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# Wind Workshop Training

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# Welcome!

# Goals for Today's Session

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1. Understand **Leap into Science program model** for connecting science and literacy
2. Be able to **lead three wind workshops** using Core Four strategies
3. Understand **expectations** for what to do after today's session

# Today's Agenda

| | |
|---|---|
| **8:30-9:30** | Why Science & Literacy & Core Four Strategies |
| **9:30-10:30** | Experience a Leap into Science Family Workshop |
| **10:30-11** | Additional Core Four Practice |
| **11-11:30** | Final Workshop, Book Selection, and Expectations |

# Who's Here?

1. Tell who you are  & the library you spend time at
2. Share what you hope to get out of today's session

# 4 Corners

When you get to your spot:

1. Share why you were drawn to this kind of activity as a kid.

# Norms

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- Step up, step back
- Be present
- Value questioning
- Use the parking lot

# What is Leap into Science?

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- Series of workshops that integrate **open-ended science** activities with **children's books**
- For **ages 3-10** and families
- **Accessible** science topics and materials
- Designed for **community-based settings** like museums, libraries, out-of-school time programs

# Wind Workshops

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**Preschool**
Ages 3-5
Structured Activities

**Elementary**
Ages 6-10
Structured Activities

**Family**
All Ages
Mix of structured & station-based

# You are joining a national network!

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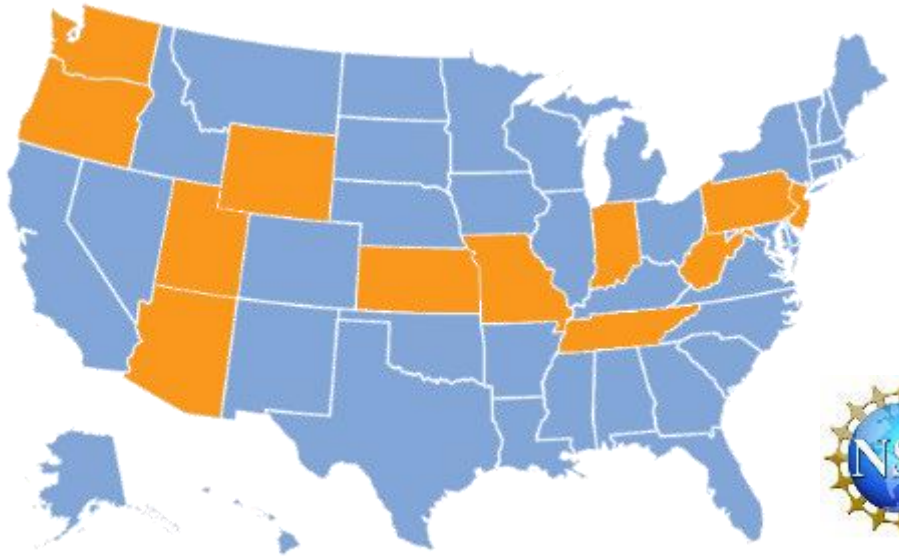
- Science museum in Philadelphia, PA
- Developed the activities and training

National Girls Collaborative Project

- Network of organizations
- Expertise in collaboration & gender equity



NSF

Leap into Science National Network currently includes 12 states, and will grow to 20 by 2021.

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# The Leap into Science Model

