

Environmental Literacy Framework: Environmental Education for Arizona's Children

Working Group Update
December 16, 2016



Our Mission

To develop a framework for environmental literacy that supports a vibrant and sustainable future for Arizona through well-informed, engaged citizens.



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Why Environmental Literacy In Arizona?

- Arizonans rate the state's natural beauty and outdoor parks and trails as some of its greatest assets
- Americans spend 90% of their lives indoors
- Only about 10% of kids between 13-18 spend time outdoors every day
- Limited time outdoors is leading to Nature Deficit Disorder
 - ✓ Epidemic rises in childhood obesity
 - ✓ Increasing social and cognitive delays as our children enter the school systems
 - ✓ Rises in diagnoses of Attention Deficit/Hyper-Active Disorder

How Do Environmentally Literate Students Help Arizona's Economy?

- ❖ Environmentally literate students have 21st-century skills and are prepared for emerging careers that create a vibrant economy for Arizona
- ❖ By 2018, employment in STEM jobs will increase 2 times as much as all other jobs
- ❖ Environmental jobs will increase by 25% in 2016 and 15% by 2022
- ❖ 75% of businesses have a strong interest in educating their employees about their corporate sustainability goals
- ❖ 92% of students and entry-level hires look for an environmentally friendly company when job hunting
- ❖ 45% of students would be willing to work for 15% less for a job that makes a social or environmental impact

What Have We Done Historically?

In 2006 AAEE began working with a diverse stakeholder group to explore the development of a state literacy plan

- Engaged leaders from business, industry, government, and environmental education
- Expanded stakeholder group in 2009 to focus on:
 - Identifying and Supporting Positive Impacts on Improved Environmental Literacy
 - Supporting Statewide Teacher Access to Quality Environmental Education Resources
 - Identifying and Supporting Environmentally Friendly School Facilities Statewide
- In 2012 produced a white paper on the state of EE in Arizona, sharing insights from their work and recommendations for the future



What Have We Done Recently?

- 1) Arizona Environmental Literacy Working Group created in May 2015
 - Established a mission and goal
- 2) Panel discussion at the STEM Innovate-2-Integrate Conference - January 23, 2016
- 3) Arizona Environmental Literacy Summit - March 12, 2016
 - Main location at Phoenix Zoo with satellite locations streamed in from throughout the state, including Show Low, Flagstaff, Tucson
 - Over 100 different stakeholders participated
 - Strategized on framework development
- 4) Summarized summit results with white paper and current K-12 initiatives (e.g., ESSA, Kids Can't Wait!)

Recommendations

1. Change name to Arizona's Strategy for Developing Environmental Literacy
 - ▶ Gabby and Auriane discussed strategy vs. framework vs. plan
2. Include the following overarching goals within the strategy:
 - ▶ Develop a strong network of learning opportunities and experiences (formal, non-formal and informal) to help children build strong connections with their local environment.
 - ▶ Make environmental literacy relevant and understood by all state stakeholders.
 - ▶ Provide professional development opportunities for educators.
 - ▶ Prepare children for sustainability/green jobs.
 - ▶ Support the development of sustainable schools through recommendations, funding opportunities, and mentorship.
 - ▶ Maintain long-term support and structure to implement and sustain the strategy.
 - ▶ Create a comprehensive plan for fundraising to provide ongoing support for the strategy.

Goals Expanded

- ▶ Develop a strong network of learning opportunities and experiences (formal, non-formal and informal) to help children build strong connections with their local environment.
 - ▶ Develop recommendations for integrating EE into the classroom.
 - ▶ Establish a means to promote awareness of, and access to, existing opportunities across the state.
 - ▶ Continue work to identify better options for assessing environmental literacy.
 - ▶ Align *AFFECT* to common core and NGSS and disseminate for use in both formal and informal education.
- ▶ Make environmental literacy relevant and understood by all state stakeholders. (e.g., school administrators, ranchers, farmers, miners, educators, urban population, rural population, Native Americans, excited community members, conservation organizations, transportation, Boys and Girls Scouts, 4H, Military, hotels, CAP, SRP, APS, trappers and anglers, legislature, hospitals, small businesses)
 - ▶ Host a series of stakeholder engagement sessions, learning webinars, one-on-one conversations, etc.
 - ▶ Demonstrate how EE contributes to well-rounded and supportive education.
 - ▶ Establish community/parent support for making environmental literacy a priority.
 - ▶ Continue to cultivate and grow the stakeholder group.

Goals Expanded

- ▶ Provide professional development opportunities for educators. (e.g., cross-content, standards-based, hands-on, and outdoor opportunities for teachers and students; connecting with experts in the field; cooperative role-modeling, learning, and planning with formal and non-formal educators; finding/providing funding for non-formal education; interpretive/inquiry-based/experiential education training for formal educators; time for formal and non-formal educators to create standards-based and standards-aligned learning opportunities)
 - ▶ Develop a tool to promote existing resources.
 - ▶ Promote AEEE's Environmental Educator Certification program.
 - ▶ Develop partnerships with schools to offer professional development.
- ▶ Prepare children for sustainability/green jobs
- ▶ Support the development of sustainable schools through recommendations, funding opportunities, and mentorship.
- ▶ Maintain long-term support and structure to implement and sustain the strategy.
 - ▶ Continue to develop and foster a culture of collaboration.
 - ▶ Share successes and promote opportunities to scale successful models.
- ▶ Create a comprehensive plan for fundraising to provide ongoing support for the strategy (e.g., federal funds, partnerships with local organizations, grants)

What's Next?

- 1) Convene working group to refine and expand current recommended goals
 - Develop goal-focused sub-groups to expand and clarify each individual goal
- 2) Engage additional stakeholders for input on the recommended goals
 - Online survey
 - Stakeholder presentations
- 3) Convene a writing committee and begin working on a draft

How Can You Help?

- Participate in group discussions to refine and expand goals
- Help continue to populate stakeholder contact list
- Expand on Auriane and Vanessa's stakeholder presentation
- Facilitate phone calls and meetings to engage stakeholders
- Review and edit all our communication materials about the committee, including website
- Participate in the writing team
- Any other ideas?!

