Attachment C1

**Graduate STEM Fellows in K-12 Education (GK-12)
Monitoring System**

Table of Contents

GK-12: Crosswalk – Awards Survey

Common Collection Categories	Staff and Project Participant [1]	Project Implementation [2]	Project Outputs[3]
Questions			
1. Award Information			
Award Status		X	
NSF Award ID		X	
Grantee Institution		X	
Award Title		X	
Award Start Date (Month, Day, Year)		X	
Award End Date (Month, Day, Year)		X	
Award Dollar Amount		X	
Annual Carryover Funds: 　Dollar amount of current year of GK-12 support that will be carried over 　Total dollar amount that will be carried over 　Dollar amount of participant support costs that will be carried over 　Dollar amount of stipends that will be carried over		X	
List the top three subdisciplines associated with your GK-12 project: 　Subdiscipline 1: _____ 　Subdiscipline 2: _____ 　Subdiscipline 3: _____		X	
Award URL		X	
2. Partnerships and Collaborations			
U.S. Academic Institution			
Institution Name	X		
City	X		
State	X		
Zip Code	X		
Non-U.S. Academic Institution			
Institution Name	X		
Country	X		
Non Academic Institution			
Institution Name	X		
Institution Type (mark all that apply) 　• Museum	X		

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[1] Elements of these characteristics include: Name, address, date of birth, gender, ethnicity, race, disability status, class, major, grade point average, yearly fellowship or stipend amount, and project role.

[2] Elements of these characteristics include: Sources and amount of funds, fellowships, scholarships, traineeships, partnerships, training, and research methods.

[3] Elements of these characteristics include: research findings, publications, presentations, degrees granted, and educational materials.

Common Collection Categories	Staff and Project Participant Characteristics	Characteristics	Project Outputs
Questions			
• Science Center • Industrial Partner • Business Partner • Government Agency • National Laboratory • Nonprofit Organization • Other			
3. Participating Schools In Your GK-12 Project			
K-12 School			
School Name	X		
School Level (select one) • Elementary (K–5/6) • Middle (6–8) • High school grades (9–12) • Pre-K/kindergarten through middle school (K–8) • Middle through high (7–12)	X		
State	X		
District Name	X		
School Setting/Location (select one) • Rural • Urban • Suburban	X		
School Type (mark all that apply) • Charter • Private • Public	X		
Percentage of students who are eligible for free or reduced price lunch (select one) • Not applicable • 1–10% • 11–20% • 21–30% • 31–40% • 41–50% • 51–60% • 61–70% • 71–80% • 81–90% • 91–100%	X		
4. Lead Principal Investigators and Co-Principal Investigator Information			
PI/Co-PI			

Common Collection Categories Questions	Staff and Project Participant ...	Project Implementation	Project Outputs

Name:
    Title
    First name
    Middle name
    Last name
    Suffix
	X		

☐ Lead PI	X		
Institutional affiliation (Name and State)			

Phone:
  Number
  Extension
	X		

Alternate Phone:
  Number
  Extension
  Type (mark one)
    • U.S. number
    • Non-U.S. number
	X		

E-mail Address	X		

Should the system e-mail a user ID and password to this participant?
  • Yes
  • No
		X	

Will this participant have authority to enter data?
  • Yes
  • No
		X	

Should this participant receive announcements and reminders that are sent to the project's lead PI from this system and from the Technical Support staff??
  • Yes
  • No
		X	

Title (e.g. Professor)		X	
Affiliation/Academic Department	X		
In what roles, functions, and activities does this PI/co-PI serve the project?		X	

Academic Disciplines (mark all that apply)
  • Chemistry – Analytical
  • …see footnote 4 for complete list[4]…
	X		

[4] Academic disciplines used throughout the GK-12 surveys:
- Chemistry – Analytical
- Chemistry – Bio-inorganic
- Chemistry – Bio-organic
- Chemistry – Biophysical
- Chemistry – Environmental
- Chemistry – Inorganic
- Chemistry – Materials
- Chemistry – Physical

Common Collection Categories	Staff and Project Participant ...	Project Implementation	Project Outputs
Questions			
• STEM Education and Learning Research – Other (please specify): _____ • Other (please specify): _____			

_____

- Chemistry – Polymer
- Chemistry – Theoretical
- Chemistry – Other (please specify):
- Comp/IS/Eng – Artificial Intelligence (including Robotics, Computer Vision, and Human Language Processing)
- Comp/IS/Eng – Computer Architecture and Grids
- Comp/IS/Eng – Computer Science – Languages and Systems
- Comp/IS/Eng – Computer Science – Theoretical Foundations
- Comp/IS/Eng – Database Information Retrieval and Web Search
- Comp/IS/Eng – Graphics and Visualization
- Comp/IS/Eng – Human Computer Interaction
- Comp/IS/Eng – Information Security and Assurance
- Comp/IS/Eng – Information Technology and Organizations
- Comp/IS/Eng – Networks and Communications
- Comp/IS/Eng – Operating Systems and Middleware
- Comp/IS/Eng – Scientific Computing and Informatics
- Comp/IS/Eng – Software Engineering
- Comp/IS/Eng – Other (please specify):
- Engineering – Aeronautical and Aerospace
- Engineering – Agricultural
- Engineering – Bioengineering
- Engineering – Biomedical
- Engineering – Chemical
- Engineering – Civil
- Engineering – Computer Engineering
- Engineering – Electrical and Electronic
- Engineering – Energy
- Engineering – Engineering Mechanics
- Engineering – Engineering Science
- Engineering – Environmental
- Engineering – Industrial
- Engineering – Materials
- Engineering – Mechanical
- Engineering – Metallurgical
- Engineering – Nuclear
- Engineering – Ocean
- Engineering – Petroleum
- Engineering – Polymer
- Engineering – Systems Engineering
- Engineering – Other (please specify):
- Geosciences – Aeronomy
- Geosciences – Atmospheric Chemistry
- Geosciences – Chemical Oceanography
- Geosciences – Climate Dynamics
- Geosciences – Geochemistry
- Geosciences – Geology
- Geosciences – Geophysics
- Geosciences – Hydrologic Sciences

