



Think Make Create



The Makerspace Playbook

Issue #3: October 2021

TMC ON THE MOVE: PREPARED FOR ANY SEASON

Whether it's snow that's coming soon or more specific changes to how you deliver TMC, there are still items you can prepare no matter the season heading your way.

- ✓ Checking tires for wear (*more tread improves traction*)
- ✓ Tire gauge (*to check air pressure*)
- ✓ Extra keys and locks*
- ✓ Chains (*for icy roads*)
- ✓ Sandbags or cat litter (*for icy roads or parking lots*)
- ✓ Water bags (*to secure the canopy in wind*)
- ✓ Deicer spray* (*for iced over locks*)
- ✓ Spending a day to really organize and review inventory in the trailer (*perhaps by replacing playdough used all summer*)
- ✓ Remove any items that will not store well in your next season (*extreme cold can cause damage to electronics, freeze certain materials, etc.*)

*include these items in a place that can be easily and readily accessed, but are not within the trailer

~Claire Sponseller,
University of Idaho Extension
4-H STEM Educator



Spotlight on Idaho: Getting Creative with STEM

The Boys & Girls Club of Western Treasure Valley serves various small communities within a 10 miles radius. Home base for this TMC Lab, #06 out of #16 in Idaho, is in Payette. This summer, our Club Experience Coordinator, [Melissa Newton](#), took the lab to Ontario, Oregon which is just over the border, to assist in weeklong STEM camps at two different locations. It was a great way for the kids to be in hands-on, minds-on STEM activities, encouraging them to be creative critical thinkers.

Also, this summer our kids participated in a Boys & Girls Club program: Summer Brain Gain. Summer Brain Gain is comprised of one-week modules with fun, themed activities for elementary school, middle school and high school students that are aligned with common core anchor standards. This program is committed to ensuring that America's youth, especially those who need us most, graduate from high school on time with a plan for the future. That's why Summer Brain Gain, a summer learning loss prevention program, was developed. Our TMC Lab was used in conjunction with Summer Brain Gain, coordinated by our Lead STEM Youth Development Professional, [Veronica Griffin](#).

Veronica has a knack for thinking outside the box and keeping our members motivated and engaged in STEM activities. Our members have competed in several national STEM competitions, using the TMC Lab and materials. These competitions featured 69 clubs and over 1,300 participants. Our club is currently nationally ranked 2nd place winner with over 101 participants.

Our team has one dedicated person to overseeing TMC daily operations, inventory, check-outs and check-ins, which has been extremely important. Having this TMC Lab has been an excellent resource to ensure that we are reaching the underserved youth in our community. We are very grateful for this opportunity.

~[Racheal Lopez](#), Boys & Girls Club of Western Treasure Valley,
Payette Clubhouse Director

Give It A Try: Strawkets

Low tech activities that encourage STEM learning are a perfect fit for any school-age making and tinkering environment. Strawkets (also known as straw or paper rockets), are a perfect way to teach about flying objects and the stability they need to stay in the air. In this activity, youth can explore different sizes and shapes of fins, location of fins, and even the size and weight of the rocket. Compare and contrast different objects that fly through the air and how they compare to rockets and how they move through the air. Additionally, you can explore careers such as aerospace engineering and what it would be like to work at NASA!

Give it a try: <https://www.sciencebuddies.org/stem-activities/paper-rocket#summary>



Straw Rockets:

Source <https://www.instructables.com/Straw-Rockets-or-Strawkets/>

~Julie Boyle, University of Nebraska, Assistant Extension Educator

Put it Into Practice:

The Art of Asking Questions

Facilitation is the act of engaging youth through non-directive leadership. This type of leadership provides youth with opportunities to make their own decisions as well as make youth responsible for their own learning.

Facilitators do this by asking questions. While learners ask questions to gain understanding, facilitators ask questions to direct learning. Through the use of questions, facilitators direct youth in the processes and activities needed to find solutions. Through this form of teaching, facilitators are supporting the development of practical knowledge, creative thinking, problem solving, teamwork, and a multitude of other life skills. Through the use of questions, facilitators are also demonstrating curiosity to youth and encouraging them to develop their own sense of wonder.

To strengthen your own skills related to asking questions check out: 'Asking Purposeful Questions' <http://click2sciencepd.org/web-lessons/asking-purposeful-questions>

~Christine Wood, SDSU Extension 4-H STEM Field Specialist

Tips and Tricks of Asking Questions

Open-ended questions are the best for facilitating learning and assessing youth understanding. Closed-ended questions should be avoided unless a specific conclusion or fact needs to be stated. Open-ended questions:

- Establish understanding
 - Describe
 - Explain
- Encourage application
 - Make
 - Construct
- Invite opinions, thoughts, and feelings
 - Evaluate
 - Compare/Contrast
- Encourage Communication
 - Discuss
 - Summarize

~Christine Wood, SDSU Extension 4-H STEM Field Specialist

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