Learning Outcomes

- Learners want to follow a process and want to have assessment.
- Learners can explain the concept of a process & list the advantages/disadvantages of following a process.

Resources

- Idaho Design Process Handout
- TIDEE Design process video (online)--http://www.tidee.cea.wsu.edu/media/design-process.swf
- Textbook

Facilitation Plan

Preparation

2. Pre-assessment. (TM20) [work on loose paper & turn in at the beginning of the next class period]. Imagine that you have been asked to perform a design project for a client. Your client wants you to design a miniature greenhouse that will keep tomato plants warm during cold spring nights, while also keeping the plants watered and fertilized. Your design should ideally be solar powered, and use modern controls, sensors, software and mechanisms to activate the watering system and to enclose the plants when air temperatures drop below 50 deg F. Your device should be low cost. However, the main objective is to minimize the water usage because the passion of your client is sustainability of the environment. Imagine that you will be working by yourself on this design project. Answer the following two questions:

(a) As you work on the project, what are the three most important actions that you will take to insure that your client is delighted with your results? Why?

(b) As your work on the project, what are the six most important actions that you will take to insure successful technical outcomes?

3. (TM15) Review the TIDEE flash animation on design at http://www.tidee.cea.wsu.edu/media/design-process.swf. In your logbook, write down the design process that is recommended.

4. (TM60) Review your textbook, mostly chapters 1 & 2, and summarize the Product Development Process that is recommended by Ulrich & Eppinger (hint: see Exhibit 1-4 and Exhibit 2-2 for a summary of the process). Place your work in your logbook.

Class Session

Bring: IDEO Video; Two Capstone Reports

1. Pick up pre-assessment.
2. (TM5)--Story: Looking @ reports--wonderful stuff--cite 3 examples. Prompt--Visualize wild success during your upcoming Capstone Course Experience. What can you imagine? Visualize ideas about what you might do, learn, and accomplish. In your logbooks, list as many ideas as
possible.

3. (TM40) Concrete Example--IDEO Video--As you watch this video, what appeals to you, what can you learn; what aspects of IDEO would you like to be part of your learning & experience? Document in your logbook--call on students for reports after the video is over. Call at random. [expand the vision of appreciative inquiry with a concrete example].

4. Mindshare & Group Processing
   a. Process means knowing the steps needed to produce excellent results, monitoring your work as you go, and accomplishing wonderful things, and improving your knowledge as you go.
   b. Process is like a map. For the state of Idaho, there are many maps: highway map, county map, 7.5 minute map for backpacking, etc. Each map has a different purpose. In the same way, there are many maps of the design process.
   c. Our goal maximize both learning and quality of your projects. However, process has both advantages & disadvantages. Key Question==What will work best for help you learn process?
   d. Form groups of four--fill out the Needs Analysis Data Collection Form.

**Homework/Followup**

None