CA BOCES

INSTRUCTIONAL SUPPORT SERVICES

Learning Resources

An Essential Partner for Navigating Your Classroom
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Environmental Education

Environmental Education offers over 50 exciting, hands-on scientific programs for students to learn the fundamentals of our environment. Programming is designed to teach students about natural and unnatural processes and their effect on the environment. Each classroom lesson is taught by our STEM Coach.

Additional elements of the program available (some include an additional fee)
- Camp Allegany
- Science on Seneca
- Freshwater Snorkeling
- Audubon Community Nature Center
- Buffalo Audubon
- Erie Canalway
- Allegany State Park
- Pfeiffer Nature Center
- Genesee River Wilds
- Guest Speakers (Bwana Jim, Hawk Creek, Nickel City Reptiles, plus more)

Kits:
- Snowshoes
- Cross-Country Skis
- GPS Units
- Water Analysis Kit
- Team Building
- Tomatosphere
- Milkweed Planting Kit

Pre-K:
- Starlab Planetarium
- In My Backyard
- Beautiful Birds
## Environmental Education

### K:
- Starlab Planetarium
- Busy Builders
- Plant Needs
- Life in an Oak
- Animal Needs
- Sleepy Creatures
- Recycle Sort
- Shaping Nature
- Is it Growing?
- Picky Eaters

### 1st:
- Starlab Planetarium
- Animal Defense
- Ladybugs
- Where is My Home?
- Invisible
- Bird Beaks
- Biomimicry
- Animal Babies
- Traits
- Animal Train

### 2nd:
- Starlab Planetarium
- Daring Migration
- Nature’s Treasures
- Seed Exploration
- Insect Inspection
- Plant Growth
- Habitats
- Biodiversity
- Earth’s Water
- Who Needs Bees?

### 3rd:
- Starlab Planetarium
- Animal X-Rays
- Food Chains
- Private Eye
- Fossils
- Group Behavior
- Life Cycles
- Ecosystems
- Adaptations
- Look-Alike

### 4th:
- Starlab Planetarium
- Lorax
- Winter Web
- Oliver and the Spill
- Nature’s Café
- Animal Senses
- Living Parts
- Human Systems
- Earth’s Landscape
- Earth’s Resources

### 5th:
- Starlab Planetarium
- Amazing Spiders
- Classifying
- Rock Talk
- Home Sweet Home
- Food Webs
- Food Science
- The Cycle
- Systems of Earth
- Water Quality
Environmental Education

**MS:**
- Starlab Planetarium
- Cells
- Organ Systems
- CO2 and H2O
- Food Webs

**HS:**
- Starlab Planetarium
- Trouble in Fruitvale (12 Lesson Unit)

More information can be found at: https://caboces.org/services/learning-resources/environmental-education/
Distance Learning

The Distance Education program coordinates and supports a wide variety of services designed to provide a full suite of options for districts looking to enhance eLearning. Participating districts are equipped with a variety of connection solutions, including Zoom rooms, portable carts, and teacher stations. Onsite training and support on all equipment, software, and instructional best practices is provided.

- **Videoconference courses**
  - Access to high school and college courses taught synchronously from site to site across the region and the state
  - Provide increased course choices, help save on college tuition, and provide revenue for host districts
  - Scheduling, equipment, training, and support provided

- **Online courses**
  - Available for elementary, middle, and high school content
  - Supported by two full-time, NYS certified Teachers for Learning Resources
  - Credit accrual courses for building depth of transcript, increasing graduation rates, and decreasing scheduling conflicts
  - Credit recovery options for quarter, semester, and course needs
  - Open enrollment periods allow flexibility as needed

- **Moodle**
  - Free learning management system for creation of fully online and/or blended courses
  - Teacher created content includes embedded videos, interactive activities, online assessments, and Wooclap.
  - Access to courses from content providers such as Pointful Education, eDynamic, Apex Learning, Edgenuity, and Spider Learning

- **Virtual Field Trips, Career Connections, and Classroom Collaborations**
  - Connect to classroom partners globally
  - Connect with experts in various fields of study and career pathways
  - Access flexible communication and collaboration opportunities for students of all ages
Educational Communications - Media

The Educational Communications CoSer offers schools a collection of online subscriptions to a wide range of electronic instructional resources. Why is instructional media important?

