



UNITED STATES DEPARTMENT OF COMMERCE
Office of the Under Secretary for
Oceans and Atmosphere
Washington, D.C. 20230

JAN 15 2013

MEMORANDUM FOR: Jane Lubchenco, Ph.D.
Under Secretary of Commerce
for Oceans and Atmosphere

FROM: Louisa Koch *Louisa Koch*
Director of Education

SUBJECT: Approval of NOAA Administrative Order for Education and Outreach

The attached draft NOAA Administrative Order (NAO) is submitted for your approval in support of the agency's STEM engagement efforts. Education and outreach are critical tools for increasing awareness of NOAA and strengthening the Nation's STEM workforce. The NAO is responsive to recommendations from NOAA's Science Advisory Board and supports President Obama's "Educate to Innovate" campaign aimed at improving the participation and performance of America's students in science, technology, engineering, and mathematics (see Attachment A).

The NAO follows the guidance from the August 14, 2012 memo from John Berry, Director of the Office of Personnel Management encouraging agencies to support employee involvement in STEM-related education and outreach activities (see Attachment B).

The NAO builds on the all-hands September 18, 2012 message "A word from Dr. Jane" encouraging NOAA employee participation in STEM activities and initiatives (see Attachment C) and more broadly promotes employee participation in education and outreach efforts in support of NOAA's mission.

This NAO has been developed with the guidance and support of Dr. Kathy Sullivan, Sandra Manning, and Cieran Clayton. There is an already established precedent of similar policies at NASA, NIST, and Census.



Attachment A

<http://www.whitehouse.gov/issues/education/k-12/educate-innovate>

Educate to Innovate

President Obama has launched an “Educate to Innovate” campaign to improve the participation and performance of America’s students in science, technology, engineering, and mathematics (STEM). This campaign will include efforts not only from the Federal Government but also from leading companies, foundations, non-profits, and science and engineering societies to work with young people across America to excel in science and math.

As part of the campaign, this Administration hopes to do a series of events, announcements and other activities that build upon the President’s “call to action” and address the key components of national priority.

Why This is Important

We have many great schools, excellent teachers, and successful students in America. But there are also troubling signs that, overall, our students should be doing better in math and science.

- In the 2006 Programme for International Student Assessment (PISA) comparison, American students ranked 21st out of 30 in science literacy among students from developed countries, and 25th out of 30 in math literacy.
- On the 2009 National Assessment of Educational Progress (NAEP) math tests, 4th graders showed no signs of progress for the first time in many years, and 8th graders tallied only modest evidence of progress. We are not advancing as we must.

What We Must Do

Through “Educate to Innovate” and other efforts, we must:

- Increase STEM literacy so that all students can learn deeply and think critically in science, math, engineering, and technology.
- Move American students from the middle of the pack to top in the next decade.
- Expand STEM education and career opportunities for underrepresented groups, including women and girls.

The First Steps

America is already stepping forward to meet these challenges. As part of the “Educate to Innovate” effort, five major public-private partnerships are harnessing the power of media, interactive games, hands-on learning, and community volunteers to reach millions of students over the next four years, inspiring them to be the next generation of inventors and innovators.



The Director

UNITED STATES OFFICE OF PERSONNEL MANAGEMENT

Washington, DC 20415

AUG 14 2012

MEMORANDUM FOR CHIEF HUMAN CAPITAL OFFICERS

FROM:

**JOHN BERRY
DIRECTOR**

A handwritten signature in black ink, appearing to read "John Berry", written over the printed name.

Subject:

Participation in STEM Activities and Initiatives

President Obama believes every student should have an opportunity to excel in the science, technology, engineering, and mathematics (STEM) fields. The President has challenged us to promote creative ways to engage young people in the STEM fields including through science festivals, robotics competitions, job shadowing, and mentoring to encourage young people to create, build, and invent -- to be makers of things, not just consumers of things. See the President's remarks at www.whitehouse.gov/the_press_office/Remarks-by-the-President-at-the-National-Academy-of-Sciences-Annual-Meeting/.

Specifically, the President has called on the more than 200,000 Federal scientists and engineers to identify and pursue STEM-related volunteer activities in their communities, with an emphasis on broadly inclusive activities that draw from all segments of society, including women and girls.

Through direct involvement in their local communities, Federal employees help build a STEM talent pipeline for future recruitment into Federal service. I encourage and support continuing this proud tradition.

STEM is a functional area included in the U.S. Office of Personnel Management's (OPM's) skills gap closure initiative, one of the Federal Government's Cross Agency Priority Goals identified on www.performance.gov. All Federal agencies are responsible for participating in Governmentwide strategies to close skills gaps. OPM is partnering with the White House, Office of Science Technology and Policy (OSTP), and the Chief Human Capital Officers Council to develop a strategy to address STEM skills gaps in the Federal workforce.

As part of the OPM's continuing efforts to recruit top talent across all workforce populations, we are encouraging Federal agencies to permit employees who work in STEM careers to use existing human resources (HR) workplace flexibilities to participate in STEM related activities. Each agency should review the extent to which alternative work schedules are authorized and used as well as the policies and practices for granting employees annual leave, leave without pay, credit hours under flexible work schedules, and compensatory time off, as appropriate, to perform STEM-related volunteer service. Agencies may also wish to consider granting a limited



Participation in STEM Activities & Initiatives

1 message

Dr. Jane Lubchenco <announcement@noaa.gov>

Tue, Sep 18, 2012 at 12:06 PM



September 18, 2012

To NOAA employees,

With the start of the school year, I encourage you to find creative ways to engage, educate and inspire young people in science, technology, engineering, and mathematics (STEM) fields. I believe that students from all segments of society should have the opportunity to excel in STEM fields. We need your help to make this dream a reality.

Through science competitions, engineering festivals, job shadowing, and mentoring you can encourage young people to explore, investigate and learn. Here are some opportunities NOAA supports that need more volunteers:

- Science fairs need scientists and other volunteers. To find one near you go to http://apps.societyforscience.org/find_a_fair/
- Aquariums, zoos and science centers are great places to volunteer. For a location near you go to <http://www.aza.org/findzooaquarium/> and <http://www.astc.org/sciencecenters/find.php>
- Serve as a coach or a judge in support of a regional or national Ocean Sciences Bowl, <http://www.nosb.org/>.
- Support the Science Olympiad <http://www.soinc.org/> build STEM talent. For the first time this year, NOAA is sponsoring the Science Olympiad meteorology event, so it would particularly helpful to have meteorologists volunteer for this effort.
- Participate in a science festival such as a Sally Ride Science Festival <https://www.sallyridescience.com/festivals> or the USA Science and Engineering Festival www.usasciencefestival.org/.
- Host a NOAA open house, give a career day talk at a local school, or participate in the annual "Take our Daughters and Sons to Work Day" <http://www.daughtersandsonstowork.org/wmspage.cfm?parm1=936>.

I encourage supervisors to work with employees to leverage existing human resources (HR) workplace flexibilities to participate in STEM-related activities. For more information about these workplace flexibilities go to <http://www.wfm.noaa.gov/> or contact your human resources specialist. For more information about NOAA's education opportunities go to <http://www.education.noaa.gov> or contact education@noaa.gov.

Sincerely,

Dr. Jane