

**Active Learning
KWLN Example**

A KWL chart is often used to organize topics to be explored by teachers and children. Use the following example as a way to guide the conversation with participants about the parts and their importance in promoting Active STEM Learning. The “N” is an additional column to indicate “Next steps”—could be used for goal-planning for participants or next steps for an Active STEM experience with children.

Use the following example to have individual participants create an individual KW (on a blank regular piece of paper) and then group (3-4 participants) KW charts (the L and N will be filled out after the “Skill in Action.” Following the individual/group work, then create a whole group KW chart with a piece of flip chart paper with all groups providing input from their group work. Complete the Group chart (adding L and N) after the “Skill in Action.”

K	W	L	N
<p>K=What do we “know” about the topic—what are our ideas about it? Pre-conceived ideas (can include misconceptions).</p> <p>For training purposes: Ask participants to share what they know about “Active Learning”</p> <p>Look for concepts: Hands-on exploration Children’s inquiry /questions On-going investigations—</p>	<p>W=What questions do we have about the topic? What do we want to learn about the topic?</p> <p>For training purposes: Ask participants to share what they want to know more about regarding Active Learning</p> <p>Look for: Ways to find out what children want to know; how to support</p>	<p>L=What did we learn? (To be completed after an experience/project.)</p> <p>For training purposes: Use after the “Skill in Action” to discuss new understandings participants have about what skills are needed for Active STEM Learning. Emphasize sometimes our “learning” is a re-affirmation of what we do well.</p> <p>Look for: Time it took Messiness Materials</p>	<p>N=Next Steps What would you do next to continue the exploration of the topic?</p> <p>For training purposes: Use the “Goal Setting and Action Plan”— participants should focus on their own Self-Reflection (completed prior to the session) and develop 1-3 goals they want to focus on with Active Learning. Share</p>

<p>predictions- ways to explore misconceptions Time, space, materials, messiness</p>	<p>them; what the adult needs to be able to do, etc.</p>	<p>Children's expressions; curiosity Adult's role</p>	<p>with the whole group to fill in this column on the Group KWLN chart.</p> <p>Trainer can offer suggestions based on the Active Learning "skills" if participants are having difficulty developing a focus area.</p>
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