# Why Science and Literacy?

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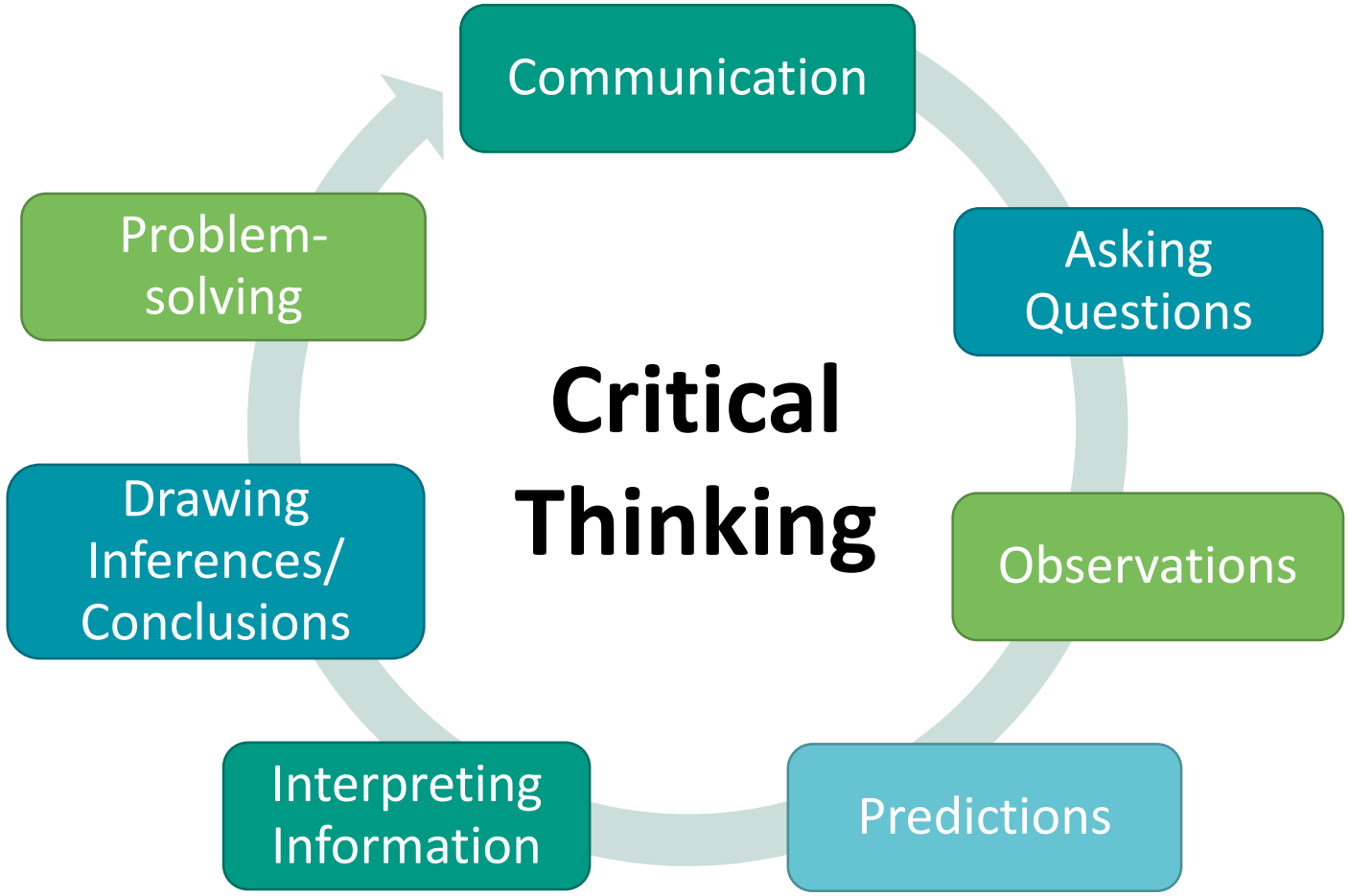
Children's books

Hands-on science

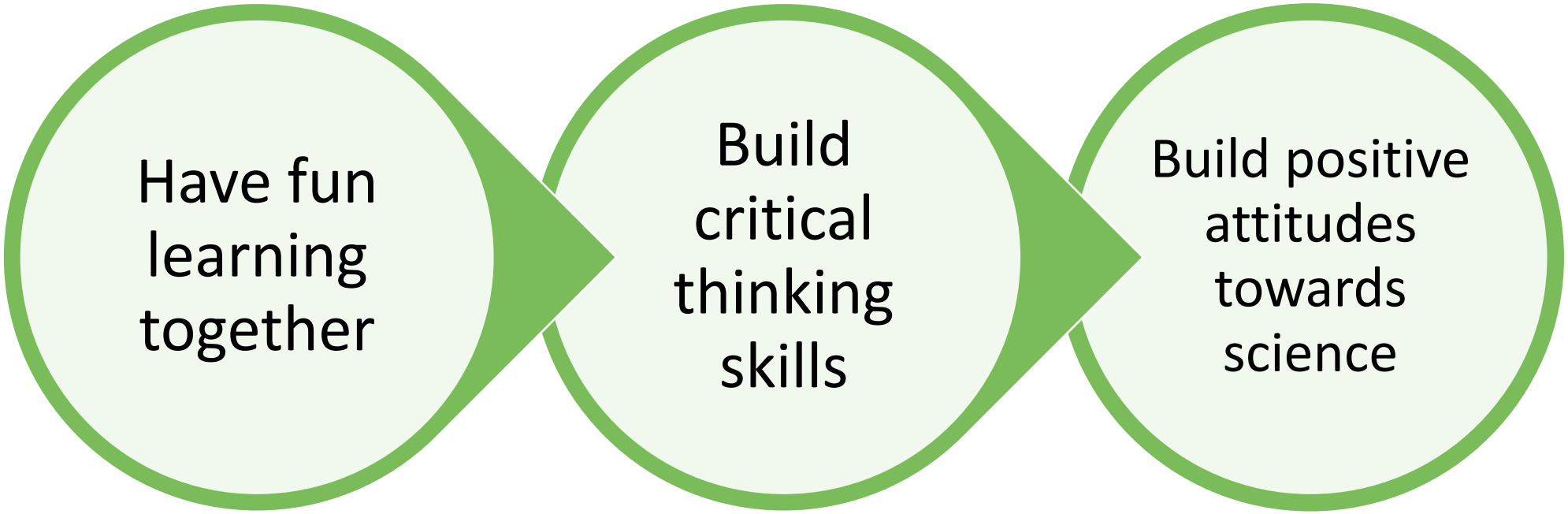
What **skills** are children practicing when learning through reading and science explorations?

Then switch!

# Common Skills



# Goals for Children & Caregivers




Not content mastery

# What is your role as an educator?

What **adjectives, actions and images** come to mind when you think of instruct and facilitate?