Common Collection Categories	Staff and Project Participant ~	Project Implementation	Project Outputs
Questions			
Does this co-PI belong to any of the following categories for education faculty?	X		

- Geosciences – Large Scale Dynamics Meteorology
- Geosciences – Magnetospheric Physics
- Geosciences – Marine Geology and Geophysics
- Geosciences – Mesoscale Dynamic Meteorology
- Geosciences – Paleoclimate
- Geosciences – Paleontology
- Geosciences – Physical Meteorology
- Geosciences – Physical Oceanography
- Geosciences – Solar-Terrestrial
- Geosciences – Other (please specify):
- Life Sciences – Agriculture
- Life Sciences – Agronomy
- Life Sciences – Anatomy
- Life Sciences – Animal Behavior
- Life Sciences – Animal Science
- Life Sciences – Biochemistry
- Life Sciences – Biological Oceanography
- Life Sciences – Biophysics
- Life Sciences – Botany (including Plant Physiology)
- Life Sciences – Cell Biology
- Life Sciences – Computational Biology
- Life Sciences – Developmental Biology
- Life Sciences – Ecology
- Life Sciences – Ecosystem Ecology
- Life Sciences – Entomology
- Life Sciences – Environmental Sciences
- Life Sciences – Evolutionary Biology
- Life Sciences – Fish and Wildlife
- Life Sciences – Forestry
- Life Sciences – Genetics
- Life Sciences – Horticulture
- Life Sciences – Immunology
- Life Sciences – Marine Biology
- Life Sciences – Microbiology
- Life Sciences – Molecular Biology
- Life Sciences – Neurosciences
- Life Sciences – Nutrition
- Life Sciences – Pharmacology
- Life Sciences – Physiology
- Life Sciences – Plant Pathology
- Life Sciences – Population and Community Ecology
- Life Sciences – Soil Science
- Life Sciences – Structural Biology
- Life Sciences – Virology
- Life Sciences – Zoology
- Life Sciences – Other (please specify):
- Mathematical Sciences – Algebra or Number Theory

Common Collection Categories	Staff and Project Participant ...	Project Implementation	Project Outputs
Questions			
• Yes (mark all capacities that apply) • Education faculty in STEM department/college. For instance, she/he could			

- Mathematical Sciences – Analysis
- Mathematical Sciences – Applications of Mathematics (including Biometrics and Biostatistics)
- Mathematical Sciences – Geometry
- Mathematical Sciences – Logic or Foundations of Mathematics
- Mathematical Sciences – Operations Research
- Mathematical Sciences – Probability and Statistics
- Mathematical Sciences – Topology
- Mathematical Sciences – Other (please specify):
- Physics and Astronomy – Astronomy
- Physics and Astronomy – Astrophysics
- Physics and Astronomy – Atomic and Molecular
- Physics and Astronomy – Condensed Matter Physics
- Physics and Astronomy – Nuclear
- Physics and Astronomy – Optics
- Physics and Astronomy – Particle Physics
- Physics and Astronomy – Physics of Fluids
- Physics and Astronomy – Plasma
- Physics and Astronomy – Solid State
- Physics and Astronomy – Theoretical Physics
- Physics and Astronomy – Other (please specify):
- Psychology – Cognitive
- Psychology – Cognitive Neuroscience
- Psychology – Computational Psychology
- Psychology – Developmental
- Psychology – Experimental or Comparative
- Psychology – Industrial/Organizational
- Psychology – Neuropsychology
- Psychology – Perception and Psychophysics
- Psychology – Personality and Individual Differences
- Psychology – Physiological
- Psychology – Psycholinguistics
- Psychology – Quantitative
- Psychology – Social
- Psychology – Other (please specify):
- Social Sciences – Archaeology
- Social Sciences – Cliometric History
- Social Sciences – Communications
- Social Sciences – Cultural Anthropology
- Social Sciences – Decision Making
- Social Sciences – Demography
- Social Sciences – Econometrics
- Social Sciences – Economics (except Business Administration)
- Social Sciences – Geography
- Social Sciences – History of Science
- Social Sciences – International Relations
- Social Sciences – Law and Social Science
- Social Sciences – Linguistics Anthropology

Common Collection Categories	Staff and Project Participant	Project Implementation	Project Outputs
Questions			
be an education person who belongs to a Biology department; this person is responsible for biological education related matters that could be biological education research and/or teaching in the department. · Education faculty in the school or college of education · Education and outreach director in a STEM department, college, university and/or research centers · Other educational faculty (please specify): _____ • No			
Ethnicity (select one) • Not Hispanic or Latino • Hispanic or Latino • Not reported	X		
Race (Mark one or more) • American Indian or Alaska Native • Asian • Black or African American • Native Hawaiian or Pacific Islander • White • Not reported	X		
Gender (select one) • Female • Male • Not reported	X		

Disability: (Select one)
• Yes (Mark "yes" if any of the following apply:
  • Deaf or serious difficulty hearing
  • Blind or serious difficulty seeing even when wearing glasses
  • Serious difficulty walking or climbing stairs
  • Other serious disability related to a physical, mental, or emotional condition)
• No
	X		

- Social Sciences – Linguistics
- Social Sciences – Medical Anthropology
- Social Sciences – Philosophy of Science
- Social Sciences – Physical Anthropology
- Social Sciences – Political Science
- Social Sciences – Public Policy
- Social Sciences – Risk Analysis
- Social Sciences – Science Policy
- Social Sciences – Sociology (except Social Work)
- Social Sciences – Urban and Regional Planning
- Social Sciences – Other (please specify):
- STEM Education and Learning Research – Engineering Education
- STEM Education and Learning Research – Mathematics Education
- STEM Education and Learning Research – Science Education
- STEM Education and Learning Research – Technology Education
- STEM Education and Learning Research – Other (please specify):
- Other (please specify):

