Expected Outcomes: Process Knowledge

Students will demonstrate knowledge of the theories and concepts of space planning and lighting design and their role in the successful specification of the three dimensional space.

Related typical general education outcomes:

- 5 Ability to Use Mathematical Methods
- 6 Ability to Solve Open-Ended Problems
- 11 Scientific Literacy

Assessment methods

Method: Assessment of Process Knowledge in CAHS 3200

Direct Method. Successful application of process knowledge requires that student work include documentation from three stages of the design process: programming, schematic design, and design development. In the grading rubric, these items are described as: • Programming section with fleshed out client program • Schematic section with process work including bubble flow, adjacency matrix, furniture layouts, and space planning drafts • Design development section with process work, including drafts of presentation drawings, notes, and other appropriate evidence of work. The documentation provided in process notebooks by 23 junior-level interior design students was evaluated for Project 2 in CAHS 3200 Residential Interiors (Fall 2011).

Findings:

This objective was worth up to 50% of the assignment grade. Each of the three stages was assessed using a four-point scale: 0 – no attempt 1 – below average 2 – average 3 – above average. Scores ranged from 0 to 3 with an overall mean score of 2.54. The mean score for programming was 2.70, and a closer look at the data reveals that all but two students received full marks in this area. The mean score for schematic design was 2.48 and the mean score for design development was 2.43. The data reveals that four students did not meet the average (passing) ranking on these two objectives.

How did you use findings for improvement?

Process knowledge is very important within the design professions, for day-to-day success on the job as well as meeting the required knowledge levels for professional certification in most states. Therefore, improving student learning outcomes in this area is a vital part of the instructor’s goals in the next offering of this course. The same format will be used, but grading of the schematic phase will be more closely monitored to allow the instructor to analyze which portions of the schematic phase are most difficult for students to meet.

Additional comments:

N/A

Method: Assessment of Process Knowledge in CAHS 3100

A random sample of 15% of the process notebooks developed by junior level students in CAHS.
3100, Lighting Design and Environmental Systems were selected for evaluation. The Light Mapping assignment was selected from the CAHS 3100 class for assessment. The Light Mapping assignment was designed to foster successful understanding and application of the lighting design process in a residential environment. The students’ process notebooks, which consisted of one of the three requirements for the Light Mapping assignment, were utilized. Three attributes were evaluated on a five point scale (1=benchmark to 5=capstone): graphic skills, critical thinking, and creative thinking.

Findings:

Scores on all attributes ranged from 2-5. The highest mean score, 4.67, was for critical thinking; this demonstrated a high level of attention to information gathering and analysis. The lowest mean score, 3, was for graphic skills; this suggested that students were less successful in clearly expressing their project content through their graphic presentation. The mean score for creative thinking, 3.67, was slightly higher. The overall mean score for process knowledge was 3.89. This score indicates that at this point in their curriculum, students appear to have a clear understanding of the process of lighting design.

How did you use findings for improvement?

The next time the course is taught, more attention will be given to identifying and mastering the graphic skills that are expected in the project.

Additional comments:

Since this is a junior level course, assessment of the development of graphic skills in lower level prerequisite courses could provide useful insights that would be applicable to this and other upper level courses.

Expected Outcomes: Product Knowledge--Materials and Finishes

Students will demonstrate knowledge of materials and finishes as they relate to interior products and successful specification of a safe and effective interior environment.

Related typical general education outcomes:

11 Scientific Literacy

Assessment methods

Method: Assessment of Product Knowledge in CAHS 4920

Indirect Method. A full time internship is required for graduation. Field Supervisors’ evaluations of student interns were assessed for the attribute, demonstrate product knowledge. Ratings were on a 1-4 scale (1= least successful, 2=less successful; 3=more successful, and 4= most successful, with an option of Not Applicable = N/A).

Findings:

Two of 22 students did not have an opportunity while on their internships to demonstrate product knowledge. Thirty-six percent of the remaining 20 interns were rated as more successful at demonstrating product knowledge, while 45% were rated as most successful. One intern was rated as less successful (i.e., rating of “2”) and one intern as least successful (i.e., rating of ‘1’).

How did you use findings for improvement?

Due to the wide variety of special design areas that Interior Design students pursue for their
Internships and job opportunities, it is difficult to prepare them all to be most successful in this area. For improvement, the program has asked alumni and advisory board members to create lists of sources, distributors, and manufacturers specific to their area of design specialization. These lists will be incorporated into the courses that help to prepare students for their internships.

