A Trail To Every Classroom (TTEC)
Curriculum Development Tool

UNIT DESIGN COVER SHEET

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Title: Appalachian Trail Junior Ranger Programs – Creating, Promoting, and Sustaining

Abstract/Vignette: Teachers are often excited to get students onto the Appalachian Trail. A few initial challenges, however, may be lack of time to develop knowledge and materials, lack of buy in from school administrators, or a program that “fizzles out” after the first few trips to the AT. This lesson highlights ready-to-go Appalachian Trail materials and tools for every educator (home or public school), school administrators, and community partners to help create, facilitate, and maintain sustainable educational programs on the Appalachian Trail.

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

Year Developed: 2015

Period (month long unit vs. week long): Adaptable as needed
**Teaching Environment:**

<table>
<thead>
<tr>
<th>In the Classroom (indoors)</th>
<th>On the Trail</th>
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<td>In the Community</td>
<td>Online/Virtual</td>
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UNIT DESIGN TEMPLATE

Unit Title: Appalachian Trail Junior Ranger Programs: Creating, Promoting, and Sustaining
School: Home or Public Schools and/or Community Partners, Northern Virginia, USA
Grade level/s: K-12
Discipline/s: English, History, Science
Unit Designer/s: Donna Evans

Stage 1 – Desired Results
- What do we want students to know, understand, and be able to do?
- How can we use students’ place (home, classroom, school and schoolyard, neighborhood, community) to help them learn this?
- What real community needs and opportunities are we trying to address?

A. Big Ideas
The high-level ideas, concepts, principles or processes for my TTEC unit include:

The Appalachian Trail and other public lands are precious natural resources that are ours to explore, appreciate, and protect. [power of place, stewardship]

Everyone can learn about, teach and advocate for the AT. [ecoliteracy, writing clearly for a purpose, advocacy through service]

Educators and administrators need ready-to-go materials that remove barriers to accessing the trail while creating, promoting, and sustaining quality AT educational programs.

B. Enduring Understandings
Students [teachers and administrators] will understand that:

We may preserve the Appalachian Trail and other natural resources for generations to come as we facilitate quality educational experiences in outdoor education.

C. Essential Question(s):
Students [Teachers and Administrators] will keep considering:

How can we best utilize resources already created, such as the Appalachian Trail Junior Ranger program or the repository of lesson plans created by experienced teachers of the TTEC program?

Working together, what important knowledge can students and teachers share with local communities through storytelling, presentations, and educational hikes outdoors or on the AT?

How can we create forums to utilize inspiring AT curriculum in a sustainable manner?
D. Content Standard(s): Sample Ways to Link Curriculum and AT Community

**English - Oral Language**
K.3 d) Listen and speak in informal conversations with peers and adults.
e) Participate in group and partner discussions about various texts and topics.

**English - Reading**
1.9 c) Relate previous experiences to what is read.
Reading 6.6 b) Use prior and build additional background knowledge as context for new learning.
c) Identify questions to be answered.

**World Geography**
WG.1 The student will use maps, globes, satellite images, photographs, or diagrams to
   a) obtain geographical information about the world’s countries, cities, and environments;
   b) apply the concepts of location, scale, map projection, or orientation;
   c) develop and refine mental maps of world regions;
   d) create and compare political, physical, and thematic maps;
   e) analyze and explain how different cultures use maps and other visual images to reflect their own interests and ambitions.

**Earth Science**
ES.8 The student will investigate and understand how freshwater resources are influenced by geologic processes and the activities of humans. Key concepts include
   a) processes of soil development;
   b) development of karst topography;
   c) relationships between groundwater zones, including saturated and unsaturated zones, and the water table;
   d) identification of sources of fresh water including rivers, springs, and aquifers, with reference to the hydrologic cycle;
   e) dependence on freshwater resources and the effects of human usage on water quality; and
   f) identification of the major watershed systems in Virginia, including the Chesapeake Bay and its tributaries.

**Instructional Technology**
The use of current and emerging technologies is essential to the K-12 science instructional program. Specifically, technology must accomplish the following:

- Assist in improving every student’s functional literacy. This includes improved communication through reading/information retrieval (the use of telecommunication), writing (word processing), organization and analysis of data (databases, spreadsheets, and graphics programs), presentation of one’s ideas (presentation software), and resource management (project management software).

**E. Place-based Service Learning Lens** (Assumes PBSL Principle #5 Integrated & Principle #6 Rigorous):

*Grounded in Place*
In what ways is your unit a direct reflection of local landscapes, resources, culture, and values? Why does doing this unit with these students in this community make sense?

This unit utilizes local outdoor venues (local parks/playgrounds/the Appalachian Trail) to highlight scientific, cultural, and historical topics which may enrich our current lifestyles.
and potentially improve health. This unit also references ready-to-go Jr. Ranger Appalachian Trail Programs suitable for K-12 audiences.

**Real**
*What authentic, real-world need or opportunity exists in your community that students will address through their project?*

Many members of Northern Virginia communities have never been on the Appalachian Trail despite their proximity. This unit will focus on creating opportunities for students, families, and the wider community to experience the Appalachian Trail.

Participants (students and/or teachers) will engage home, school and community partners as they present programs about various topics surrounding the Appalachian Trail (such as highlighting the history and flora of the Appalachian Trail) and invite participants to experience AT hikes and future presentations.

