# **Cross Agency Priority Goal Quarterly Progress Update**

### STEM Education

Goal leaders:

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National Science Foundation, Education and Human Resources



FY2016 Quarter 4

### Overview

#### **Goal Statement**

Improve science, technology, engineering, and mathematics (STEM) education by implementing <u>The Federal STEM</u> <u>Education 5-Year Strategic Plan</u> announced in May 2013, and specifically seek to:

- improve STEM instruction;
- increase and sustain youth and public engagement in STEM;
- enhance STEM experience of undergraduate students;
- better serve groups historically under-represented in STEM fields;
- design graduate education for tomorrow's STEM workforce;
- · build new models for leveraging assets and expertise; and
- build and use evidence-based approaches.

#### **Urgency**

- Advances in STEM have long been central to our nation's economy, security, and ability to preserve the health of
  its people and the environment; as well as enhancing U.S. students' engagement and success in STEM disciplines
  that is essential for the U.S. to maintain its preeminent position in the world.
- We have considerable progress to make given that our K-12 system ranks "middle of the pack" in international comparisons.
- Meeting the growing demand for STEM expertise and competency is important to the economy and our democracy.
- Increasing opportunities in STEM for more Americans is critical to building a just and inclusive society.

#### Vision

• The Federal STEM Education 5-Year Strategic Plan sets out ambitious national goals to drive federal investment in five priority STEM education areas toward which significant progress will require improved coherence and coordination across federal agencies having STEM assets, expertise and STEM education resources.

## **Progress Update: FY16 Quarter 4 Highlights**

- 1. On August 15-16, 2016, the third annual National Science Foundation (NSF) Tribal Colleges and Universities Program/National Institute of Food and Agriculture 1994 Land Grant Act (TCUP/1994) Research Symposium was held at NSF's headquarters. The event included 40 faculty and students from tribal colleges who presented 21 posters and 13 sessions on a variety of STEM research topics including computer science, engineering, marine science, botany, biology, and environmental science.
- 2. On August 24, 2016, members from the Graduate Education Interagency Working Group (IWG) organized a webinar entitled "How to Successfully Apply for Federal Fellowships" as part of the Federal STEM Graduate Seminar Series. This IWG is under the auspices of Federal Coordination in STEM Education (FC-STEM) Subcommittee. Speakers included Pam Hudson-Veenbaas (Smithsonian Institution (SI)), Carolyn Knowles (National Aeronautics and Space Administration (NASA)), Kay Lund (National Institutes of Health (NIH)), and Gisele Muller-Parker (NSF). Approximately 470 participants joined the webinar and there were 266 responses to the postwebinar survey. Overall, the response to the webinar was positive and participants indicated that they were likely to attend a similar event in the future. Most of the participants (nearly 80%) were graduate students, and about 10% identified as postdoctoral fellows. In addition, approximately half of the participants were current recipients of federal support for their graduate studies.
- 3. On August 23, 2016, the Computer Science for All (CS for All) Interagency Working Group (IWG) charter was signed into effect. This IWG is under the auspices of the Federal Coordination in STEM Education (FC-STEM) Subcommittee. On September 8, 2016, the inaugural meeting was held. The CS for All IWG represents the interests of more than a dozen federal departments, agencies, and offices. The working group aids in coordinating investments, activities, and partnerships among the federal government and local school districts, higher education, community organizations, non-profits, and the private sector. This coordinated approach will accelerate the vision of CS for All, empowering all American students to learn computer science and the computational thinking skills necessary for the 21st-century digital society.
- 4. In September, 2016, NSF announced a recent update to its broadening participation initiative and the Department of Energy (DoE) announced a new initiative supporting broadening participation. On September 12, NSF's INCLUDES (Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science) initiative awarded 37 launch pilots to improve access to STEM education and career pathways at the national scale, making them more widely inclusive to underserved populations. On September 22, DoE had their "OneDOE kickoff." OneDOE will help renew the DoE focus on diversity and inclusion within their community. This is part of a broader commitment from senior leadership at the Department, and a strategic effort is being made to institutionalize best practices and policies that will last beyond any one administration.

