

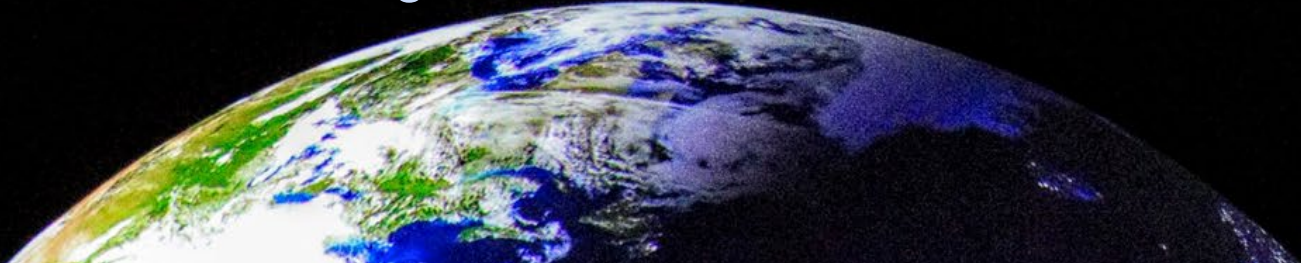
# 2020 Virtual Science On a Sphere® Users Collaborative Workshop



Integrating SOS Technology in the  
K-12 Classroom

Wednesday, Dec. 2 (3:20 PM Breakout)

Rachel Wellman, PhD - Palm Beach County School District  
Lauren Butcher - Pine Jog EE Center, Florida Atlantic University



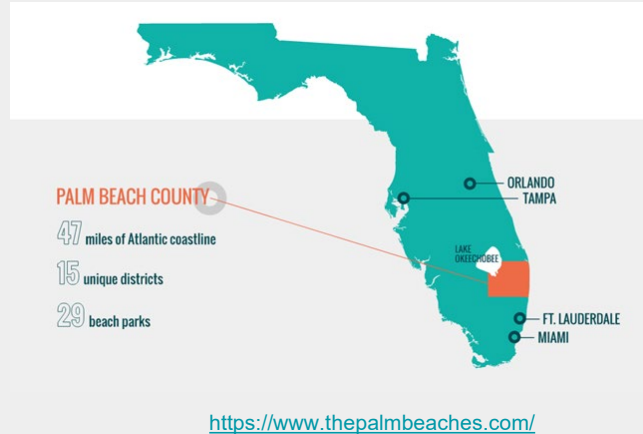
# Integrating SOS Technology in the K-12 Classroom

## Meet the Presenters



Rachel Wellman, PhD  
Boca Raton Community High School  
Palm Beach County School District (PBCSD)

<https://sites.google.com/palmbeachschools.org/rachelwellmanphd/home>



Lauren Butcher  
Pine Jog Environmental Education Center  
Florida Atlantic University (FAU)

<http://www.pinejog.fau.edu/ourgreenschools/contact.php>

# Integrating SOS Technology in the K-12 Classroom

## Galaxy E3 Elementary School

- [Title 1](#) Public School
  - Boynton Beach, FL
  - PBCSD
- [Platinum level LEED](#) facility
  - Uses 42% less energy
- SOS installed in 2013
  - Upgrade planned for 2021



[Galaxy E3 Elementary School](#)

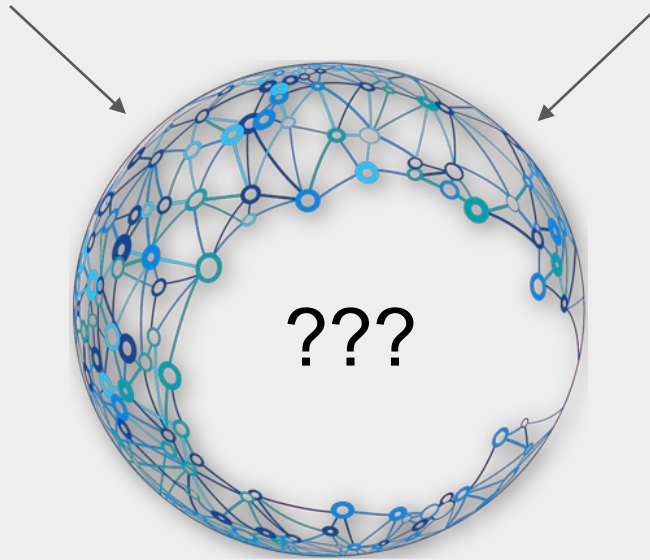
# Integrating SOS Technology in the K-12 Classroom How???



