

# SPOTLIGHT ON 4-H

Nebraska Extension 4-H Newsletter

May 2020

## Nebraska 4-H Summer Camps - By Mary Loftis

Did you attend camp when you were a kid? If you missed out, you won't want that to happen to your 4-H members! You'll see a hesitant child leave their parents side to explore new opportunities at camp and then return bubbling with excitement, talking a mile a minute and tired! If you are carpooling kids to camp, offer to bring them home after camp because you'll get to hear all the exuberance and camp stories while they're fresh!

The purpose of 4-H camps is to provide unique educational opportunities in a safe, inclusive, and fun environment. The Nebraska 4-H camps offer all youth a place to discover, learn, and grow while developing valuable leadership and citizenship skills. They include planned opportunities to learn and apply life skills such as leadership, citizenship, community service and encourage healthy risk-taking such as kayaking, adventure courses, or just new fun games.

Over 10,000 youth in Nebraska participate in 4-H camp programs each year. There are camp opportunities on county, regional and state levels. Every type of camping opportunity is available from county day camps for Clover Kids and older 4-H ages to attending state-wide camps at the Eastern NE 4-H Center near Gretna or the State 4-H Camp near Halsey. These can be a single day camp, a week of day

camps, or residential overnight camps. Field trips add to the learning and fun!

Nebraska 4-H Youth Development offers a variety of day and overnight camps, which provide unique experiences that focus on life skills, including:

- science exploration
- leadership and citizenship skills
- future career opportunities
- healthy decision-making
- natural resources education

Camping adventures vary from Splash Bash to Wild Zoo Adventures, Getting Messy, and so much more! Older 4-H members can check out leadership opportunities as youth counselors by attending Leaders in Training camp.

Check out local camping opportunities in your 4-H newsletter as well as the statewide camp options by going to <https://4h.unl.edu/camps> Making a decision which camp to attend will be the hardest job! Scholarships for camp are available. Contact your local extension office for county opportunities and/or go to: <https://4h.unl.edu/camps-centers/summer-camp/scholarship>

Whatever you do, don't miss out on the fun!



### In the Spotlight for May

- ◆ Library Innovation Studios
- ◆ Measure & Create Fluffy Paint—Grab & Go
- ◆ 4-H Social Emotional Learning
- ◆ Horticulture Donation Project
- ◆ STE(A)M—What does it mean & Why is it important?
- ◆ Citizenship Washington Focus
- ◆ Financial Support to attend the University

Extension is a Division of the Institute of Agriculture and Natural Resources at the University of Nebraska-Lincoln cooperating with the Counties and the United States Department of Agriculture.

The 4-H Youth Development program abides with the nondiscrimination policies of the University of Nebraska-Lincoln and the United States Department of Agriculture.

# Library Innovation Studios

By Bailey Carpenter

Creating at your local Library Innovations Studio is a great way to add creative and educational components to your 4-H club meetings. By using the variety of machines and kits that are available, there will be something for all of the club members to participate in. Many of the machines will even produce products that can be entered into your county fair.

Machines and projects ideas:

- 3D Printer-This machine uses filament to recreate 3D designs. Project ideas include small clover key chains for each member or a big clover that could be used at a meeting. This machine is great for prototyping products for entrepreneurs or for the youth interested in design. Skills learned from designing with the software are transferable to designing in virtual reality.
- Laser Cutter-This machine is used for cutting and engraving Materials that can be used in the Laser Cutter are wood, glass, some metal, denim, and much more.
- Vinyl Cutter-This machine allows you to design your own vinyl decals. Vinyl decals are decorative stickers that can be applied to a variety of objects. Ideas include monograms of each club member for a water bottle or a 4-H window cling.
- CNC Router- This machine is great for the woodworkers in your club. The CNC router is very similar to a handheld router. Ideas for projects include signs or cutting boards.
- Embroidery Machine- This machine can also be used as an embroidery or sewing machine. In the sewing setting, you will be able to use any of the pre-programmed design stitches. In the embroidery machine setting, there are 100's of designs you can choose from or you are able to purchase other designs. Project ideas are embroidered clothing, pillowcases, or using the design stitches on a sewing project. The sewers in your club will really enjoy this!
- Heat Press-This machine is used to apply a design to fabric. Project ideas include making t-shirts or aprons for your club. This would also be great for the entrepreneurs in your club.
- Other kits available are Lego Mindstorms, Laminator, Arduino, SparkFun, Makey Makey, camera and video kit, audio/music kit, soldering kit, and a button maker.
  - For the youth in your club that are into robotics and programing check out the Lego Mindstorms, Arduino, SparkFun, and Makey Makey.
  - For the youth in your club that are interested in photography and video, check out the camera and video kits and the audio/music kit.

