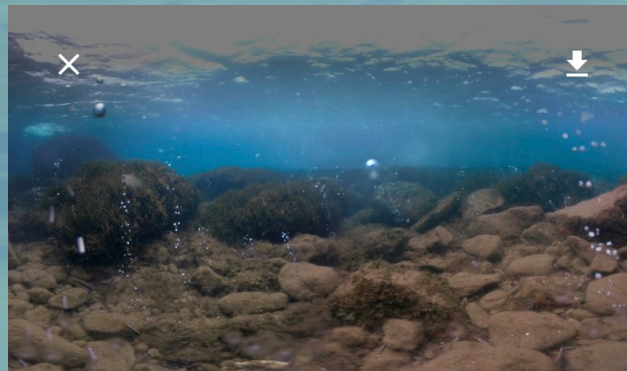
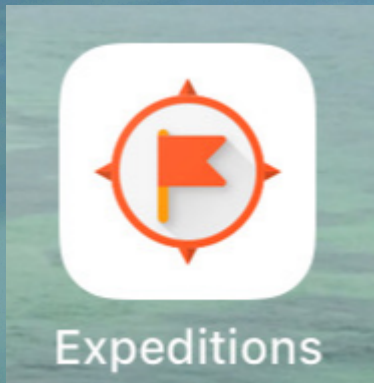


VR/Distance Learning K.Lodes

Google Expeditions (free app from phone)

Used as part of a unit on Ocean Acidification



Ocean Acidification



Virtual Human Interaction Lab, Stanford University
VR · 9 scenes

[Download to view or guide](#)

See the effects of different pH levels in the water. We are going to take a dive in the Ischia Bay off the isle of Ischia in the Mediterrean Sea.



Planting Science (Power of Sunlight module)

Students run through activities to address misconceptions on photosynthesis and then plan an experiment in teams to find out more for themselves while communicating with a scientist on a secure, on-line platform

<https://plantingscience.org/>



- Joides Resolution Skyping with Jennifer Magnusson
- Skyping with scientists or programs
- Sending Styrofoam cups on an expedition
- SOCCUM float
<https://www.mbari.org/products/southern-ocean-carbon-climate-observations-and-data/> / NOAA buoy



December 17, 2018



We arrived at our first CTD station on December 15th at 63.5°S, 80°W after a very long transit. We deployed the first SOCCUM float for this cruise, the *SJA Angelfish*, at this station. This float was adopted by St. Joseph's Academy in St. Louis, MO. The students provided 2 drawings which I tried my best to transfer to the float but the students are very talented artists! St. Joseph's Academy's mascot is Angels which provided the inspiration for the name *SJA Angelfish* and "We figure the float is moving through the ocean gathering data like a fish could do (and the oil that regulates the buoyancy is like a fish gas bladder). We want it to be an angelfish because the data from the SOCCUM float can be used to help make predictions about our ocean and hopefully protect it." -SJA

The sea state was very calm for the deployment and several scientists and crew came outside to the aft deck to see the float off on the beginning of its hopefully long voyage throughout the Southern Ocean.

It will be another couple days before the next SOCCUM float will be deployed but there is much work being done collecting water and biological samples. Ship operations are 24 hours and I am on the 10pm-10am watch except when a float needs to be deployed. The sky is lit up almost 24 hours a day with only a slight period of dusk for about 2 hours which makes it less confusing being awake all through the night! Unfortunately there are no dark night skies for observing the stars or frequent *Aurora australis*. There are still plenty of interesting icebergs and sea ice to gaze out upon.

Until next time,



Overall

The Good 😊

- Can “visit” places and interact that are unavailable locally
- Exposes students to a much bigger world and job opportunities
- Excites students (and teachers)

Areas to grow 😞

- Need to make sure the activity/experience fits into the learning objectives
- Sometimes the wow factor interferes with the learning objective
- Technology issues