Earth Systems Science (ESS)

- \*Water Cycle
- \*Weather and Climate
- \*Flow of Energy
- \*Human Impact

[Example](#)



[sos.noaa.gov](http://sos.noaa.gov)



Earth Structures (SC.K-12.E)

Earth and Space Science

- \*Water Cycle
- \*Weather and Climate
- \*Flow of Energy
- \*Human Impact

[Example](#)

# Integrating SOS Technology in the K-12 Classroom

## Discovering Datasets and Connections

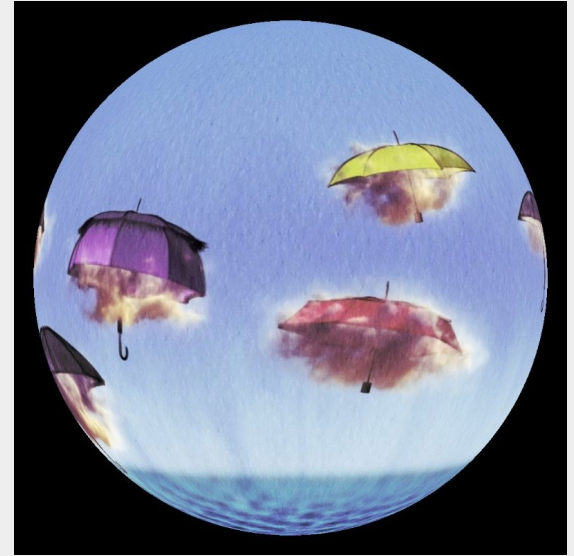
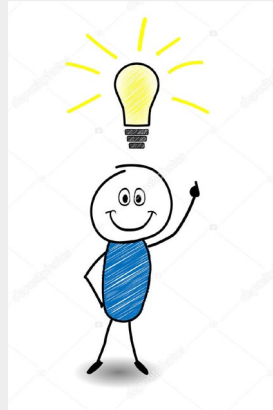


Image - <https://images.app.goo.gl/BSXnQ7y8Ea8LRDTF8>

<https://sos.noaa.gov/datasets/water-falls/>  
[https://youtu.be/FwxnSaoq0\\_k](https://youtu.be/FwxnSaoq0_k)

<https://sos.noaa.gov/datasets/water-cycle-a-water-falls-docent-script/>

# Integrating SOS Technology in the K-12 Classroom 2014 - Present

[Galaxy E3 Elementary School](#)

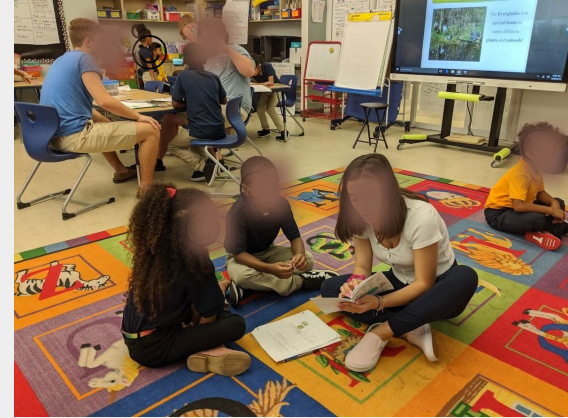
[2015 SOS Users Collaborative  
Network Workshop](#)



Investigating Lessons  
[Waterfalls Lessons](#)  
[Additional Lesson Plans from NOAA](#)

Technical Support from [BWC](#) and  
PBCSD Volunteer, Kelly Fallon - Linux Systems Engineer

[Field Trips with Boca Raton Community High School students](#)  
[Expanding on lessons to Reading Goals](#)  
**\*\*[9-12 Students Teaching K-5 Students!!!](#) (Ex. Children Story!)**



[NOAA Environmental Literacy Grant](#)

# Integrating SOS Technology in the K-12 Classroom

## NOAA Environmental Literacy Grant

**Program:** [Climate READY! \(Climate Resilience Education and Action for Dedicated Youth\)](#)



### **Grantee:**

- [Pine Jog EE Center, Florida Atlantic University](#)

### **Partners:**

- [School District of Palm Beach County](#)
- [Galaxy E3 Elementary School](#)
- [PB County Coastal Resilience Partnership](#)
- [Palm Beach County Office of Resilience](#)
- [SE Florida Regional Climate Change Compact](#)
- City Sustainability Offices - [West Palm Beach](#), [Boynton Beach](#), [Boca Raton](#)

# Integrating SOS Technology in the K-12 Classroom

## NOAA Environmental Literacy Grant

### Climate READY Components:

- CR Institute - Teen Ambassadors
- Teacher Professional Development
- Afterschool Students (Grades 4-8)
- Community Outreach Events

### Communities:

- Glades
- Riviera Beach
- West Palm Beach
- Lake Worth
- Boynton Beach/Delray
- Boca Raton

