The Campus as a Learning & Living Lab module: The King Library LEED Certification

Description: The Sustainability at the King Library module reviews the major LEED categories that buildings applying for LEED certification are reviewed by. The goal of the module is to provide a basic overview of criteria used for each LEED category. The module’s goal is to have students’ rate the library’s features via a physical tour and an online tour to discover sustainable features. The module asks the students to explore the building, discover how people use it, and to apply their understanding of LEED’s categories to sustainability in their own lives and living environments. The module consists of a pre-tour class session and the information for this session is found in the MLK King Library LEED Certification Research Guide at http://libguides.sjsu.edu/King_Library_Leed_certification. Next, students take a physical tour of the Library to explore its sustainability components. Then, students come together with the instructor for a post-tour discussion of what they found. Finally, the instructor can assess student learning in a number of ways through the Research Guide.

Length of time for Module: 2 hours – 2 hours and 30 minutes

SJSU GE Learning Objectives: Area D1 - Human Behavior

- SLO 1: Students will be able to place contemporary developments in cultural, historical, environmental, and spatial contexts.
- SLO 4: Students will be able to recognize the interaction of social institutions, culture, and environment with the behavior of individuals.

Module Preparation:

1. Review the MLK King Library LEED Certification research guide at http://libguides.sjsu.edu/King_Library_Leed_certification. See pages 3-4, below, for a summary of the information in this detailed website.
2. Choose which activities to include for assessment:
   - questions for reflection
   - surveys
   - photos / photo essay
   - website or library suggestions
   - LEED checklist scoring
3. Pre-tour decisions:
   - Should students tour the library in groups or individually?
   - Should students use a digital or physical copy of the checklist?
4. Post-tour decisions:
   - Large group discussion on LEED categories and the King Library’s features?
   - Student groups present on categories of library’s LEED features?
Module:

The URL for the King Library LEED module information is:
http://libguides.sjsu.edu/King_Library_Leed_certification

1. Pre-tour Class Session (~30 minutes)
   Introduce these topics for whole group discussion:
   
   - **Sustainability.** (Sustainability & 3 E’s tab)
     What does this mean?
     Discuss the definition from the United Nations, World Commission on Environment and Development report, "Our Common Future" from the Brundtland Commission.
   
   - **The 3 E’s of sustainability in our lives.** (Sustainability & 3 E’s tab)
     What does this mean for the Environment?
     What does this mean for Social Equity?
     What is Social Equity?
     What does this mean for Economics?
   
   - **Why are green buildings important?** (LEED Certification tab)
     What does this mean for the environment? Social equity? Economics?
     What effect do green buildings have on the people who use the building?
   
   - **What is LEED Certification?** (LEED Certification tab)
     Discuss the six categories of LEED certification
     Discuss the worksheet layout & points system

   **Pre-tour activity:** Students download check list to use during their tour.

2. Physical tour (~60 minutes)
   A. Assign groups of students (4-5) to each category to explore the relevant parts of the library, take photos, complete the questions for reflection for that category. Each group would present on their category for the class including a discussion of the questions for reflection, and suggestions for other websites. The group would rate the library in that category;
      Or,
   B. Individual students explore the library on their own, completing the questions, suggestions, photos on their own. Every student would rate the library in every LEED category.

3. Post-Tour Class Discussion (~30 minutes)
   A. Discuss the LEED categories and student discoveries of the King Library’s features.
      - For each category discuss what impact this category has on people who use the library (students, the elderly, the homeless, families)
      - Share the campus websites on the King Library’s LEED certification with students for further discussion,
        http://www.sjsu.edu/fdo/departments/maintops/sustainability/king_lib_leed/
B. Share the checklist from the SJSU King Library’s LEED working group with the students to see how the group managed the project to get certified:  
http://www.sjsu.edu/fdo/docs/king_eb_checklist.pdf

C. Wrap-up:
- Why are green LEED buildings important for communities?
- How can students be sustainable at home, work, school?

MLK King Library LEED Certification Guide Information Summary:

The URL for the King Library LEED Certification research guide is:  
http://libguides.sjsu.edu/King_Library_Leed_certification

This link includes information on the topics listed below:

- **Sustainability and the 3 E’s**: A basic overview of the definitions of sustainable and the 3 E’s. Students write three paragraphs applying the three E’s to their lives. Students conduct basic research to find other sustainability definitions.

- **LEED Certification**: A basic overview of the need for green buildings, and understanding LEED through the US. Green Building Council website and the Canadian Green Building Council video. Asks students to discover how many hours the average American is at work, and the average student is at school. Lists a brief description of the King library’s LEED certifications. Contains a link to a modified version of the LEED checklist for the Existing Building Operations & Maintenance, v4 for students to use as they physically tour the building.

- **Sustainable Sites**: Links to the history of the SJSU Library and the San Jose Public Library history. Includes a video celebrating the 10th anniversary of the library that shows the users, various features, and materials in the library. Asks students to list the various ways that people get to the library. Asks students to consider why this site is sustainable. Includes a student survey where they can rate the library on the sustainable site category.

- **Water Efficiency**: Link to the SJSU’s webpage on water use and recycled water that contains data on the library’s recycled water use. Asks students to evaluate water use outside and inside the library and to photograph what they see. Asks students how they save water and to search for other ways to save water. Includes a survey box where students rate the library on the water efficiency category.

- **Energy & Atmosphere**: Students begin the inside tour of the library from the 8th floor to the lower level. They document the different ways people use energy through photographs. Students are asked to evaluate the atmosphere on various floors. Students gain an understanding of how the library is powered by skimming the SJSU Utilities Master Plan. Reflection questions ask students how the environment affects users and employees. An energy pledge is included for students to encourage students to save energy. Includes a survey box where students rate the library on the energy & atmosphere category.
• **Materials & Resources:** Reflection questions ask students how reusing library materials helps the community and about the library’s role in the community. Students take the online tour of Mel Chin’s Art to find where the recycled art. They document the art by taking a “selfie” by the recycled art to understand how materials can be reused as art. Students can create a photo essay documenting all the different types of materials found in the library. Students explore the library’s online webpages to find resources/services, and select one to discuss who can use it, and whether it is sustainable. Basic info is provided on the green products and materials reused in the library. Students share what cleaning products and materials reuse they use at home. Includes a survey box where students rate the library on the materials & resources category.

• **Indoor Environmental Quality:** This category seemed most difficult to describe so there is a list of the various criteria that students can consider. They are asked to find 2 features in the library that demonstrate the criteria and to photograph it. There is a link to an animated series that demonstrates good air flow and problems that can occur. Students are asked to consider the IEQ for their home environment. Includes a survey box where students rate the library on the indoor environmental quality category.

• **Innovations in Operations.** Describes ways to earn points for innovative operations. Description of the innovations the King Library earned points for: public educational tours, saving energy, and saving space. Reflection question asks students to suggest other ways the library can be sustainable. Includes a survey box where students rate the library on the innovations in operations category.

• **The Green Ninja and more info:** Includes websites on LEED, California LEED, and LEED buildings, the American Library Association websites on sustainability and related blogs. Links for the Green Ninja series is an easy way to share sustainability information in a user friendly format. Includes links to books from the King Library catalog about green buildings and sustainability topics, and LEED exam study guides available. For further research students can use the suggested databases links. Students from Foothill College and DeAnza can use the San Jose Public databases with a library card from any of the San Jose Public libraries. Students from San Jose State University can use the databases listed on the linked Environmental Studies research guide. Contact information for guide creator is included.