- Addresses multiple learning styles
- Provides a common base of knowledge among students
- Extends walls of the classroom to enrich student experiences
- Helps students make associations between existing knowledge and new information
- Facilitates transfer of learning from one discipline to another
- Engages students through multiple modalities
- Activates emotional involvement to increase learning and student retention
- Stimulates class discussion to reinforce instruction and reading
- Reaches students who do not respond well to traditional methods of teaching

These resources include:
- The entire BrainPOP suite
- Castle Learning
- CueThink
- Discovery Streaming
- Ferguson’s Career Guidance Center
- Learn 360
- Math Seeds
- PBS Learning Media
- Reading Eggs
- Soundzabound
- Study Island
- The Mailbox
- TigTag/TigTag Jr/Twig

Additionally, we also supply hard copy kits that provide tangible resources including coding and robotics, equipment, Leveled Reader kits, Real Care Babies/Empathy Belly, Play-based learning kits for early learners, book sets, and SEL kits.

Our Digital Media and Technology Coordinator can provide one on one consultation or group training online, or in your building/district at a time that meets your needs.
Library Services and Online Databases

The Library Services CoSer provides collections of databases, periodicals, newspapers, and reference resources. Teachers and students can use these multiple, searchable databases for informational text and research projects. Our Database Service provides access to two major online resources and eBooks. This service also allows for district purchase of databases.

Currently all participating districts have access to:

- Tumble Books – simultaneous e-books for PreK-8, some in French and Spanish
- The Buffalo News – Today’s news and archived articles dating back to 1989
- Noodletools - Helps students stay organized as they evaluate information, build citations, save articles, take notes, outline topics, and prepare to write. Three differentiated levels support individual students in upper elementary through 12 grade and various abilities
- NewsBank – America’s historical newspapers 1690 to 2000; state, national, and international newspapers. Current events and hot topics; appropriate for grades 7-12.
- WorldBook - Resources for students of all ages from early learning through high school, including educator tools, visually interactive resources, translation abilities, quizzes, timelines, and research tools
- NovelNY – Opposing Viewpoints, Gale in Context/Middle School, Gale in Context/Elementary, and many subject specific databases.
Library Services and Online Databases

Cattaraugus-Allegany School Library System (CASLS) Provides:
- Access to a library of over 9,460 items housed at Learning Resources
- Access to a regional consortium of school libraries who share resources (ILL)
- Access to books borrowed from a national library consortium (OCLC)
- Twice weekly delivery of library resources to all school buildings

Also included with the Library Services CoSer are
- Professional development
- Library programming and best practices
- Collaboration between multiple library systems including academic and public.
- Product trials and quotes
- On demand training
- Copyright and Fair Use guidance
- Library Collection Management & Weeding
Instructional Materials - STEM

The Instructional Materials program (COSER 521) provides access to all hands-on and standards-aligned classroom curriculum resources for learning experiences in the elementary (Grades PK-5 – COSER 521.001) and middle level (Grades 6-8 – COSER 521.002) classrooms. Kits are supported with all resources needed to use the curriculum in the classroom along with necessary teacher training and support.

Grades K-5 Resources

Advancing STEM Curriculum
- Designed for the NYS Science Learning Standards
- Curriculum materials accessible online at www.advancingstem.com
- Digital Learning Guides for each kit to assist with online teaching/learning

Engineering is Elementary
- Aligned to NYS Science Learning Standards
- Present real world challenges that encourage students to explore multiple ways to solve a problem in diverse fields of engineering

Other Notable Kits/Resources
- Ron’s Habitat Adventure (PreK)
- Ron’s Ramp Adventure (PreK)
- Digital Star Lab
- Incubation and Embryology
- Rocketry
- Math Manipulatives
Instructional Materials - STEM

Grades 6-8 Resources

Engineering Everywhere
- Aligned to NYS Science Learning Standards
- Present real-world challenges that encourage students to explore multiple ways to solve a problem in diverse fields of engineering.
- Engineering Everywhere Kit Titles
  - Don’t Runoff: Engineering an Urban Landscape
  - Food for Thought: Engineering Ice Cream
  - Go Fish: Engineering Prosthetic Tails
  - Growing Up: Engineering Vertical Farms
  - Here Comes the Sun: Engineering Insulated Homes
  - It’s About Time: Engineering Timers
  - It’s in the Bag: Engineering Bioinspired Gear
  - Outbreak Alert!: Engineering a Pandemic Response
  - Plants to Plastic: Engineering Bioplastics
  - Put a Lid On It: Engineering Safety Helmets