# Core Four Strategies

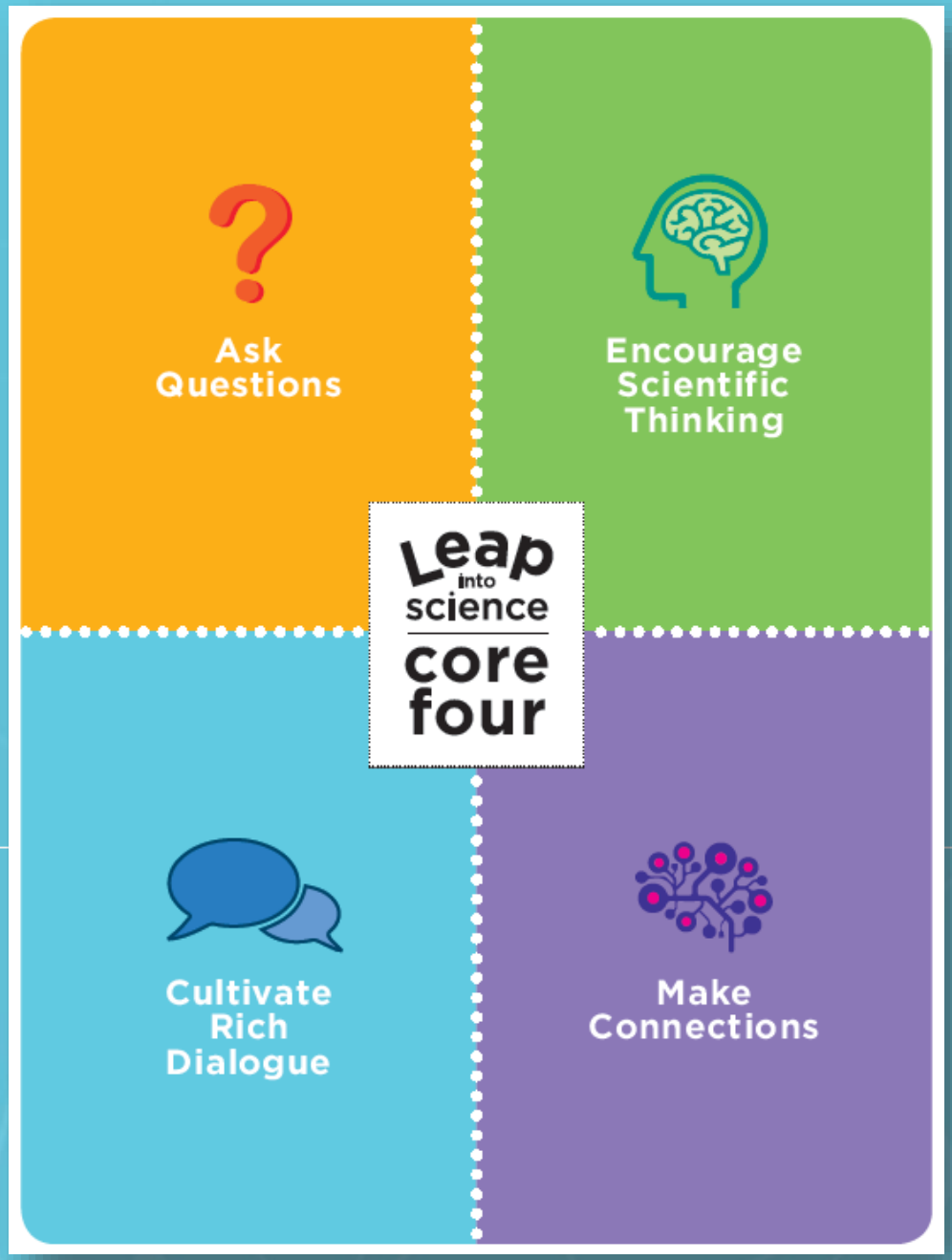
## Building science and literacy skills

Watch video

# Questions to Consider

1. How do the strategies work together?
2. How are you already using them?
3. What behaviors should you avoid?

- Open-ended
- Closed-ended
- Highlights learner's ideas

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- Observing
- Predicting
- Taking risks

- Key vocabulary
- Collaborative communication

- Personal meaning
- Feeling like a scientist

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# Experience a Leap into Science Workshop

# Workshop Sequence

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**Engage** → **Read** → **Explore** → **Reflect**

- Pique curiosity
- Build knowledge


- Investigate ideas
- See themselves as scientists

# Wind Elementary Workshop

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Ages 6-10
Structured
Activities

# Wind Preschool Workshop

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Ages 3-5
Structured
Activities

# Wind Family Workshop


- Stations
- Self-directed
- Designed for partners
- Guide from the side
- Start with group reading, end with reflection

