

Annual Review of Progress: FY14

NOAA Education Data Team



March 18, 2015
NOAA Education Council

New Strategic Plan is the umbrella concept that provides a framework for M&E activities.



Data Team
prepares data for Annual Review

Ed Council
reviews findings & assesses progress.

Educators
collects & reports data about programs

Data Team Implementation

Effort allocated =

John Baek (.6 FTE), Valerie Williams (.12), Christopher Nelson (.12),
Kristen Jabanoski (.12), Marissa Jones (.12), Lisa Nakamura (.12)
TOTAL = 1.08



Year 1	Goal 1 (1.1, 1.2, 1.3), Goal 4 (4.3), Goal 5 (5.1, 5.2, 5.4)
Year 2	Continue plus add Goal 4 & 5 objectives
Year 3	Continue plus add Goal 2 objectives
Year 4	Continue plus add Goal 3 objectives
Year 5	Data collected for all goals and objectives (minimally)

Evaluation Questions

Is NOAA Education making progress on its goals and objectives?

- What efforts contributed to this objective?
- What are the results of these efforts?
- Which results indicate evidence of progress?
- What next steps should be taken by the Education Council and the Data Team?

Data Sources

Unified Data Call - Common Measures

- Number of **P-12 students** who participated in NOAA-supported formal education programs that enhance understanding and use of NOAA science and other resources.
- Number of **youth and adults** who participated in NOAA-supported informal education programs that promote and inform environmental stewardship and decision-making.
- Number of **people who visited NOAA Education websites** that support a broad spectrum of educational activities and provide critical information to the Nation.
- Number of **educators** who participated in NOAA-supported professional development programs that enhance understanding of NOAA-related topics and use of NOAA educational and scientific resources.
- Number of **institutions with increased educational capacity** through NOAA-supported education programs or hosting exhibits that extend NOAA Education's reach and capabilities.
- Number of **people that visit** museums, aquariums, and other informal education institutions hosting NOAA-supported exhibits or programs that enhance stewardship and promote informed decision-making.
- Number of **postsecondary students** trained in NOAA-mission related sciences through NOAA-funded higher education programs that prepare students for career paths at NOAA and related organizations.
- Number of **postsecondary degrees** in NOAA-related disciplines awarded to students who were supported by NOAA in higher education programs.

Unified Data Call - Annual Accomplishments, Program Descriptions

Working Group Report Outs

Strategic Planning, Implementation Planning

Slide Structure

Objective Statement	
What efforts contributed to this objective?	<u>Columns indicate categories of programs or products</u>
What are the results of these efforts?	Blue text indicates performance numbers. Red text indicates gaps in measurement.
Evidence of Progress Statement	
Which results indicate evidence of progress?	
Next steps?	

Order of Presentations

Objective 1.1, 1.2, 1.3 - Lisa Nakamura

Objective 4.3 - Kristen Jabanoski

Objective 5.1 - Marissa Jones

Objective 5.2 - Valerie Williams

Objective 5.4 - John Baek, Marissa Jones

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Science-Informed Society

An informed society has access to, interest in, and understanding of NOAA-related sciences and their implications for current and future events.

1.1.Youth and adults from all backgrounds improve their understanding of NOAA-related sciences <u>by participating</u> in education and outreach opportunities.			
What efforts contributed to this objective?	<u>Formal Education Programs w/in 9 Ed Council reporting units</u> NOS, ONMS, NERRS, CSC, B-WET, OEd, OAR, NMFS, NWS	<u>Informal Education Programs w/in 8 Ed Council reporting units</u> ONMS, NERRS, CSC, OEd, OAR Sea Grant, NMFS, WCM	<u>Education Products</u> Data in the Classroom Games Portal, Planets Stewards; DLN broadcasts; Newspapers in Education;
What are the results of these efforts?	570K P-12 students participated in formal education program in FY14 Percent that gain in understanding	2.6M youth and adults participated in informal education programs in FY14	592K visitors to DitC website # products disseminated
Evidence of Progress 1.1a: Developed <u>more</u> education and outreach opportunities for youth and adults from all backgrounds.			
Which results indicate evidence of progress?	Database of formal and informal education programs # new and updated formal and informal education programs		Database of education products # users of products
Next steps?			

