

A. INSTRUCTION

4. Pre-Professional Curriculum Development

This discussion will examine two courses in which the candidate achieved significant contributions to the curriculum. The two courses are ID 252 Basic Industrial Design II - U 5, taught in the Winter Quarter, and ID 253.03 Industrial Design Practices - Design History - U3, taught in Spring Quarter.

ID 252 Basic Industrial Design II - U 5

Winter Quarter 1990, 1991, 1992, 1993

The course is the second studio course required of all majors in the Department of Industrial Design. Normally, three sections of the course are offered during the Winter Quarter averaging 20 students per section. The candidate taught one of these sections during Winter Quarter '90, '91, '92, and '93.

In preparation for the Winter Quarter 1992, the Department Chairperson requested the three faculty teaching the course to develop and implement significant revisions to the curriculum. Working with the instructors teaching the other two sections, Profs. Joseph Koncelik and Reinhart Butter, the candidate designed major revisions to the curriculum during the quarter preceding the course.

Needs The revisions achieved two fundamental changes to the curriculum. First, to improve consistency of subject matter across the three sections, and second, to link subject matter across the studio problems assigned during the quarter.

a. Development of Curriculum

The basic subject matter continues the introduction of design principles and methods, begun in ID 251, while expanding the scope from two-dimensional to three-dimensional design issues. To maintain consistency between the sections, the three instructors agreed to work within a subject matter framework while developing their own set of suitable studio problems. The instructors defined two core subject matter issues for the course: thinking and visualization.

The thinking subject matter is manifested as design process, problem solving, and sensitivity to "good design". The visualization subject matter is manifested as drawing and desktop model making. These two groups of subject matter are applied over the three units of the course in conjunction with the studio problems.

The second major revision required that the studio problems create a broader design educational experience for the students. During this course students need to finalize their choice of major within industrial design: interior space, product or visual communication design. The instructors agreed to design the studio problems to provide an educational experience within each of the three majors. Further, the instructors agreed to design the studio problems so that they interlock to show the connection between the various design disciplines. This range of experience provides both the student and the instructor a means to compare abilities and performance in making a choice of major.

Based on the agreed subject matter and studio objectives, the candidate developed more detailed subject matter and concepts.

b. Curriculum Contributions and Innovations

The candidate designed a number of contributions and innovations to the curriculum to enhance the student's thinking and visualization.

Designed New Connections Between Subject Matter Units

Important to the student's thought process about design was their understanding of the interrelationships between the design majors. A key to establishing the interrelationship was to integrate the three units of subject matter with a linking element. The linking element can be most any physical thing with visual, form and structural issues. In this case the linking element chosen was a system to display a student's design work and the potential concepts associated with the display. For example, the display and organization of the information being displayed is a visual communications problem. The interaction of people with the display and its context or surrounding space is an interior space problem. Finally, an object being displayed is a product design problem.

Developing a student's ability to think about a design problem is critical to their development as an effective designer. The candidate designed the course to direct that development along two tracks.

Required Students to Maintain a Graphic Journal

First, is the repeated exposure to applying a structured process to solving design problems. The student was required to prepare a "Process Book" which documents the design process they followed for each problem. The Process Book contains research documentation, analysis, conceptual development drawings, photographs of models and other pertinent information.

Designed Studio Experiments to Encourage Observation and Thinking

Second, is building diagnostic skills based upon observation and clear deductive thinking to enhance a student's sensitivity to the design issues of form, space, human interaction, etc. The candidate utilized a technique to carefully pace the introduction of subject matter and concepts to the students while encouraging student observation and thinking. At the outset of each unit the students participated in a series of short studio exercises. These short exercises would lead directly into the longer studio problem. For example, at the beginning of Unit #1, students found and created textures. Through observation and analysis they discovered that textures contain modules. This prepared them to research and develop the module forms necessary to complete the studio problem.

Created Evening Seminars with Guest Speakers

The visualization subject matter was of particular concern. Sketching, drawing and model making were required for every unit. Additional exposure to practical design visualization would be ideal. Working together the three instructors put together a series of three evening seminars. The seminars would bring the three sections together to further enhance the consistency of information and knowledge being received. Each seminar brought in professionals from the local design community to discuss and demonstrate visualization techniques and "good design". In exchange for a regular class meeting, students were required to attend the evening seminar. The first seminar, organized by the candidate, introduced practical drawing techniques. Local design professionals from interior space, product, and visual communication firms came for a two hour discussion and demonstration. These professionals provided a wide range of practical examples of drawing techniques and application for the students.

ID 253.03 Industrial Design History -

Spring 1989 and 1990, lecture with an average of 45 students

The course is the only design history course required of all majors in the Department of Industrial Design. It is taken concurrently with ID 253.01. Two sections of the course were offered during the Spring 1990 quarter. The candidate taught one of these sections.

Working with the instructor teaching the other section, Prof. Shirley Olsen, the candidate utilized the existing subject matter framework of the course. It was important to maintain the consistency of subject matter across the two sections.

a. Development of Curriculum

The basic subject matter focuses on a survey of design history from 1850 to the present. Its purpose is to bring all students to an equal level of knowledge and skills in preparation for more advanced studio courses in their specific major.

To maintain consistency between the sections, the two instructors agreed to work within a subject matter framework while developing their own set of suitable lectures, class assignments, quizzes and exams. The instructors defined two core subject matter issues for the course: identification of significant designers and their contributions, and the philosophies or schools of thought associated with these designers. The two instructors also used several of the same textbooks.

In addition, the candidate included two other subject matter issues to this core: the definition and role of design history, and the social and cultural context of the significant designers. Utilizing an existing course outline, the candidate incorporated the above subject matter additions and other modifications. The resulting curriculum included lectures the candidate developed at another institution, several thousand personal slides of design artifacts, and a prototype Design History Workbook published as a course packet.

b. Curriculum Contributions and Innovations

Creating the "Design History WorkBook"

The most significant modifications to the curriculum occurred in two areas. The first was with the use of the Design History WorkBook. The second was with a basic shift in the main subject matter - significant designers and their contributions. The shift was to achieve a better balance between architecture, interior space, product, and visual communication.

History of design traditionally takes a "show and tell" approach. Students are shown significant design artifacts, told information about them and the designers, and then asked to perform rote memorization for later examination. To enhance this process, the candidate used the WorkBook to give the students a more active role in their learning process. In addition to being a textbook, the WorkBook includes sheets for written and drawn responses from the students. It is used both in class and for homework assignments.

Using Sketching to Reinforce the Learning Experience

For example, several times in every class students use the WorkBook to sketch a design artifact shown on a slide. Then as homework they write responses to a series of questions about the artifact and the designer. The sketching reinforces their visualization of the design and its important features. It also feeds their need to sketch at this point in their education. The written responses reinforce their knowledge of the design and the designer. It can then be used as a study tool for quizzes and examinations.

Expanding the Course Content to Include Interior Space and Visual Communication Design

The existing course outline needed more attention, especially, to interior space and visual communication designers and their significant contributions. Lectures the candidate had previously written were updated and included in the curriculum. Content in the Design History WorkBook was also updated to reflect this addition to the subject matter.