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# Family Workshop

# Your job is to…

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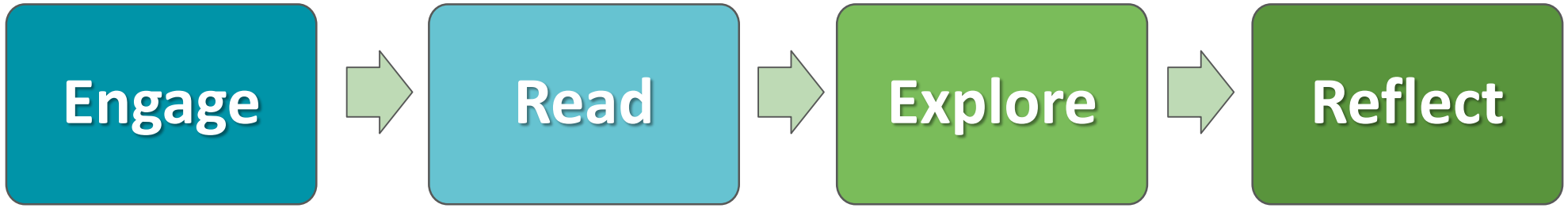
## Be the young learner!

- Explore, ask questions, and have fun!
- Watch for examples of the Core Four.

# Let’s Reflect

Now think from your educator perspective.

# Workshop Design




- How did the activities build upon each other?
- How did the book and activities support each other?

# Using the Core Four


## How were the Core Four modeled?

- Think to yourself about specific examples of where you saw the Core Four.
- Turn and talk with your neighbor, and discuss a way that we used each strategy.

# Engaging Caregivers

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- What are **key struggles** with engaging caregivers in their children's learning?
- What strategies have you found to be **effective**?

# Strategies

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## Set expectations

- Children are the scientists.
- There are no right answers.
- Have fun!

## Promote collaboration

- Model the Core Four.

# Question Guides

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## A tool for you and caregivers

*Guiding questions that support children's exploration*

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**Wind Preschool Workshop**
**Question Guide**

*Here are some key questions you can ask to guide children's explorations during the workshop.*

| WORKSHOP SECTION | ASK |
|---|---|
| **ENGAGE:**<br>Breeze and gust<br>Blow on pompoms<br>Make wind with tray | *What does a windy day look like outside?*<br>*What does a soft, gentle breeze feel like?*<br>*Did anyone make a strong, hard gust?*<br>*What did you notice?* |
| **READ:**<br>Storytime | *What do you notice about the cover of the book?*<br>*Where do you see something moving in the wind?*<br>*Do you think this is a breeze or a gust?*<br>*What makes you think that?* |
| **EXPLORE:**<br>Moving objects with wind<br>Wind detectors | *What do you notice?*<br>*How could you move this object even further?*<br>*How could you change your wind detector to better show if the wind is a breeze or a gust?*<br>*What do you think would happen if you . . . ?* |
| **REFLECT:**<br>Group discussion<br>Read *What Is a Scientist?*<br>Introduce a scientist | *How did we make things move in a breeze and a gust today?*<br>*Did anything happen that surprised you? What was it?*<br>*How did you feel like a scientist today?* |

To find out more about The Franklin Institute and Leap into Science, visit leap.fi.edu

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# Core Four Practice

# Let's Practice


1. Divide into **groups of 4-5**.
2. Explore each station for 5-6 minutes:
   - Pick **one educator** to practice modeling all of the core four.
   - Others are children and families.
3. At the next station, pick a new person to be the **educator**. Repeat!

# Let's Reflect

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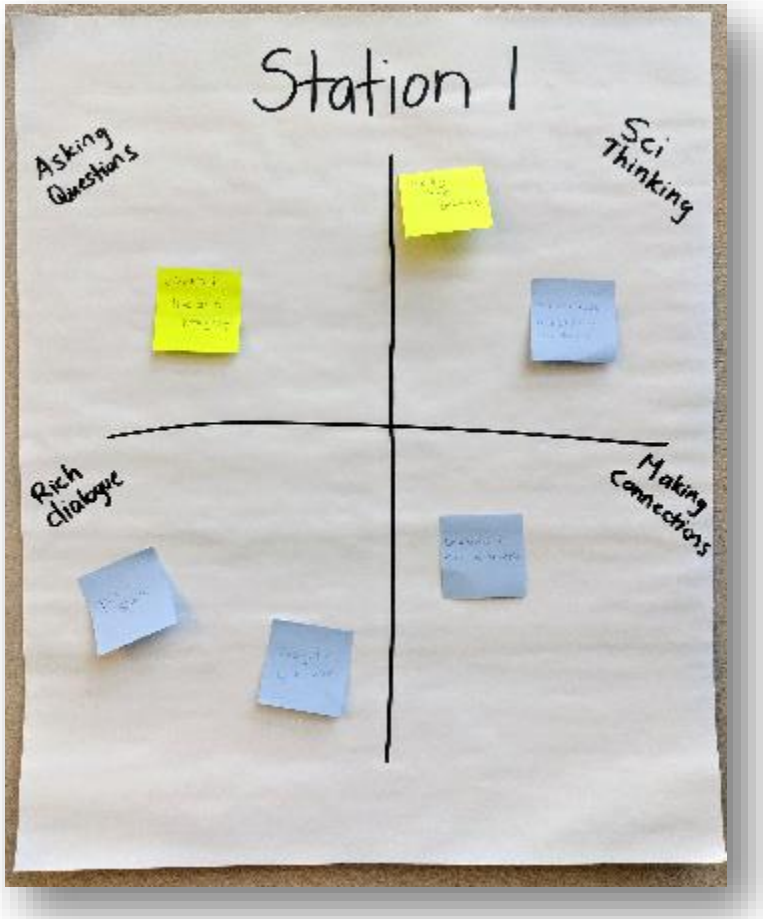
## How did you use the Core Four?