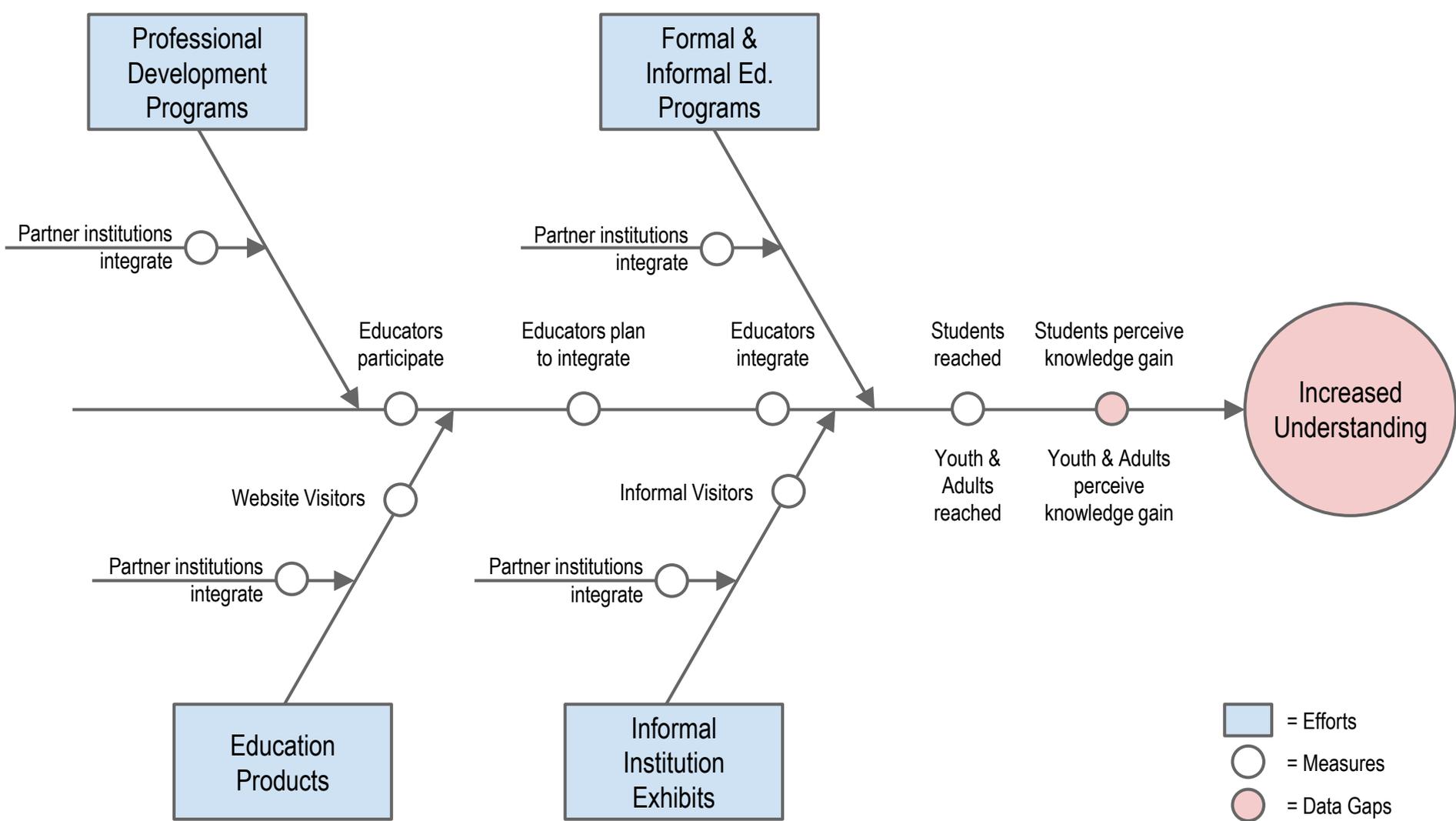
1.2. Formal and informal educators integrate ocean, coastal, Great Lakes, weather and climate sciences into their curricula, practice, and programs.

