



# A TRAIL TO EVERY CLASSROOM

**Curriculum Topic:** Environmental Stewardship

**Grade Level:** Middle School

**Areas of Study:** Geography, Art, Mapping, Journaling, Reading, Environmental Awareness, Life-long Fitness Skills, Math

**Developed for:** Virginia State Standards

**Developed by:** Marlene Jefferson and Inez Lemmert

Blue Ridge Middle School

Loudoun County, VA

**Year:** 2008

As a result of the “A Trail to Every Classroom” program, the staff at Blue Ridge Middle School in Loudoun County, Virginia implemented a school-wide environmental theme beginning in the fall of 2007. Teachers and students became actively involved in studying, appreciating, conserving and preserving the natural, local environment.

## **Environmental Activities at Blue Ridge Middle School**

### Teacher In-service on Placed-based Education

Every school year the faculty of Blue Ridge Middle School has a rejuvenating back-to school retreat. This year the Placed-base Education team led a discussion on the significance of our environment in education. Each faculty member drew a map of their community when they were 11 or 12 years old, the same age as the students in our classrooms today. Teachers shared their map stories in small groups and in one large group. Then teachers compared their own communities with the communities of their students. The overwhelming conclusion was that our students experience a life much different for the lives the teachers had. The value of outdoor experiences was discussed and teachers agreed that place-based education is extremely important in our students’ development. After the discussion, teachers shared ways they already use place-based education in their curriculum. Teachers then discussed ways to expand place-based education experiences.

### **Some suggestions include:**

- Use the Rust Library for genealogy research.
- Use the existing Outdoor Classroom for observation poems.
- Tour the water treatment plant in Purcellville.
- Visit the local bookstore in Purcellville with local authors.
- Take a walking tour of Purcellville and note the changes in ecology due to the development.
- Use the newly created Carver Center (Senior Citizen Center in Purcellville) for oral history. Students read to the senior citizens and vice versa. Students perform musical selections for the center during activity periods. This center is in walking distance of the school.
- Use the W&OD bike path in physical education classes.

- Study local Civil War history: Lincoln cemetery in walking distance of the school.
- Create displays featuring history of Blue Ridge Middle School use historical photos.
- Visit Bears Den on the Appalachian Trail for an outdoor experience
- Create scavenger hunt using a compass.
- Create a nature walk on the school campus using the five senses.
- Convert steps walked from miles into metric units.
- Have students create their own map of their neighborhood as the teachers did and compare.

### **Cross Curricular Activities**

TTEC participants chose a sixth grade team of 131 students and 7 teachers to implement their place-based lesson plans using the Appalachian Trail. A section of the Appalachian Trail is located less than 10 miles from Blue Ridge Middle School. This section has an area called Bears' Den where there are a number of outdoor resources, such as a hostel, rock outcropping with a view of the Shenandoah River and Valley, nature trail, maintenance trail, and streams. Since few people in our school community are aware of this resource a cross-curricular learning activity was developed and implemented to raise the awareness and use of the Appalachian Trail. Lessons on geography, art, mapping, journaling, reading, environmental awareness, life-long fitness skills, and math were integrated to connect learning to the Appalachian Trail. In October the entire team went to Bears Den to experience the AT first hand. The following are the activities the students completed.

**Journaling:** In Language Arts, students use journaling to write about their experiences. The student's experience on the AT was journaled through writings and drawings. Prior instruction was given on how to journal. Examples were shared with the students. Each student wrote or drew pictures about each activity on the AT.

**Physical Exercise (Hiking):** All students hiked a variety of trails around Bears' Den and a section of the Appalachian Trail to the south of Bears' Den. Trails ranged from easy to challenging. Many participants experienced the Appalachian Trail for the first time. This physical fitness activity made students and parents aware of the lifelong sport of hiking.

**Geography:** Students connected their study of the Regions of the U.S. to hiking one of the regions, the Appalachian Mountains.

**History:** Students toured the hostel at Bears' Den and learned the history of the AT and the hostel.

**Thru Hiker:** Students met a thru-hiker and interviewed him.

**Creative Writing:** Upon returning to school students wrote a descriptive writing about their experience on the AT including a description of a thru-hiker.



## A TRAIL TO EVERY CLASSROOM

**Water Testing:** Students participated in the World Water Monitoring Day, completing water testing on Spouts Run and its tributaries.

**Science:** Environmental SOLs were experienced hands-on by the students when they hiked the trail maintenance trail and completed the water testing.

**Growing Native Program:** Students collected seeds from the trees along the nature trail to be used in a Virginia Department of Environmental Quality Program. Seeds were sent to the state nursery to be cultivated into trees for reforestation along local water sources.

**Math:** Students used charts and other resources to compute distances, highest points, state with the longest part of the AT, etc. Students created and shared their own questions.

**Art:** Students learned and practiced the skill of sketching. The art teacher presented a lesson on sketching landscapes and buildings. Students sketched scenery at Bears' Den.

**Outdoor Fitness and Recreation-Backpacking/Camping:** Students were instructed on essentials for hiking/backpacking and camping on the AT by the Mountain Club of Maryland and the Potomac Appalachian Trail Club.

**Safety on the Trail:** students learned about the “Hug-A-Tree and Survive” program. Precautions to take when encountering dangerous plants, animals, and situations were also identified and discussed.

**Environmental Stewardship:** “Leave No Trace” practices were identified discussed, practiced and evaluated.