## **Progress Update: FY16 Quarter 4 Highlights**

- 6. On September 7, 2016, PAEMST award recipients and members of the K-12 education research community participated in NSF's <a href="Symposium on Active Learning in STEM Education">Symposium on Active Learning in STEM Education</a>, where awardees heard from national experts on active learning as well as OSTP Associate Director for Science Dr. Jo Handelsman. Dr. Handelsman also announced that day a nationwide <a href="Active Learning Day to be">Active Learning Day to be</a> held on October 25 (as a follow up to OSTP's Call to Action on Active Learning).
- 7. On September 8, NSF and OSTP convened leaders in K-12 education to discuss and share knowledge about key components for effective STEM high schools of the 21st century at the <a href="Next Generation STEM High School Forum">Next Generation STEM High School Forum</a>. Featured speakers included OSTP Deputy Director for Policy Tom Kalil. The following Monday, on September 12, OSTP and the Department of Education convened the second annual Summit on Next Generation High Schools. A <a href="report">report</a> of the convening on September 8 was provided by NSF's Assistant Director of Education and Human Resources Dr. Joan Ferrini-Mundy.
- 8. On September 14, 2016, the White House Summit on Computer Science for All was held and the White House Office of the Press Secretary released the Fact Sheet: New Progress and Momentum in Support of President Obama's Computer Science for All Initiative. The event highlighted the progress since the launch of the initiative in January 2016 and celebrated new commitments including more than \$25 million in new grants awarded by NSF to expand computer science education; the formation of the CS for All Consortium; and the commitments of more than 200 organizations participating in the initiative.

## **Progress Update: FY16 Quarter 4 Highlights**

9. On September 19, 2016, NSF's Division of Graduate Education held an Open House, with presentations by two panels focusing on high-impact EHR-funded research and alternative careers in STEM. The event was open to the public, with on-site and remote attendees from agencies such as NIH, DoE, National Oceanic and Atmospheric Administration, and Office of Management and Budget; from organizations such as Council for Graduate Schools, Social Science Research Council, Fellowship Roundtable, American Statistical Organization, and National Academy of Sciences; and from local universities, NSF's EHR Directorate, and other NSF directorates. In the first panel, *The Big Picture: Challenges and Opportunities in Graduate Education*, six distinguished, awardwinning researchers from universities across the country presented their findings and perspectives on graduate education. The second panel, entitled *There is no "Typical" in T: from Ph.D. to STEM Leader*, was comprised of six early- and mid-career individuals who are all successfully pursuing diverse non-academic careers. They discussed how NSF funding contributed to their professional development, as well as how their professional development experiences have made their careers possible.

## **Action Plan Summary**

	Sub-Goals	Major Strategies to Achieve Impact See Page 18 for STEM Education CAP Goal Indicators
1.	Improve STEM instruction	<ul> <li>Support teacher preparation efforts that encourage use of evidence-based STEM learning opportunities</li> <li>Increase and improve authentic STEM experiences for teachers</li> </ul>
2.	Increase and sustain youth and public engagement in STEM	<ul> <li>Provide access to scientific and engineering assets of the Federal Government</li> <li>Integrate STEM into school-readiness and after-school programs</li> <li>Improve empirical understanding of how authentic STEM experiences influence learning or interest</li> </ul>
3.	Enhance STEM experience of undergraduate students	<ul> <li>Implement evidence-based instructional practices</li> <li>Improve STEM education in 2-year colleges for both A.S. degree programs and transfer programs to the 4-yr level</li> <li>Support the development of university-industry partnerships to provide relevant and authentic experiences</li> <li>Address high failure rates in introductory undergraduate mathematics</li> </ul>
4.	Better serve groups historically under- represented in STEM fields	<ul> <li>Anticipate education challenges/opportunities in the Nation's changing demographics</li> <li>Focus investments on developing and testing strategies for improving preparation for higher education</li> <li>Invest in efforts to create campus climates that are effective in improving success for students from underrepresented groups</li> </ul>
5.	Design graduate education for tomorrow's STEM workforce	<ul> <li>Recognize and provide financial support to students of high potential</li> <li>Provide opportunities for fellows' preparation in areas critical to the Nation</li> <li>Combine and enhance mechanisms that evaluate the impact of fellowships to inform future federal investments</li> </ul>
6.	Build new models for leveraging assets and expertise	<ul> <li>Collaborate to build implementation roadmaps in the goal areas</li> <li>Reduce administrative barriers to collaboration</li> <li>Develop a framework to guide coordinated CoSTEM agency budget requests</li> </ul>
7.	Build and use evidence- based approaches	<ul> <li>Support syntheses of existing research on critical issues in STEM priority areas</li> <li>Improve and align evaluation and research strategies across federal agencies</li> <li>Streamline processes for interagency collaboration</li> </ul>
8.	Provide access to rigorous and engaging computer science education	<ul> <li>Facilitate the preparation and support of a sufficient number of educators, and expand the pool of educators, to deliver rigorous, engaging computer science education</li> <li>Support the CS education ecosystem</li> <li>Foster and create a culture of equity and inclusion</li> <li>Amplify, feed, and support the national CS for All movement</li> </ul>