<p>What efforts contributed to this objective?</p>	<p><u>Professional Development Programs w/in 13 Ed Council reporting units</u> NOS, ONMS, NERRS, CSC, B-WET, OED, OAR, CPO, OER, NMFS, TAS, NWS-WCM, NESDIS</p>	<p><u>5 Education Product Web Portals</u> CPO, OER, OED, NERRS, NOS</p>	<p><u>2 Working Groups</u> NGSS WG - Developed sample Oyster curriculum sequence and provided webinar Data in the Classroom WG - Training webinars conducted</p>
<p>What are the results of these efforts?</p>	<p>36.6K educators participated in those PD programs in FY14</p>	<p>15M visitors to 4 websites (Climate.gov, Ocean Explorer, NOAA Education Resources, Estuaries 101) # products disseminated</p>	<p>New education products: Oyster curriculum sequence, Data in the Classroom module Number of attendees at webinars</p>

Evidence of Progress 1.2a. Increased integration of NOAA resources and topics by educators into their curricula, practices, and programs.

<p>Which results indicate evidence of progress?</p>	<p>% educators that intend to integrate into their work % educators that integrated into their work</p>	<p>Implement website ForeSee survey % educators that intend to integrate into their work</p>	
<p>Next steps?</p>			

1.3. Formal and informal <u>education organizations integrate</u> oceanic and atmospheric science content in, and collaborate with NOAA scientists on the development of exhibits, media, materials and programs that support NOAA's mission.		
What efforts contributed to this objective?	<p>423 Institutions with Increased Educational Capacity ONMS, NERRS, CSC, B-WET, OED, EPP, OAR, CPO, NMFS</p>	<p>3 Working Groups Partnerships WG - Portfolio Review Digital Learning WG - DLN Partnership Regional WG - Collective Impact Survey</p>
What are the results of these efforts?	<p>423 institutions have integrated NOAA-related science in their exhibits, media, materials and programs in FY14 108M visitors to 191 informal education institutions in FY14 <u>What exhibits, media, materials, and programs?</u> <u>How was content integrated?</u></p>	<p>67 partnerships identified by Portfolio Review Identified characteristics of high-return partnerships 4 DLN broadcasts; piloted module; educator's guide 4 priority regions identified to advance EE policy efforts</p>
Evidence of Progress 1.3a. <u>Expanded partnerships</u> that lead to deeper integration of NOAA resources into development of exhibits, media, materials, and programs.		
Which results indicate evidence of progress?	<p><u>Database of partnerships</u> <u>% existing partnerships that seek deeper integration</u> <u># states with policies incorporating NOAA related subjects in their education policy</u></p>	
Next steps?		