Common Collection Categories	Staff and Project Participant	Project Implementation	Project Outputs
Questions			
• Do not wish to provide			
5. Project Coordinator Information			
☐ Mark the box if your project does not have a coordinator and skip the other questions in this section		X	
Project Coordinator			

Name:
    Title
    First name
    Middle name
    Last name
    Suffix
	X		

Should the system e-mail a user ID and password to this Project Coordinator? • Yes • No		X	
Will this participant have the authority to enter data? • Yes • No		X	
Should this participant receive copies of announcements and reminders that are sent to your project's lead PI from this system and its Technical Support staff? • Yes • No		X	

Phone:
    Number
    Extension
	X		

Alternate Phone:
    Number
    Extension
    Type (mark one)
• U.S. number
• Non-U.S. number
	X		

E-Mail Address	X		
6. Graduate Fellow Information			
Graduate Fellow			

Name:
    Title
    First name
    Middle name
    Last name
    Suffix
	X		

Common Collection Categories	Staff and Project Participant	Project Implementation	Project Outputs
Questions			
Citizenship (select one) • U.S. citizen • Permanent resident • U.S. national • Non-U.S. citizen	X		

Phone:
  Number
  Extension
	X		

Alternate Phone:
  Number
  Extension
  Type (mark one)
  • U.S. number
  • Non-U.S. number
	X		

E-mail Address	X		

Fellowship Start Date
  Month
  Year
		X	

Fellowship End Date
  Month
  Year
		X	

Total stipend received by graduate fellow
• Funded by NSF at the full rate of $30,000/yr
• Funded by other source(s), please specify:
  If funded by other source(s):
    Source(s) of non-NSF funding
    $ Amount
		X	

7. Cooperating Teacher Information			
Cooperating Teacher			

Name:
  Title
  First name
  Middle name
  Last name
  Suffix
	X		

Phone:
  Number
  Extension
	X		

Alternate Phone:
  Number
  Extension
	X		

Common Collection Categories	Staff and Project Participant	Project Implementation	Project Outputs
Questions			
Type (mark one) • U.S. number • Non-U.S. Number			
School E-mail Address	X		
Other E-mail Address	X		
☐ Lead teacher and/or NSF supported Teacher		X	

What NSF GK-12 funds did this teacher receive during the current reporting period?
   Stipend $_____
   Travel Budget $_____
   Materials Budget $_____
   Other $_____ Please Explain: _____
		X	

8. Award Evaluator Information			
Award Evaluator			

Name:
   Title
   First name
   Middle name
   Last name
   Suffix
	X		

Phone:
   Number
   Extension
	X		

Alternate Phone:
   Number
   Extension
   Type (mark one)
• U.S. number
• Non-U.S. number
	X		

E-mail Address	X		
Organization/Unit	X		
9. Other Participant Information			
Other Participant			

Name:
   Title
   First name
   Middle name
   Last name
   Suffix
	X		

Should the system e-mail a user ID and password for this participant?		X	

Common Collection Categories	Staff and Project Participant	Project Implementation	Project Outputs
Questions			
• Yes • No			
Will this participant have the authority to enter data? • Yes • No		X	
Participant Role (select one) • Programmer • Technician • Other (Please specify) :_____		X	
Phone: Number Extension	X		
Alternate Phone: Number Extension Type (mark one) • U.S. number • Non-U.S. number	X		
E-mail Address	X		
10. Academic Achievements Related to GK-12 Activities and Themes			
Achievement			
Academic Achievement Product (select one) • Educational product – Educational research – Journals – Refereed • Educational product – Educational research – Journals – Non-refereed • Educational product – Educational research – Book • Educational product – Educational research – Book Chapter • Educational product – Institutional presentation – Conference presentation/poster • Educational product – Institutional presentation – Conference proceeding • Educational product – Institutional presentation – Invited talk/seminar • Educational product – Instructional product – Instructional materials • Educational product – Instructional product – Teaching modules • Educational product – Instructional product – Curriculums and lesson plans • Scientific Product – Refereed journal • Scientific Product – Non-refereed journal • Scientific Product – Book • Scientific Product – Book chapter • Scientific Product – Conference proceeding • Scientific Product – Conference presentation/poster • Scientific Product – Invited talk • Scientific Product – Seminar • Patent application • Patent awarded • Other (please specify): _____			X
Citation (with NSF-funded GK-12 fellows noted by "*" and cooperating			X

Common Collection Categories	Staff and Project Participant	Project Implementation	Project Outputs
Questions			
teachers noted by "+")			
11. Additional Funding Sources			
Source			
Source Name		X	
Additional funding source type (select one) • Business • Foundation • State government • Federal Government • Local government • Home institution • Other (please specify):_____		X	
Amount of additional funding $_____		X	
Additional funding type (mark all that apply) • Monetary contribution • Materials and supplies • Equipment • Other (please specify):_____		X	
12. Program Outreach Information			
Outreach Activity			
Activity Title			X
Activity description			X
13. Development Activities			
Fellows' Developmental Activities:			X

Activity	Frequency (mark one per activity)				
	Summer	Weekly	Bimonthly	Monthly	Other (please specify)
Fellows took coursework/training (e.g., new courses, seminars) that included regular critique of and feedback on communication skills.	☐	☐	☐	☐	
Fellows received training in collaboration and team building.	☐	☐	☐	☐	
Fellows received training to develop their leadership skills.	☐	☐	☐	☐	
Fellows received training in pedagogy (definition: science of teaching, education, and instructional methods).	☐	☐	☐	☐	
Fellows participated with teachers in content and pedagogy sessions	☐	☐	☐	☐	

Common Collection Categories						Staff and Project Participant ...	Project Implementation	Project Outputs
Questions								
related to developing GK-12 activities.								
Fellows received training on effective time and task management.	☐	☐	☐	☐				
Fellows developed multimedia materials, Web sites, or other cyber-enabled tools to communicate their research activities to external audiences.	☐	☐	☐	☐				
Fellows had other preparation in professional skills development (please specify): _____	☐	☐	☐	☐				

