tr>
<td>no groups- individual assessment</td>
<td>1</td>
</tr>
<tr>
<td>more hands on and visual aids</td>
<td>1</td>
</tr>
<tr>
<td>more discussion</td>
<td>1</td>
</tr>
</tbody>
</table>

### Group Project- what was helpful or not?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>helped me learn</td>
<td>9</td>
</tr>
<tr>
<td>groups too big</td>
<td>5</td>
</tr>
<tr>
<td>good for group skills</td>
<td>5</td>
</tr>
<tr>
<td>didn't help me learn</td>
<td>2</td>
</tr>
</tbody>
</table>

### Group Project- improvements

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>presentation time</td>
<td>1</td>
</tr>
<tr>
<td>smaller groups</td>
<td>2</td>
</tr>
<tr>
<td>set structure</td>
<td>1</td>
</tr>
</tbody>
</table>

### Team-based learning- helpful or not

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>get to know each other</td>
<td>4</td>
</tr>
<tr>
<td>interaction and peer learning</td>
<td>21</td>
</tr>
<tr>
<td>good grade</td>
<td>4</td>
</tr>
<tr>
<td>team could earn higher grade</td>
<td>4</td>
</tr>
<tr>
<td>negative/unproductive group</td>
<td>6</td>
</tr>
<tr>
<td>hard to focus in group w/friends</td>
<td>2</td>
</tr>
<tr>
<td>grade relied on group members</td>
<td>2</td>
</tr>
<tr>
<td>teamwork is quicker</td>
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<td>redundant</td>
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### Peer review- improvements

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<td>more occasions</td>
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<td>more in-depth</td>
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<td>discussion</td>
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<td>more examples</td>
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<td>instructor feedback</td>
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### Peer review- helpful or not

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<td>good to see peers' work</td>
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<tr>
<td>not helpful</td>
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APPENDIX N

HUMAN SUBJECTS APPROVED CONSENT FORM FOR DATA COLLECTION.

FSU Behavioral Consent Form
A Study of Millennial Student Learning Preferences: An Analysis of Two Interior Design Class Case Studies

You are invited to be in a research study of attitudes of millennial interior design learners towards instructional techniques. You were selected as a possible participant because you are enrolled in this class. We ask that you read this form and ask any questions you may have before agreeing to be in the study.

This study is being conducted by Stephanie Sickler, MFA Candidate, Interior Design, Florida State University.

Background Information:

The purpose of this study is: To assess what teaching techniques are used in Interior Design classes and students’ attitudes towards teaching techniques used in Interior Design classes.

Procedures:

If you agree to be in this study, we would ask you to do the following things: Complete a maximum of four short surveys in which you will be asked to reflect on class activities during the fall semester, 2008. Instructional techniques will be observed in this class and several participants will be selected to participate in a voluntary interview, consisting of six questions and lasting no more than ten minutes, at the end of the semester.

Risks and benefits of being in the Study:

There are no anticipated risks to your participation.

There are no anticipated benefits to participation in this study.

Compensation:

There will be no compensation for your participation.

Confidentiality:

The records of this study will be kept private and confidential to the extent permitted by law. Questionnaire and interview responses will not be shared with the instructor. In any sort of report we might publish, we will not include any information that will make it possible to identify a subject. Research records will be stored securely on the researcher’s personal computer and in a locked office and only the researcher will have access to the records. No names will be recorded.

Voluntary Nature of the Study:

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

Contacts and Questions:

The researcher conducting this study is Stephanie Sickler, MFA Candidate. You may ask any questions you have now. If you have a question later, you are encouraged to contact her at: 2612 Fenwood Court, Tallahassee, FL 32303; or by phone at: 850-562-5725; or by email at: sms06v@fsu.edu. Additionally, you may contact her major professor, Jill Pable by email at jpable@fsu.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), you are encouraged to contact the FSU IRB at 2010 Levy Street, Research Building B, Suite 276, Tallahassee, FL 32306-2742, or 850-644-8633, or by email at jcooper@fsu.edu.

You will be given a copy of this information to keep for your records.

Statement of Consent:

I have read the above information. I have asked questions and have received answers. I consent to participate in the study.

______________________________  ________________
Signature                     Date

______________________________  ________________
Signature of Investigator       Date

APPENDIX O

HUMAN SUBJECTS EMAIL VERIFICATION OF RESEARCH APPROVAL

Office of the Vice President For Research
Human Subjects Committee
Tallahassee, Florida 32306-2742
(850) 644-8673 · FAX (850) 644-4392

APPROVAL MEMORANDUM

Date: 9/18/2008

To: Stephanie Sickler

Address: 2612 Fenwood Court Tallahassee, FL 32303
Dept.: INTERIOR DESIGN

From: Thomas L. Jacobson, Chair

Re: Use of Human Subjects in Research
A Study of Millennial Student Learning Preferences: An Analysis of Two Interior Design Class Case Studies

The application that you submitted to this office in regard to the use of human subjects in the proposal referenced above have been reviewed by the Secretary, the Chair, and two members of the Human Subjects Committee. Your project is determined to be Expedited per 45 CFR § 46.110(7) and has been approved by an expedited review process.

The Human Subjects Committee has not evaluated your proposal for scientific merit, except to weigh the risk to the human participants and the aspects of the proposal related to potential risk and benefit. This approval does not replace any departmental or other approvals, which may be required.

If you submitted a proposed consent form with your application, the approved stamped consent form is attached to this approval notice. Only the stamped version of the consent form may be used in recruiting research subjects.

If the project has not been completed by 9/17/2009 you must request a renewal of approval for continuation of the project. As a courtesy, a renewal notice will be sent to you prior to your expiration date; however, it is your responsibility as the Principal Investigator to timely request renewal of your approval from the Committee.
You are advised that any change in protocol for this project must be reviewed and approved by the Committee prior to implementation of the proposed change in the protocol. A protocol change/amendment form is required to be submitted for approval by the Committee. In addition, federal regulations require that the Principal Investigator promptly report, in writing any unanticipated problems or adverse events involving risks to research subjects or others.

By copy of this memorandum, the Chair of your department and/or your major professor is reminded that he/she is responsible for being informed concerning research projects involving human subjects in the department, and should review protocols as often as needed to insure that the project is being conducted in compliance with our institution and with DHHS regulations.

This institution has an Assurance on file with the Office for Human Research Protection. The Assurance Number is IRB00000446.

Cc: Jill Pable, PhD, Advisor
HSC No. 2008.1623
REFERENCES


BIOGRAPHICAL SKETCH

Stephanie Sickler was born and raised in Panama City Beach, Florida just before the millennial generation began. She earned an International Baccalaureate Diploma from Rutherford High School in 1999 and went on to complete a Bachelor of Arts from Huntingdon College in Montgomery, Alabama. She completed her degree in just three years, graduating cum laude in 2002. Stephanie will graduate Florida State University in May 2009 magna cum laude with a Master of Fine Arts degree in Interior Design.

Stephanie presented preliminary work on this thesis at the Interior Design Educator’s Council South Region Conference in October 2008, where she was awarded best graduate student presentation. The completed work will be presented at the Interior Design Educator’s Council National Conference in March 2009. Stephanie looks forward to her career in the design world both as an interior design practitioner and educator.