A Trail To Every Classroom (TTEC)
Curriculum Development Tool

UNIT DESIGN COVER SHEET

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School name, state and town: Craneville Elementary, Dalton, MA

Title: Dalton’s Wonders and Hidden Treasures!

Abstract/Vignette: A national treasure maintained by volunteers, the AT passes through a variety of habitats including woodlands—a natural environment, and town neighborhoods—a built environment, as it runs through the students’ hometown of Dalton, Massachusetts.

Grade level(s): Please check all that apply.

☑ K-2 ☐ 3-5 ☐ 6-8 ☐ 9-12 ☐ College and Lifelong Learning

Discipline: Please check all that apply.

☐ Art and Music ☐ Health and PE ☐ Foreign Language
☑ Literature and Language Arts ☐ Mathematics ☑ Science
☑ Social Studies and Geography ☑ History ☑ Technology

Year Developed: 2011

Period (month, week, year): Year

Teaching environment:

☑ In the Classroom (indoors) ☑ On the Trail

☑ In the Community ☐ Online/Virtual
A Trail to Place-Based Service-Learning Curriculum

Connecting Youth & Communities Along the Appalachian Trail

Start Here!

State Standards (Objectives/Anchors/Outcomes)
Which elements of the state framework of standards does this unit address? What are the skills and outcomes you are working towards?

SCIENCE AND TECHNOLOGY/ENGINEERING
Skills of Inquiry, Experimentation and Design Grades preK-2
Life Science (Biology) prek-2
Characteristics of Living Things 1 and 2
Living Things and Their Environment 6, 7, and 8
Technology/Engineering 1.1

HISTORY AND SOCIAL SCIENCE
History and Geography 3 and 3rd grade

ENGLISH LANGUAGE ARTS AND LITERACY
RL.2.2 W.2.2 W.2.7 W.2.8 W.3.4 A.3A SL.2.1

Big Idea
What is the main idea you want your students to come away from the unit knowing? A national treasure maintained by volunteers, the AT passes through a variety of habitats including woodlands—a natural environment, and town neighborhoods—a built environment, as it runs through the students’ hometown of Dalton, Massachusetts.

Service Project
What project(s) could your class undertake that would actively engage your students in learning about this theme? What could be the final product be?

Students will investigate and compare habitats along the AT in the woods and in town. They will learn the route the AT takes through Dalton, as well as its route from Maine to Georgia. They will learn about the joys and challenges provided by hiking the Trail, and they will learn about the importance of volunteers in maintaining and protecting the AT.

Having become informed about and inspired by the AT, they will brainstorm and choose a way to share their new knowledge and enthusiasm with the rest of the school community. Some possibilities are: a bulletin board-sized map of the AT through Dalton, a presentation about the AT in a whole-school gathering, sharing their writings through the school newsletter, making a book about the AT for children.

Our local trail club would like to install a new kiosk at the edge of Dalton, and Craneville students would be responsible for contributing to that.

Skills and Habits of Mind
What are the academic or life skills students will gain from this unit? What habits of mind do you expect them to demonstrate? Think all disciplines.

* Respect, appreciation and care of the natural environment
* Health and wellness—spending time outdoors
* Critical thinking and problem solving skills
* Communication skills—speaking and writing to communicate experiences and learning about the AT
* Science process skills
* Mapping skills
* Civic literacy—volunteering; ownership of public lands

Essential Questions
What are the essential questions that will help guide students toward understanding the Big Idea?

* What and where is the AT? Where does it go through Dalton? What information do maps give about places we know and places we don’t know?
* What are built and natural environments and what similarities and differences exist between them? What happens when humans and nature interact? What effects does spending time in nature have on humans? What effects can humans have on nature?
* How can we use our senses to observe and describe a place? What changes to living and nonliving things do the seasons bring? How do living things use their habitats to meet their needs?
* What is a volunteer? How are volunteers important for the AT? How might it be helpful if more people in Dalton knew about the AT?

Student Role (Youth Voice)
How will you guide your students to express ideas, be involved in project decisions, and evaluate outcomes?

* Students’ voice will be heard in their journal entries, narrative and descriptive writing, and artwork.
* Students will be involved in selecting what and how to share their new learning with the rest of the school, and what to display at the new AT kiosk.

Community Connections
What opportunities or needs exist in your school or community that could be addressed by a student project related to your big idea for learning?

* Opportunity for students to spend time outdoors becoming comfortable and familiar with local natural resources.
* Opportunity to increase awareness of the AT in the rest of the Cranville community, by sharing with students their new learning about the national treasure that is the AT.

* Need for a new AT kiosk as the Trail enters town to give hikers information about what and where services are available.
* Opportunity to raise families and other townspeople’s awareness and appreciation of the AT, by displaying Cranville students’ work on a kiosk at the interface of the town with the woods.

Partnerships & Benefit(s)
Who are potential community partners that could assist you in this project? What are the potential benefits for your class and your partners of working together?

AMC-Berkshire Chapter leaders will share their knowledge and experiences of the AT with their students. They will assist us in leading family hikes. We will work together to design, build, install and maintain a new kiosk where the AT enters town.

Craneville’s PTO will partner with us to organize and support a Craneville Family Hiking Club. They also fund a 2nd grade field trip to a local Audubon sanctuary.