### STEM Education Goal Team and Governance Plan

## National Science Technology Council Committee of STEM Education (CoSTEM)

Co-Chairs: France A. Córdova (NSF) and Jo Handelsman (OSTP)

Oversight and Project Management of Federal Coordination in STEM Education (FC-STEM)

Co-Chairs: Joan Ferrini-Mundy (NSF) and Donald James (NASA)

Oversight and Project Management of Cross Agency Priority (CAP) Goal on STEM Education

Goal Leaders: Joan Ferrini-Mundy (NSF) and Jo Handelsman (OSTP) Deputy Goal Leaders: NSF and OSTP

IWG:

Below are the **7 FC-STEM Interagency Working Groups (IWGs)**, who report their activities quarterly to FC-STEM through the CAP Goal Report.

NSF

IWG:
P-12 STEM
Instruction
(CAP SubGoal
1)
Co-Leads:
• ED

NSF

IWG:
Engagement
(CAP SubGoal
2)

Co-Leads:
NASA
Smithsonian

IWG:
Undergraduate
STEM
Education
(CAP SubGoal
3)
Co-Leads:

IWG:
Broadening
Participation
(CAP SubGoal
4)

Co-Leads:
HHS (NIH)

LWG:
Graduate
Education
(CAP SubGoal
5)

Co-Leads:
HHS (NIH)

raduate<br/>ducationCoordination<br/>ObjectivesP SubGoal<br/>5)(CAP SubGoals<br/>6 and 7)D-Leads:<br/>HHS (NIH)Lead:<br/>• FC-STEM

IWG:
Computer
Science for All
(CAP SubGoal
8)
Co-Leads:
• ED
• NSF

OSTP

## Work Plan Sub-goal 1: Improve STEM Instruction

#### **Strategic Objectives**

- Support teacher preparation efforts that encourage use of evidence-based STEM learning opportunities
- Increase and improve authentic STEM experiences for teachers

#### **Barriers/Challenges**

- \*Milestone broken into three separate milestones to reflect three separate deliverables. Date for PPT revised to 10/2016. Date for one pager revised to 12/2016. Date for science.gov repository revised to 1/2017
- \*\*Date moved to 12/2016 allowing additional time for incoming working sub-group members to complete task.

Key Milestones (Co-Leads: Department of Education/NSF)	Milestone Due Date	Milestone Status	Owner
Compile information about federal resources for P-12 STEM teachers and programs that support P-12 STEM teachers in an online repository on science.gov.	9/2016*	Missed	IWG P-12
Compile information about federal resources for P-12 STEM teachers in an one-pager at STEM education conferences and events and for distribution to P-12 STEM educators.	9/2016*	Missed	IWG P-12
Compile information about federal resources for P-12 STEM teachers in a PowerPoint (PPT) presentation for use at STEM education conferences and events and for distribution to P-12 STEM educators.	9/2016*	Missed	IWG P-12
Utilizing federal resources curated by the P-12 IWG (existing literature and research), develop a set of recommendations for evaluating professional development for STEM teachers	10/2016**	On Track	IWG P-12
Collect information on successful inter-agency collaborations that have made an impact on educators and share these examples	09/2016	Complete	IWG P-12
Develop materials to conduct a webinar for STEM teachers on federal professional development and funding opportunities	09/2016	Complete	IWG P-12
Finalize FY17 outcomes, activities, and milestones	10/2016	On Track	IWG P-12