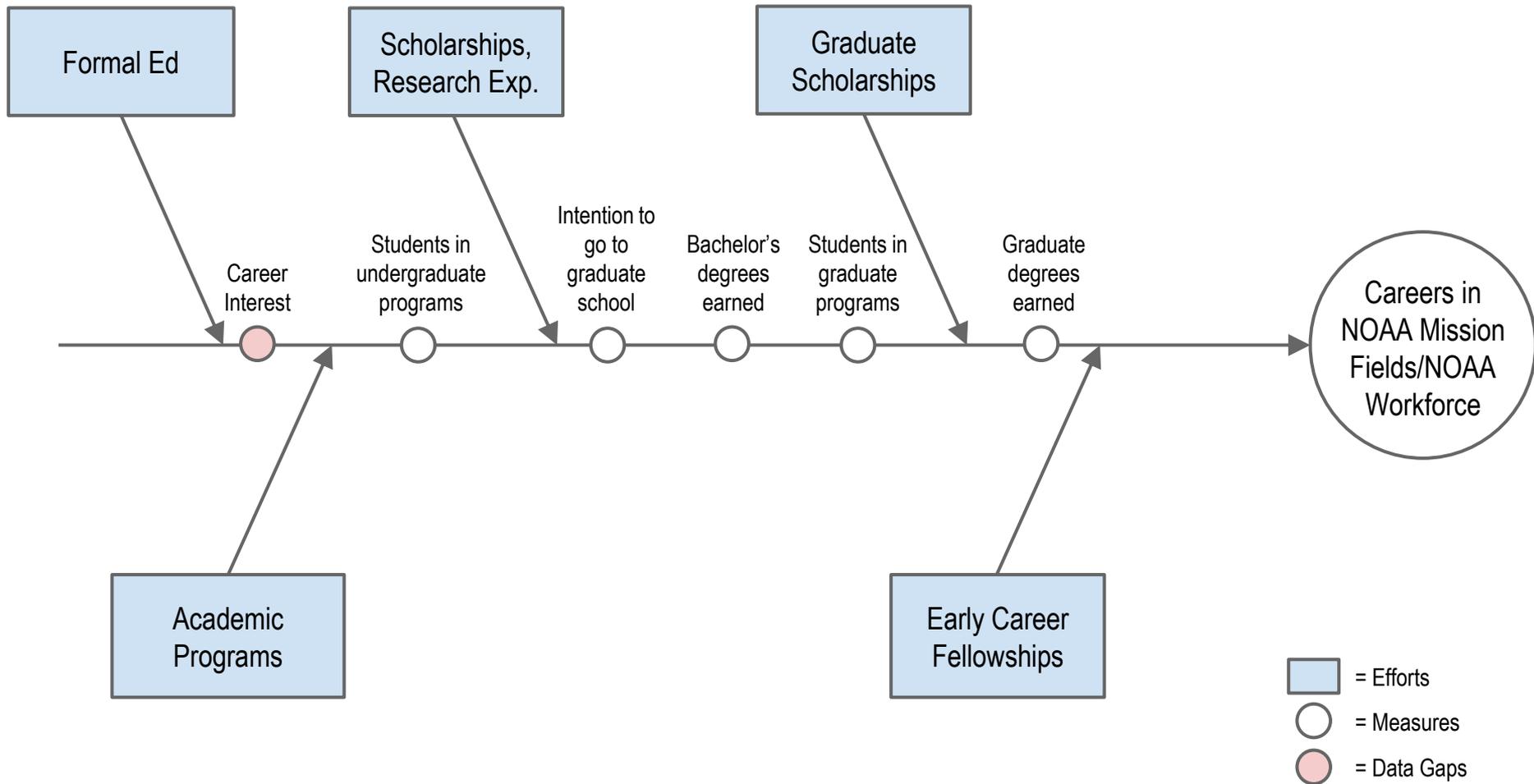


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Future Workforce

A diverse and highly-skilled future workforce pursues careers in disciplines that support NOAA's mission.

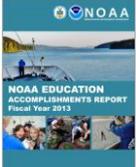
4.3. Postsecondary students, particularly from underrepresented groups, pursue and complete degrees in disciplines critical to NOAA's mission.	
What efforts contributed to this objective?	<p>Higher Education Programs</p> <p>ONMS, CSC, EPP, OAR, SG, NMFS</p> <p>Scholarships, Fellowships (e.g. Hollings, EPP USP, Nancy Foster)</p> <p>Academic Programs (e.g. Cooperative Science Centers, RTR, Sea Grant Colleges)</p>
What are the results of these efforts?	<p>3,424 postsecondary students trained in FY14</p> <p>582 postsecondary degrees earned in FY14</p> <p>Breakdown by degree type</p> <p>% of undergraduates who intend to pursue graduate degrees</p>
Evidence of Progress 4.3. Increased the proportion of trained students from underrepresented groups pursuing careers in disciplines critical to NOAA's mission.	
Which results indicate evidence of progress?	<p>Proportion of undergraduates and graduates from underrepresented groups pursuing/completing degrees</p> <ul style="list-style-type: none"> Compare with demographics of discipline & demographics of US & NOAA workforce
Next steps?	



5

Organizational Excellence

NOAA functions in a unified manner to support, plan, and deliver effective educational programs and partnerships that advance NOAA's mission.