**Empowering**
*How will your students help determine what project they take on? How will they help design the project, make decisions along the way, and evaluate their success?*

Learners will understand that they are “reporters” who can choose their own topics to research and present revolving around the Appalachian Trail (Civil War history, plant identification, plant medicine, stories of trees along the trail, etc.).

Learners will act as advocates for the Appalachian Trail and make decisions about organizing meeting places, designing interesting programs, advertising (press releases, Meetup.com, etc.), follow-up articles for the press, and more.

**Collaborative**
*What opportunities will students have for mutually beneficial collaboration with other disciplines, community or public land partners? To answer this, identify how each of the partners will benefit.*

Students will be able to collaborate with other disciplines, such as science (identifying plants), history (sharing ancestral traditions), and English (preparing advertisements and presentations) as they learn and teach about the AT.

Learners will create community partnerships as they interact with libraries, chambers of commerce, rotary clubs, families, etc. to form meaningful audiences. Community will have additional resources to draw upon as students/teachers/administrators forge relationships.

**F. Acquisition:**
*Students will be able to articulate historic, cultural or scientific knowledge of the AT in public presentations.*
*Students will know how to promote a public event through social media as well as print advertising.*
*Students will be skilled at making presentations to excite public interest in participating in local AT experiences.*

**Stage 2 – Acceptable Evidence**
How will we know if students are learning/have learned this?
**Performance Task(s):**

*Learners (Teachers/Students/Administrators) will show that they really understand by:*

Preparing presentations on topics of interest revolving around the AT. These could include AT Junior Ranger programs, Top 10 travel tips on the Appalachian Trail, most famous AT hikers, notable stories along the AT and how ancestors used plants on the AT for food and medicine, how the Appalachian Trail was created, etc.

Organizing public venues to present Appalachian Trail Junior Ranger programs.

*Students will be skilled at…*

Preparing engaging presentations to excite interest on various aspects of the Appalachian Trail.

Writing press releases which may be used to engage public participation in an Appalachian Trail Junior Ranger Program.

Inviting an audience through social media, such as Meetup.com. Writing news articles for local papers and social media to inform what is happening along or related to the AT.

Note: Teachers or Students write news articles for local papers and prepare other modes of advertising (blogposts, twitter, facebook, etc.) to promote local programs for which they are responsible.

**Other Evidence:**

*Students will show they have achieved Stage 1 (Desired Outcome) goals by:*

- using rubrics to assess the success of their presentations

- observing effects of media advertising through public attendance at events and attendee evaluations, including stated interest in future programs

- noting how many members of the community have completed an Appalachian Trail Junior Ranger program as a result of their efforts

**Evaluative Criteria**

- Speech rubric
- Participant feedback forms
- Event planning evaluations

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**Stage 3 – Learning Plan**

*What learning experiences will enable students to learn this?*

**Learning Activities:**

Engage students in an Appalachian Trail Junior Ranger program so they experience it firsthand. After learning fun facts about the AT, help students participate in a day hike either on the trail or at a local nature site of choice. A pre-assessment tool may be given through an informal questionnaire to discover knowledge of the AT prior to commencing the Junior Ranger program.

**Progress monitoring through pre-assessments, simulations, formative & summative assessments**
Invite students to organize a learning event in the community in which they present topics of interest about the Appalachian Trail, share their experiences on it, or use materials already available, such as an AT Junior Ranger program.

Already – created AT Junior Ranger programs include:


More Junior Ranger programs may be discovered on the internet.

Instruct students to prepare 5-10 minute speeches/presentations on a selected topic from any discipline that can be related to the Appalachian Trail. Hold a speech contest with peer evaluations in which the top three speeches are selected for the public venue event. [May give formative assessments based on student topics]

With students, discuss and select location(s) for an Appalachian Trail Junior Ranger program. Secure location.

Instruct students on how to prepare interesting advertisements / press releases for print and social media. Assign each student to select a way to advertise for the AT event and track responses and measure success through attendance. Guidelines and examples found at: https://blog.scottsmarketplace.com/sample-press-release/

As practical, assign students to help facilitate the Junior Ranger program taught to the public.

Track success of program through attendance, evaluation forms, and Junior Ranger program completions.

Have students create blog posts to synthesize and report their experiences advocating for the Appalachian Trail, including thoughts on what they can do in the future to encourage responsible stewardship for our nation’s natural resources.

Provide summative assessment of AT topics experienced in class.

Adaptations

Learner-centered and context-sensitive adaptations for our TTEC unit include:
Students are allowed to select learning topics from a variety of disciplines relating to the Appalachian Trail. A program’s AT hike may need to be simulated (set up in the backyard of the school, for example, or visit a local park) if access to the Appalachian Trail is not feasible.

**Reflections**

*Post-instruction reflections by TTEC unit designer(s)/instructor(s) include:*

It takes more time than first considered to coordinate schedules when working with community clubs and other organizations so it is important to keep enthusiasm and focus when planning events. Remain open to suggestions on other and perhaps better ways of doing things and be flexible.

**Attachments:**

- Sample Appalachian Trail Junior Ranger Curriculum Materials
- Speech rubric
- Sample Press release