

OER Education Review Response: Implementation Update

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Education Review Recommendations

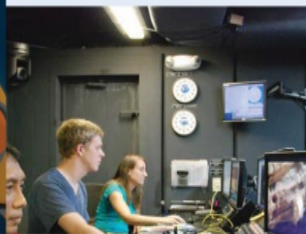
- I. Promote and Strengthen the Community of Ocean Exploration Programs
- II. Enhance Value of Expeditions to the Education Community
- III. Enhance Professional Development Workshops to Increase Impact
- IV. Improve Organization of Educational Materials and Website
- V. Update/Develop Educational Materials to Reflect Current Research and Standards
- VI. Expand the Ocean Exploration Education Alliance Network
- VII. Enhance Diversity in Program Participants

OER Education Initiatives



Educator Professional Development

Workshops, Lesson Plans,
Activities



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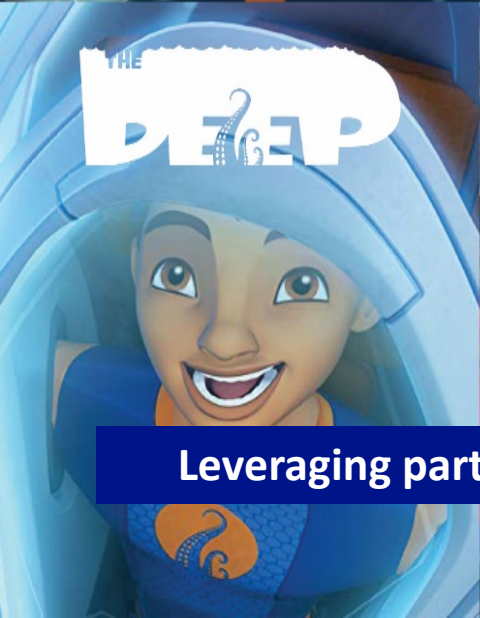
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Scientist Professional Development

Explorer-in-Training, Hollings
Scholar, Knauss Fellowship



Leveraging partnerships to reach all age groups across the education spectrum.

Education Review Recommendations

I. Promote and Strengthen the Community of Ocean Exploration Programs

- OET-SOI-OER-NOAA Education “alliance”
- NASA
 - *Ocean Worlds*
 - *Challenger Center for Space Science*
- Octonauts and The Deep
- Ocean Discovery Institute
 - *focus on underserved communities*
 - *Possible “Cuerpo de Exploración”*
- Ocean Today
 - *NOAA Video Studio*
- Inner Space Center
 - *New livestreaming & live interaction approaches*



Education Review Recommendations

II. Enhance Value of Expeditions to the Education Community

- SOI-OET-OER Website with shared education resources, including ship schedules and other information about expeditions (could be expanded to other organizations)
- First expedition findings webinars for workshop alumni (February 2019). Could be expanded to include SOI and OET.
- Increase number and format of live interactions. Not ship schedule dependent.
- Linking expedition results to educators in underserved communities (Puerto Rico, American Samoa)



Education Review Recommendations

III. Enhance Professional Development Workshops to Increase Impact

- Expert observers to workshops to advise on ways workshops can incorporate current pedagogy, standards, and learning
 - Report and recommendations to OER
- Regular updates to workshop materials to reflect current expedition results, other information; pending revamp of OER education materials (with outside facilitation, OET, SOI).
- Process underway at NMSF to hire a new evaluator focused on measurable—and relevant--results
- Search underway for two additional workshop facilitators
 - One to serve Midwest, one bi-lingual for Spanish-speaking communities



Education Review Recommendations

IV. Improve Organization of Educational Materials and Website

- Rebuilt OER website first step. Focus now on Education content to manage “content as vast as the ocean.”
- Launch of new OER-SOI-OET web space on (noaa.gov) for joint materials in 2019
- New internal focus on highlight videos and other communications products tailored for education.
- Engaging education community through Facebook (a frequent educator request)
 - Expedition findings
 - Updates to material
 - Opportunities for live interactions