	Staff and Project Participant	Project Implementation	Project Outputs
Fellows' other development activities: (mark all that apply) • Fellows participated with teachers in content and pedagogy sessions related to developing GK-12 activities • Fellows developed multimedia materials or other cyber-enabled tools to communicate to external audiences • Fellows developed and presented course and/or curriculum materials • Fellows served as a mentor to others (e.g., graduate students, undergraduates, laboratory technicians) • Fellows authored/coauthored and submitted grant proposals • Fellows had professional interactions other than internships with non-academic employers (e.g., industry, government) in order to learn about carrier opportunities and requirements • Fellows communicated, worked, or collaborated with scientists of other nationalities • Fellows made presentations to non-academic public • Fellows received other preparation in professional skills development (please specify): _____			X

Cooperating Teachers' Development Activities: (mark all that apply)

Activity	Summer	Yearlong			
Teachers and fellows participated in content and pedagogy training related to developing GK-12 activities.	☐	☐			
Teachers participated with fellows in training that stressed teamwork.	☐	☐			
Teachers received training in effective mentoring skills.	☐	☐			
Teachers participated in coursework/training sessions that helped increase their science content knowledge.	☐	☐			
Teachers participated as team members engaged in joint research and educational efforts.	☐	☐			X
Teachers made presentations at academic/scientific professional conferences or meetings.	☐	☐			
Teachers participated in the development of multimedia materials, Web sites, or other cyber-enabled tools for teaching/learning.	☐	☐			
Teachers participated in training in authoring, submitting, or publishing professional papers.	☐	☐			
Teachers had other preparation in professional skills development (please specify):_____	☐	☐			

Common Collection Categories	Staff and Project Participant ...	Project Implementation	Project Outputs
Questions			
14. International Experience			
☐ Mark the box if your project did not participate in an international experience and skip the other questions in this section.		X	
What country or countries did any your project participants visit as part of the GK-12 international experience (select all that apply) • Afghanistan • Albania …		X	
How many of your fellows engaged in an international experience through the GK-12 project during this reporting period:_____		X	
How many of your teachers engaged in an international experience through the GK-12 project during this reporting period:_____		X	
Identify the following international activities involving GK-12 fellows (mark all that apply) • Fellow(s) worked in a university and conducted research overseas. • Fellow(s) worked as a team with teachers and students overseas. • Fellow(s) worked with their teachers overseas. • Fellow(s) attended conferences/workshops. • Other international activities (please specify):_____		X	
Identify the following international activities involving GK-12 teachers (mark all that apply) • Teacher(s) worked as a team with their fellow in similar to GK-12 activities with international teachers and students. • Teacher(s) attended conferences/workshops. • Teacher(s) took coursework/training. • Teacher(s) worked or conducted research/field work with their fellow. • Other international activities (please specify):_____		X	
Identify the opportunities for PIs and co-PIs that resulted from the international experiences associated with the GK-12 project. (mark all that apply) • Developed new collaborations • Developed new access to facilities/skills • Developed new opportunities for research/education/training • Other (please specify): _____			X
Do you plan to maintain the collaborations developed from the international experience • No • Yes, please specify:_____			X
Please specify why your project does or does not plan to maintain collaborations developed from the international experiences:		X	
Briefly identify up to three research or educational achievements resulting from the international component of your GK-12 project. Each achievement may involve a single fellow or a group of fellows. Achievement 1:_____			X

Common Collection Categories	Staff and Project Participant ...	Project Implementation	Project Outputs
Questions			
Achievement 2:_____			
Achievement 3:_____			
15. Program Impact			
Do you have an overall plan in place and active with a specific set of goals and timelines for recruitment and retention of GK-12 fellows, including specifics for broadening participation of groups underrepresented in science and engineering? • Yes • No		X	
Regardless of your response to the previous question, please describe up to three of the best practices you employed to recruit qualified fellows to your GK-12 project during this reporting period. Best Practice 1:_____ Best Practice 2:_____ Best Practice 3:_____		X	
Please describe the extent to which each of the following practices has been productive for recruiting fellows overall to your GK-12 project during this reporting period (see practice table below)			X
Please describe the extent to which each of the following practices has been productive for recruiting underrepresented minority and women fellows overall to your GK-12 project during this reporting period.		X	

Practice	Productive	Somewhat Productive	Not Productive	N/A
*Relationships with NSF programs that can provide an undergraduate pool of potential GK-12 fellows (e.g., REU's NSF Centers)	☐	☐	☐	☐
*Relationships with faculty and programs at other academic institutions	☐	☐	☐	☐
*Use of recruiting resources on the GK-12 campus (e.g., career service office, graduate studies office)	☐	☐	☐	☐
*Collaboration with other NSF-funded programs to improve recruitment	☐	☐	☐	☐
*Use of professional meetings, conferences, associations to communicate, research, and market to potential GK-12 fellows	☐	☐	☐	☐
Other (please specify): _____	☐	☐	☐	☐

Common Collection Categories	Staff and Project Participant	Project Implementation	Project Outputs

Questions

Practice	Underrepresented Minorities				Women			
*Relationships with NSF programs that specifically focus on broadening participation of women or underrepresented minorities in STEM (e.g., LSAMP, AGEP, TCUP, ADVANCE)	☐	☐	☐	☐	☐	☐	☐	☐
*Use of resources on the campus (e.g., academic development programs, offices for campus diversity, or minority and women's student groups)	☐	☐	☐	☐	☐	☐	☐	☐
*Interaction with professional associations, organizations, or committees serving women or underrepresented minority communities (e.g., National Action Council for Minorities in Engineering, Society of Women Engineers, committees in professional societies focused on minority communities and women)	☐	☐	☐	☐	☐	☐	☐	☐
*Bridge programs for entering graduate students	☐	☐	☐	☐	☐	☐	☐	☐
*Mentoring or advisement arrangements that take advantage of underrepresented minorities or women faculty or graduate students on campus	☐	☐	☐	☐	☐	☐	☐	☐
*Relationships with faculty and programs at minority-serving academic institutions (e.g., historically black colleges and universities, Hispanic-serving institutions, tribal colleges)	☐	☐	☐	☐	☐	☐	☐	☐
*Collaboration with other GK-12 projects for recruitment	☐	☐	☐	☐	☐	☐	☐	☐
Other (please specify): _____	☐	☐	☐	☐	☐	☐	☐	☐

