Environmental Literacy Plan Template for Virginia School Divisions





This template is designed to allow each school division in Virginia to create their own *Environmental Literacy Plan* scaffolded from Pre K- High School. Each school division can choose their own overarching Environmental Literacy Goals, a Multidisciplinary Investigative Issue for each grade level, SOL correlations for the investigations, and preferred partners to help implement the investigations.

The Virginia Department of Education has defined Environmental Literacy as:

Having the knowledge, skills and dispositions to solve problems and resolve issues individually and collectively that sustain ecological, economic and social stability.

Furthermore, the Virginia Department of Education enumerates the **Profile of an Environmentally Literate Graduate.** An environmentally literate graduate:

- has a foundation in environmental and science concepts.
- has participated in authentic inquiry based learning outside to include MWEEs (Meaningful Watershed Educational Experiences) at least once in elementary, middle, and high school.
- has been involved in environmental stewardship at the classroom, school, and/or community level.
- has an understanding of government and the role of the individual in making an impact in their community.
- can determine sources of credible information.
- can view issues from multiple perspectives in order to make informed decisions.
- is able to articulate a viewpoint in a cohesive way that is supported with evidence.
- can articulate ways to positively impact the environment at the individual, organizational, and community levels.
- is aware of careers in the environmental field.

On the following page is a template with some examples of overarching Goals, grade level Investigative Issues, SOLS, and Partners. The next page is a blank fillable template for each school division to use in creating their own *Environmental Literacy Plan*.

Following the blank template is the section *Goals for Students, Teachers, Schools and Communities* with detailed targets to meet the definition of an Environmentally Literate Graduate.

Environmental Literacy Plan for (school division)

As a result of our Environmental Literacy Plan, students will be prepared to address the environmental issues in ______ (county or city), the Commonwealth of Virginia, and the United States with 21st Century skills and knowledge. Environmentally literate students will "have the knowledge, skills and dispositions to solve problems and resolve issues individually and collectively that sustain ecological, economic and social stability"

Goal 1: e.g. Every Student Outdoors Every Year Goal 2: e.g. Authentic Inquiry Based Learning for all Students Goal 3: e.g. Professional Development of E-Lit. for all Teachers Goal 4: e.g. Every School will be a Green School

Simple, succinct Goals here! Following the fillable Template will be detailed Goals for the Students, Teachers, Schools and Communities.

Grade Level	Overarching Theme (from VA SOL's and Foundation Blocks)	Multidisciplinary Investigative Issue(s)	VA SOLs (All Appropri- ate Disciplines)	Supports MWEE	Partner(s) and Location
Pre-K	Using My Senses to Understand my World				
к	Using My Senses to Understand my World	e.g. What's Living in Our Schoolyard? Can we discover what plants and animals are living in our schoolyard? How do we know what is living and what isn't? Can we describe what we see? Can we draw a map of our schoolyard?	Science K.6 Math K.2, K.9 English K.7 K.9 Geography K.5	~	School Grounds Local Master Naturalist or forester
1	How I Interact with My World	e.g. How Do Plants and Animals Survive? What do the plants and animals in our schoolyard need to live and grow? What affects how they grow? Does our school and schoolyard affect their growth? Do we affect their growth?	Science 1.4, 1.5 Math 1.12, 1.13 English 1.10 Geography 1.6	>	School Grounds Local Master Gardener or Extension Agent
2	Change Occurs All Around Us				
3	Interactions in our World				
4	Our Place in the Solar System				
5	Transforming Matter and Energy				
6	Our World, Our Responsibility				
7	Life Science				
8	Physical Science				
Biology					
Environmen- tal Science					
Earth Science					

Environmental Literacy Plan for _____

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Goal 1:

Goal 2:

Goal 3:

Goal 4:

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Biology					
Enviro Science					
Earth Science					

As defined in the <u>National Project for Excellence in Environmental Education</u>: "Environmental education is a process that aims to develop an environmentally literate citizenry that can compete in our global economy; has the skills, knowledge, and inclinations to make well-informed choices; and exercises the rights and responsibilities of members of a community."

Goals for Students, Teachers, Schools and Communities

For Students:

Every student in the school division will graduate with the knowledge and skills to make informed environmental decisions.