Additional comments:

N/A

Method: Assessment of Product Knowledge in CAHS 3100

A random sample of 15% of the specification binders developed by junior level students in CAHS 3100, Lighting Design and Environmental Systems were selected for assessment. The Light Mapping assignment was selected from the CAHS 3100 class for evaluation. The Light Mapping assignment was designed to foster successful understanding and application of the lighting design process in a residential environment. The students' specification binders, which consisted of one of the three requirements for the Light Mapping assignment, were utilized. Three attributes, i.e., terminology, appropriate materials, and synthesizing objectives were evaluated on a five point scale (1=benchmark to 5=capstone):

Findings:

Scores on all attributes ranged from 1-4. The highest mean scores, 3, were for terminology and synthesizing objectives; these indicated an acceptable level of knowing terminology and being able to synthesize different aspects of product knowledge. The lowest mean score, 2.67, was for appropriate materials; this score showed that the students were less successful in accomplishing the appropriate specification of lighting fixtures and lamps. The overall mean score for product knowledge, 2.88, was approximately one point lower than the overall means for Communication and Process Knowledge.

How did you use findings for improvement?

The next time the course is taught, additional directed attention will be given to the specification binder and necessary product knowledge. There are many details to be considered in specifying lighting designs. The mean score reflects students' knowledge midway through the semester. Product knowledge should have increased by the end of the semester. Therefore, next year the assessment should be conducted either in a higher level studio or on a project completed later in the semester.

Additional comments:

N/A

Expected Outcomes: Oral Communication

Students will demonstrate effective oral communication skills.

Related typical general education outcomes:

8 Oral Communication

Assessment methods

Method: Assessment of Oral Communication in CAHS 4400

Direct Method: Evaluation of scores earned by senior students for Project 1 and Project 2 in CAHS
4400 Institutional Design. Two course assignments completed by 21 students incorporated oral communication components. The first focuses on a presentation that communicates a project’s parameters and support of design decisions by a literature review. The second calls for a “pitch” for the design proposal’s quality, details, and meeting of project parameters.

**Findings:**

Using a grading rubric (20 possible points), the mean score for the first presentation was 17.95 (range: 13-20). High scoring students generally demonstrated good integration of key points with visual aids, and low scoring students generally missed one or more key points. Using a grading rubric (30 possible points), the mean score for the second presentation was 26.43 (range: 24-28). High scoring students generally demonstrated good opening and closing, while low scoring students failed to open or close successfully. Between the assignments, a lecture and exercise was given to assist students in identifying and communicating key points for presentation. All students successfully integrated key points with visual aids on this assignment, showing improvement from the first presentation.

**How did you use findings for improvement?**

In the next offering of this course the same format (attempt – lecture/exercise – attempt) will be used. Further, the assessment of oral communication will be subdivided into two distinct objectives: 1) terminology and language skills and 2) key points and narrative flow. This change is intended to enable the instructor to better assess different aspects of students’ oral communication skills.

**Additional comments:**

N/A

**Method:**

Assessment of Oral Communication in CAHS 4920

Indirect Method: Oral communication skills of INDS seniors were assessed by the field supervisors of the required capstone internship, CAHS 4920. After a 10 week, 400 hr. internship, onsite intern supervisors rated 22 students’ performance on a scale of 1-4 (1= least successful; 2=less successful; 3=more successful, and 4= most successful, and with an option of Not Applicable = N/A). The rating was based on the students' success in orally presenting information to clients. Three supervisors reported that interns did not have that opportunity.

**Findings:**

Of the 19 evaluated students, 15 were rated as most successful (i.e., a rating of ‘4’). Of the remaining four interns, two were judged more successful (i.e., a ‘3’) and two as less successful (i.e., a ‘2’).

**How did you use findings for improvement?**

To more precisely identify areas for improving preparation for oral presentation, we can adjust the evaluation questionnaire to split the oral communication question into three parts: oral communication of design concepts, oral communication to clarify instructions, and oral communication of project parameters to client.

**Additional comments:**

N/A

**Expected Outcomes:**

Professional attitudes and skills

Students will demonstrate professional products and characteristics appropriate for the workplace.
Related typical general education outcomes:

7  Written Communication
8  Oral Communication
9  Informed and Engaged Citizenship
12 Aesthetic Appreciation and Engagement

Assessment methods

**Method :** Assessment of Professional Skills in CAHS 4920

A full time internship, i.e., CAHS 4920, is required for graduation. Field Supervisors’ evaluations of all 22 student interns were assessed for the following attributes: professionalism, reliability and timeliness, work ethic, and teamwork. Ratings were on a 1-4 scale (1= least successful; 2-less successful; 3-more successful, to 4= most successful, and with an option of Not Applicable = N/A)

**Findings:**

Overall, most interns were rated as ‘4’ or ‘most successful’ for all four attributes. For reliability and timeliness 94.5% were judged most successful. For professionalism, work ethic, and teamwork, 90% were rated most successful. Students not rated most successful (i.e., #4), were all rated as more successful (i.e., #3) except for one student who was deemed least successful (i.e., #1) on the teamwork attribute.