16. Verify Fellows Interactions with K-12 Students

Common Collection Categories	Participant Characteristics	Project Implementation	Project Outputs
Questions			

Approve/edit/add fellow-teacher pairs submitted by fellows and teachers

Teacher Names	Fellow Names								
Last, First	☐	☐	☐	☐	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐	☐	☐	☐	☐

(Project Implementation: X)

Approve/edit/add in- classroom locations submitted by fellows

School	Class Name	Other Identifying Information	Subject(s)	GK-12 Teacher(s)	Fellow(s)	Grade(s)	# Students	Delete Class
								☐
								☐
								☐

(Project Outputs: X)

Approve/edit/add out-of-classroom activities submitted by fellows

Location	Activity Type	Fellow(s)	# Teachers	# Students	Delete Activity
					☐
					☐
					☐

(Project Outputs: X)

Questions	**Common Collection Categories**	Staff and Project Participant [5]	Project Implementation [6]	Project Outputs[7]
1. Contact Information *Some data will be pre-filled with data entered by the PI*				
Name: Title First name Middle name Last name Suffix		X		
Social Security Number: (select one) I choose to report my full SSN:___-__-____ I choose to report the last 4 digits of my SSN: ____ Other (if blank system assigns 999-99-9999): _____		X		
Current Address: Street address 1 Street address 2 City State Zip or postal code		X		
Phone: Number Extension		X		
Alternate Phone: Number Extension Type: (mark one) • U.S. number • Non-U.S. number		X		
E-mail Address		X		
2. Permanent Contact Information				

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[5] Elements of these characteristics include: Name, address, date of birth, gender, ethnicity, race, disability status, class, major, grade point average, yearly fellowship or stipend amount, and project role.

[6] Elements of these characteristics include: Sources and amount of funds, fellowships, scholarships, traineeships, partnerships, training, and research methods.

[7] Elements of these characteristics include: research findings, publications, presentations, degrees granted, and educational materials.

Questions **Common Collection Categories**	**Staff and Project Participant**	**Implementation Characteristics**	**Project Outputs**

Permanent Address:
    Street address 1
    Street address 2
    City
    State or country
    Zip or postal code
	X		

Permanent Phone:
    Number
    Extension
	X		

Alternate Phone:
    Number
    Extension
    Type: (mark one)
    • U.S. number
    • Non-U.S. number
	X		

Permanent E-mail Address			
3. Demographic Information			

Ethnicity: (select one)
    • Hispanic or Latino
    • Not Hispanic or Latino
    • Not reported
	X		

Race: (mark one or more)
    • American Indian or Alaska Native
    • Asian
    • Black or African American
    • Native Hawaiian or Other Pacific Islander
    • White
    • Not reported
	X		

Gender:
    • Female
    • Male
    • Not reported
	X		

Citizenship: (select one)
    • U.S. citizen
    • Permanent resident
    • U.S. national
    • Non-U.S. citizen
	X		

Permanent Resident since: [reported only by permanent residents]
    Month
    Year
	X		

Questions / Common Collection Categories	Staff and Project Participant	Project Implementation	Project Outputs

Disability: (Select one)
  • Yes (Mark "yes" if any of the following apply:
    • Deaf or serious difficulty hearing
    • Blind or serious difficulty seeing even when wearing glasses
    • Serious difficulty walking or climbing stairs
    • Other serious disability related to a physical, mental, or emotional condition)
  • No
  • Do not wish to provide
	X		

Place of Birth (U.S. State or Country)	X		
4. Academic History			
Name of high school/secondary school/institution from which you graduated/received a diploma	X		
Location of High School (City, State or Country, and Zip or Postal code)	X		

School type (select one)
  • Public
  • Private
  • Other (please specify): _____			

Undergraduate Degree			

Institution:
  U.S. Institution (Name and State)
  OR
  International Institution:
    Name
    Country
	X		

Degree: (select one)
  • B.A.
  • B.S.
  • Other (please specify) _____
	X		

Discipline: (select one)
  • Chemistry – Analytical
  • …see footnote 4 for complete list…
  • STEM Education and Learning Research – Other (please specify): _____
  • Other (please specify): _____
	X		

Academic Department	X		

Date of Completion:
  Month
  Year
	X		

Graduate Degree			

Institution:
  U.S. Institution (Name and State)
  OR
  International Institution:
    Name
	X		

Questions / Common Collection Categories	Staff and Project Participant	Project Implementation	Project Outputs
Country			
Degree: (select one) • M.A. • M.S. • Ph.D. • Other Postbaccalaureate Degree(please specify) _____	X		
Discipline: (select one) • Chemistry – Analytical • …see footnote 4 for complete list… • STEM Education and Learning Research – Other (please specify): _____ • Other (please specify): _____	X		
Academic Department	X		

Date of Completion:
  Month
  Year
	X		

5. Previous Employment and Teaching Experience			
Do you have a K-12 teaching certification? • Yes, please specify _____ • No	X		
Do you have any prior K-12 teaching experience? • Yes, please specify _____ • No	X		
Have you taken/are you taking any education certification courses? • Yes, please specify _____ • No	X		
Were you employed in the public or private sector for 1 or more years after receiving your first undergraduate degree and prior to becoming a GK-12 fellow? • Yes • No	X		
Total number of years (equal to or greater than 1 year, to the nearest year) you were employed in the public or private sector after receiving your first undergraduate degree and prior to becoming a GK-12 fellow	X		
6. Current Graduate Work			
Current Graduate Institution:_____	X		