- Students will understand environmental systems and human impacts on them.
- Students will engage in hands-on, outdoor learning experiences that include inquiry and problem solving. This should include both structured and unstructured learning activities. It's encouraged that students have these experiences at least once each year.
- Students will engage in service learning activities and career exploration and readiness opportunities that connect with local communities and partners.
- Students will understand underlying structures for making decisions on the local and national scale and should practice civic skills for exercising their voices, particularly around natural resource topics.
- Students will gain the tools and resources to become stewards of the environment through taking actions in their individual lives and as a community.
- Students will be able to engage in activities that promote the 5C's outlined in a Profile of a Virginia Graduate (critical thinking, creative thinking, collaboration, communication, and citizenship).

For Teachers:

Professional learning in Environmental Education will empower teachers to improve their environmental content knowledge, skill in teaching about environmental issues, and field-based pedagogical skills.

- Professional learning will increase teachers' self-efficacy for teaching Environmental Education.
- Educators will develop their sense of personal and civic environmental responsibility.
- Educators will have continuing learning opportunities provided by their school divisions and by other entities such as state agencies and non-profit organizations.
- Professional learning will integrate theories, research, and models of environmental learning.
- Professional learning will be evidence-based with the goal of increasing teacher effectiveness and student outcomes.
- Educators will be prepared to engage all learners in culturally relevant and inclusive environmental education, especially when considering environmental issues that are controversial and require learners to seriously reflect on their own and others' perspectives.

For Schools:

A supportive school environment will promote environmental literacy across all grade levels and subject areas.

- School administrators/districts will support professional development opportunities for teachers that increase environmental literacy, especially those programs that offer CEU renewal credits.
- Schools/districts will encourage extracurricular student academic and service-oriented environmental clubs.
- Schools/districts and community partners will provide opportunities for students to participate in service -learning projects and internships that relate to the environment and environmental issues.
- Schools/districts and community partners will promote participation in structured events including science fairs, Envirothon, poster and essay contests, Science Olympiad, International Earth Science Olympiad, etc. that focus on the environment.
- Guidance counselors and career and technical education professionals will promote career and college choices that emphasize environmental literacy and the wide variety of environmental careers. They can provide information about a variety of environment-themed two-and four-year degree programs, internships and college visitation opportunities.
- Teachers and school administrators will take part in professional development opportunities focused on developing school grounds that incorporate natural areas, outdoor classrooms, and instructional leadership for environmental education.
- Schools will pursue becoming certified through Project Learning Tree GreenSchools, the USDE Green Ribbon Schools, Project Green Schools, etc.

For Communities:

By bridging the school systems to their local community the quality of environmentally based learning will improve leading to greater environmental literacy.

- The administration and teachers will work together to define their community.
- Motivated teachers who desire to collaborate with the local community will be identified.
- Community leaders, community organizations and school board members to collaborate with will be identified.
- Teachers, students and identified community partners will support environmental project based learning including action projects.
- The community will provide support to teachers through volunteers, classroom visits and supervision of outdoor events

As you plan your environmental investigations you might want to consider contacting the following organizations who may have resources available. Please check with your local office. Also, tools and resources to develop outdoor education lessons/units/experiences including MWEEs can be found on the <u>Chesapeake</u> <u>Bay Program Bay Backpack website</u>.

National Parks and Refuges (https://www.nps.gov/findapark/index.htm)

Natural Resources Conservation Services (<u>https://www.nrcs.usda.gov/wps/portal/nrcs/main/va/contact/local/</u>) NOAA

Virginia Department of Forestry (<u>https://www.dof.virginia.gov/locations/index.htm</u>)

Virginia Department of Wildlife Resources (https://www.dgif.virginia.gov/about/offices/)

Virginia Department of Conservation and Recreation

Virginia State Parks (<u>https://www.dcr.virginia.gov/state-parks/find-a-park</u>)

Soil and Water Conservation Districts (<u>https://vaswcd.org/districts-by-countycity</u>)

Area Extension Offices: (<u>https://ext.vt.edu/offices.html</u>)

Extension agents

Master Gardeners

Master Naturalists

Keep Virginia Beautiful (<u>https://keepvirginiabeautiful.org/about/affiliates/</u>)

Save Our Streams

County/Regional Parks & Recreation

City Parks & Recreation

Utilities:

Electric

Gas

Water

Sewer

Landfill

Local Conservation Groups (i.e. Nature Conservancy, James River Association, Chesapeake Bay Foundation, Friends of Rappahannock, etc...)

Local colleges/universities

Museums and Aquariums

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