## Work Plan Sub-goal 1: Improve STEM Instruction

Key Milestones (Co-Leads: Department of Education/NSF)	Milestone Due Date	Milestone Status	Owner
Identify effective practices across agencies used to disseminate and communicate federal opportunities to STEM teachers and share and/develop communication resources	01/2017	On Track	IWG P-12
Explore a partnership with an external P-12 group to reach a wider group of STEM educators with federal tools and resources	03/2017	Not Started	IWG P-12
Explore partnerships with the Undergraduate and Graduate IWGs to support building the supply of P-12 STEM educators	09/2017	Not Started	IWG P-12
Host webinar for P-12 educators to highlight resources and professional development opportunities from federal agencies	11/2017	On Track	IWG P-12

## Work Plan Sub-goal 2: Engagement in STEM Education

#### **Strategic Objectives**

- Access to scientific and engineering assets of the Federal Government
- Integration of STEM into school readiness and after-school programs
- Empirical understanding of how STEM experiences influence learning or interest

#### **Barriers/Challenges**

\*Missed. Revising milestone deadline to 12/2016.

Key Milestones (Co-Leads: NASA/SI)	Milestone Due Date	Milestone Status	Owner
Identify evaluation approaches used to effectively study the impact of engagement	12/2016	On Track	IWG Engagement
Investigate available metrics from existing data sources on student engagement in formal and informal settings (and investigate existing surveys where we might add new questions) that could indicate a baseline regarding the number of U.S. youth who participate in an authentic STEM experience (e.g. NAEP for in-school metrics)	8/2016*	Missed	IWG Engagement
Develop and prioritize activities and correlate milestones for FY16 to the end of FY17.	10/2016	On Track	IWG Engagement

## Work Plan Sub-goal 3: Undergraduate STEM Education

#### **Strategic Objectives**

- Implement evidence-based instructional practices
- Improve STEM education in 2-year colleges for both A.S. degree programs and transfer programs to 4-yr level
- Support the development of university-industry partnerships to provide relevant and authentic experiences
- Address high failure rates in introductory undergraduate mathematics

#### **Barriers/Challenges**

• No barriers/challenges to report FY16 Q4.

Key Milestones (Co-Leads: DoE/NSF)	Milestone Due Date	Milestone Status	Owner
After the exchange summit, release summit products (meeting report, video clips, and graphic recording).	12/2016	On Track	IWG Undergrad
Develop community engagement plan for widespread uptake of the resources generated by the knowledge exchange activity.	12/2016	On Track	IWG Undergrad
Include item on undergraduate mathematics instruction in National Center for Education Statistics (NCES) 2009 High School Longitudinal Survey (HSLS) – Step 2 of 3- Survey data collected from HSLS	12/2016	On Track	IWG Undergrad
Include item on undergraduate mathematics instruction in National Center for Education Statistics (NCES) 2009 High School Longitudinal Survey (HSLS) – Step 3 of 3- Survey results available	12/2017	On Track	IWG Undergrad
Release Undergraduate STEM Research Playbook	12/2016	On Track	IWG Undergrad

# Work Plan Sub-goal 4: Broadening Participation in STEM Fields

#### **Strategic Objectives**

- Anticipate education challenges/opportunities in the Nation's changing demographics
- Invest in efforts to create campus climates that are effective in improving success for students from underrepresented groups

#### **Barriers/Challenges**

 Capacity for the IWG to meaningfully engage multiple tasks at once; recruitment efforts are underway to build team capacity and improve ability to multi-task. Currently, most capacity has been prioritized around the convening of campus leadership. As such, one of the milestones will be removed.