Date when you started your program:
  Month
  Year
	X		

Expected Graduation Date
  Month
  Year
	X		

If you expect to graduate within one year, what type of employment are you			X

Questions	Staff and Project Participant	Project Implementation	Project Outputs
pursuing? (check all that apply) • Government - Postdoc • Government - Full-time position • Government - Part-time position • Industry/Business - Postdoc • Industry/Business - Full-time position • Industry/Business - Part-time position • Educational Institution (college, University, or K-12) - Postdoc • Educational Institution (college, University, or K-12) - Tenure-track faculty • Educational Institution (college, University, or K-12) - Non-tenure-track faculty • Educational Institution (college, University, or K-12) - Staff • Nonprofit - Postdoc • Nonprofit - Full-time position • Nonprofit - Part-time position • Self-employed/Entrepreneur			
If you expect to graduate within one year, what type of employment would you prefer most? (check one) • Government - Postdoc • Government - Full-time position • Government - Part-time position • Industry/Business - Postdoc • Industry/Business - Full-time position • Industry/Business - Part-time position • Educational Institution (college, University, or K-12) - Postdoc • Educational Institution (college, University, or K-12) - Tenure-track faculty • Educational Institution (college, University, or K-12) - Non-tenure-track faculty • Educational Institution (college, University, or K-12) - Staff • Nonprofit - Postdoc • Nonprofit - Full-time position • Nonprofit - Part-time position • Self-employed/Entrepreneur			X
Academic level during fellowship year: (select one) • Master's 1st year • Master's 2nd year • Master's 3rd year • Doctorate 1st year • Doctorate 2nd year • Doctorate 3rd year • Doctorate 4th year • Doctorate 5th year • Other (please specify level and year) _____	X		
Discipline: (select one) • Chemistry – Analytical • …see footnote 4 for complete list… • STEM Education and Learning Research – Other (please specify): _____ • Other (please specify): _____	X		
Academic Department	X		
Amount of NSF funds in your GK-12 stipend for the current academic year:		X	

Questions **Common Collection Categories**	**Staff and Project Participant**	**Project Implementation**	**Project Outputs**
(select one) • $30,000 stipend • $10,500 cost of education • Less than $10,500; specify the amount:$_____			
Did you have to pay tuition and fees in excess of the $10,500 allowance for the cost of education? • Yes • No If yes, how much did you have to pay?	X		
How does your fellowship stipend compare to stipends received by regular teaching or research fellowships at your institution? • Greater than others • Equal to others • Less than others • Do not know		X	
What is your research topic? *(research topic does not have to be related to GK-12)*	X		
Does your research involve the following: (check all that apply) • Bioinformatics • Biotechnology • Civil Infrastructure • Climate change • Computational Science and Engineering • Cyber infrastructure Enabled Discovery and Learning • Device Development • Energy and Alternative Energy • Entrepreneurialism • Evolution and Development • Materials Science and Engineering • Nanoscience and Nanotechnology • Neuroscience: Biology and Psychology • Sensing, Signals, Imaging and Signal Processing • Social and Behavioral Sciences • Sustainability, Ecology and the Environment • Water and water quality • Other leading-edge science (please specify): _____	X		
7. Research Advisor Information			

Advisor's Name:
  Title
  First name
  Middle name
  Last name
  Suffix
	X		-

Advisor's Academic Discipline: (select one)	X		

Questions / Common Collection Categories	Staff and Project Participant	Project Implementation	Project Outputs
• Chemistry – Analytical • …see footnote 4 for complete list… • STEM Education and Learning Research – Other (please specify): _____ • Other (please specify): _____			
Advisor's Academic Department	X		

Advisor's phone:
   Number
   Extension
	X		

Advisor's E-mail Address	X		
8. Interactions with K-12 Students			
Teachers you worked with as part of your GK-12 participation: (select all that apply) • Teacher 1 • Teacher 2 …		X	
Schools, organizations and other locations you worked with as part of your GK-12 participation: (select all that apply) • School/organization 1 • School/organization 2 …		X	
Class You Worked With as Part of Your GK-12 Participation			
School		X	
Teacher(s) of This Class (select all that apply) • Teacher 1 • Teacher 2 • …		X	
Class Name		X	
Additional Identifying Information (e.g. period, time, marking period)		X	
Grade of students (mark all that apply) • K—Kindergarten • 1--1st grade • 2 --2nd grade • 3---3rd grade • 4 --4th grade • 5 --5th grade • 6 --6th grade • 7--7th grade • 8 --8th grade • 9-- 9th grade • 10 --10th grade • 11 --11th grade • 12 --12th grade		X	
Subjects (select one) • Mathematics—Elementary • Mathematics—General		X	

Questions / Common Collection Categories	Staff and Project Participant	Project Implementation	Project Outputs
• Mathematics—Middle school • Mathematics—High school (secondary) • Science—Elementary school • Science—General • Science—Integrated science • Science—Biology • Science—Chemistry • Science—Earth science • Science—Physical science • Science—Physics • Science—Social • Computer science • Other (please specify) _____			
How is this course considered? • Honors/AP/IP • Academic • Non-Academic		X	
Number of students			X
Out-of-Classroom GK-12 Activity			
Schools and organizations you worked with as part of your GK-12 participation in this out-of-classroom activity with K-12 students: (select all that apply from preloaded list and add nonpartners) • School/organization 1 • School/organization 2 … Organizations not partnered with project		X	
Activity Type(s): (check all that apply) • After school science club • Community outreach on STEM • Field trips • Informal science education activities • Science fair • Schoolyard activities • University/laboratory visits • Other (please specify): _____		X	
Number of K-12 teachers you worked with as part of your out-of-classroom GK-12 activity		X	
Number of K-12 students you worked with as part of your out-of-classroom GK-12 activity			X
Overall Classroom Experience			
To what extent did you integrate your research into the GK-12 classroom experience for each of the items listed below (for each item choose one rating) | Item	Integration of Research				X