If any of the machines or kits interest you, please contact your local library about them and applying for the Makerspace Grant. If your library would receive a Makerspace, make sure to sign up for the training for the machines and kits that would be of interest to your club.



# Measure & Create Fluffy Paint—Grab & Go Lesson

By Lee Sherry

Many times you are looking for a last minute activity to introduce at your next club meeting – without going out to purchase expensive materials. Your next lesson is measuring liquid ingredients. Rather than making a traditional food item, show youth how important measuring is in all aspects of life. Ask them to list people who have to measure things (scientist, pharmacist, doctors etc.). Fluffy Paint encourages youth to stretch their imagination as well as use measuring skills. This is an opportunity to make a 3D fluffy paint creation into a pretend item or pet. It might be a 4 legged animal with wings!

Start by discussing Abstract Art: It is a form of modern art which does not represent images of our everyday world. It has color, lines and shapes (form), but they are not intended to represent objects or living things. Abstract art could be creating a picture of a horse using shapes like triangles, rectangles and circles. Using the concept of abstract art you will not create a flower that looks like a flower in your garden. Ask your participants how they could create it differently? Remind them they do not have to color “in the lines” nor do they have to use the traditional colors – bring out your neon colors.

## Supplies:

- Shaving Cream (not shave gel)
- ¼ Cup Glue
- Medium or Large mixing bowl
- Card stock –or cardboard -extra pieces
- Paint (liquid water color or other)
- Spoon to Mix
- Decoration assortments – buttons, glitter, pony beads, feathers, rhinestones)
- Cleaning Supplies (ice cream bucket of soap and warm water, paper towels, etc.)



## Directions:

*Talk or demonstrate how to measure liquid/dry ingredients using a see-through measuring cup. Practice measuring glue and shaving cream before you start.*

1. Measure and pour ¼ cup white glue into mixing bowl.
2. Add shaving cream about ½ - 1 heaping cup to glue.
3. Mix glue and shaving cream together with spoon until the mixture is smooth and thick like cake frosting.
4. Drop 2-3 drops of paint into mixture – stir to create even and bright colors; add more color as needed.
5. Use spoon, paint brush, fingers, or squeeze bottles to spread fluffy paint onto cardstock – some children will create interesting abstract designs while others will have more traditional designs forming letters, numbers or animals.
6. Add any collage materials to fluffy paint mixture while it is still wet.
7. Children can create colorful craters while they are exploring the fluffy paint – for added effect drop a couple drops of liquid water color on top. Watch the color flow *down*.
8. Box to take item home in – let dry overnight or longer.

*Leader – go around room and asked each child to tell you about their creation. Discuss the choices of materials they used. Offer encouragements and praise for their creation. Ask them what would happen if they added more or less embellishment. You are not suggesting to change it, just to let them think about all the possibilities. End program reminding them measuring is not only used in the kitchen, but in other places especially by scientists.*

# How 4-H Contributes to Social Emotional Learning

By Emily Bormann

Social and emotional learning helps to develop youth into contributing members of society, by teaching life skills needed to be successful. In 4-H youth learn through the four essential elements, including; *belonging, independence, generosity, and mastery.*

It's well-known that youth who participate in 4-H reap the benefits of the program and use skills they've learned throughout their lives. 4-H integrates life skills into activities and projects for youth, with the intent to improve their physical health and well-being. 4-H also provides youth with positive and caring adults – an essential relationship ALL youth need to progress through their developmental stages.

