INTRODUCTION:
The importance of bridging academic studies and the work environment expectations is increasingly important. Historically, student design courses are frequently based upon limited-experience assumptions. These assumptions are abstractions and distance consideration for creating safe and accessible facilities.

Design Education
Creating safe and accessible facilities does not necessarily require rigorous resources. It does, however, require awareness of the needs of the end-users, who may be facing various challenges. As design educators, it is important to not only teach the implications of the Americans with Disabilities Act (ADA) building codes, but also to heighten our students’ awareness and empathy for the non-typical end user (2009, Council for Interior Design Accreditation, 2014). Design for the non-typical end user, which is best described as universal design, is not new to the design profession. Universal design is designing a space for all people without architectural restriction. Research indicates that there is an insufficient incorporation of universal design in university as the majority of the participants did not know the content and its content (Helvacigil & Kazancioglu, 2012).

Alicias’ research explored both students and instructors’ attitudes toward accessibility standards, often referred to as universal design. From the students’ point of view, having universal design implemented is not related to a lack of knowledge. Instructors reported, “the students are not able to correlate the information gained in syllabus lectures. They need to be encouraged. Thus, providing the linkage between the content of the course and why universal design issues could be a good way to foster the developments of innovative teaching strategies” (Alicias, 2011). Alicias’ findings concluded that one seminar is not enough for both instructors and students to respond to the requirements of universal design and combining these requirements into pedagogical issues. Finally, the implementation of universal design within the curriculum content is essential so that universal design becomes an inseparable part of the design process and is a fundamental aspect of design education (Alicias, 2011, p. 3191).

In order to increase the incorporation of accessibility standards, educators should supply various academic and design-related experiences, which include universal design experiences, workshops, conferences, student-led design competitions to promote the development of universal design (Helvacigil & Kazancioglu, 2012). While a separate course in accessibility design and building codes has increased student awareness accessibility guidelines must still be immersed in the context of design studios (Oguntokun & Densrmen, 2009). Welch and Ostroff research findings confirmed that this was not enough for most students to fully engage the value of accessibility and the principles of accessibility (1995).

Experiential Learning
Experiential learning processes are more important to the reflection of these experiences, has profoundly affected students’ empathy, as well as awareness, by being temporarily subjected to a situation which stimulates impairment and/or disability. One such approach to achieve this experiential learning through image-based inquiry “Image-based inquiry minimize reliance upon verbal language and exposes imagery as a universal language communicating complex concepts between the interior designer and end users” (Perrin & Robben, 2010, p. 198). In preliminary studies, it was discovered that while student generated images foster metacognition and self-reflection, the impact was temporary, limited to the designated course (Ford & Gerhart, 2011). See Figures 01-05.

1. Determine occupancy classification for a given space.
2. Calculate occupant load for a given space.
3. Calculate aisle access ways for a given space.
4. Calculate required water closets for a given space.
5. Calculate required bathtubs/showers for a given space.
6. Determine required number of accessible fixtures for an occupancy classification.
7. Identify the building(s) type for which ADA has an impact.
8. Identify accessible barriers.
9. Design a restroom that complies with accessible standards for persons in wheelchairs.

In order to increase the incorporation of accessibility standards, educators should supply various academic and design-related experiences, which include universal design experiences, workshops, conferences, student-led design competitions to promote the development of universal design (Helvacigil & Kazancioglu, 2012). While a separate course in accessibility design and building codes has increased student awareness accessibility guidelines must still be immersed in the context of design studios (Oguntokun & Densrmen, 2009). Welch and Ostroff research findings confirmed that this was not enough for most students to fully engage the value of accessibility and the principles of accessibility (1995).

Questions
1. In what ways do building code requirements affect your conceptual design solutions? Explain.
2. What are architectural barriers?

Research that investigates interior design students’ implementation of building code interior standards into concept courses has not been done. To provide a basis to develop pedagogical strategies in CIDA accredited interior design programs, this on-going study will examine the depth of awareness and understanding of junior and senior level design students enrolled in junior and senior level concept courses, at two peer institutes over a two-year period. The estimated representative sample size is 20.

Since the main issue was to analyze and ultimately determine transformational learning among students, regarding awareness and implementation of building code expectations within students’ junior and senior year design concept coursework, the questions were constructed as such to respond to research questions. Qualitative analysis will be conducted to ascertain emerging themes among respondents’ image-based inquiry and open-ended question responses.

