



# MARKETPLACE FOR KIDS EDUCATION DAY

## Thursday, January 9, 2025

### 9:00 A.M. – 2:00 P.M.

## VALLEY CITY STATE UNIVERSITY

Welcome!

On-Line Registration opens **Friday, November 8, 2024**. All registrations are “first come first served.” The registration must be complete before it can be processed.

Registration closes **Friday, December 13, 2024**. You will be notified when your registration has been received and processed.

### Education Day General Schedule:

*(A personalized schedule for each student will be printed on their name badge)*

**\*Note that these times are subject to change**

9:15 am – 9:30 am	Pre-Opening Music	11:35 am – 12:00 pm	(Teal) Non-Project Students Lunch
9:30 am – 9:50 am	Opening Rally		(Maroon) Non-Project Students View Projects
10:00 am – 10:25 am	All Students Attend Classes	12:00 pm – 12:25 pm	(Teal) Non-Project Students View Projects
10:35 am – 11:00 am	All Students Attend Classes		(Maroon) Non-Project Students Lunch
11:00 am – 11:30 am	Project Students Eat Lunch	12:30 pm – 12:55 pm	All Students Attend Classes
11:10 am – 11:35 am	Non-Project Students Attend Classes	1:05 pm – 1:30 pm	All Students Attend Classes
11:30 am – 12:25 pm	Project Students Present Projects at Hall of Great Ideas Showcase	1:40 pm – 2:00 pm	Closing Rally

## Class List and Description

### A. Land Surveying and Mapping

Discovering Land Surveying and how we, as Land Surveyors, help build the world around us by using technology such as Laser scanners, Robots, GPS and Drones.

### B. Fun with Chemistry

We'll play with glitter and fingernail polish remover as an example of how a "calming bottle" is made. In this experiment, we will discuss how different chemicals are attracted or repelled from each other. Limit 24 Students

### C. Border Protection

Canine drug detection demonstration. Limit 32 Students.

### D. DIY Breadboard Circuits

Come learn and explore circuit builds and the basics of electricity flow through circuits. In this session, students will become familiar with circuitry components like photoresistors, push buttons, batteries, LED's, capacitors, and breadboards. Each build increases in complexity, and all components are reusable so that builds may be disassembled and recreated! Two 50-minute sessions and one 25-minute class. Limited 16 Students.

### E. CAN You Build It?

Students will work as a team in groups to put together our CAN tests. It tests their mechanical knowledge, ability to work as a team, and is overall a very fun and fulfilling activity! Limit 16 Students.

### F. Unlock Your Coding Potential

From robots and virtual worlds to AI and space travel - coding makes it all possible! Join us for a fun, hands-on introduction to programming for young learners. In this short session, we'll dive into coding with engaging visual tools. Through playful, quick activities, we'll explore important coding concepts like logic, problem-solving, and creativity. It's all about having fun while learning how we can use code to make things happen. Let's unlock your potential and discover the power of code together. Limit 16 Students.

### G. Experiments with Electricity

We will be using snap circuits and teaching kids about conductive materials and insulators, mechanical energy and electrical energy. Limit 24 Students.

### H. Young Workers – Talking Safety

Let's talk about safety for young workers. Your first real job could come with real risks. Limit 24 Students.

### I. Power UP! Exploring Energy and Future Careers

Explore various forms of energy and methods used in ND to generate electricity and other power sources. Includes hands-on activities to experience firsthand how energy is transformed and used. Limit 24 Students.

### J. Discover Japan in North Dakota

Class will provide students with an opportunity to experience unique Japanese culture. Limit 16 Students.

### **K. Farm Power: How Shortline Equipment Gets in Job Done!**

This class explains the importance of shortline farm equipment, benefits of using the equipment, the innovation behind the machines, and how these units will benefit your farm.

### **L. Lessons About Your Money**

The more you know about how to make money, how to save money, and how to spend money, the less likely it is that you will have problems as an adult. Do you know people who never seem to have enough money? If you don't want to live that way, listen up. We have some good information to share with you today.

### **M. Building Windows with Marvin**

Get ready to dive into the world of engineering and manufacturing! Students will be inspired by videos showcasing the fun and importance of manufacturing engineering. They will wrap up the class by taking on the exciting challenge of building a window. Limit 16 Students.

### **N. Basic Observational Astronomy**

A quick look at seasonal constellations of the Northern Hemisphere. Limit 50 Students.

### **O. Operation LifeSaver**

Railroad Safety, trespass prevention, and how to report emergencies that occur while on or near railroad property. Limit 32 Students.

### **P. Hispanic America Passport**

Fill your passport with as many stamps as you can by exploring Spanish-speaking countries across the world! At each station, you'll discover fun facts about different cultures, learn new Spanish words, and complete exciting challenges. How many countries can you visit? Collect all your stamps and become a world explorer! Limit 24 Students.

### **Q. Build Electronic Gadgets for Yourself**

Want to create a cool and romantic light show? Do you want to build a robot that can walk, dance and be controlled by you? If your answer is yes, join this course. We will show you how to build your electronic gadgets in several steps. You will learn the basics of circuits and how to use resistors while building a smart device with your own hands. Limit 16 Students.

### **R. How to Save a Life**

Nursing faculty and students will demonstrate life-saving skills. Recognize someone is having a heart attack or stroke. Learn how to do hands-only CPR. Learn how to apply a tourniquet to stop bleeding. Limit 12 Students.

### **S. Stress Busters**

We all have times when we feel happy, excited, and energetic. We also have times when we feel scared, sad, or overwhelmed. Psychologists can help people understand their emotions and teach them healthy ways to work through their feelings. In this session we

will talk about what stress feels like and we will make stress balls that students can use the next time they feel stressed.

### **T. Cereal Box Design**

Learn about entrepreneurship and marketing. Students will come up with their own cereal box design and marketing jingle.

### **U. Career Paths in Aviation**

STEAM as a tool to foster entrepreneurship, problem solving, using critical thinking and career paths in aviation.

### **V. Money DOES Grow on Trees!**

Wood, paper, heating, buildings, musical instruments, crafts, toys, nuts, fruits, and even mushrooms! "Wood" you believe it comes from a tree? Many jobs rely on forestry and selling "specialty forest products" could be an opportunity to start your own business to earn extra money. Limit 30 Students.

### **W. Breaking Through Traditional Roles – A NEW Challenge!**

Feeding a growing world is one of the most vital needs for the future! In this session students will have fun "breaking out" of lock boxes (similar to an escape room) while learning about many career paths that are available to them and how these jobs relate to agriculture and feeding the world. Come and be challenged! Limit 24 Students.

### **X. US Army Corps of Engineers**

Natural Resource Specialist/Park Ranger Career Information.

### **Y. Who takes care of the roads we drive on every day?**

Have you ever wondered who takes care of the roads you drive on to get to your house? Have you ever wondered who designed that bridge your school bus drives over? Have you ever wondered who cleans the snow off the roads? Come and explore the different career paths with the North Dakota Department of Transportation.

### **Z. Rain to Drain**

Students will construct models to learn about the movement of stormwater in natural and developed communities and ways to use green infrastructure and stormwater best management practices to reduce urban runoff and nonprofit source pollution. Limit 24 Students.

### **AA. The Art of the Square Bubble**

Let's explore the principals of surface tension and geometry by designing and testing a bubble-blowing device capable of forming square-shaped bubbles. Plus, you get to take your bubble blower with you! Limit 24 Students.