A Trail To Every Classroom (TTEC)
Curriculum Development Tool

UNIT DESIGN COVER SHEET

Authors contact: Barbara Lindtner,

School name, state and town: Seven Generations Charter School, Emmaus, PA

Title: Seven for Seven: Creating Stewards of the Appalachian Trail

Abstract/Vignette:

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
Unit Title: Seven for Seven: Creating stewards of the Appalachian Trail

School: Seven Generations Charter School

Grade level/s: Third Grade

Discipline/s: Environmental Education, Social Studies, History, Language Arts

Unit Designer/s: Barbara Lindtner

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 principles of LNT encourage real world exploration of social and natural systems, which when we implement, will develop generations of environmentally-minded stewards.

What can the land tell us and how can we preserve land for future generations.

B. Enduring Understandings
Students will understand that:

Leave No Trace Principles for Kids
1. Know Before You Go
2. Choose The Right Path
3. Trash Your Trash
4. Leave What You Find
5. Be Careful With Fire
6. Respect Wildlife
7. Be Kind To Other Visitors

- Leave No Trace Principles are a way for students to engage responsibly in understanding the social and natural systems in the Lehigh Valley along the Appalachian Trail.

- The practice of Leave No Trace Principles are fundamentally critical for the protection of the natural system.

- Application of the Leave No Trace Principles in the natural and social systems can engage students and other stakeholders and create life-long stewards.

- Land is a natural resource and people have an impact on how it is used.

- Conservancies are preserving land for future generations.
C. Essential Question(s):

Students will keep considering:
How do the Leave No Trace Principles function as a system?

How does using the Leave No Trace Principles preserve the natural system?

Why is it important to use guiding principles?

How does applying Leave No Trace Principles engage students in socially responsible actions? (service learning projects will help answer this question)

What can the land tells us?

How can we conserve land for future generations? Why is it important?

D. Content Standard(s):

4.1.3.A Differentiate between living and non-living components in the environment;
4.1.3.E. Identify changes in the environment over time;
4.3.3.A Identify the natural resources used to make various products;
4.3.3.B Identify local natural resources;
7.1.3.A Identify and locate places and regions as defined by physical and human features;
7.4.3.A Identify effect of the physical systems on people within a community;
7.4.3.B. Identify the effect of people on the physical systems within a community;
CC.1.1.3.E Read with accuracy and fluently;
CC.1.2.3.B Ask and answer questions about text and make inferences from text;
CC.1.2.3.G Use informational text to demonstrate understanding of text;
CC.1.4.3.A Write informational/explanatory texts to examine a topic and convey ideas and information clearly;
CC.1.4.3.G. Write opinion pieces on familiar texts;
CC.1.4.3.S. Draw evidence from literary or informational texts to support analysis and reflection;
CC.1.4.3.V Conduct short research projects that build knowledge about a topic;
CC.1.5.3.A. Engage in a range of collaborative discussion on grade level;
CC.1.5.3.C. Ask and answer questions about information from a speaker offering appropriate detail;
CC.1.5.3.D. Report on a topic or text, tell a story or recount an experience with appropriate facts;
E. Place-based Service Learning Lens

**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?*

**Real**

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

**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?*

**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.*

**PBSL Lens**

- **Grounded in place:** Seven Generations is an environmentally focused, service learning based school that uses the local environment as a context for learning. Hiking is an integral part of our daily educational experience. Though we hike frequently, our students are not adequately prepared for these hikes physically or emotionally. Our goal is to bring the principles of Leave No Trace to our students in a manner that enables them to apply these sustaining practices to their lives, school community, and trail experiences, both locally and on the AT. The third graders will have an opportunity to explore a local conservancy’s preserved property and compare and contrast their learning with the Appalachian Trail Conservancy’s work and the Appalachian Trail.

- **Real:** As educators we address the need of our student body by teaching the principles. As students, each of our student groups will identify a need present on the trail and develop and implement a solution.

- **Empowering:** Our school uses a constructivist approach and students direct their learning. As educators, we seek to guide them in investigations that explore natural and social systems. This allows for students to develop critical thinking and problem solving skills. By collaborating with community partners, students have an ability to identify a community need as their project. Students decide on the design of the project and their success will be evaluated by the effective implementation of their ideas.
Collaborative: Our school collaborates with several community partners who act as educators in helping to bring the learning experience to our students. Our partners include Seven Generations Charter School, the Borough of Emmaus, Wildlands Conservancy, federal, state and local government agencies, the ATC, and local trail clubs. The following are some examples of our anticipated stakeholder benefits:

Students
- social awareness (including networking skills)
- critical thinking skills
- environmental mindfulness
- responsible stewardship
- self awareness

Trail Clubs (AT & Wildlands) & Agencies
- increased exposure with sustainability driven individuals
- recipient of need-based service
- responsible stewardship

Borough of Emmaus and our communities at large
- responsible stewardship

Seven Gen
- responsible stewardship
- community involvement
- further perpetuation of our mission and vision

Educators
- accessible tools
- comfort with tools needed to access local environment for teaching

F. Acquisition:
Students will:
- state the Leave No Trace Principles
- demonstrate understanding of the Leave No Trace Principles
- apply the Leave No Trace Principles on the local trail
- apply and integrate their learning to new contexts
- assess the local trails, identify a need, and implement a solution

### Stage 2 – Acceptable Evidence

**How will we know if students are learning/have learned this?**

<table>
<thead>
<tr>
<th>Performance Task(s):</th>
<th>See Attached Constructivist Unit Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learners will show that they really understand by:</td>
<td></td>
</tr>
<tr>
<td>Students will know…</td>
<td></td>
</tr>
<tr>
<td>See Attached Constructivist Unit Plan</td>
<td></td>
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<tr>
<td>Students will be skilled at…</td>
<td></td>
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<tr>
<td>See Attached Constructivist Unit Plan</td>
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</tbody>
</table>

**Other Evidence:**

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

See Attached Constructivist Unit Plan

### Stage 3 – Learning Plan

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

<table>
<thead>
<tr>
<th>Learning Activities:</th>
<th>See Attached Constructivist Unit Plan</th>
</tr>
</thead>
</table>

Progress monitoring through pre-assessments, simulations, formative & summative assessments
### Adaptations

*Learner-centered and context-sensitive adaptations for our TTEC unit include:*

See Attached Constructivist Unit Plan

### Reflections

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

See Attached Constructivist Unit Plan

### Attachments:

Include substantial supporting materials such as:
- Detailed lesson plans
- Partners contact list
- Instructional materials and supplies
- Resources: books, articles, web links
- Exemplars and benchmarking models
- Checklists and rubrics
- Diverse samples of student work/artifacts
- Press releases