Washington State

Environmental and Sustainability Literacy Plan

Executive Summary

July 2011

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Washington State Environmental and Sustainability Literacy Plan

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- The Washington State Environmental and Sustainability Literacy Plan (Plan) defines a 2021 Vision of:
  
  *Excellent and relevant environmental and sustainability education for each student, in and outside of school, at all grades.*

- The purpose of the Plan is to:
  
  - Build on, contribute to implementation of, and leverage existing environmental and sustainability education programs and initiatives in Washington State.
  - Ensure that students have ample opportunities to increase their environmental literacy and enhance their academic achievement and prepare for life and work through innovative, real-world, project-based learning.
  - Ensure that Washington State is well-positioned to obtain private and public funding to support this important work.

- The Plan was developed and informed by a steering committee representing a broad range of education stakeholders.
  
  - The steering committee was comprised of elementary, middle, and high school teachers; school administrators and directors; teacher educators; regional professional development providers; informal educators; natural resource agency staff; state education agency content and assessment experts; students; parents; business leaders; and tribal and other community partners.

- The Plan includes history and background on environmental and sustainability education in Washington State.
  
  - The plan compels action towards an innovative 21st century education that Washington is uniquely poised to model.

- The Plan includes six forward-thinking and attainable 10-year goals.

  **GOAL 1 – Lifelong Learning and Community Connections**
  The community surrounding the K-12 system supports students’ environmental and sustainability literacy. Environmental and sustainability education resources and opportunities are available to all and accessed by many people in Washington State, from the youngest children to senior citizens.

  **GOAL 2 – Learning Standards, Content Areas, Courses, and Instructional Materials**
  School districts, schools, and teachers in Washington State have the necessary resources to support integrated environmental and sustainability education learning opportunities for each student.

  **GOAL 3 – Graduation Requirements**
  All students in Washington State have the opportunity to graduate from high school with proficiency in environmental and sustainability literacy and are prepared to continue their education and/or enter related careers.
GOAL 4 – Professional Development
A comprehensive environmental and sustainability education professional development program addressing the needs of informal and formal educators is developed and implemented in Washington State.

GOAL 5 – Assessment System
Multiple assessments, including summative and formative assessment processes, are used to measure students’ environmental and sustainability literacy and inform teaching and learning.

GOAL 6 – Implementation and Funding
Obtain ongoing diversified funding to implement, track, measure, and manage the Washington State Environmental and Sustainability Literacy Plan.

• The Plan includes a “theory of change” for each goal area.
  o The theory of change statement in each goal area articulates the underlying assumptions that were made as to why the strategies will achieve the desired goals and outcomes. The theory of change shows a causal pathway from action to outcome.

• The Plan includes outcomes and key strategies in each of the six goal areas.
  o To ensure that the Plan would be realistic, attainable, and transformational, the steering committee developed a set of criteria to guide the development of the Plan’s outcomes and strategies.
  o Upon completion and approval of the Plan, a detailed work plan will identify key leaders, steps, methods of measurement, and a timeline to guide step-by-step adaptive management and achievement of the outcomes and strategies.

• The Plan includes the use of Systems Thinking perspectives and tools.
  o The Plan reflects the efforts of the E3 (Education, Environment, Economy)\(^1\) initiative to link educators and systems thinkers in order to bring environmental and sustainability education to scale.
  o A systems thinking perspective can help decision-makers better understand the system and its complexity resulting in resilient, responsive, and effective policies.

\(^1\) E3 Washington: Education-Environment-Economy is the leading initiative of EEAW which is in the process of transitioning its organization name to “E3 Washington.”
Legend: The causal loop diagram represents the Plan’s comprehensive high-level “theory of change” strategy. The arrows indicate causal relationships, that is, a change in the value of the variable at the tail of an arrow “causes” a change in the value of the variable at the head of that arrow. The boxes signify variables that have a significant degree of persistence over time; they tend to maintain their values and not change significantly over short periods. The green boxes are persistent variables related to the above-stated goals, and the blue boxes are other persistent variables that are important for understanding the plan’s theory of change. See Appendix D for a more detailed explanation (reveal) of the causal loop diagram.

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2 Causal loop diagrams are from the field of system dynamics, a perspective and a set of conceptual and simulation tools for strategy analysis. Using existing knowledge, causal loop diagrams show why social and physical systems behave the way they do. They help people build progressively richer understandings of dynamic problems, and anticipate weaknesses in strategy initiatives over time. They portray a ‘feedback’ perspective - the realization that tough dynamic problems arise in situations with multiple pressures and perceptions that interact to form loops of circular causality, rather than simple one-way causal chains.
Organizational Chart of Leadership Roles

Washington State Environmental and Sustainability Literacy Plan
Leadership Roles for Funding and Implementation

Executive and Legislative Policy-Makers

Fundraising and Policy Council
Business, Governmental, Tribal, Community, and Education Leaders

OSPI
- Staff Steering Committee
- Coordinate Implementation
- Propose and Inform Policy
- Evaluate Progress

E3 Washington
- Staff Fundraising and Policy Council
- Coordinate E3 Network Delivery
- Research and Facilitate Fundraising
- Showcase Progress

Implementation Steering Committee
Representatives from PreK-12 Educators and Leaders, Informal Educators, ESDs, Students, Community-based Organizations, Businesses, Agencies, and Tribes

Note: For each goal area below, the steering committee selects a member who has funding and institutional expertise to lead a representative implementation team responsible for the successful achievement, tracking, and measuring of each Plan outcome and strategy.

Goal Areas

Lifelong Learning and Community Connections
Learning Standards, Content Areas, and Courses
Graduation Requirements
Professional Development
Assessment System
Implementation and Funding

Strategy 1
Align ESE with Early Learning Plan
- Support the use of ESE in student culminating projects
Strategy 2
Ensure access by families to outdoor learning
- Ensure students have career information on ESE
Strategy 3
Emphasize all - people in WA have access to ESE opportunities
- Disseminate high-quality ESE materials

Strategy 1
- Embed ESE concepts in core content assessments
Strategy 2
- Use ESE concepts as context for Collection of Evidence
Strategy 3
- Provide support for ESE formative assessments

Strategy 1
- Create Advisory Council and Financial Plan
- Assist all new teachers to meet ESE Residency Certification
- Support teachers earning ESE Specialty Endorsement

Implementation and Funding

Strategies listed are examples for the purpose of this structure chart. For each strategy, the respective goal area team will map the priority actions that will leverage all others, the responsible stakeholders, and a timeline to achieve each strategy in order to scale environmental and sustainability education in PreK-12 education.
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