5.1. Leaders internal and external to NOAA recognize and support agency education investments as a way to achieve Agency mandates, mission, and goals.		
What efforts contributed to this objective?	<u>Annual Accomplishments</u> 37 stories from 14 Ed Council reporting units (up from 23 stories in FY13)	<u>Briefing materials</u> 8 common measures Up-to-date Program Descriptions
What are the results of these efforts?	Communicate NOAA-wide Education Accomplishments to leaders and the public: FY13 Report completed Oct 2014 FY14 Report completed Apr 2015 # times stories are used # web visitors to Report page 	Communicate NOAA-wide Education Accomplishments to leaders and the public: # congressional visits # meetings with leadership # taskers that OED responds to # web visitors to NOAA-wide Accomplishments
Evidence of Progress 5.1a. Increased recognition by leaders of the importance of education to achieve NOAA's mission.		
Which results indicate evidence of progress?	Stronger relevance, response, results that resonate with Congress (geographic) and NOAA (mission).	Improve internal tracking to measure level of engagement from Congress and other leaders (e.g., accept invitation, length of meeting, follow-up questions). Monitor published documents, transcripts from speeches, informal circulars where NOAA leadership and leadership from external organizations cite or mention NOAA education and its contribution to NOAA's mission
Next steps?	Complete and disseminate FY14 Report. Develop guidance for FY15 Report.	

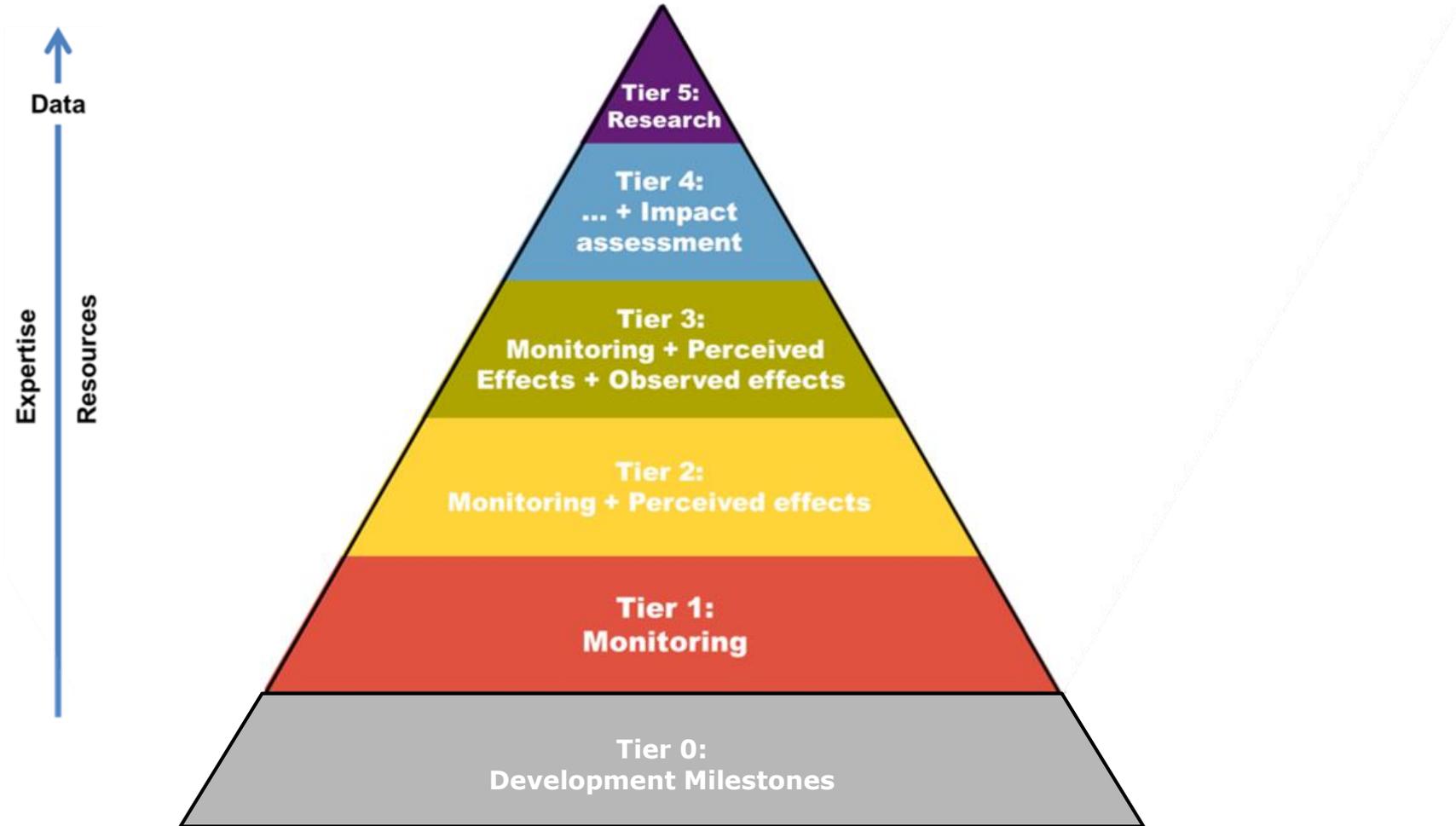
5.2. NOAA's education community develops and implements Agency education priorities informed by constituent needs and national initiatives.

