

## Post Fellowship Reporting - Project Summary

Report Title: Science Expedition Studies Lobster Name: Robert D. Rinehart

Other Team Members:

Program: EL Education Program

**Trip Dates:** 11/30/-0001 - 11/30/-0001 **Location Visited:** Boston, MA

Post Fellowship Reporting Template: PFR Template 01

**Project Summary:** Outward Bound programs are based on a "development-by-challenge" philosophy, eloquently and passionately articulated by its inspirational founder, Dr. Kurt Hahn. Expeditionary Learning Schools Outward Bound (ELS) is a national, non-profit organization; to improve student achievement; build student character; enhance teacher practices; and instill a positive school culture. The ELS approach promotes rigorous and engaging curriculum; active, inquiry-based pedagogy; and a school culture that demands and teaches compassion and good citizenship.

The ELS approach is experiential and project-based, involving students in original research -- with experts -- to create high-quality products for audiences beyond the classroom.

Career Impact: Our school team consisting of myself, "Chad" Murphy, Danny Moore, Steve Hitchcock, and Josh Cornwell attended the ELS Secondary Institute Summer 2008 in Boston, MA from July 7, to July 12, 2008. Our objective was to learn by doing. It was, and is, our hope to see the methodology and success of the Expeditionary Learning Schools program established in our school (Catawba Valley High School, Hickory, NC) in the school year (2008-2009). The institute allowed the five of us, along with 59 other educators, and administrators from around the USA, to experience success as learners in an educational setting conducted within, the ELS schools tool, a Learning Expedition. At the heart of ELS schools are Learning Expeditions, interdisciplinary units aligned with state and district standards. The total group of learners was separated into two Learning Expeditions of about equal numbers, one based in the Humanities and one based in the Sciences. I was included in the Science Expedition along with 34 others (we were for the most part assembled into 7 study teams of five persons each). Each study team had a sixth member, a one to one and a quarter pound Spiny Maine Lobster (Homarus americanus). Ours was named FLUFFY because of the fine feather structures along the margin of his (our expedition also taught us how to verify the fact of HIS gender!) exoskeleton (shell). We all experienced and learned as "students" in our respective expeditions. We also learned, as educators, how to conduct similar scenarios, of our own creation, to lead our school's students through equally successful learning and growth. The guide and focus of a well functioning learning experience is its Learning Targets. Learning Targets are both the goal and the means of making students successful.

Classroom/Community Impact: Crafting quality learning targets plays an integral role in using assessment to engage, support, and hold students accountable for rigorous learning. As a group of teachers we had nine, clear and concise, learning targets shared with us on page one of our institute study guide. I believe, from my experience, that every "learner" achieved every target! As for the learning targets set out in our learning expedition to study the Maine Lobster, its biology, ecology and industry ... we realized a handson, heads-up, learning experience equivalent to growing up in our own families. Some of us know the "lobster" more intimately than we might ever have thought possible. Though it was gained through real work and effort it was always fun, engaging, and well paced to keep us learning throughout the five days of classes.

As for our school team, the consensus now is, as the current slogan goes,: JUST DO IT!

**Open Response:** The drive of fourteen hours, or so, back from Boston to Hickory provided for the development of a rough outline of three collaborative expeditions across three core content areas (math, science and language arts) we will present our ideas to our faculty in a meeting on July 22, 2008. ...and we start our guest for Fall 2008:

Objective 1, Every teacher and every class at CVHS participate in at least one coordinated Learning Experience in the first nine weeks;

Objective 2, Every student and every teacher be able to work two days every week for twenty minutes a day in a CREW activity.

Quote: Learning topical content while learning a process made for five very full days...just wonderful.

## Photos:



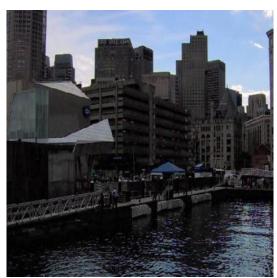
Mr. Eddy Hook just started the show on the commercial life of the lobster.



"James Hook and Company" an historic land mark on the Boston waterfront.



Thumbnail picture of FLUFFY



New England Aquarium: a place to study the science of lobster life.

Mr. Rinehart 2007-2008



Mr. Rinehart and the project final product explaining the life of the lobster.



Fluffy's study team putting his life story together



The big one that did not get away!