RESEARCH QUESTIONS

1. Is there a significant difference between what students think they know and what they actually know about building code ADA requirements within their upper level junior and senior level course work, it occurred only when their work was near completion.
2. Calculate required water closets for a given space.
3. Calculate aisle access ways for a given space.
4. Calculate required bathtubs/showers for a given space.
5. Calculate required water closets for a given space.
6. Calculate required number of accessible fixtures for an occupancy classification.
7. Identify the building(s) type for which ADA has an impact.
8. Identify accessible barriers.
9. Design a restroom that complies with accessible standards for persons in wheelchairs.

The following questions guided the research:

1. How does student awareness and implementation of building code expectations within students’ junior and senior year design concept coursework.
2. Have efforts to teach building codes to interior design students successfully ensured transformational learning among students in upper level course work?

EXPERIMENTAL LEARNING
Experimental learning processes are more important to the reflection of these experiences, has profoundly affected students’ empathy, as well as awareness, by being temporarily subjected to a situation which stimulates impairment and/or disability. One such approach to achieve this experiential learning through image-based inquiry “Image-based inquiry minimize reliance upon verbal language and exposes imagery as a universal language communicating complex concepts between the interior designer and end users” (Perrin & Robben, 2010, p. 198). In preliminary studies, it was discovered that while student generated images foster metacognition and self-reflection, the impact was temporary, limited to the designated course (Ford & Gerhart, 2011). See Figures 01-05.

Research indicates, “curricula that meets the current FIDER guidelines prepare students for entry-level positions in both residential and nonresidential interior design” (Hines, Albanese, & Garrison, 1994). Even while individual courses and programs have met CIDA requirements, research indicates that only two lectures are set aside to address issues related to accessibility.

The class syllabus indicates that only two lectures are set aside to address issues related to accessibility. The class syllabus indicates that only two lectures are set aside to address issues related to accessibility. The class syllabus indicates that only two lectures are set aside to address issues related to accessibility. The class syllabus indicates that only two lectures are set aside to address issues related to accessibility. The class syllabus indicates that only two lectures are set aside to address issues related to accessibility. The class syllabus indicates that only two lectures are set aside to address issues related to accessibility. The class syllabus indicates that only two lectures are set aside to address issues related to accessibility. The class syllabus indicates that only two lectures are set aside to address issues related to accessibility. The class syllabus indicates that only two lectures are set aside to address issues related to accessibility. The class syllabus indicates that only two lectures are set aside to address issues related to accessibility.

References


Figure 01: The students are not able to correlate the information gained in syllabus lectures. They need to be encouraged. Thus, providing the linkage between the content of the course in terms of universal design issues could be a good way to foster the developments of innovative teaching strategies (Alicias, 2011).

Figure 02: This is a clear indicator that students do not carry the information over to the other studios as observed by principle investigators and the class syllabus indicates that only two lectures are set aside to address issues related to accessibility. Student work did not demonstrate a linkage between the content of the courses in terms of universal design issues could be a good way to foster the developments of innovative teaching strategies (Alicias, 2011).

Figure 03: In preliminary studies, it was discovered that, while student generated images foster metacognition and self-reflection, the impact was temporary, limited to the designated course (Ford & Gerhart, 2011). See Figures 01-05.

Figure 04: The following questions guided the research:

- How does student awareness and implementation of building code expectations within students’ junior and senior year design concept coursework.
- Have efforts to teach building codes to interior design students successfully ensured transformational learning among students in upper level course work?

Figure 05: Research that investigates interior design students’ implementation of building code interior standards into concept courses has not been done. To provide a basis to develop pedagogical strategies in CIDA accredited interior design programs, this on-going study will examine the depth of awareness and understanding of junior and senior level design students enrolled in junior and senior level concept courses, at two peer institutes over a two-year period. The estimated representative sample size is 20.

Figure 06: Since the main issue was to analyze and ultimately determine transformational learning among students, regarding awareness and implementation of building code expectations within students’ junior and senior year design concept coursework, the questions were constructed as such to respond to research questions. Qualitative analysis will be conducted to ascertain emerging themes among respondents’ image-based inquiry and open-ended question responses.