



Think Make Create

LABS

The Makerspace Playbook

Issue 4: November 2021

TMC ON THE MOVE

BRAIN FOOD TRUCK SERVES STEM AT THE HAMMOND NORTHSORE REGIONAL AIRSHOW

A key feature of TMC mobile labs is its mobility and easy customization based on the program or event it is supporting.

The Louisiana Northshore STEM Coalition's TMC lab, aka the Brain Food Truck, was able to serve thousands of youth during a weekend-long, tailor-made program of hands-on, minds-on STEM activities to kids of all ages at the Hammond Northshore Regional Air Show.

Activities included NASA Astro Camp's Make a Shoebox Fly, Paper Airplane Engineers (from Kite & Airplane Design), and Anemometers (measuring wind speed), which kids tested on the Kid's Village runway!

The Brain Food Truck had a strong presence at this event thanks to the adaptability of the TMC mobile lab model. The trailer itself caught the attention of many passersby, and the program was customized to the Air Show by featuring activities that inspired kids and families in STEM related to the amazing world of aeronautics and aviation!

~ Jessica Deville, Communications VISTA Northshore STM Coalition



Spotlight on You: Project Washkon

Omaha Nation's Project Washkon at Walthill Public School has been busy at work with their Think Make Create lab for the last 6 months. Walthill received their TMC lab in late 2020 and has already put it to use alongside many afterschool projects as well as using it for individual activities in afterschool. In May of this year, Walthill applied for and received a TMC Gardening upgrade from which they were able to expand outdoor and environmental engagement through things like the BioBlitz, Environmental scavenger hunt activities and many others. Shortly thereafter, they also applied to the Beyond School Bells Summer of Innovation grant and implemented a uniquely student-oriented garden project where students in Project Washkon worked with those in the school's shop class to build raised bed gardens as well as a garden shed to house the gardening tools that would not fit in their TMC. While the project was not specific to the TMC, they were able to put their TMC Gardening upgrade to immediate use by preparing the beds, planting various vegetables, and caring for the garden. In mid-summer, they built on their understanding of the biological factors that supported their gardens with a BioBlitz run entirely out of their TMC. Students were able to test their own soil texture and composition in addition to learning about groundwater, natural filtration and their local water sources. After a summer full of outdoor, environmental, and gardening projects, Walthill was also invited to serve as one of two pilot sites for the Beyond School Bells project: Grow NE which will build food systems education around innovative gardening tools and local experts and opportunities. This project will tie in TMC activities, tools, and opportunities through the fall and even indoor activities through the winter. Stay tuned for news of continued food systems, gardening, and many other TMC activities out of Project Washkon - they don't have any plans to slow down!

~Dakota Staggs and Sandy Day, Beyond School Bells & Julie Boyle, Nebraska Extension

Give It A Try: Community Service Projects

One part of our role as youth organizations is to promote compassion and the betterments of our communities. Makerspaces are a great tool to support community service projects and inspire social action. However, instead of working around a project, encourage the youth to find a need within their community, then create and design a maker project addressing that need! Approach local non-profits, libraries, schools, or even the community center on how your maker youth can help. Sometimes the simplest action can spur a reaction to result in the biggest impact. If you need more ideas, here's a great [website](#) to get you started.

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



Put it Into Practice:

Engaging Native Communities

Through funding from Society of Care; Beyond School Bells (BSB), Nebraska's Statewide Afterschool Network was able to place Think, Make, Create Labs in four Nebraska Native American Communities - Macy, Walthill, Winnebago, and Santee. Nebraska Extension and BSB are working on to ensure the TMC Labs are inclusive of all those being served. Here are some ways we are engaging with the Native Communities in Nebraska:

1. Work with Tribal stakeholders: In each community, we have identified and been able to work with local stakeholders (e.g. Tribal Councils, Tribal Education Departments, School Districts, Tribal Leaders, Boys and Girls Clubs, parents) who have helped provide local support for the use of the TMC Labs.
2. Engage locals in providing culturally relevant activities. We have partnered with Little Priest Tribal College Extension to provide some cultural activities. We have also worked with each program to start engaging parents with different skills and expertise in the Native American Culture
3. Communication is key - Be sure to keep open lines of communication. We try to check in on a weekly basis.
4. Listening is critical - Listen to understand not to be understood. Try not to assume you know what their concerns are. Each Tribe and location will have different wants, needs, and concerns. Learn about them by asking questions and let them learn about you.

~Julie Boyle, Nebraska Extension; Sandy Day and Dakota Staggs, Beyond School Bells

Tips and Tricks: Culturally Relevant Programs

1. Know who your audience is - When working with different cultures be sure to know who is represented in your audience or clientele.
2. Ask questions - Ask open ended questions to learn more about those in your audience. Listen intently as culturally diverse audiences will have a variety of different wants and needs.
3. Engage local organizations - Work with local business and organizations on culturally relevant materials and education. Many communities have people or organizations willing to help you learn
4. Go to them - Go to where you can find those you want to engage. Whether it is a park, community center, school etc. set up activities where your audience gathers.
5. Be flexible - Sometimes things don't always go as planned. Have a plan B and C ready just in case.

~Julie Boyle, Nebraska Extension 4-H Youth Development Educator

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