

# User Testing: Adding New Coral to a Saltwater Aquarium

## Section 1: Participants

### *Participant 1*

Skill Level: Novice

Used Graphic sequence

Participant 1 completed the process of adding new coral to a salt water aquarium with little to no errors. I noticed that participant 1 did not completely understand why they were putting the rubber bands on the air line tubing, but successfully limited the rate of water flow.

### *Participant 2*

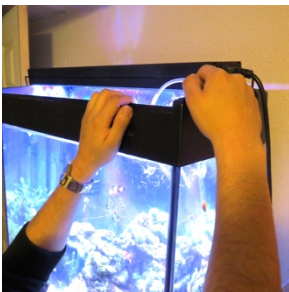
Skill Level: Novice

Used Photo sequence

Participant 2 also completed the process of adding new coral to a salt water aquarium, however not as well as participant 1 did using the graphic sequence. The actions being depicted in the photos were harder to discern than those in the graphic sequence. Harder to see the water dripping out of the tube in the photos, but completed the process none the less.

## Section 2: Photos of Participants

### *Participant 1*



## *Participant 2*



## **Section 3: Strengths and Weaknesses**

### *Photo Sequence*

The main weaknesses that I noticed while observing the participants was that the photos were hard to make out at such a small size. Also, the “how to tie the rubber band” set of steps were confusing and had too much hand in the photos. There was a sufficient amount of dark areas in the photos as well, which made it harder for participant 2 to discern the actions being depicted in the photos. The strengths of the photo sequence were that it was clearer that the rubber bands were being wrapped around the tube, and it was easier to tell what the rubber bands were.

### *Graphic Sequence*

Some weaknesses with the graphic sequence were that the rubber bands in the required objects section were hard to see. I had drawn them in 2 dimensions which did not properly convey the form of the 2 rubber bands. Also, the salt water aquarium in some steps was hard to tell apart from the small container. I also forgot to add the rubber bands to the step where the participant creates a siphon by sucking on the banded end of the tube. Some strengths were that there are no backgrounds to the graphics, so it is easier for the participant to focus on exactly the objects that are involved in each step. Also, it was more effective to convey the drop of water in vector graphics instead of a photo, because the clear water could be simplified and outlined in black.

## Section 4: Revisions

### *Photo Sequence*

I am going to make each photo larger, so it is easier to see for the viewer of the photo sequence. Also, I am going to simplify to “tying the rubber band around the airline tube” into 2 steps and I will not have any pictures of hands in those steps. Removing the hands and simplifying the steps will help the viewer not feel overwhelmed or confused. I am also going to further balance the light levels in the photos, and I will use the flash on the camera to try to remove as many dark areas as I can in each photo.

### *Graphic Sequence*

To revise the graphic sequence, I am going to represent the rubber bands in a  $\frac{3}{4}$  view, because making it three dimensional will better convey the form and shape of the rubber bands. I noticed that the simple two dimensional representation of the rubber bands was confusing and did not supply the viewer with enough information about the object. I am also going to better distinguish between the small container and the salt water aquarium by adding a wave-like line at the top of the aquarium to inform viewers that there is water in it. I will also further emphasize the diagonal lines that I have going across the aquarium that imply the space is filled and not empty. Lastly, I am going to add the rubber bands to the step where the siphon is created, because it will better convey the process of creating a siphon and it will not so heavily rely on the text to describe what is happening.