

**Erikson Institute**

Technology in Early Childhood Center

**Webinar Learning Series:  
Science Activities for PreK-3rd Grade  
Remote Learning  
*Starting at 3pm CST***

**While waiting for the webinar to start**

- Introduce yourself in the chat: Town, State & Grades/Ages you work with
- Download handout: link and document in chat

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# **Webinar Learning Series: Science Activities for PreK-3rd Grade Remote Learning**

*Presented by:*



**Jenna Herdzina, MS**  
Program Manager

# Webinar Logistics & Details

- Please use the chat and Q&A functions
- Opportunity for Q&A at the end
- Recording and will share it with everyone who registered as soon as we can!
- If you'd like to take notes during, feel free. You'll also have access to the recording, the PDF of the slides, and handout.
- We cannot provide CPDUs, CEUs, or certificates for these webinars. However, we do have paid PD options!

# About Technology in Early Childhood (TEC) Center at Erikson Institute

# Erikson Institute

## Technology in Early Childhood Center



**Alexis Lauricella, PhD**  
Associate Professor &  
Director

**Jenna Herdzina, MS**  
Program Manager

**Missi Jacobson, MSW**  
PhD Student &  
Research Assistant

**Morgan Russo**  
Graduate Student,  
Research Assistant

# Erikson Institute

## Technology in Early Childhood Center

### Research



### Practice



### Leadership



*Connecting theory, policy and research to practice*

# Erikson Institute

Erikson Institute is a graduate school in child development, early education, and social work



## Mission

Erikson Institute educates, inspires, and promotes leadership to serve the needs of children and families so that all can achieve optimal education, social, emotional, and physical well-being

# TEC Center Resources and Opportunities

## TEC Center: [teccenter.erikson.edu](https://teccenter.erikson.edu)

- Paid PD Series
- Customizable PD Services
- Research
- Educator Tips, Lesson plans, Activities

## Erikson Institute: [erikson.edu](https://erikson.edu)

- MSECE Degree (Online) with STEM Concentration



### “Back to School”: Remote PD Workshop Series with TEC Center

We are excited to provide a two-part technology-focused professional development workshop series for early childhood educators. Space limited- Register today! [Read more →](#)



# Webinar Agenda

- STEM in Early Childhood
- Remote Science Activities
  - Observe, Question and Predict
  - Collect, Record, and Analyze
  - Collaborate and Communicate
- Q&A



# STEM in Early Childhood

# STEM in Early Childhood

## Science Technology Engineering Math

- STEM disciplines build on and are connected to one another
- Educational approach should include both integration, as well as discipline-specific attention
- Children's attitudes about STEM form early



[bit.ly/STEMatters](https://bit.ly/STEMatters)

# STEM: A mindset and a skill

- When you think of STEM, what activities come to mind?
- Problem solving, critical thinking, trial and error are foundational to STEM



Image courtesy of <http://www.cesiscience.org>

# Examples of STEM activities

- Helpsters > teaching pre-coding skills
- Remote learning: Technology troubleshooting with student “techperts”
- Play plans: Tools of the Mind



Image courtesy of Apple TV

# Remote Science Learning Now

- Technology can be one tool, among many others
- Balance on-screen activities and screen-free activities
- Consider students' varying home environments and tools

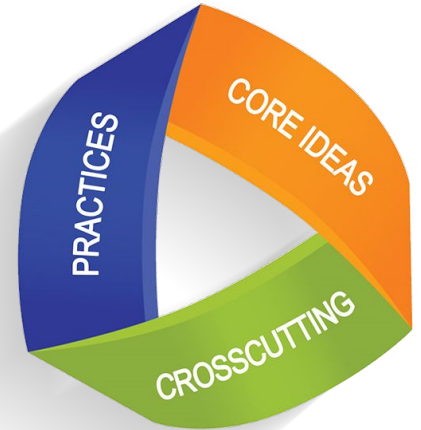


# POLL 1

# Next Generation Science Standards

## K-2 Science Standards

- observe
- question
- predict
- collect & record
- interpret & analyze: compare & contrast, patterns
- collaborate & communicate



[www.nextgenscience.org/](http://www.nextgenscience.org/)



# POLL 2

# Remote Science Learning: Observe, Question & Predict

# Observe, Question & Predict: Activities and Tips

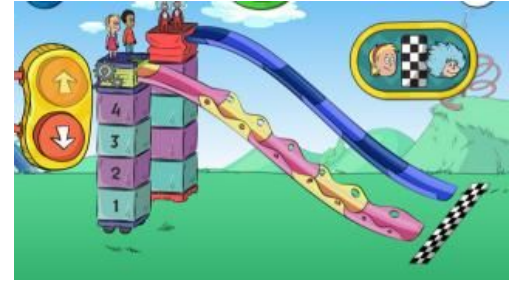
- A space & time to share questions & predictions
- Create “I wonder” cards for caregivers
- Create a class “I wonder” jar
- Yard “Show and tell”- discuss where plants & animals live
- Class scavenger hunt- “A picture of a bee pollinating a flower”, “An object in darkness” etc.
- Take everyday moments and turn into observation opportunities



