

How to Select an ACE Team Project - Option 2: Mentor Prescribed

by Michael Cetera

New York City Department of Design and Construction, ceteram@ddc.nyc.gov

Educational Goals: Team building / verbal communication skills.

For Students

- Encourages “TRUST IN MENTORS” and development of client/professional relationships. As a result the students and mentors bond in a client/consultant and architect/apprentice relationship
- Introduces team building skills, through pre-planned lesson plan & activities
- Stimulates creative thinking and problem solving from Day one (1) of the ACE Mentor experience
- Stimulates articulation/ sketching of ideas and student/mentor relationships
- Practice project development and sharpens communication skills
- Simulates real-life decision-making process
- Encourages and builds research and problem-solving skills

Caveat: Students may or may not have an initial interest in the selected project. This can be used by Mentors to help create discipline and other design skills, as real world design professionals learn quickly to be excited by their paying client’s ideas and interests.

For Mentors

- Takes advantage of special resources, skills, and interests that the mentors may have with respect to a particular type of project
- Encourage discussion management (example: time, scope and scale management) – for project implementation rather than project selection which is usually a client function, not an ACE function
- Emphasizes importance of consensus building for design and construction projects
- Identify student interests and skill sets by taking rational steps to set up the project

Time: 3 mentoring sessions

Materials: Writing board, chalk, markers, Paper, tracing as well as graph paper, Pencil, Pen, Erasers, Architectural and Engineering Scales, Various materials as required by lesson plan, Gifts for students (hard hats, notepads, pencils, pens, erasers, etc).

Session 1: Introduction

Duration: 1 meeting: Visit To Client Office:

- I. Kickoff Team's project.
- II. Give an overview of the process of the project
- III. Briefly describe some past projects
- IV. Ask mentors and students to come up with specific project ideas for our next session.
- V. Ask mentors and students to be prepared to present their ideas for the next session and to be able to identify the possible pros and cons of their ideas.
- VI. Highlight and/or distribute some resources and references for ideas such as newspapers, books, Internet, professional magazines.

Session 2 – Brainstorming

Duration: 1 meeting: Visit Architect's Office

- I. Architect Mentor presents overview of the Project
- II. Have everyone present their ideas in order around the table, and discuss each idea individually. Mentors to work with students to make decisions and implement or eliminate ideas presented.
Caveat: Students should present "concepts" for the specific type of project selected by the Mentors.
- III. Record all ideas on the flip pad, listing the Pros and Cons of each idea.
- IV. Categorize ideas (architectural, engineering, landscape, artwork,
Caveat: Usually this takes most of that particular session's time period.

Session 3: Project Kickoff

Duration: 1 meeting: Visit Construction Manager's Office

- I. Based on the "type" of project selected and depending on the number of team members, formulate specialized design committees. This exercise simulates the breakdown of the trades to the various disciplines and specialty groups

Project and Specialized Design Committees Example:

Multi-use Skyscraper Building Specialized Design Committee:

1. Site Selection / Civil Design Committee (2 -3 students 1- 2 Mentors)
2. Structural Design Committee (2 -3 students 1- 2 Mentors)
3. Mechanical Design Committee (2 -3 students 1- 2 Mentors)
4. Electrical Design Committee (2 -3 students 1- 2 Mentors)
5. Architectural / Interior Design Committee (2 -3 students 1- 2 Mentors)



- II. Solicit student volunteers first to staff these committees.
- III. Assign remaining students by interest or skill set.

Caveat: Sometimes the mentors will need to assign some students to balance the number of participants in each committee. Some students will want to switch design committees in future sessions as skill sets and interests are identified further.