Crane Co., a local business, and Staples may help us with printing needs.

Appalachian Trail Conservancy will need to give permission to erect a new kiosk.

L. P. Adams, a local building supplies store, may support us with supplies and equipment for building the new kiosk, and perhaps with permission to erect it on their land.

Resources
Describe resources (books, articles, materials, supplies) you will use to support this unit.

* Nature Journaling/Habitat Observing: marbel composition books, cameras to record AT observations and experiences.
* Learning to Make Choices for the Future: The Duis, C. Clark AT and Mapping Using OSGS map of Dalton; ATC poster map of AT; ATC strip map of AT; Massachusetts/Connecticut AT Guide and Map; Ellie’s Long Walk by Pam Flowers.

Models & Examples
How will students understand the expectations for their project? What exemplars of student work will they see? What opportunities will there be for them to critique each other’s work?

* Students will identify success criteria/rubrics together for their oral presentations to the school and finished products for the kiosk by thinking and talking about what they want the product to accomplish and how they will know if it does that.

* They will use their 4th grade Buddies as a test audience.

* We will access photos of other kiosks along the AT that feature student work, and flyers other TTEC classrooms have produced to use as exemplars.

Reflection
How will reflection be built into your curriculum and activity(ies)?

**Graffiti:** AT Dalton mural map—to record questions and new learning about the AT throughout the year

**Head-Heart-Hands and What? So what? Now what?** Discussions (journey of ideas: whole class, small group and partner discussion) will provide opportunities for ongoing reflection about what effects our work is having on ourselves and others.

**Students wrote reflections** at beginning of year on spending time indoors and out. They will answer the same questions at the end of the year to assess changes in attitudes.

**Analysis of student assessments** to determine what has/haven’t worked for their learning.

**Seek input from community partners:** Compare beginning and end of year surveys to look for evidence of increased awareness of AT and enjoyment of outdoor natural resources.

Final Celebration
How will you celebrate the success of your unit and share its results with the school and community?

This will take shape as we work our way through the year, and will incorporate input from the students. Some likely possibilities:

* a culminating hike on the AT through the town and woods of Dalton
* a presentation to the Craneville School community at a “Community Gathering” sharing what we have learned about the AT during the course of the year.
* the unveiling of the new kiosk

Student Assessment
How will you assess student learning? Will you know if they have met the goals for the established outcomes?

* **Rubrics of use to assess:**
  - Nature Journal entries
  - Narrative writing
  - Descriptive/informative writing
  - Science and Social Studies pre- and post-assessments
  - Reflection activity responses

Project Name: Dalton’s Wonders and Hidden Treasures
Teacher(s): Tora Huntington with Deborah Araujo and Stephanie Morris
Grade Level: second grade
Time Frame: 2011-2012 school
SECOND GRADE CURRICULAR CONNECTIONS

MASS. SCIENCE AND TECHNOLOGY/ENGINEERING CURRICULUM FRAMEWORK
Inquiry, Experimentation and Design in the Classroom
Skills of Inquiry, Experimentation and Design Grades preK-2
In grades PreK–2, scientific investigations center on student questions, observations, and communication about what they observe.
- Ask questions about objects, organisms, and events in the environment.
- Tell about why and what would happen if?
- Make predictions based on observed patterns.
- Name and use simple equipment and tools (e.g., rulers, meter sticks, thermometers, hand lenses, and balances) to gather data and extend the senses.
- Record observations and data with pictures, numbers, or written statements.
- Discuss observations with others.

Life Science (Biology) preK-2
Characteristics of Living Things
1. Recognize that animals (including humans) and plants are living things that grow, reproduce, and need food, air, and water.
2. Differentiate between living and nonliving things. Group both living and nonliving things according to the characteristics that they share.

Living Things and Their Environment
6. Recognize that people and other animals interact with the environment through their senses of sight, hearing, touch, smell, and taste.
7. Recognize changes in appearance that animals and plants go through as the seasons change.
8. Identify the ways in which an organism’s habitat provides for its basic needs (plants require air, water, nutrients, and light; animals require food, water, air, and shelter).

Technology/Engineering
1.1 Identify and describe characteristics of natural materials (e.g., wood, cotton, fur, wool) and human-made materials (e.g., plastic, Styrofoam).

MASS. CURRICULUM FRAMEWORK FOR ENGLISH LANGUAGE ARTS AND LITERACY Incorporating the Common Core State Standards
RL.2.2 Recount stories and determine their central message, lesson, or moral.
W.2.2 Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.
W.2.7 Participate in shared research and writing projects (e.g., record science observations).
W.2.8 Recall information from experiences to answer a question.
W.3.MA.3.A Write poems, descriptions, and stories in which figurative language and the sounds of words (e.g., alliteration, onomatopoeia, rhyme) are key elements.
SL.2.1 Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.
SL.2.4 Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences.

MASS. HISTORY AND SOCIAL SCIENCE CURRICULUM FRAMEWORK
History and Geography
2nd grade 5. Read globes and maps and follow narrative accounts using them.
3rd grade 4. Use cardinal directions, map scales, legends, and titles to locate places on contemporary maps of New England, Massachusetts, and the local community.