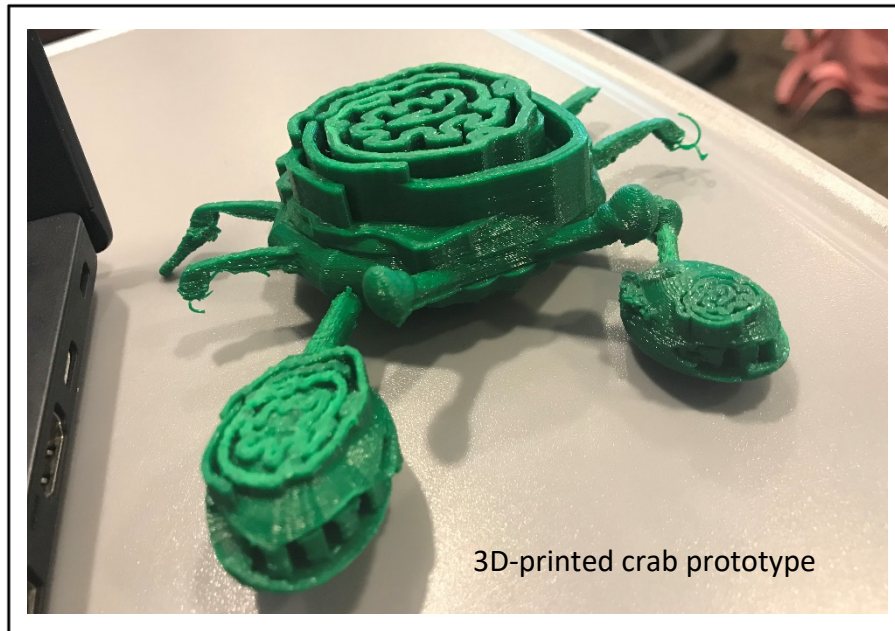


# Guide to Using Peer Evaluations and Self-Reflections to Motivate Iterative Design

Author: Alecia Septer (Marine Biology MASC 442)



## Goals of this Guide

The goal of this guide is to describe how to combine the use of peer evaluations and self-reflections to help students move their design process forward.

## Recommendations

- Assign students to small groups (3-4) in which their design projects share a common theme. (ex. in Marine Biology the students were grouped by habitat type and each student had to design a newly discovered marine creature from that habitat. Students were asked to rank their favorite habitats at the beginning of class, which guided group assignments)
- After each deliverable/milestone the students gather in their small groups and provide constructive and respectful feedback on their peer's product (ex. Concept, prototype, narrative, etc...)
- Students record what their peers identified as strengths about their idea/concept, what their suggestions were, and how they were going to integrate this feedback into the next prototype.
- At the end of class, have students turn in a summary of the peer feedback and their plans to incorporate the feedback into the next design iteration. (See "other resources" below for an example).
- My observations:
  - Student accountability: Because student meet with the same group throughout the semester, they have were motivated to make improvements and address design issues that were identified by their peers rather than the instructor.

- Saves instructor time: If you have a large class students get feedback without it taking hours of your time (If I go through all 36 student concepts and provide feedback it takes 2-3 hours)
- Other recommendations:
  - Make it worth points. Although only worth 5-10 points each, we had many of these in class so it provided the necessary motivation for students to complete them)
  - Schedule them into class time. I found it took about 20-30 min for students to discuss each other's milestones and complete the feedback reflection. Although this exercise took away from lecture time, it was worth it to help students stay on schedule and keep moving their projects forward.
  - Check in on the small groups. I would walk around the room and check in with the groups to see if they had questions or to specifically talk with a student/group that I know had been struggling with their design concept.

## Things to Avoid

- Discuss with the students how they should use this peer feedback.
  - Students should not feel they must make all the recommended changes
  - A specific recommendation might not be in line with their creative vision, but it could address a larger point (ex. Peers don't like the organisms color and think it should be brown, not red. The student doesn't need to change the color to red, but should consider why their peers have a problem with the red color)
- Try not to let these group sessions last too long – bring them to an end once you hear the conversations diverge into non-course topics.

## Modifications

- For larger classes: these could be done outside of class time via zoom or asynchronously on Sakai using the discussion forum or through private messaging.
- Incorporate self-reflections into final deliverable: It may be valuable for students to review all of their feedback/self-reflection forms at the end to see how their design concept changed over time and the role that peer feedback had in this iterative process

## Other Resources

Example of Feedback Reflection is below (used for MASC 446)

*Provide a brief evaluation of your checkpoint assignment according to feedback from students in your habitat group. Turn this assignment in at the end of class. Use the following questions to guide your reflection:*

- **What aspects about your project did your group members like and you plan to keep?**
- **What were some suggestions by your group members to improve your design?**
- **What is your plan of action to implement these suggestions?**