**How did you use findings for improvement?**

Historically, interns have performed particularly well with regard to professionalism. It may be beneficial to identify students who do not perform well in teamwork-oriented exercises earlier in their programs and make suggestions to help with confidence, public speaking and group dynamics, or provide these students with more opportunities to experience leadership opportunities. The new (instituted in 2012) evaluation, ranking, and acceptance process for moving Pre-Interior Design students into the Interior Design program (sophomore-senior year) considers work ethic, leadership and teamwork in addition to other performance-based criteria evidenced in CAHS 1000 and CAHS 1100. This early screening may help to identify the need for mentoring and additional teamwork or leadership opportunities in order to raise the quality of professionalism by the time of the mandatory internships.

**Additional comments:**

N/A

**Expected Outcomes : Business Knowledge--Terminology**

Students will know and apply terminology commonly used in the Interior Design business.

**Related typical general education outcomes:**

4  Ability to Construct Arguments
7  Written Communication

Assessment methods

**Method :** Assessment of Business Knowledge in CAHS 3500

Pre and post test results from CAHS 3500 Professional Practices were assessed. The essay
question assessed focused on defining the concept of “a professional”. The same question was asked on the midterm and the final exam: “What are the elements common to all professions? They are common to interior design, as well. Be sure to include the one main common denominator and explain what it means.” The testing for minimal competency, education in specialized skills, evaluation and accreditation of educational programs, professional societies which exist to self-regulate, standards for ethical practice, research to advance the profession, provision of service for public good, and other standard terms used to define professions were to be listed and discussed in an intelligent and cohesive manner.

**Findings:**

On the midterm, 10 of the 15 students scored just a 3 or 4 of 8 possible points; only two students scored a 7 or 8. The remaining three students scored a 5 or 6. Thirteen of the 15 students in the class improved their scores during the semester from the midterm to the final; 9 of 15 got a perfect score on the final exam question. Only one student scored as low as 4 points. The remaining five students scored a 6 or 7. All but one student improved their knowledge, and 80% made a perfect score or missed only one point on the final exam question. All but one student (93%) improved their knowledge of the term “professional” over the semester.

**How did you use findings for improvement?**

Because this is a fundamentally important term to understand and express, other components will be added to the learning opportunities next time. The students may be broken into groups and asked to debate the defense of interior design being a profession and then interior design not being a profession.

**Additional comments:**

N/A

**Expected Outcomes: Global Perspective-Sustainability**

Students will understand the global aspects of interior design as they relate to sustainability.

**Related typical general education outcomes:**

9. Informed and Engaged Citizenship

**Assessment methods**

**Method:** Assessment of Global Perspective in CAHS 2400

Exam questions in CAHS 2400, Materials and Components were evaluated to assess the sophomore students’ global perspective as related to sustainability. Two exams given in CAHS 2400 address aspects of sustainability as applied to interior design. Exam questions were designed to foster successful understanding of the three main components that define sustainability; people, planet, and prosperity. Five attributes, i.e., terminology, eco-certifications understanding, and each of the components of sustainability (people, planet, and prosperity) were evaluated on a five point scale (1=benchmark to 5=capstone).

**Findings:**

Mean scores on all attributes ranged from 1-5. The highest mean score, 5.0, was for terminology, demonstrating an advanced level of understanding in terminology regarding sustainability. The lowest mean score was 3.31 for planet, suggesting a basic (but not advanced) understanding of the negative externalities to the environment that can stem from the interior design profession. The mean score for eco-certification was 4.42, indicating a high level of understanding.
regarding various eco-certifications that apply to products and materials in the building and design industry. The overall mean score for people was 3.92, indicating a proficient understanding of the potential impact materials and products have on people’s physical health. The overall mean score for prosperity was 4.62, indicating a high level of understanding of the ways in which sustainability can positively influence economic gains.

How did you use findings for improvement?

Next time the course is taught, more attention will be given to discussing how to improve the lives of those with whom buildings interact through the specification of materials and components. In addition, further discussion will occur regarding eliminating waste and responsible resource management. Additional assessment of sustainability should occur at higher course levels to determine if the understanding levels have remained constant, declined, or increased.

Additional comments:

N/A