Education Review Recommendations

V. Update/develop educational materials to reflect current research and standards (including 3D learning, NGSS)

Short Term (now)

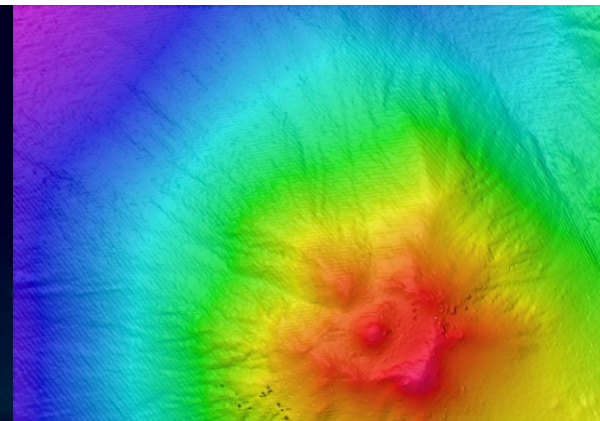
- Rebuilding “theme pages” into modular packages based on specific topics/phenomena

Medium Term (2019-2021)

- Increase website searchability of education materials by phenomena, NGSS, etc.
- Reconsideration and/or revamp of OER education product line (with outside facilitator, OET and SOI involvement)

Long Term

- Potential for integrated OET-SOI-OER suite of education products and services (with room for other partners)



Education Review Recommendations

VI. Expand the Ocean Exploration Education Alliance Network, with a particular emphasis on inland states

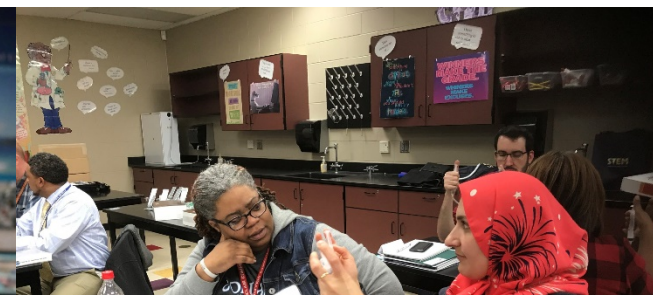
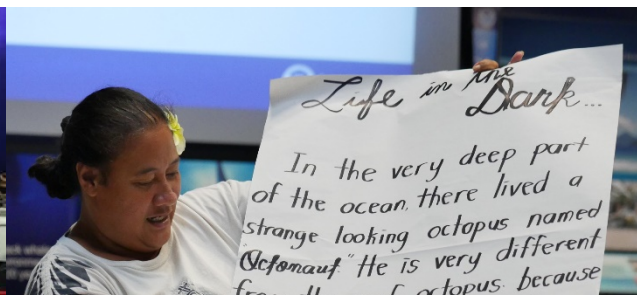
- Since the review, added new Alliance partners:
 - Albuquerque Biopark, NM
 - Great Lakes Aquarium, Duluth, MN
 - EcoExploratorio, San Juan, PR (agreement in principle)
- NMSF to help identify other inland opportunities
 - Detroit
 - Denver
- Using new Alliance Network partners to help develop approaches to underserved communities (Native American, Spanish speaking)



Education Review Recommendations

VII. Enhance diversity in program participants

- Initial approach: explore more effective approaches to educators serving Spanish-speaking, Native American, and Pacific Island communities
 - Using existing relationships and experience
- Native American
 - Session at American Indian Science and Engineering Society Conference on educator needs (2018)
 - Albuquerque BioPark
 - Olympic Coast National Marine Sanctuary
- Spanish-Speaking
 - Puerto Rico (linked to 2015 and 2018 expeditions)
 - Ocean Discovery Institute
 - Translation, new services
- Pacific Island
 - Teacher workshops in American Samoa through Waikiki Aquarium
 - Potential to expand to CNMI and Guam
 - Leverage CAPSTONE legacy





[OceanExplorer.NOAA.gov](https://oceanexplorer.noaa.gov)



**Ocean Exploration
and Research**