



2008-2009 Assessment Plan Report

PROGRAM ASSESSMENT REPORT AY 2008-2009

Report Date: July 24, 2009

School/College: University of San Francisco, College of Arts & Sciences

Department/Program: Art + Architecture / Architecture & Community Design

Person completing the Report: Seth Wachtel

1. **Overview Statement:** Briefly summarize the assessment activities that were undertaken this academic year, indicating:
 - a. which program learning outcomes were assessed this year.
 - b. who in your department/program was involved in the assessment of the above learning outcomes

a. Architecture and Community Design (ARCD) faculty assessed Learning Outcomes in a sampling of courses from three areas of the ARCD curriculum: Architecture History, Design Studio, and Community Design Outreach. The learning outcomes assessed were:

- 1a. Demonstrate comprehensive knowledge of the development and trajectory of architectural history from prehistory to contemporary times**
- 1b. Demonstrate through architectural and urban design projects a broad knowledge of the concepts and terminology related to urban and architectural history**
- 2a. Demonstrate, through design practice, knowledge of the key methods of visual representation with an emphasis on the strategies that promote visual clarity and understanding.**
- 2b. Demonstrate, through design practice, competence in using architectural graphic standards as a component of visual communication**
- 2c. Demonstrate, through design practice, competence with design process methodologies.**
- 2d. Demonstrate understanding of the fundamental concepts structure and materials in architectural design.**
- 2e. Demonstrate strategies that promote cultural identity and human wellbeing.**



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- 3a. Identify and describe the key concepts and design methods in the history and theory of architecture through critically reflective work.**
- 3b. Initiate, research, and develop a design project that requires Service-Learning skills.**
- 3c. Demonstrate the ability to effectively apply culturally sensitive architectural solutions to underserved communities.**
- 4a. Demonstrate comprehensive skills using freehand drawing and/or an architectural computer-rendering program such as VectorWorks, AutoCAD, or SketchUp.**

These outcomes reflect the content of required ARCD major classes Architectural History 1, Architecture Studio 2, Architecture Studio 4, Architecture Studio 5, and Architecture Studio 7.

- b. The Architecture and Community Design Assessment activities involved Professors Seth Wachtel, Tanu Sankalia, Hana Mori, and Matthew Peek assessing their respective classes for Fall 2008 and Spring 2009 by evaluating their students' studio projects and final exams.**

2. Please Answers the Following Questions for Each of the Student Outcomes Assessed:

a. What did you do?

Describe clearly and concisely how you assessed the learning outcomes that were evaluated this year (e.g., measures, research methods, etc.). [please use bullet points to answer this question]

- Sankalia assessed History of Architecture 1. Final exams were read, analyzed and evaluated for learning outcomes.**
- Sankalia assessed Architecture Studios 2 and 5 through the review of several interim and final projects. This included evaluation of work ranging from conceptual sketches, process diagrams, process drawings, sketch models, final drawings, final models and oral presentations were documented and analyzed for evaluating learning outcomes. Aspects such as quality of idea, clarity of conceptualization through diagrams and models, precision and quality of drawings, output and quality of final presentation, both oral and drawn**
- Mori and Peek taught one section each of Architecture Studio 4. Each assessed learning outcomes for this course by evaluating student performance in the following areas: assignments on**



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annotated graphics & diagrammatic representation, documentation, construction drawings and recreation of an existing built object, development of construction drawings of a new design, and large scale details and models of construction elements to demonstrate understanding of building material components, their assembly and interaction. Further evaluation of learning outcomes was based on the following: quality of research and presentation on existing solutions to an assigned design problem, quizzes on architectural, structural, materials, and construction methods, use of computer skills to study tectonic composition of proposals, mid-term and final reviews with juried presentations.