- Return to the station(s) where you were the educator.
- Fill in the chart with examples of how you used the core four.



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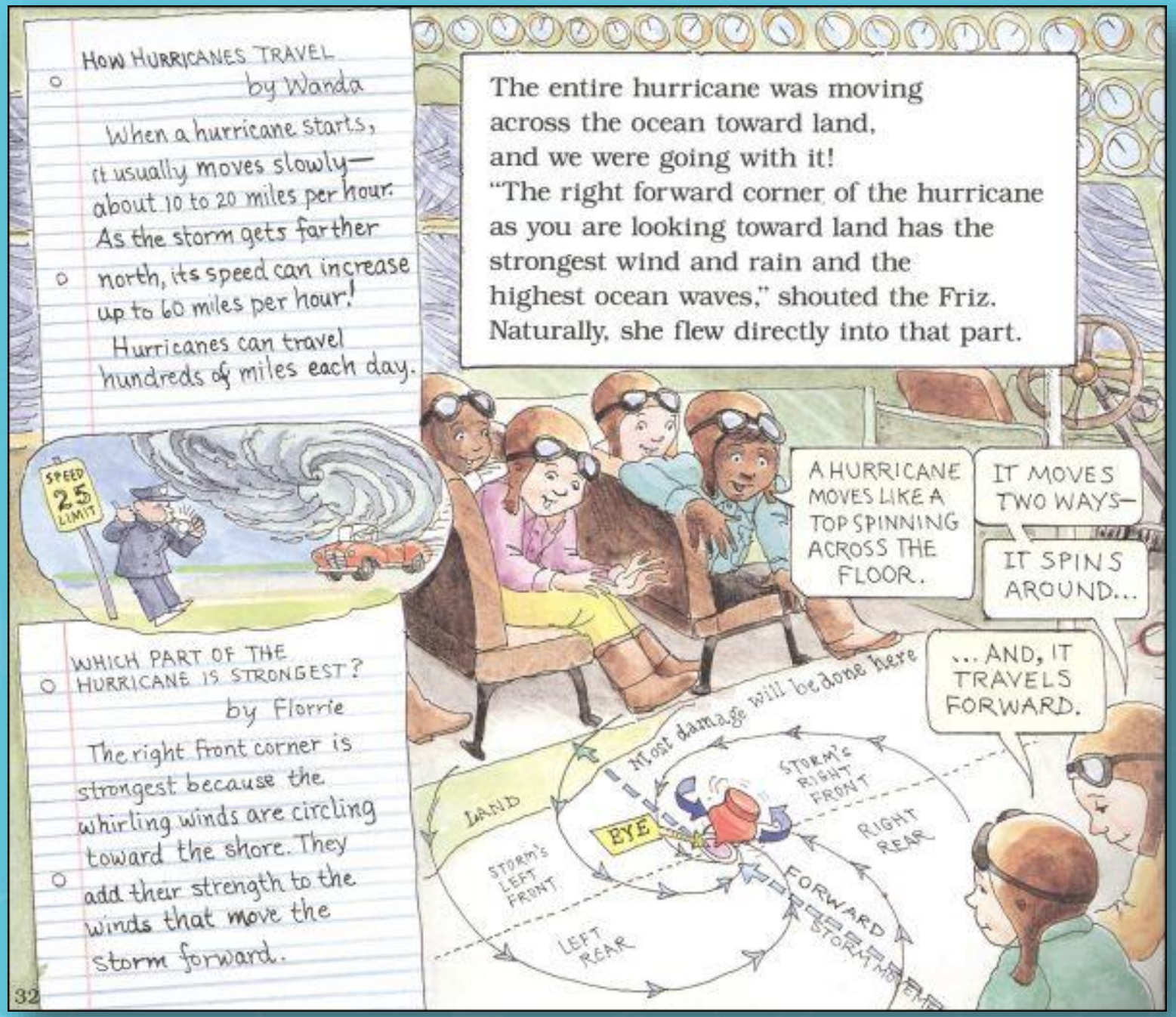
# What makes a good read-aloud book?