<p>What efforts contributed to this objective?</p>	<p><u>Strategic Planning Process (2013-2015)</u> Developed conceptual map informed by current activities and programs within NOAA Education 12 of 16 Ed Council Admin Units completed conceptual mapping templates Reviewed 5 government departments' strategic plans to identify optimal strategic plan structure Provided 3 open reviews for comment on strategic plan framework</p>	<p><u>Implementation Planning Process</u> Employed 3 methods for gathering information from the NOAA Ed Community on education priorities for implementation plans: - Focus group discussions with working groups - Gathered information from presentations by the networking groups - Online surveys for gathering information from line offices and programs</p>
<p>What are the results of these efforts?</p>	<p>Strategic plan has 5 goal areas that better align with the goals and mission of the agency Strategic plan structure includes objectives and strategies that reflect the outcomes and activities of NOAA Education community</p>	<p>Survey data that identified priorities for programmatic activities to be included in implementation plan Feedback from Ed Council and working groups to prioritize strategies for Ed Council activities for iplan</p>

Evidence of Progress 5.2a. Implemented systematic approaches for collecting data about constituent needs to inform NOAA's education priorities.

<p>Which results indicate evidence of progress?</p>	<p>Documentation of the conceptual mapping process as basis for updating strategic plan goals and objectives</p>	<p>Development of a process map that defines the set of steps required to ensure adequate data collection and analysis for setting NOAA's education priorities</p>
<p>Next steps?</p>	<p>Annual monitoring to determine the extent to which NOAA Education activities align with and report progress toward strategic plan goals and objectives</p>	<p>Develop survey for i-planning retreat to gather feedback on effectiveness of incorporating information for NOAA Education priorities</p>

TIERS “Tool for Intra-agency Evaluation Resource Sharing”