- Wachtel assessed Architecture Studio 7 – Community Design Outreach. Assessment was based on evaluation of midterm and final project proposals, summaries and reflection papers, project research presentations, observation of interaction with local community partners, individual and group student design processes involving conceptual sketches, process diagrams, process drawings, sketch models, final drawings, final models and oral presentations in front of architecture and urban design professionals.
- The evaluation for Studio 7 was focused around student facility in design and presentation skills in the context of community projects of varying scales and complexity, with real clients and professional expectations.

b. What did the faculty in the department or program learn?

Summarize your findings and conclusions as a result of the assessment indicating strengths and weaknesses in student learning demonstrated by this assessment.

Architecture History 1

- The interest and enthusiasm for student learning in History of Architecture 1, related to learning outcomes 1a and 1b is relatively low.
- As a result, a majority of the students are performing in the Average Achievement category (about 50%) while the other half are approximately equally divided between the Poor Achievement (about 25%) and Very Good Achievement (about 25%) as regards to learning outcomes 1a and 1b.

Architecture Studio 2

- Architecture Studio 2 related to learning outcomes 2a, 2b and 2c and 3a. A majority of the class performed at the “Good” to “Very Good” level.
- More than 70% of the students were able to produce architecture



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studio projects that were well conceptualized and clearly and skillfully represented through a wide-range of media including sketches, drawings, models and oral presentations.

- With respect to learning outcome 3a, 25% of the class was able to perform at the “Very Good” achievement level.

Architecture Studio 4

- For learning outcome 2a, with technical topics such as building methods and materials, students seemed to learn best through a combination of demonstration, readings, lecture with images, and physically undertaking projects themselves.
- For learning outcome 2b, drawing, whether formally or informally, created a direct path between hand and mind, allowing students to make observations and think through every mark they made. Additionally, students tended to enjoy both types of drawing and took many opportunities to express their interests and skills. The general strengths in this area were research, physical models, and axonometric drawing. The weaknesses were sections, elevations, details, and graphic composition.
- For learning outcome 2c, the course focused on an aspect of architectural design, which is often considered unglamorous, but the students were excited to obtain a complete picture of the elements that must be present in a successful design. There was marked improvement in understanding how buildings are constructed in the following areas: wood, steel, concrete detailing; foundation and roof design, energy-efficient detailing; sustainable materials innovation; special construction measures for disaster-prone areas; graphic presentation; use of elegant detailing and construction methods as integral to the aesthetics of architecture.
- For learning outcome 2d, students typically had good physical intuition, or at least an ability to readily grasp three-dimensional problems. Their interest level in “getting their hands dirty” varied, but this seemed to be the best way to acquire information about the material and structural aspects of physical systems.
- For learning outcome 2e, the Studio 4 course was the proper level and subject matter for the introduction of the concepts of culturally or contextually appropriate decision-making as one of the bases for ecologically sound design. Students were ready to absorb and apply these ideas, as they learned to minimize waste and maximize understanding of the natural properties of building materials.

Architecture Studio 5

- Architecture Studio 5 related to learning outcomes 2a, 2b and 2c



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and 3a. A majority of the class performed at the “Good” to “Very Good” level.

- More than 70% of the students were able to produce architecture studio projects that were well conceptualized and clearly and skillfully represented through a wide-range of media including sketches, drawings, models and oral presentations.
- With respect to learning outcome 3a, 30% of the class was able to perform at the “Very Good” achievement level

Architecture Studio 7– Community Design Outreach

- For learning outcome 3b, 73% of students demonstrated the capacity to employ a leadership role in a service-learning project.
- 59% showed the ability to produce a design report comprehensive enough for the community partner to continue to develop the project.
- 27% and 41% respectively, showed an average ability to demonstrate the outcomes sought in this area, while no students demonstrated “poor” achievement.
- The conclusion from this assessment is that requiring that students develop projects for both local and international community partners is effective in introducing students to different methods of community engagement. Student engagement in the real world challenges of solving urban design and architectural design problems was a potent tool in conveying methods of engagement across a wide range of problem types.
- For learning outcome 3c, 86% of students demonstrated awareness and initiative in applying culturally sensitive solutions to the course design problems.
- The required research component of each class design project appeared to be effective in developing students’ cultural sensitivity when devising solutions for underserved communities.
- For learning outcome 4a, 82% of students were able to demonstrate comprehensive skills using freehand drawing and/or an architectural computer-rendering program. 18% showed average achievement in this area, while no students showed “poor” achievement.
- The conclusion here that the level of freehand and computer drawing skills developed in previous architecture classes sufficiently prepared students for the comprehensive use of this skill set in their capstone studio.

c. What will be done differently as a result of what was learned?