Key Milestones (Co-Leads: NIH/NSF)	Milestone Due Date	Milestone Status	Owner
Design a convening of campus leadership via cross-agency coordination to obtain buy-in for effective approaches to inclusion that could create a campus climate where students are likely to succeed	7/2016	Complete	IWG BP
Agencies identify and begin implementation of modifications to existing program portfolio to address gaps to provide more opportunities for students from groups under-represented in STEM	12/2016	On Track	IWG BP
Ideas proposed to maximize the impact of the federal investment with a timeline for agency adoption	12/2016	On Track	IWG BP
Establish a protocol to receive feedback from targeted audiences on federally funded programs with broadening participation in STEM education opportunities	9/2016		IWG BP
Work with the Graduate Education IWG on a goal related to identifying best practices for defining and measuring diversity and broadening participation in graduate education	9/2017	On Track	IWG BP
Working with UG and Grad IWGs, develop a cross-agency effort to eliminate bias in federally-funded higher education institutions as a strategy for enhancing inclusion and eliminating isolation. Fund interventions for evidence-based strategies for enhancing inclusion and eliminating isolation resulting from campus climate	9/2017	Not Started	IWG BP

# Work Plan Sub-goal 4: Broadening Participation in STEM Fields

Key Milestones (Co-Leads: NIH/NSF)	Milestone Due Date	Milestone Status	Owner
Work with the UG and Grad IWGs to steer the implementation of a convening of campus leadership in support of an "Initiative to promote supportive and	9/2017	On Track	IWG BP
inclusive campus climates in science, technology, engineering, and math (STEM) fields" by the designated contractor.			

## Work Plan Sub-goal 5: Graduate STEM Education

#### **Strategic Objectives**

- Recognize and provide financial support to students of high potential
- Provide opportunities for fellows' preparation in areas critical to the nation
- Combine and enhance mechanisms that evaluate the impact of fellowships to inform future federal investments

#### **Barriers/Challenges**

No barriers/challenges to report FY16 Q4.

Key Milestones (Co-Leads: NIH/NSF)	Milestone Due Date	Milestone Status	Owner
Based on the discussions with the NCSES, determine if information about federally- funded teaching assistantships should continue to be collected on the survey	09/2016	Complete	IWG Grad
Explore the inclusion of additional resources for the portal	09/2016	Complete	IWG Grad
Work with the Undergraduate IWG to explore expanding GRIP to undergraduate students supported by NSF's S-STEM program	12/2016	On Track	IWG UG and IWG Grad
Enlist stakeholders such as NAS and CGS to examine the evidence base for the reform of graduate education	12/2016	On Track	IWG Grad
Explore the use of individual development plans (IDPs) by graduate students funded through different mechanisms and agencies	12/2017	On Track	IWG Grad
Programmatic evaluation of GRIP	12/2017	On Track	IWG Grad
Continue discussions with programs/initiatives designed to provide graduate students a broad range of professional skills and expose them to a variety of potential careers in order to (a) learn about which strategies/approaches are most effective, and (b) explore opportunities for federally-funded graduate programs to adopt effective strategies for broadening graduate education	12/2017	On Track	IWG Grad

## Work Plan Sub-goal 6 and 7: Coordination Objectives

#### **Strategic Objectives**

Build new models for leveraging assets and expertise.

- Collaborate to build implementation roadmaps in the goal areas
- Reduce administrative barriers to collaboration
- Develop a framework to guide coordinated CoSTEM agency budget requests Build and use evidence based approaches.
- Support syntheses of existing research on critical issues in STEM priority areas
- Improve and align evaluation and research strategies across federal agencies
- Streamline processes for interagency collaboration

#### **Barriers/Challenges**

No barriers/challenges to report FY16 Q4.