*The Magic School Bus: Inside a Hurricane*
by Joanna Cole

# Read-Aloud Books

- Captivating stories
- Clear and accurate science concept
- Relevant ethnicity, culture and language
- Keep pages visible when reading


**Avoid:**
**Too long, text-heavy, too many unfamiliar words**

# Exploratory Books

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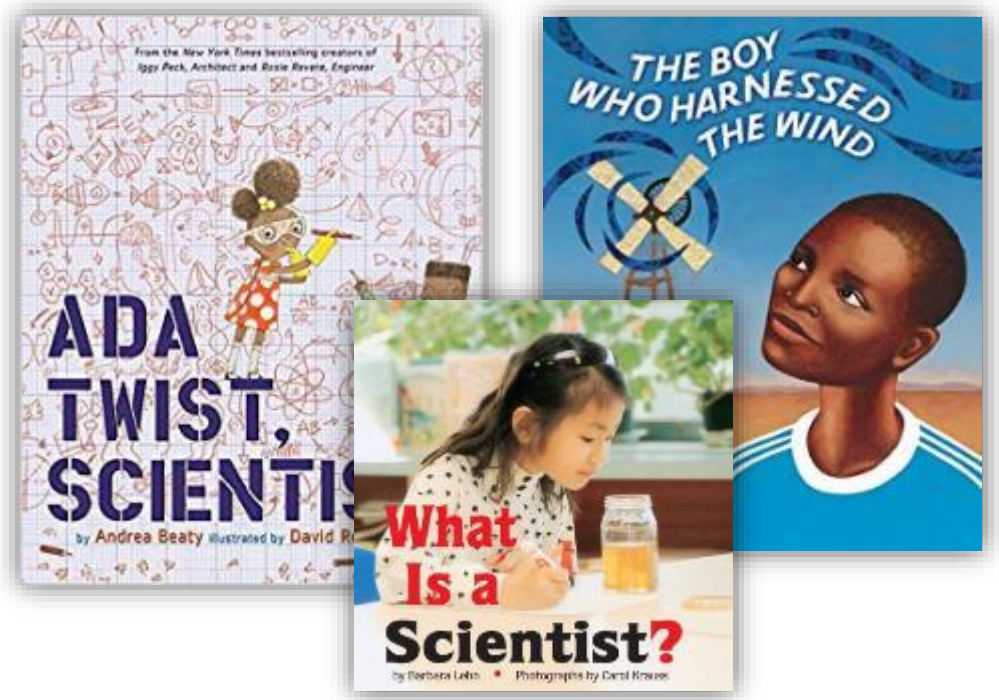
Choose books that…

- Extend concepts by providing additional information
- Highlight diverse communities
- Focus on the process of science




**Avoid:**
**outdated content, text-only books**

# Guidelines for Workshops

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1. Lead all sections of workshop sequence.
2. Use Core Four strategies effectively.
3. Engage children and caregivers inclusively.

## What's flexible?

- Materials
- Length, time & location
- Number of attendees
- Read-aloud book that follows criteria

# Knowing Your Audience

How might you **adapt** this workshop to meet specific needs of your audience?

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# Expectations

What are you expected to do after today?

# Educator Handbook

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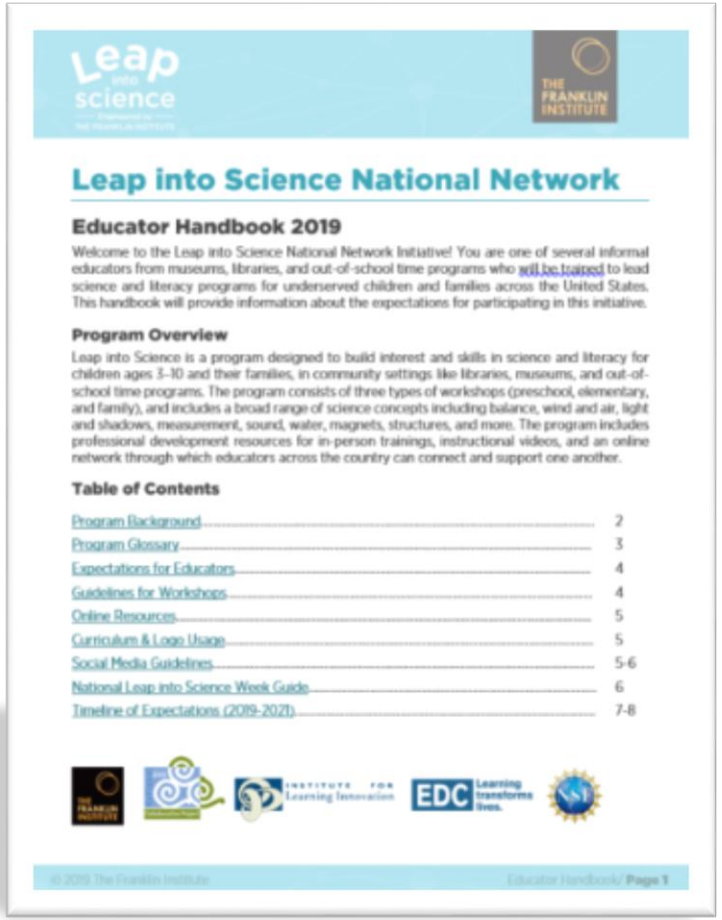
- Expectations
- Timeline
- Resources
- Social Media
- Curriculum & Logo Usage
- Links for reports



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## Leap into Science National Network

### Educator Handbook 2019

Welcome to the Leap into Science National Network Initiative! You are one of several informal educators from museums, libraries, and out-of-school time programs who will be trained to lead science and literacy programs for underserved children and families across the United States. This handbook will provide information about the expectations for participating in this initiative.