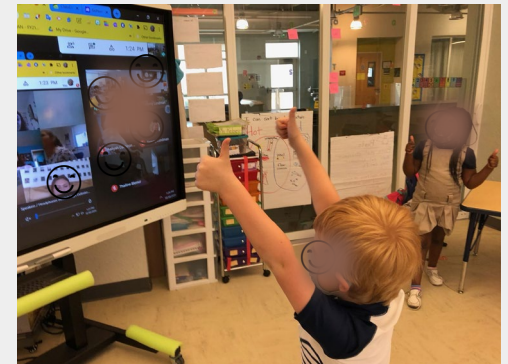
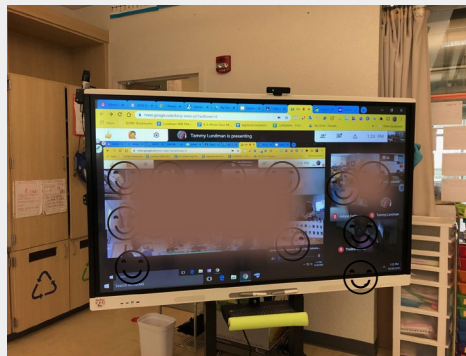
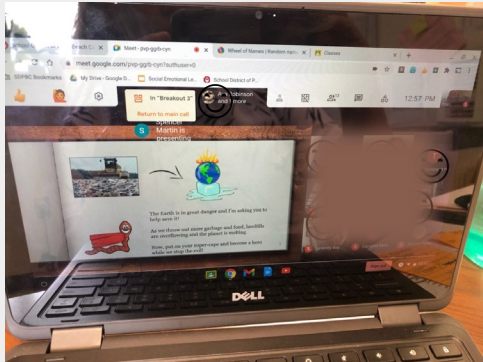




# Integrating SOS Technology in the K-12 Classroom

## Future Plans

- Tools to use in a Digital Classroom
  - [SOSx Mobile App](#)
  - Virtual Field Trips
  - [Google Tools](#) \*\*Collaborative!
    - Docs, Meets (Breakout Rooms), Slides, Sheets, Draw, etc.
  - SMART Boards
  - [Jamboard](#), [Kahoot](#), [Quizziz](#), [Quizlet](#), etc.

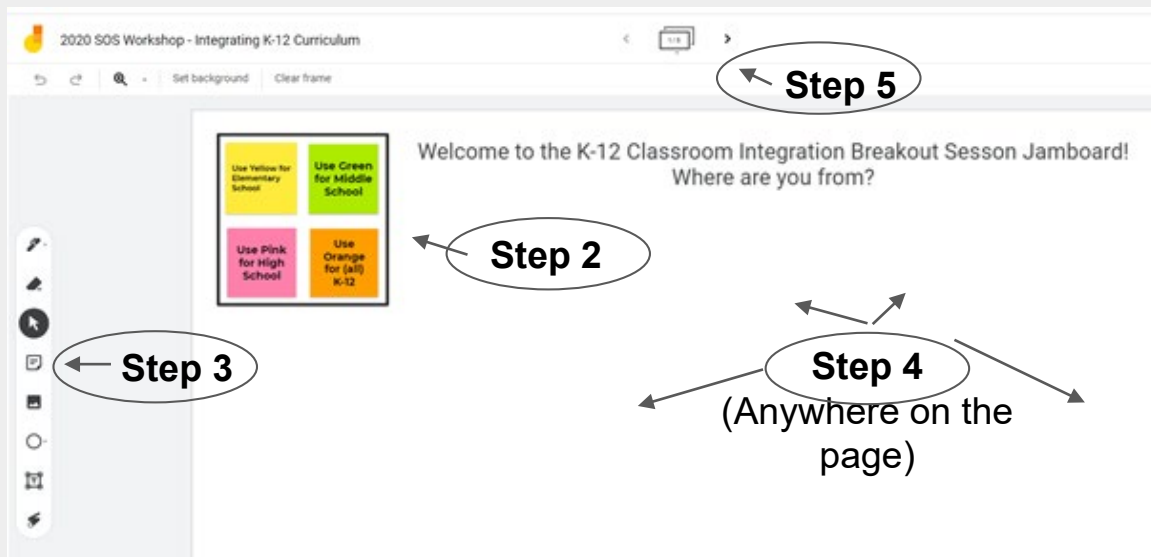


# Integrating SOS Technology in the K-12 Classroom Share

## Step 1

Thank you for letting us share our story. Now let's hear from you through Jamboard:

[https://jamboard.google.com/d/1ruvG7DNQdyxYdbW\\_IsVqd-EuM3yDiEXNmX-0xpHpeBc/edit?usp=sharing](https://jamboard.google.com/d/1ruvG7DNQdyxYdbW_IsVqd-EuM3yDiEXNmX-0xpHpeBc/edit?usp=sharing)



**Step 1:** Click on the link above

**Step 2:** Identify with a “sticky note” color  
(yellow = elementary, green = middle,  
pink = high school, orange = (all) K-12)

**Step 3:** Use the toolbar on the left and  
click on the “Sticky Note” icon  
(Ctrl+Shift+P)

**Step 4:** Provide an answer for questions  
1-4

**Step 5:** Use arrows at the top to move  
through pages

Note: All contributions are anonymous  
unless you state your name