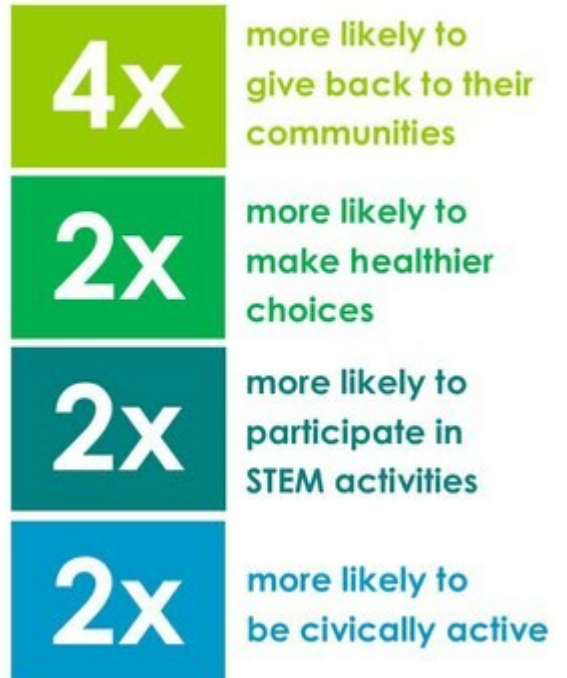
4-H Positive Youth Development (PYD) Programs contribute to the social emotional development of youth through the eight critical elements of PYD. The eight elements include the following:

- Positive & caring adult relationships
- Inclusive learning environment
- Physically & psychologically safe learning environment
- Opportunities for competency building
- Opportunities for engaged learning
- Self determination
- Helping others
- Preparation for the future

Now, you may be thinking, can being a 4-H member really make that large of an impact on the social and emotional development of young people? In short, the answer is yes! Youth who participate in 4-H have several opportunities to grow and develop in a positive environment! Members of all ages have the opportunity to mentor others, and serve as a role model.

Some information in this article was taken from a University of Illinois, 4-H Youth Development article, found [here](#).

## 4-H'ers are...



# Horticulture Donation Project

By Autumn Lemmer

The Horticulture Donation Project started when local 4-H youth realized the significance of tackling food waste. They wanted to look at this problem on a local level, and decided that County Fair was a good place to start. The 4-H'ers and 4-H Staff noticed that there was significant food waste at county fair – specifically the 4-H Horticulture exhibits. The exhibits were brought in to be judged, then sat in a building with no air control for the week. By the time 4-H'ers were picking up their exhibits, the produce was unsafe for consumption. This is how the Horticulture Donation Project was born!

This project has been very successful for the Washington County 4-H Program. Starting this project is simple and easy to implement. First, it was announced that all 4-H Horticulture exhibits would be donated to the Washington County Food Pantry. The exhibits were still physically judged on county fair judging day, except instead of heading off to the exhibit hall with the ribbon, the exhibit went in a box to be taken to the food pantry! In order to still honor the hard work that the 4-H's put into their 4-H horticulture exhibit, volunteers took a photo of each exhibit with a name card of the 4-H member. Volunteers then printed the photos and attached the ribbon and scoresheet to the corresponding exhibit. The photo then went off to the exhibit hall, and the produce went in a box to be taken to the food pantry later that day. We also wanted to collect data on how much produce was donated. After judging was complete, the exhibits were recorded and weighed before being set aside for donation.

Just because fair is only one week in the summer doesn't mean the donations have to stop there! Encourage your 4-H clubs and 4-H members to donate their excess garden produce throughout the entire summer! Encourage your 4-H'ers to bring in donations to county fair – even if they aren't exhibiting their produce! Make the donation a friendly competition between clubs or families and record the weights and amount of produce donated each month. While working with the food pantry worked well with our county program, other avenues for the horticulture donation might be local nursing homes, retirement communities or local 4-H families in need! This project can be flexible to meet the needs of your county, your club or your 4-H friends and family!

Get this project started in your county by reaching out to your local 4-H Staff at your local Extension Office!



