



Today's Kids...

Tomorrow's Ocean Professionals

Ocean Education Initiative

ACZISC Presentation

September 11, 2013

Ocean Education Initiative

- Vision and Strategic Goals
- Major Components
- Our Partners
- Key Milestones
- Field Program: At-Sea Excursions, Joint Programming
- Digital Oceans Project: Taking the Ocean to the Classroom: Video Streaming, Remote Monitoring
- Discussion: Areas of Collaboration



Vision and Strategic Goals

- Bring exciting world of coastal and ocean science and technology to students and teachers in NL school system
- Expose young people and teachers alike to diversity of career opportunities in ocean-related sectors
- Create awareness of the marine environment of Newfoundland and Labrador



Major Components

- At-sea experiential learning opportunities for high school students: Coastal Explorers Field Program
- Training of marine interpreters: internships for undergraduates in ocean sciences and technology
- Teacher professional development: Summer Teachers Institute and PD days
- Online educational programming, dedicated web portal: Digital Oceans Project
- Mobile app development to support student fieldwork projects (data collection)



Key Milestones

- **November 2011:** Hebron funding announced for expansion to Holyrood Marine Base; Oceans Learning Partnership incorporated
- **April 2012:** Dept of Fisheries and Aquaculture announces funding
- **August 2012:** Dept of Innovation, Business and Rural Development announces funding for expansion to Bonne Bay Marine Station on west coast
- **October 2012:** Planning for expanded field program/joint programming with partner sites begins; collaborative site set up
- **February-March 2013:** Confirmation of renewed funding from Hebron Project for calendar year 2013 and funding from ACOA confirmed for Digital Oceans Project
- **April 2013:** Start-up of the Digital Oceans Project
- **September 2013:** Piloting of Field Program and new teacher resources



Partnerships: Key to Success

- Program Partners – Partner Sites (next slide)
- Education Partners – Dept of Education, School Districts
- Participating Scientists – DFO and Ocean Sciences Centre (MUN)
- Government Partners – Provincial and Federal
- Industry Partners – Sponsors (Hebron), funding proposal in progress to build linkages to industry and professional associations in 2013-2014

This is a MAJOR collaborative effort. We are still building the foundations.

Partner Sites – Joint Programming Initiative

Terra Nova National Park

- Andrea Cote, Manager, Partnerships

Ocean Sciences Centre

- Danielle Nichols, Manager, Public Education

Holyrood Marine Base

- Randy Gillespie, Head, Centre for Applied Ocean Technology

Bonne Bay Marine Station

- Allison Eaton, Manager

Coastal Explorers Field Program Pilot: Sept 2013 to June 2014

- Testing five modules:
 - Climate Change and the Oceans
 - Aquatic Invasive Species
 - Plankton and Marine Food Webs
 - Applications of Seabed Mapping
 - Navigation and Marine Safety
- New equipment: ROV; deep-water camera; multibeam sonar; onboard microscope; CTD
- Hands-on activities linked to real projects
- Participating scientists (DFO, MUN)
- Pre- and post- cruise activities to bring ocean into the classroom (teacher resources) to support curriculum and solidify learning experience
- Data collection application in development



Digital Oceans Project

- Dedicated oceans portal for NL schools; digital programming
- Video streaming to the classroom: remote monitoring application
- Online interactive sessions with scientists and professionals

**R&D Project/Prototype development:
Sept 2013 to June 2014**

Our Funding Partners

- Hebron Project
- Department of Fisheries and Aquaculture
- Department of Innovation, Business and Rural Development
- Atlantic Opportunities Agency (ACOA)
- Department of Education
- Department of Environment and Conservation





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