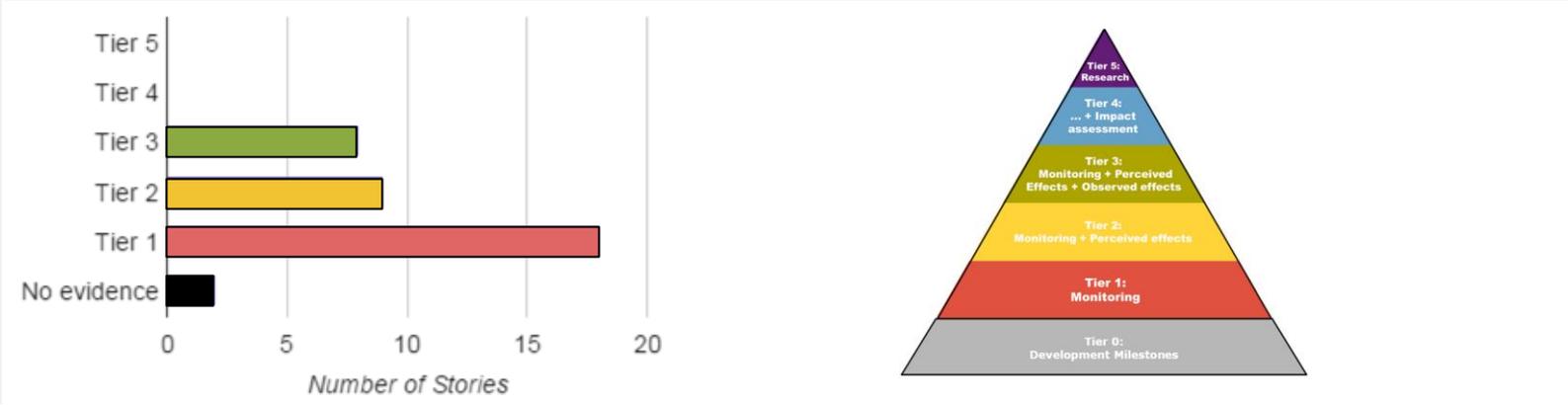


5.4. NOAA and partner organizations utilize effective evaluation, performance monitoring and evidence-based approaches in the design and management of educational programs, products and services.

What efforts contributed to this objective?

Annual Accomplishments
Identified TIERS in the Accomplishment stories based on information provided in the text.

What are the results of these efforts?



5.4.a. Improved the practice of evaluation by educators to inform the improvement and management of NOAA education programs.

Which results indicate evidence of progress?

Increase the number of stories that communicate the highest possible tier.
Increase capacity for evaluation and monitoring to help programs report at a higher tier.

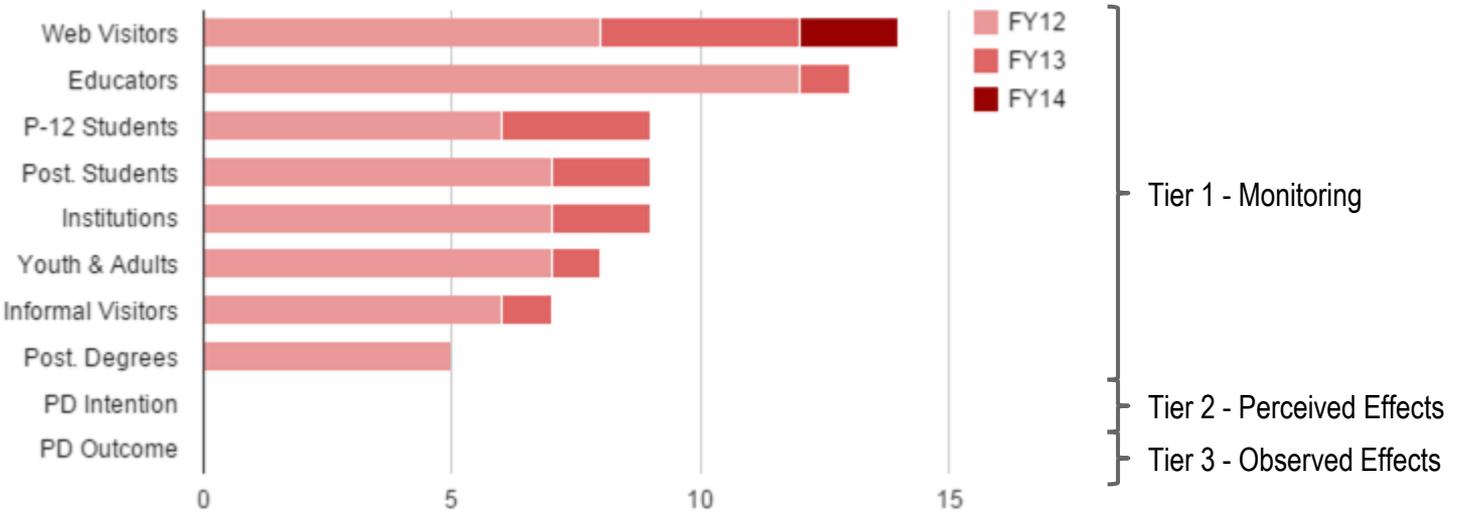
Next steps?

5.4. NOAA and partner organizations use effective evaluation, performance monitoring, and evidence-based approaches in the design and management of educational programs, products, and services.

What efforts contributed to this objective?

Unified Data Call
Reporting Common Measures by Ed Council Unit

What are the results of these efforts?



5.4.a. Improved the practice of evaluation by educators to inform the improvement and management of NOAA education programs.

Which results indicate evidence of progress?

NOAA Educators review currently collected data to inform program management decisions.

Next steps?

