CEO Updates is a bi-weekly newsletter designed to inform and engage the Berkeley STEM education and outreach (E&O) community and our off-campus partners. Please scroll to the end of this message for more information about CEO.

A note to subscribers of the CEO elist: CEO surveys our members each summer to learn how we can better meet your needs. As a subscriber to the CEO elist and newsletter, we hope you will take a few minutes to complete our 2015 CEO Member survey. Please click here to begin the survey. Survey responses are needed by June 15. Your feedback is valued and much appreciated!

Tools & resources

Foundation Landscapes: Education is a new online portal that serves as a hub of information about education philanthropy. This website draws dynamically from a variety of Foundation Center information resources to provide a central, comprehensive source for the most current education-related reports, news, case studies, giving trends, funding data, and other digital content.

New NSF Communication ‘Toolkit’ This new interactive resource available through NSF’s website will help NSF-funded principal investigators and their institutional public information officers better understand the process for creating communications tools, such as videos and feature stories, so that NSF can more effectively communicate the science it funds. This user-friendly resource is essentially a decision tree that shows examples of all of NSF’s Office of Legislative and Public Affairs (OLPA) capabilities.

Technical Assistance for Expanded Learning Opportunities in California is a new report by the After School Division (ASD) of the California Department of Education in collaboration with Public Profit. It provides high-level information about the availability of technical assistance (TA) by region, strategy, and links to quality standards for expanded learning in after-school settings. Regional Profiles provide at-a-glance information about providers in each of California's 11 regions. California is a national leader in Expanded Learning, both for the breadth of its publicly funded Expanded Learning programs and for its growing focus on quality. The ASD is further enhancing its supports for program quality through the System of Support, including funding for TA.

Equity in Out-of-School STEM Learning: Professional Development Needs and Strategies, A Research + Practice Collaboratory —How can professional learning for out-of-school staff be organized to promote equity in STEM learning? This is the question a group of out-of-school educators and educational researchers gathered to discuss at the Exploratorium in January 2015. The meeting was sponsored by the Research + Practice Collaboratory, an NSF-funded project that develops and tests new models for integrating research and practice perspectives for the improvement of science and mathematics education. Four big ideas for supporting equity-oriented facilitation emerged from the group's discussions: (1) Seeing, hearing, and honoring, (2) Reflecting on teaching, learning, and equity, (3) Adopting asset-based approaches to staff development, and (4) Foregrounding equity to shape program activities. “(hub.mspnet.net, March 2015.)

New and noteworthy

Higher education leader Nancy Cantor calls on higher ed to renew its public service mission Speaking on May 29 on Stanford’s campus, Nancy Cantor urged both public and private colleges and universities to engage with their communities in meaningful ways. Cantor asserted that faculty and administrators in higher education should step up as “anchor institutions” that collaborate with private and public enterprises and organizations to strengthen the immediate economy as well as the social mobility of local residents of all ethnicities and economic backgrounds. Cantor said, “Not only do we have to learn how to listen and to partner, but we also must support
and reward this collaborative, long-term work, the success of which may be hard to monetize and evaluate. Yet, that is what it will take to change the map of inequality and opportunity.” Referencing a study by CEOs for Cities, a nonprofit in Chicago, Cantor said, “Across the 51 largest metro regions in the U.S., a 1 percent increase in post-secondary attainment rates of residents would translate into $154 billion in annual aggregate income across those regions.” (News.Stanford.edu, 5/29/15.)

A Scientist's Guide to Achieving Broader Impacts through K–12 STEM Collaboration—The NSF and other agencies are increasingly requiring broader impacts in grant applications to encourage US scientists to contribute to science education and society. Concurrently, national science education standards are using more inquiry-based learning (IBL) to increase students' capacity for abstract, conceptual thinking applicable to real-world problems. Scientists are particularly well suited to engage in broader impacts via science inquiry outreach, because scientific research is inherently an inquiry-based process. We provide a practical guide to help scientists overcome obstacles that inhibit their engagement in K–12 IBL outreach. Strategies to overcome these challenges include scaling outreach projects to the time available, building collaborations in which scientists’ research overlaps with curriculum, employing backward planning to target specific learning objectives, encouraging scientists to share their passion, as well as their expertise with students, and transforming institutional incentives to support scientists engaging in educational outreach. (Komoroske L, Hameed S, Szoboszlai A, Newsom A, and Williams S, 2015, Bioscience.)

Changing How High Schools Serve Black and Latino Young Men: A Report on New York City's Expanded Success Initiative — Since 2011, New York City's Young Men's Initiative (YMI) has been at the forefront of efforts to address disparities in education, employment, health, and criminal justice. YMI's Expanded Success Initiative (ESI), focuses on the issue of low college readiness among Black and Latino male students, a problem that has persisted in NYC even as high school graduation rates have risen. ESI is providing funding and professional development to 40 NYC high schools, aimed at helping them improve outcomes, particularly college and career readiness, among their Black and Latino male students. (Research Alliance for New York City Schools, 2015.)

An app that predicts GPA In a small experiment, researchers at Dartmouth College have shown that data automatically collected by an Android app can guess how students are spending their time — predicting their end-of-term grades with scary accuracy. (NPR, 6/2/15.)

Non-academic skills are key to success, but what should we call them? What should we call the non-academic skills that are so important to a student's success? (NPR, 5/28/15.)

The Role of Digital Technologies in Deeper Learning, To compete in today's global, knowledge-based, innovation-centered economy, young people must go beyond a high school diploma and acquire not just academic knowledge, but interpersonal and interpersonal capacities. That is, they must engage in deeper learning. As schools shift away from traditional education models in favor or providing deeper learning environments, they are required to replace their outdated technology practices and implement a new infrastructure to support student learning. This report explores how partnering deeper learning strategies with effective technology designs allows for greater educational success. (Christ Dede, Harvard University, Jobs For The Future, December 2014.)

About CEO

The Coalition for Education & Outreach (CEO) is self-formed group of staff, faculty, postdocs, and students on the Berkeley campus and surrounding community who work in science, technology, engineering and math education and outreach (E&O). During the academic year (Oct-May), we hold monthly meetings to further professional development, networking, and information exchange among members of our community. Click here to subscribe/unsubscribe to the CEO e-list and newsletter. For more information, contact Kate Spohr or Dan Zevin.