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Discuss how courses and/or curricula will be changed to improve student learning as a result of the assessment. Include a discussion of how the faculty will help students overcome their weaknesses and improve their strengths.

- **We must increase learning enthusiasm for History of Architecture classes. We will do this by increasingly stressing the importance and connection of history to contemporary practices of urban planning, development of architectural form, understandings of locale/place and sustainability.**
- **We will require, and follow through on more rigorous standards of reading and writing, which will be essential for students to obtain a stronger grasp of the concepts and trajectory of architectural and urban history.**
- **We will include greater historical and theoretical discussions in Architecture Studio classes so as to make stronger connections between history/theory and practice.**
- **We will introduce an upper-division/capstone class that deals with issues discussed in contemporary architectural theory and practice.**
- **For learning outcome 2a, more examples of the key methods of visual representation will be provided from different sources, as well as readings on the theory of graphic representation and methods for improving clarity in visual presentations.**
- **For learning outcome 2b the combination of sophomore level graphic/model making skills and the early public exhibition of graphic boards, more time was needed to produce 3-D models of the projects. As a result, we will introduce architectural graphics earlier in the syllabus or at least be prepared for the unique scenario of a civic exhibition and introduce models earlier in the process. Additionally, due to time constraints, subgroups were formed with specific tasks for the major project. Because of this, some students had more practice developing and honing their drafting skills than others. This will be evened out in the future with each student more responsible for their portion of formal drafting.**
- **For learning outcome 2c, it was clear in the assessment that case studies and examples of successful work are invaluable for getting points across. As a result, more case studies will be incorporated into lectures and early stages of projects.**
- **For learning outcome 2d, we will increase student exposure to structural and building material concepts in architectural design, through more field trips to real-life construction sites, fabrication/testing shops and professional offices.**
- **For learning outcome 2e, the issues of culture and context will be more emphasized especially as they relate to explaining where**



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building conventions come from and how these choices enhance or weaken ecologically sound design.

- **Learning Outcome 3b had a favorable assessment result, so no changes will be made to the structure of this portion of the course. However, what will be introduced is sharing between student teams of their differing methodologies of communication across diverse project types, communities, and locations. Faculty will share personal and anecdotal experience in the field to provide examples and context for students to relate to their current projects.**
- **Learning Outcome 3c had a favorable assessment result, so the current course structure will not be changed in this assessment area.**
- **Learning Outcome 4a was met with favorable assessment results, but the unexpected result of the very high level of graphic skill highlighted the contrasting need for improvement in writing skills associated with presentation of real world design projects. As a result, a specific requirement to write clear and informative summaries of critical design aspects of each project will be added to the course requirements.**

3. Attach a copy of the components of the department/program assessment plan that have been modified since its initial submission:

- a. Program Mission
- b. Program Learning Goals
- c. Program Learning Outcomes
- d. Program Learning Rubrics aligned with outcomes
- e. Curriculum map that shows the courses that pertain to the outcome

***Please see the attached revised Outcome Rubric (d.) used to assess learning outcomes 1a, 1b, 2a, 2b, 2c, 2d, 2e, 3a, 3b, 3c, and 4a.**

Please return to: Provost Office by June 1, 2009

You can send your replies as either a Word attachment (to: marin@usfca.edu) or as a hard copy to: Provost Office, Lone Mountain Rossi Wing 4th floor.

If you have any questions, please contact: William Murry, Director of Institutional Assessment (wmurry@usfca.edu or x5486).