# STE(A)M—What does it mean & Why is it important?

By Kameran Ulferts

The U.S. Department of Education believes that in an ever-changing, increasingly complex world, it's more important than ever that our nation's youth are prepared to bring knowledge and skills to solve problems, make sense of information, and know how to gather and evaluate evidence to make decisions. President Barack Obama put out the call in his 2011 State of the Union Address, igniting a movement to teach students 21st-century skills to become more competitive with other nations in the fields of STEM. The U.S. Department of Education suggests that these are the kinds of skills that students develop in science, technology, engineering and math—disciplines collectively known as STEM.

Where does the “A” come in to turn “STEM learning” into “STEAM learning” and why? The STEAM approach recognizes the *arts* in STEM learning experiences. John Dewey, American philosopher, psychologist, and educational reformer, believed in the desegregation of subjects and in allowing children to just ask and seek answers with their unbridled natural curiosity. In today's educational system, youth asking questions can be seen as inadequate rather than curious. In reality, the most successful innovators, creators, engineers and scientists use a myriad of skills to innovate, create and engineer.

A fantastic example of this comes from the University of Concordia-Portland's website: “The scientist who can use science and math to create a new treatment for disease must also use design-thinking to imagine and visualize her work. She must also express herself with impressive communication skills in order to secure funding and support. She must work collaboratively with her colleagues and investors to improve and expand ideas, and then publicly speak about her progress and discoveries with eloquence and ease. This multi-skilled individual is a representation of a student who understands how academic subjects are meant to work together.”

In the context of 4-H Youth Development, 4-H provides the cross-curricular projects and real-life experiences that youth need to further develop their skills in the field of STEAM. 4-H programs use hands-on activities in robotics, computer science, electrical engineering and various other areas, to teach problem solving, creative and critical thinking, and inspire kids to explore engineering and technology. In the Nebraska State Fairbook there are countless opportunities for leaders and parents to further involve youth in hands-on STEAM learning experiences. In every area of the static exhibits at the fair there is more than one opportunity for STEAM learning to be incorporated. For example, project ideas from six areas of the static exhibits are listed below with contextual STEAM questions for leaders and parents to ask youth:

**Agronomy: Crop Technology Display** – Display information about aspects of technology used in crop production, such as genetic engineering, crop breeding, GPS, yield mapping, computers, etc. *In the context of STEAM-* This project uses science

and technology concepts to explore the question, “how can crop production be improved?” These examples (genetic engineering, crop breeding, GPS, yield mapping, computers, etc.) give the youth the opportunity to explore engineering and math concepts as well. In order for a viewer to actually want to read this display, the youth must also consider his or her design to catch the viewer's attention.

**Citizenship: Exhibit depicting a cultural food-** that is special to your family. Can be a story or essay. *In the context of STEAM-* How does the science of different ingredients affect this special food? Have advances in technology made the process of making this food faster or easier?

**Entomology: Insect Poster/Display Exhibits** - Exhibits can be posters or three-dimensional displays, and artistic creativity is encouraged. Posters should be no larger than 22" x 28". They should be instructional and can be attractive and have pictures, drawings, charts, or graphs. *In the context of STEAM-* How might the youth engineer an interactive display? Could technology be used?

**Clothing: Embellished Garment with Original Design-** Create a garment using intermediate or advanced techniques as defined in the project manual. Designs are the original idea of the 4-Her using the elements and principles of design to make an original statement. *In the context of STEAM-* how might you use technology to compliment the creation of this garment?

**Photography: Creative Techniques & Lighting Display or Print-** Photos should capture a creative use of lighting, such as diffused lighting, backlighting, or hard lighting, reflections, or another lighting technique covered in Book 2 Next Level Photography. *In the context of STEAM-* How does the science behind light (optics) come into play with photography? How could the photographer engineer a better lighting set up in a dimly light area? Could the use of technology improve the lighting?

**Conservation, Wildlife & Shooting Sports: Community Vitality Display** - Explore how shooting sports, conservation, fishing, and hunting makes a difference in keeping Nebraska vibrant especially in rural areas. Present facts and research in an interesting way for the public to learn from. *In the context of STEAM-* How does technology improve these areas? How do public displays catch visitor's attention and bring them into communities?

Displayed in the information above, STEAM concepts can be found throughout the Nebraska fairbook. By incorporating multiple subject areas, 4-H can create more meaningful learning experiences for youth. When projects are designed with STEAM concepts, intention and care, they can lower barriers to engagement, stimulate creativity, and allow youth to deeply connect to their work.

