Nature and Science in the classroom

Let’s Talk Quality Webinar Series
Tracy Walter
Program Quality Assessor
Introduction
Objectives

• Why science in the classroom is important for early learning
• Goal of science learning
• What is needed to make the classroom a place for nature/science opportunity
• How we pull this all together in the classroom
• What you can do about children with tactile sensitivity
Why is Early Science Learning Important?

• Helps children explore, discover and question
• Powerful catalyst for their work and play
• Helps with inquiry skills and other important skills
  • Working with one another
  • Large and small motor control
  • Language development
  • Early mathematical understanding
Goal of Science

• The goal of science learning is to understand the natural world through a process known as scientific inquiry.
What is needed?

- Materials
- Space
- Time
Material Categories

- LIVING THINGS CHILDREN CAN OBSERVE CLOSELY OR CARE FOR
- NATURAL OBJECTS
- AT LEAST 5 FACTUAL BOOKS/NATURE-SCIENCE/PICTURE GAMES
- NATURE/SCIENCE TOOLS
- SAND OR WATER WITH TOYS (INDOORS OR OUTDOORS)
Examples of materials

<table>
<thead>
<tr>
<th>Living Things Children can Observe Closely or Care For</th>
<th>Natural Objects</th>
<th>Factual Books/Games</th>
<th>Nature/Science Tools</th>
<th>Sand or Water with Toys (indoor or outdoors)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ant farm</td>
<td>Birds’ nest</td>
<td>Books with real pictures</td>
<td>Binoculars/viewers</td>
<td>Buckets</td>
</tr>
<tr>
<td>Aquarium with fish, snails, etc.</td>
<td>Collections of seeds</td>
<td>Board games</td>
<td>Color paddles</td>
<td>Funnels</td>
</tr>
<tr>
<td>Butterfly hatching kit</td>
<td>Different types of wood</td>
<td>Matching games (body parts)</td>
<td>Kaleidoscope</td>
<td>Measuring cups/spoons</td>
</tr>
<tr>
<td>Class pet</td>
<td>Insects in transparent plastic</td>
<td>Plastic animals</td>
<td>Lifting objects with levers/pulleys</td>
<td>Pails</td>
</tr>
</tbody>
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<tr>
<td>Eggs that hatch</td>
<td>Leaves, nuts, pinecones</td>
<td>Puzzles with natural pictures or sequences</td>
<td>Magnets &amp; magnetic and non-magnetic things</td>
<td>Rakes</td>
</tr>
<tr>
<td>Plants</td>
<td>Rocks</td>
<td>Videos</td>
<td>Microscope and slides to look at</td>
<td>Sand molds</td>
</tr>
</tbody>
</table>
Space

- Do you have enough space in your science interest area?
Time

- Allow enough time for the children to play, discover, explore, experiment
How do we put this all together in a classroom?

• Be intentional with your science interest center
• Ensure you have the materials needed
• Provide ample space
• Allow enough time for science inquiry
Children with Tactile Sensitivity
Tactile Sensitivities in Nature

- Place natural materials in the classroom for a long period of time
- Use positive language and modeling
- Introduce one texture at a time
- Offer familiar objects first
- Place gloves or mittens in the natural objects
Tactile Sensitivities in Nature (cont.)

• Assign pairs with assigned roles
• Ask children to bring their own items
• Use other senses to experience
• Observe and draw
• Open door policy for family volunteers
Resources

- http://www.pedskolci.rs/HTML/Literatura/Science%20in%20Early%20Childhood%20Classrooms.pdf
- https://www.pakeys.org/program-quality/program-quality-assessment/program-observation-instrument/rosie/
Let’s Talk Quality Blog:
www.letstalkqualitypa.com

Let’s Talk Quality Spotlight
Science in the Classroom
December 21st at
1:00 PM and 6:00 PM
Spot Light Series for Nature and Science in the Classroom

• 1:00 Session
https://berksiu.zoom.us/meeting/register/tJckc-CrpzsjHNBo51EUA0F4BOLQ5PqHvShM

• 6:00 Session
https://berksiu.zoom.us/meeting/register/tJYsfu-vqjwoGtVr-aeUmUbOqy3biUGAqK2x