**Program Overview**

Leap into Science is a program designed to build interest and skills in science and literacy for children ages 3-10 and their families, in community settings like libraries, museums, and out-of-school time programs. The program consists of three types of workshops (preschool, elementary, and family), and includes a broad range of science concepts including balance, wind and air, light and shadows, measurement, sound, water, magnets, structures, and more. The program includes professional development resources for in-person trainings, instructional videos, and an online network through which educators across the country can connect and support one another.

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# Expectations

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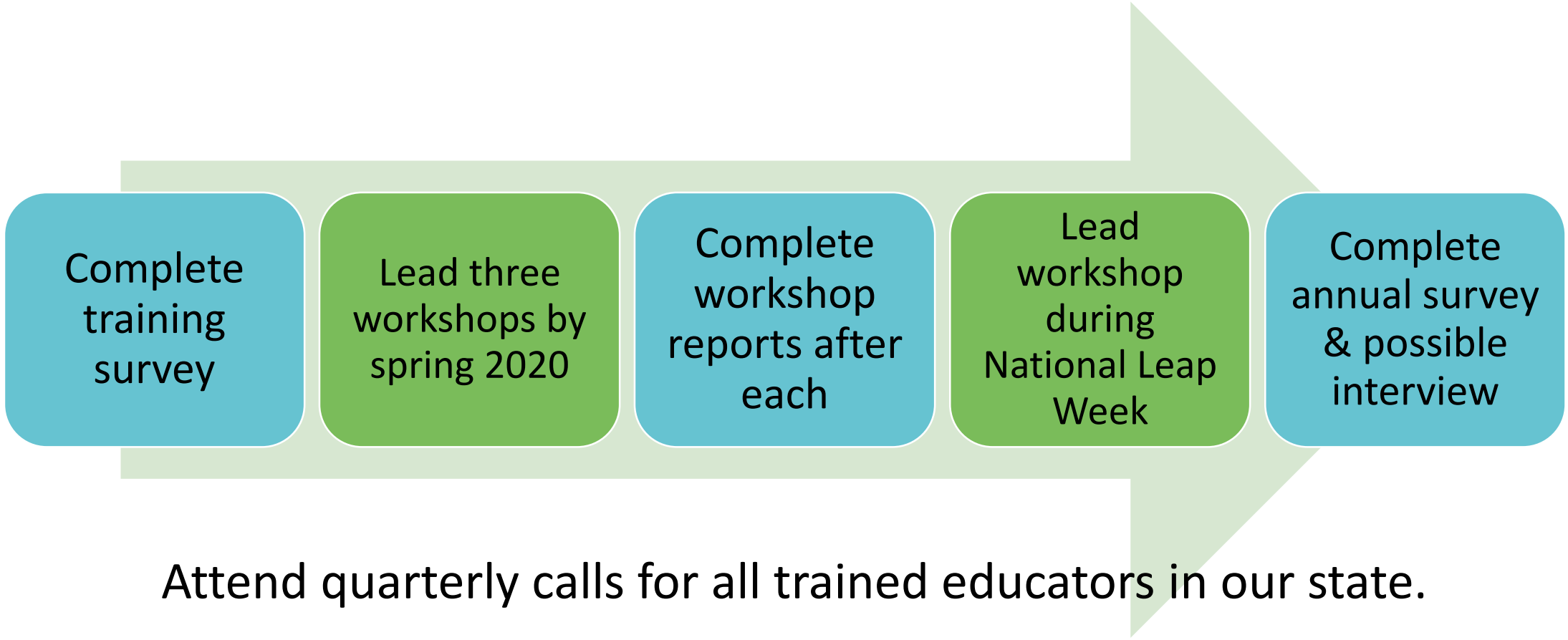


Attend quarterly calls for all trained educators in our state.

# Posting Workshops

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THE CONNECTORY

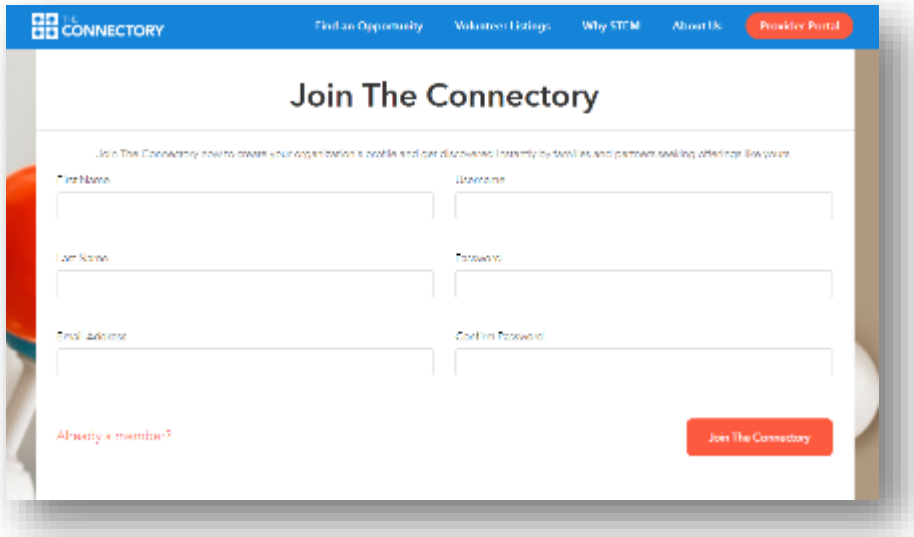
National Girls Collaborative Project

A searchable database of STEM experiences for children and families in your area.