Lab-Aids (additional purchase)
- Designed for the Next Generation Science Standards
- Issues connected phenomena drive the storyline of each unit for students to investigate, discuss, analyze, and design solutions.
- Life Science Kits
  - Body Systems
  - Evolution
  - Ecology
  - From Cells to Organisms
  - Reproduction
Instructional Materials - STEM

- Earth Science Kits
  - Earth’s Resources
  - Geological Processes
  - Land, Water, and Human Interactions
  - Solar System and Beyond
  - Weather and Climate

- Physical Science Kits
  - Chemical Reactions
  - Chemistry of Materials
  - Energy
  - Fields and Interactions
  - Force and Motion
  - Waves

Other Notable Kits/Resources
- Digital Star Lab
- Incubation and Embryology
- Rocketry
Instructional Materials - STEM

Kindergarten

Advancing STEM Curriculum
- Eyes to the Sky: Investigating Weather Patterns
- It’s a Matter of Pushing or Pulling: How Objects Move
- One Under the Sun: Plant and Animal Interactions with the Sun and Their Environment
- Spot the Differences: Changes to the Environment

Engineering is Elementary
- Catching the Wind: Designing Windmills
- Thinking Inside the Box: Designing Plant Packages
- To Get to the Other Side: Designing Bridges

Health Kits
- My Body

Grade 1

Advancing STEM Curriculum
- It’s Just a Phase: Patterns in the Sky
- Lend Me Your Hears: Discovering Sound Properties
- Traits and Behaviors: Ants and Plants
- Watt’s So Bright?: Discovering Light Properties

Engineering is Elementary
- Just Passing Through: Designing Model Membranes
- Lighten Up: Designing Lighting Systems
- Sounds Like Fun: Seeing Animal Sounds

Health Kits
- My Body Works Together
Instructional Materials - STEM

Grade 2

Advancing STEM Curriculum
- A Bird’s Eye View Over Land and Water: Models, Maps, and Patterns
- Lean on Me: How Plants and Animals Depend on Each Other
- Matter Matters: Properties of Matter
- Weathering the Change: Erosion Processes

Engineering is Elementary
- The Best of Bugs: Designing Hand Pollinators
- A Stick in the Mud: Evaluating a Landscape
- A Sticky Situation: Designing Walls

Health Kits
- Body Senses

Grade 3

Advancing STEM Curriculum
- Forced to Stick with It: Motion and Magnetism
- Hand-Me-Down Genes: Life Cycles and Traits of Butterflies
- I Will Survive: Organisms Surviving in Different Environments
- Weather Around the World: Data Trends, Water Cycle, and Weather Hazards

Engineering is Elementary
- The Attraction is Obvious: Designing Maglev Systems
- Marvelous Machines: Making Work Easier
- A Slick Solution: Cleaning an Oil Spill

Health Kits
- Nutrition and Digestion
Instructional Materials - STEM

Grade 4

Advancing STEM Curriculum
- Centuries of Change: Processes That Shape the Earth
- Full of Potential: The Effects of Energy
- Makin’ Waves: Patterns of Waves and Information Transfer
- Parts of a Whole: Internal and External Plant and Animal Structures

Engineering is Elementary
- An Alarming Idea: Designing Alarm Circuits
- No Bones About It: Designing Knee Braces
- Now You’re Cooking: Designing Solar Ovens
- Solid as a Rock: Replicating an Artifact

Health Kits
- Move Your Body

Grade 5

Advancing STEM Curriculum
- A Light Snack: Energy and Matter in Ecosystems
- Models of the Earth: Earth’s Systems and Water Resources
- Chemistry in the Kitchen: Structure and Properties of Matter
- There’s No Space Like Home: Stars and the Solar System

Engineering is Elementary
- A Long Way Down: Designing Parachutes
- Taking the Plunge: Designing Submersibles
- Water, Water Everywhere: Designing Water Filters
- A Work in Process: Improving a Play Dough Process

Health Kits
- Our Lungs, Heart, and Health
- Our Brain and Its Systems