# Citizenship Washington Focus

By Michelle Garwood

Citizenship Washington Focus (CWF) “brings history to life”, inspiring high school youth to become engaged in the democratic process. While changes are coming for the CWF program from the State 4-H Program, here are important lessons learned over the years that will still help you design a once-in-a-lifetime experience.

- A volunteer/youth-led trip is ideal. Consider identifying two core leaders, supported by a parent advisory board and different parents signing up to lead fundraising projects. Assign youth leadership roles during fundraising, training, and for the trip itself.
- Participating in fundraisers prior to the trip (some groups spend three years on this) helps youth get to know one another, develop teamwork, and learn responsibility. Some counties are able to give part or all of the fair food booth business to CWF groups.
- Consider utilizing a bus option to allow students to see as much of the eastern United States and its history as possible (this may be the only chance some students ever have to do so). Stops might include: Chicago, Cleveland, Hershey, PA, Gettysburg, Philadelphia, New York City, Niagara Falls, St. Louis, and Indiana Amish Country. Some trips last approximately 2 weeks and revolve around the week-long CWF experience at the National 4-H Center in Washington, D.C. This is one aspect of the program that will be changing in the future, with a specific number of trip packages being offered to all groups across the state. But the bus option will still be available with a set number of tours to choose from, and I highly recommend this option if you have the time available to fundraise for it.
- Utilizing the “We the People” curriculum prior to the trip helps prepare youth to visit with Nebraska leaders and represent their county and the 4-H program. Lessons on the democratic process are reviewed/reinforced. Part of this training could involve Real Colors to help youth choose teams and leadership roles to play on the trip.

*“I learned a lot about how to become a good citizen from the CWF trip. We did a lot of leadership activities that will help me in the future. It was an amazing experience getting to see our history and see all the monuments we only see in our textbooks.” – 2019 participant*

P.S. I’m an alumna of this amazing trip which has changed very little over 20 years in my home county! I still have vivid memories and count it as one of the most important and impactful events from my 4-H career.



# Financial Support to Attend the University

By Stacey Keys

Money is always a concern, especially in a changing economy during unprecedented times. This worry might include the money it takes to get an education. The University of Nebraska has two new opportunities, for those who qualify, to help with the financial cost of higher education.

The **Nebraska Promise** program covers undergraduate tuition at the University of Nebraska's four campuses (UNK, UNL, UNMC and UNO) for students who meet academic qualifications and have a family income of \$60,000 or less (Adjusted Gross Income or AGI) or are Pell Grant-eligible. The student must also be a Nebraska resident and be an enrolled full-time undergraduate student.

We want to make sure that any Nebraskan who wants to get a college education can. And we don't want cost to get in the way of getting your degree. With COVID-19 throwing many lives into disarray, some high school students may feel that college is not within their reach right now. We're here to say: *it is*. Go to: <https://nebraska.edu/nebraska-promise> for more information and to apply.

Another scholarship opportunity is "**The CASNR Change Maker Competition.**" Here is your chance to share what you will tackle to leave your mark on the world.

Do you have an idea for making a difference in the world? Pitch

us your idea in a 2-minute video. If your idea is selected you could earn a CASNR scholarship and have the chance to work directly with mentors on tackling your big idea. *Multiple winners will be selected.*

Competition is open to all individuals in the following categories:

- 6<sup>th</sup> – 11<sup>th</sup> grade students
- Incoming college freshmen or transfer students for 2020-21 academic year
- Returning CASNR undergraduate students for 2020-21 academic year

Employees of the University of Nebraska and their immediate families or those living in the same household as a University of Nebraska employee are not eligible to enter this competition.

Create and submit a video on one or more of the following grand challenges: feeding the world; new energy; biodiversity, sustainability, and environment; engaging diverse communities; water for the future; climate and the future; health; developing tomorrow's leaders. Go to: <https://casnr.unl.edu/casnr-change-maker-competition> for application instructions.

**4-H! YOUR FIRST CLASS AT THE  
UNIVERSITY OF NEBRASKA!**