Key Milestones (Lead: FC-STEM)	Milestone Due Date	Milestone Status	Owner
Continued analysis of the 14 participating federal agencies' FY17 and FY16 STEM education budgets as compared to FY11's	12/2016	On Track	FC-STEM
Develop a collaborative tool that provides live information to the federal agencies involved in STEM education about federal STEM education programs and activities	12/2017	On Track	FC-STEM
Create a synthesis of promising practices for the use in designing and revision of federal STEM education programs	12/2017	On Track	FC-STEM

## Work Plan Sub-goal 8: Computer Science for All (CS for All)

#### **Strategic Objectives**

- Facilitate the preparation and support of a sufficient number of educators, and expand the pool of educators, to deliver rigorous, engaging computer science education
- Support CS education ecosystem
- Foster and create a culture of equity and inclusion
- Amplify, feed, and support the national CS for All movement

#### **Barriers/Challenges**

 As a newly established interagency working group, the group is beginning the process to establish a strategic framework to guide their work going forward.

Key Milestones (Co-Leads: Department of Education/NSF)	Milestone Due Date	Milestone Status	Owner
Identify agency involvement in the CS for All IWG and conduct inaugural meeting to begin interagency coordination around the CS for All initiative.	09/2016	Complete	IWG CS for All
Computer Science Education Week: Determine the agencies that will be able to participate in CS Education Week	10/2016	On Track	IWG CS for All
Computer Science Education Week: Identify cross-government activities to occur during this week to further the work of this IWG.	11/2016	On Track	IWG CS for All
Computer Science Education Week: Develop a social media campaign for agencies to implement	12/2016	On Track	IWG CS for All
IWG Strategic Framework: Establish IWG goals, objectives, strategies, milestones and metrics to build out the IWG Strategic Framework	10/2016	On Track	IWG CS for All
IWG Strategic Framework: Develop a DRAFT Strategic Framework to present to FC-STEM for approval	11/2016	On Track	IWG CS for All

## Work Plan Sub-goal 8: Computer Science for ALL (CS for ALL)

Key Milestones (Co-Leads: Department of Education/NSF)	Milestone Due Date	Milestone Status	Owner
IWG Strategic Framework: Receive FC-STEM/CoSTEM Approval of Strategic Framework	12/2016	On Track	IWG CS for All
"Year of Action:" Plan and execute a "Year of Action" to coordinate and amplify computer science education opportunities enabled by the activities of participating federal agencies in calendar year 2017	12/2017	On Track	IWG CS for All

## **STEM Education Key Indicators**

Key Implementation Data								
Indicator	Source	Baseline Data	Date Baseline Set	Target/Trend	Reporting Frequency	Most Recent Data	Most Recent Date	Most Recent Trend
Percentage of high school mathematics and science teachers who hold degrees in their teaching field or in science or mathematics education	<u>S&amp;EI 2014</u>	73% and 82%	2012	1	Biannually but based on variable survey	n/a	2012	n/a
Number of STEM bachelor's degrees earned annually	<u>S&amp;EI 2016</u>	554,365	2011	1	Biannually	615,475	2013	11% Increase
Number of STEM Certificates earned annually	NCES, IPEDS	60,887	2013	1	Biannually	n/a	2013	n/a
Number of STEM Associate's Degrees earned annually	NCES, IPEDS	88,795	2013	t	Biannually	n/a	2013	n/a
How many undergraduate students enroll in 4-yr institutions?	<u>S&amp;EI 2016</u>	18,299,791	2011	Stable	Biannually	17,700,719	2013	3% Decrease
What is the retention rate in U.S. 4-yr institutions?	<u>S&amp;EI 2012</u>	57.8%	2011	t	Biannually	n/a	2011	n/a
Percentage of STEM degrees earned by								
Women?	<u>S&amp;EI 2016</u>	50.3%	2011	<b>†</b>	Biannually	50.3%	2013	No Change
Racial and Ethnic Minorities?	<u>S&amp;EI 2016</u>	35%	2011	1	Biannually	36%	2012	1% Increase
Number of associate's degrees earned annually in computer science	<u>S&amp;EI 2016</u>	37,675	2011	1	Biannually	38,897	2013	3% Increase
Number of associate's degrees earned annually in engineering	<u>S&amp;EI 2016</u>	2,994	2011	t	Biannually	3,871	2013	29% Increase
Number of bachelor's degrees earned annually in computer science	<u>S&amp;EI 2016</u>	43,586	2011	t	Biannually	51,586	2013	18% Increase
Number of bachelor's degrees earned annually in engineering	<u>S&amp;EI 2016</u>	78,099	2011	1	Biannually	87,812	2013	12% Increase

