The Learning Barge: Inspiring River Restoration + Environmental Education through Design

Prof. Phoebe Crisman, University of Virginia / Crisman+Petrus Architects


The Learning Barge, a traveling, all-season, environmental education vessel, exemplifies the power of design to educate, engage and stimulate community environmental education. Designed and built by University of Virginia and Elizabeth River Project, this unique project has educated over 11,000 visitors in the Chesapeake Bay watershed since 2009.

The Learning Barge offers 1,024 square feet of interior and exterior exhibitions, providing hands-on environmental education in seasons where traditional modes of learning are not possible. The 32’ x 120’ barge is powered by solar and wind energy, rainwater collection, and gray water filtration, utilizing native plants, and engages the community through public access and educational programming. The barge offers learning on renewable energy, a planet in crisis, and the power to collaborate to make change possible.

The Learning Barge participates in an annual, remarkable public art installation called the Learning Barge Project Periwinkle. The project educates over 53,000 visitors since launch, has been featured in the USA Science & Engineering Festival, presented at the Smithsonian Institution and the Virginia State Capitol, and was part of the low carbon transportation plan elaboration at the U.N. Climate Change Conference in Copenhagen.

Outreach and Community Engagement Efforts are Essential for Effective River Restoration and Long-term Resilience. The Learning Barge serves as a catalyst for engaged communities and places through innovative community and academic partnerships. Through the power of design and collaboration, the Learning Barge project: (1) leverages the power of design to educate, engage, and stimulate community environmental education, (2) demonstrates the potential for design to engage the public on complex environmental issues, and (3) provides a model for environmental learning in the nation’s most important estuarine watershed.

The Learning Barge is a key component of the Elizabeth River Project, a public-private partnership that has been working to clean up the largest industrial harbor in the United States since 2009. The project has educated over 53,000 visitors since launch, has been featured in the USA Science & Engineering Festival, presented at the Smithsonian Institution and the Virginia State Capitol, and was part of the low carbon transportation plan elaboration at the U.N. Climate Change Conference in Copenhagen.

The Learning Barge is a traveling, all-season, environmental education vessel, exemplifying the power of design to educate, engage and stimulate community environmental education. Designed and built by University of Virginia and Elizabeth River Project, this unique project has educated over 11,000 visitors in the Chesapeake Bay watershed since 2009. It is powered by solar and wind energy, rainwater collection, and gray water filtration utilizing native plants, and engages the community through public access and educational programming. The barge offers learning on renewable energy, a planet in crisis, and the power to collaborate to make change possible.

The Learning Barge Project Periwinkle is an annual, remarkable public art installation. Since launch, it has educated over 53,000 visitors, featured in the USA Science & Engineering Festival, presented at the Smithsonian Institution and the Virginia State Capitol, and was part of the low carbon transportation plan elaboration at the U.N. Climate Change Conference in Copenhagen.

The Learning Barge project is a key component of the Elizabeth River Project, a public-private partnership that has been working to clean up the largest industrial harbor in the United States since 2009. It has educated over 53,000 visitors, featured in the USA Science & Engineering Festival, presented at the Smithsonian Institution and the Virginia State Capitol, and was part of the low carbon transportation plan elaboration at the U.N. Climate Change Conference in Copenhagen.