Questions	Common Collection Categories						Staff and Project Participant	Project Implementation	Project Outputs
		Not at All	*One Time*	*Several*	*Ongoing*	*Incorporated Into Curriculum*			
Developed module/lesson plan		☐	☐	☐	☐	☐			
Special presentation		☐	☐	☐	☐	☐			
Involved teacher in research		☐	☐	☐	☐	☐			
Involved students in research		☐	☐	☐	☐	☐			
Other (please specify) _____		☐	☐	☐	☐	☐			
Please check the activities that you participated in while in the classroom: (check all that apply) • Serving as a role model for students • Adapting scientific expertise to the appropriate grade level • Working collaboratively with teachers • Working with students during class • Enhancing lessons/curriculum • Serving as a scientist in the classroom • Showing teachers and students how to use new tools, technology, instrumentation, and measurement • Other (please specify): _____									X
9. Honors and Awards During GK-12 Project Participation									
☐ Select if no honors or awards to report									X
Honor or Recognition									X
Name of honor or recognition									X
Organization granting the award									X
Year earned									X
Other Award: Fellowship, Scholarship, or Grant Other Than GK-12									
Title of the proposal									X
Awarding agency									X
Year awarded									X
10. Development Activities									
Average hours per week spent on GK-12 activities								X	

Common Collection Categories **Questions**	Staff and Project Participant	Project Implementation	Project Outputs
Did you participate in regular training throughout the year specific to your GK-12 project • Yes • No, Elaborate why not (and skip the next two questions)			X
Format of training (check all that apply) • Courses • Seminars • Workshops • Other (please specify): _____			X

Training received:

Activity	Summer	Weekly	Bimonthly	Monthly	Other (please specify)
		Frequency (mark one frequency per activity)			
I took coursework/training (e.g., new courses, seminars) that included regular critique of and feedback on communication skills	☐	☐	☐	☐	
I received training in collaboration and team building	☐	☐	☐	☐	
I received training in developing leadership skills	☐	☐	☐	☐	
I received training in pedagogy (i.e., science of teaching, education, and instructional methods)	☐	☐	☐	☐	
I received training dealing with effective time and task management	☐	☐	☐	☐	
I received other training (please specify):_____	☐	☐	☐	☐	

(Training received section marked: Project Outputs — X)

Questions	Staff and Project Participant	Project Implementation	Project Outputs
Did you participate in a GK-12 summer institute? • Yes, • No, Elaborate why not (and skip the next question)		X	
How long did the summer institute last? (select one) • Less than 1 week • 1 week • 2 weeks • 3 weeks • 4 weeks • More than 4 weeks Other (please specify): _____			
Professional development activities associated with your GK-12 project during the reporting period. (check all that apply)		X	

Item	Summer	Yearlong
I participated with teachers in content and pedagogy training related to	☐	☐

Questions — Common Collection Categories			Staff and Project Participant	Project Implementation	Project Outputs
developing GK-12 activities.					
I developed multimedia materials or other cyber-enabled tools to communicate to external audiences.	☐	☐			
I developed and presented course and/or curriculum materials.	☐	☐			
I served as a mentor to others (e.g., graduate students, undergraduates, laboratory technicians).	☐	☐			
I authored/coauthored and submitted grant proposals.	☐	☐			
I had professional interactions other than internships with non-academic employers (e.g., industry, government) in order to learn about carrier opportunities and requirements.	☐	☐			
I communicated, worked, or collaborated with scientists of other nationalities.	☐	☐			
I made presentations to non-academic public.	☐	☐			
I received other preparation in professional skills development (please specify):_____	☐	☐			
11. International Experience					
Did you visit a foreign country as part of your GK-12 fellowship? • Yes • No, skip the following questions in this section				X	
Experience per Country					
Country				X	
Main purpose of visit				X	
Length of international experience in weeks (1-52)				X	
Activities that you participated in as part of your international experience (check all that apply) • Attended a conference/workshop outside of the U.S. • Undertook coursework/training outside of the U.S. • Worked as a team with teachers and students overseas • Worked, conducted research/field work, or interned outside of the U.S. • Worked with my classroom teacher overseas • Participated in other international activities (please specify): _____				X	
Is this international experience related to your current graduate research? (select one) • Yes • No			X		
Most beneficial professional or career related aspect of this international activity					X
Were you prepared for your international experience? • Yes • No				X	
How were you prepared prior to the international visit? (check all that apply) • Course • Seminar • Workshop • Other (please specify): _____				X	
What experiences were included in the preparation for your international				X	

Questions	Common Collection Categories		
	Staff and Project Participant	Project Implementation	Project Outputs
experience? (check all that apply) • How to work in a foreign laboratory/field work • Graduate education/Education/ laboratory differences in country to be visited • Language • Cultural differences • Learning about the area • Other (please specify): _____			
What did you accomplish?			X
What types of accomplishments apply to your international experience? (check all that apply) • Awards/Honors/Recognitions • Invention/Patent • Presentations • Publications • Other (please specify): _____			X
Do you plan to continue with this international collaboration? • Yes • No		X	
Specify why you do or do not plan to continue with this international collaboration		X	
12. Research and Professional Experience			
How involved was your faculty advisor in your GK-12 activities? (select one) • Not involved • Somewhat involved • Involved • Regularly involved		X	
How did participation in GK-12 activities affect your graduate research productivity? (check all that apply) • I am better organized. • I find my work time is too fragmented. • I am better able to write about my research results. • I am better able to focus on my research. • I have less time to focus on my research. • I am better prepared to present research findings to broad (scientific and nonscientific) audiences. • Other (please specify): _____			X
How did your GK-12 participation affect your professional pursuits and career goals as a scientist? (check all that apply) • I have been better able to figure out what I want to pursue as a career. • I am better prepared for a career in academia. • I am better prepared to pursue a career that involves research and teaching. • I will now consider a wider array of career paths than I did before GK-12. • I am committed to contributing to K–12 STEM education at some point in my career. • I better understand the importance of the role of a scientist in K–12 education. • I am a more globally engaged scientist. • Other (please specify): _____			X

