



From H-2-O: A Water Quality Workshop for Teachers

Project Status

Project Year: 2007-present

Status: Ongoing

Category: Water Quality

Location: LUMCON

Project Partners: LUMCON

Background and Problem Addressed:

Educators enjoy learning science from professional scientists but finding opportunities can sometimes be challenging. BTNEP has partnered with the Louisiana Universities Marine Consortium (LUMCON) to provide excellent field experiences lead by scientists for professional teachers.

Using “From H-2-O: A Water Quality Workshop for Teachers,” scientists and teachers work together to advance water quality testing techniques. Water quality sampling can incorporate multiple fields of science including biology, chemistry, environmental science and physics, in addition to math, reading and presentation skills. Water quality sampling is a model method for communicating scientific principles to teachers. Teachers then have a solid means for communicating these principles to students. The “From H-2-O” teacher workshop provides scientific content about water quality to K-12 science teachers. Information about water quality, training on how to sample water quality, and water quality sampling kits are provided to teachers who participate in this project. Data collected as part of a network of water quality stations can then be used by students and teachers to understand real data describing actual trends in watersheds throughout the BTNEP area.



Project Description:

“From H-2-O” is a teacher workshop developed to train participants to use water sampling and educational strategies to educate students about water quality and related issues within the Barataria-Terrebonne Estuary System. Partnering with LUMCON’s *BayouSide Classroom* water monitoring program the activities serve as the platform for connecting students to their local environment and the Gulf of Mexico through routine water sampling and data reporting. *BayouSide Classroom* is LUMCON’s ongoing student-based water monitoring program. All data collected by students is entered onto the *BayouSide Classroom* database which can be viewed and used by anyone with an Internet connection.

“From H-2-O” is designed to allow teachers, informal educators, and scientists to work together to build a community that will foster scientific thinking and environmental stewardship within Louisiana. Teachers who use their training and *BayouSide Classroom* in their schools are invited to apply as mentor teachers. By inviting mentors, teachers are kept conversant about new information and resources, as well as, up to date in new and existing program protocols. Mentors, in turn help to keep the workshop moving forward and give input on how to effectively use *BayouSide Classroom* in local schools.

The hands-on science inquiry methods used in the program are conducive to the quality of education and experience that help students to understand the environment and the role they play in preservation and conservation. The scope of the program has increased exponentially over the last decade. Since 2007, the program has been offered to many more educators and thus has been more accessible to students. Many teacher resources have been developed for use in the classroom. Students are learning practical skills and content in chemistry, physics, environmental science, biology, math, data graphing and interpretation and the scientific method.

Due to the meaningful and relevant nature of the content and experiences, since its inception in 2001, the program has impacted over 530 educators and roughly 101,000 students across Louisiana and the nation.



CCMP Action Items Addressed:

Citizen Monitoring Program (Sustained Recognition # 4)

Written, Audio and Visual Materials (Sustained Recognition # 11)

Estuarine Curriculum Development (Sustained Recognition # 14)

Continuing and Informal Education Programs (Sustained Recognition # 15)

Financial Support for Educational Initiatives (Sustained Recognition # 16)