## **STEM Education Key Indicators**

Key Implementation Data								
Indicator	Source	Baseline Data	Date Baseline Set	Target Trend	Reporting Frequency	Most Recent Data		t Most Recent Trend
Number of views of the <u>Reaching</u> <u>Students</u> webinar.	NAS, NRC, BOSE	114	June 2015	1% <b>1</b> Annual	Quarterly	129	3/31/16	7% Increase/ Target Met
Number of times <u>Reaching Students</u> has been downloaded.	NAS, NRC, BOSE	16,512	January 2015	1% <b>†</b> Annual	Quarterly	22,023	6/30/16	5% Increase/ Target Met
Number of international venues in which <u>Reaching Students</u> has been downloaded	NAS, NRC, BOSE	149	January 2015	1% <b>†</b> Annual	Quarterly	153	3/31/16	3% Increase/ Target Met
Percent of downloads of Reaching Students which are international	NAS, NRC, BOSE	33%	April 2016	1% <b>†</b> Annual	Quarterly	37%	6/30/16	4% Increase/ Target Met
Number of Unique Participants for the Graduate Education IWG Seminar Series	WebEx	60	April 2016	100 Annual	Quarterly	530	August 2016	780% Increase
Number of participants for GRIP outreach webinars	Webinar provider	279	April 2016	500 Annual	Quarterly	279	September 2016	No Change
Number of GRIP applicants	National Science Foundation Records	41	FY 2015	25% <b>†</b> Annually	Annually	54	FY 2016	32% Increase/ Target Met

## **Contributing Organizations**

- Department of Agriculture (USDA)
- Department of Commerce (DOC)
- · Department of Defense (DOD)
- · Department of Education (ED)
- Department of Energy (DOE)
- Department of Health and Human Services (HHS)
- Department of Homeland Security (DHS)
- Department of the Interior (DOI)
- Department of Labor (DOL)
- Department of Transportation (DOT)
- Environmental Protection Agency (EPA)
- Smithsonian Institution (SI)
- National Science Foundation (NSF)
- · National Aeronautics and Space Administration (NASA)
- Office of Science and Technology Policy (OSTP)
- Office of Management and Budget (OMB)
- Domestic Policy Council (DPC)
- National Economic Council (NEC)
- Corporation for National and Community Service (CNCS)
- Institute of Museum and Library Services (IMLS)

## **Acronyms**

Acronym	Description
	Asian American Native American Pacific Islander Serving
AANAPISI	Institutions
BP	Broadening Participation
CAP	Cross Agency Priority
CCIC	Community College Innovation Challenge
CS for All	Computer Science for All
E.O.	Executive Order
ED	US Department of Education
FY	Fiscal Year
GRIP	Graduate Research Internship Program
	Survey of Graduate Students and Postdoctorates in
GSS	Science and Engineering
HSLS	High School Longitudinal Study
IHE	Institutes of Higher Education
IWG	Interagency Working Group
MOU	Memorandum of Understanding
MSI	Minority Serving Institutions
NAS	National Academies of Science
NASA	National Aeronautics and Space Administration
NCES	National Center for Education Statistics
NCSES	National Center for Science and Engineering Statistics

Acronym	Description
NIH	National Institutes of Health
NSB	National Science Board
NSF	National Science Foundation
OMB	Office of Management and Budget
OSTP	Office of Science and Technology Policy
P-12	Grades preschool through twelve
PIC	Performance Improvement Council
PPEC	Pacific Postsecondary Education Council
Q (Q1)	Quarter (1-4)
S&EI	NSB Science and Engineering Indicators Report
STEM	Science, Technology, Engineering and Mathematics
TCUP	Tribal Colleges and Universities Program
UG	Undergraduate
URM	Underrepresented Minorities
USDA	US Department of Agriculture