As you schedule your workshops, you are **required** to post them in **The Connectory**.

# theconnectory.org/signup

- **Join:** Create your user account.
- **Create Program**: Add your organization/program provider information and submit for approval.
- **Add Opportunities**: Add your Leap into Science workshops & submit for approval



# National Leap into Science Week

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## Feb 24 - Mar 1, 2020

- Annual celebration of science and literacy in all national sites
- Host Leap programming during that week
- Share on social media #leapweek #leapintoscience

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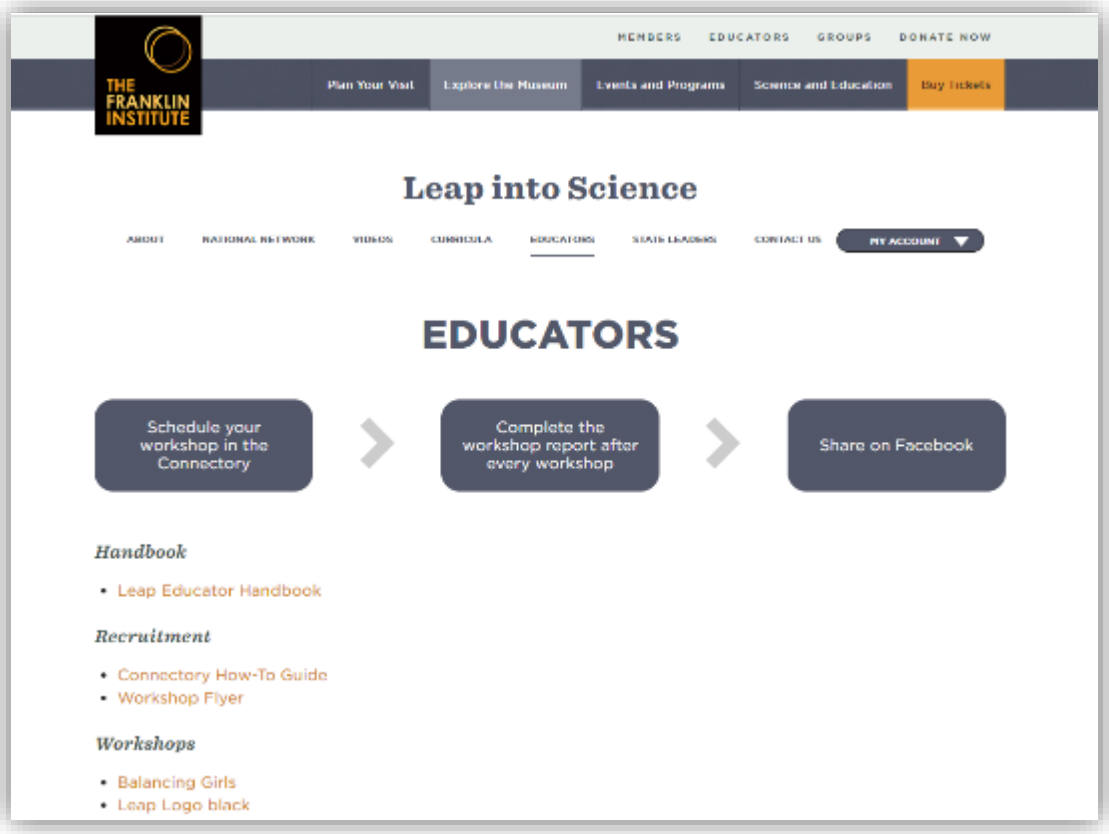
# How to Stay Involved

# Leap into Science Website




- Curricula, videos, handbooks, flyers, links for surveys and reports
- You will receive an email with your account information. Check SPAM/junk.

# Social Media

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Facebook Group:
Leap into Science Educators

Share programs, questions, ideas

Twitter:

#leapintoscience

@TheFranklin

@ngcproject

Advertise programs, share pictures

# More Curriculum & Training

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**Balance**
**2018**

**Wind**
**2019**

**Light & Shadows**
**2020**

In 2020:

- Web-based training
- Assemble own kits

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# Parking Lot & Questions

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# Workshop Planning

Where and when will you lead workshops?

How will you recruit diverse communities?

# Next Steps

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Complete training survey

Log in on Leap website

Make Connectory account

Post workshops on Connectory

Survey will be emailed or you can do it now:

https://go.edc.org/Leap-into-Science-Training-Survey

# Thank You!

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