Top image courtesy of Erin Stanfill

# Observe, Question & Predict: Tools and Resources

- The Cat in the Hat Knows a Lot About That (age 3+)
- The Cat in the Hat Builds That (age 4+)
- Plum's Photo Hunt (age 7+)
- Professor Astro Cat's Solar System (age 7+)
- Tinybop apps: The Earth, Space, and States of Matter
- PBS Kids website: Plum Landing and Nature Cat
- Wonderopolis (Grades 2-6)



The Cat in the Hat Builds That



States of Matter by Tiny Bop



# Remote Science Learning: Collect, Record, and Analyze

# Collect, Record, and Analyze: Activity Ideas

- Small group brainstorming of how and where to find answers/information
- Journals for recording observations
- Use of various tools to record i.e. observational drawings, digital camera, voice recordings, etc.
- Pictures of weather each day- create a digital calendar and discuss patterns
- Use “Show and tell” activity to discuss patterns of where animals and plants survive






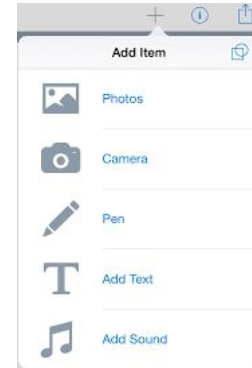
Mon	Tue	Wed	Thu	Fri
3	4	5	6	7
				

Image courtesy of First 8 Studios



# Collect, Record, and Analyze: Tools and Resources

- Seesaw (K-12)
- Book Creator (3-12)
- Virtual museum/zoo tours
- National Geographic Kids (PreK-8)
- National Geographic Education (PreK-12)
- Nova (PreK-12)
- Google Earth (K-12)
- Newsela (2-12)



Book Creator



Google Earth



# Remote Science Learning: Collaborate and Communicate

# Collaborate and Communicate: Activity Ideas

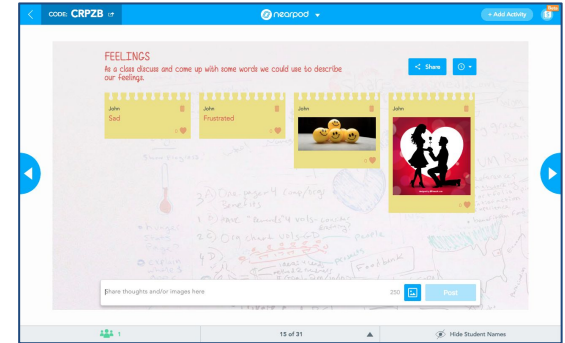
- Cross-age peer projects
- Partner experiments/tests via collaborative documentation platform or video calls:
  - Make a ramp and work with partner to improve ramp (try slow-mo!)
  - Share how sound can make matter vibrate & partner shares how vibrating matter can make sound
- 1 class researcher each week with 1:1 meetings-share at the end of the week



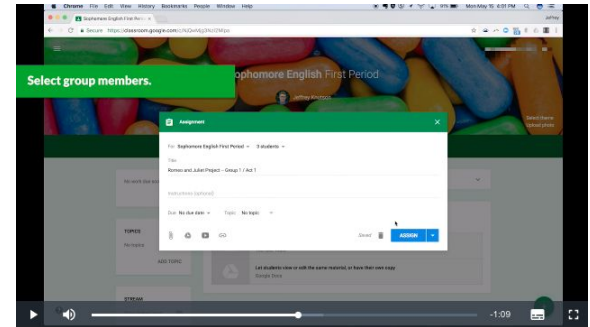
Image courtesy of <https://handsonaswegrow.com/>

# Collaborate and Communicate: Tools

- Zoom meeting and breakout groups
- Skype (1-12), Facetime
- FlipGrid
- Nearpod (K-12)
- Google Classroom (3-12)
  - Group/partner assignments
  - Google Meet Breakout Rooms



Nearpod



Common Sense Education video of how to assign group work in Google Classroom



# POLL 3

# Q&A

**Please fill out Google Form:**

**<https://forms.gle/ZM2GtXvXLDKUytzd7>**

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**Thank you for joining us!**  
**Stay tuned for our next webinar.**

[teccenter.erikson.edu](http://teccenter.erikson.edu)



[teccenter.erikson](https://www.facebook.com/teccenter.erikson)



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