Questions / Common Collection Categories	Staff and Project Participant	Project Implementation	Project Outputs
Check the areas in which your knowledge/skills have improved as a result of your GK-12 participation. (check all that apply) • Professional and academic writing skills • Pedagogy/teaching skills • Professional speaking or presentation skills • Team building/collaboration skills • Communicating science or math concepts to diverse audiences • Communicating my research and/or area of expertise • Other (please specify): _____			X
Involvement with the GK-12 program			
Most important thing you gained from participating in the GK-12 program			X
Most important contribution you made to the GK-12 program			X

List up to two concerns about or areas of improvement for the GK-12 program or your experience with the program.
  Concern 1
  Concern 2
			X

Common Collection Categories Questions	Staff and Project Participant Characteristics[8]	Project Implementation[9]	Project Outputs[10]
1. Contact Information *Some data will be pre-filled with data entered by PI*			

Name:
   Title
   First name
   Middle name
   Last name
   Suffix
	X		

Address:
   Street address 1
   Street address 2
   City
   State
   Zip or postal code
	X		

Phone:
   Number
   Extension
	X		

Alternate Phone:
   Number
   Extension
   Type: (mark one)
     • U.S. number
     • Non-U.S. number
	X		

School E-mail Address	X		
Other E-mail Address	X		
School Name(s)	X		
2. Demographic Information			

Ethnicity: (select one)
   • Hispanic or Latino
   • Not Hispanic or Latino
   • Not reported
	X		

[8] Elements of these characteristics include: Name, address, date of birth, gender, ethnicity, race, disability status, class, major, grade point average, yearly fellowship or stipend amount, or project role.

[9] Elements of these characteristics include: Sources and amount of funds, fellowships, scholarships, traineeships, partnerships, training, research methods.

[10] Elements of these characteristics include: research findings, publications, presentations, degrees granted, educational materials.

Common Collection Categories Questions	Staff and Project Participant Characteristics	Implementation Characteristics	Project Outputs
Race: (Mark one or more) • American Indian or Alaska Native • Asian • Black or African American • Native Hawaiian or Other Pacific Islander • White • Not reported	X		
Gender: • Female • Male • Not reported	X		

Disability: (Select one)
• Yes (Mark "yes" if any of the following apply:
  • Deaf or serious difficulty hearing
  • Blind or serious difficulty seeing even when wearing glasses
  • Serious difficulty walking or climbing stairs
  • Other serious disability related to a physical, mental, or emotional condition)
• No
• Do not wish to provide
	X		

3. Degrees			
Undergraduate Degree			

Institution:
  U.S. Institution (Name and State)
  OR
  International Institution:
    Name
    Country
	X		

Degree: (select one) • B.A. • B.S. • Other (please specify) _____	X		
Discipline: (select one) • Education – Early childhood • Education – Elementary • Education – Middle • Education – High • Education – Other • Chemistry – Analytical • …see footnote 4 for complete list (other than Education –…)… • STEM Education and Learning Research – Other (please specify): _____ • Other (please specify): _____	X		

Date of Completion:
  Month
  Year
	X		

Graduate Degree			

Common Collection Categories **Questions**	Staff and Project Participant	Project Implementation	Project Outputs

Institution:
   U.S. Institution (Name and State)
   OR
   International Institution:
      Name
      Country
	X		

Degree: (select one) • M.A. • M.S. • Ed.D. • Ph.D. • Other Postbaccalaureate Degree (please specify) _____	X		
Discipline: (select one) • Education – Early childhood • Education – Elementary • Education – Middle • Education – High • Education – Other • Chemistry – Analytical • …see footnote 4 for complete list (other than Education –…)… • STEM Education and Learning Research – Other (please specify): _____ • Other (please specify): _____	X		

Date of Completion:
   Month
   Year
	X		

4. Teaching Experience and Credentials			
Total number of years teaching (at any K–12 school)	X		
Do you have any K-12 teaching certification? • Yes, complete the following questions in this section • No, skip the following questions in this section	X		
Grades certified to teach: (select all that apply) • Early childhood • Elementary • Middle/junior high • High school	X		
Subjects certified to teach: (select all that apply) • Mathematics • Computer/technology • General studies • Science-Biology • Science-Chemistry • Science-Earth science • Science-Elementary science • Science-General science • Science-Integrated science	X		

Common Collection Categories Questions	Staff and Project Participant	Project Implementation	Project Outputs
• Science-Physical science • Science-Physics • Other (please specify) _____			
Did you receive your certification through an alternative certification program? (e.g., Teach for America) • Yes • No	X		
5. Experience Working With GK-12 Fellows			
Graduate fellows you worked with as part of your GK-12 participation		X	
Fellow			
Fellow Name (Select names from fellow list pre-populated with data entered by the PI)		X	
Subjects (check all that apply) • Mathematics—Elementary • Mathematics—General • Mathematics—Middle school • Mathematics—High school (secondary) • Science—Elementary school • Science—General • Science—Integrated science • Science—Biology • Science—Chemistry • Science—Earth science • Science—Physical science • Science—Physics • Science—Social • Computer science • Other (please specify) _____		X	
# Male students			X
# Female students			X
# Underrepresented minority students			X
Activity/Lesson Written/Developed in Classroom Using Fellows as Scientific Experts			
Grade level(s) for activity/lesson developed (mark all that apply) • Elementary • Middle school • High school • Other (please specify) _____			X
Academic Disciplines (mark all that apply) • Mathematics—Algebra I • Mathematics—Algebra II • Mathematics—Elementary school • Mathematics—Geometry • Science—General			X

Common Collection Categories **Questions**	Staff and Project Participant	Project Implementation	Project Outputs
• Science—Integrated • Science—Biology • Science—Chemistry • Science—Computer • Science—Earth/space • Science—Engineering • Science—Physical science • Science—Physics • Other (please specify): _____			
Brief Description			X
Overall Experience Working with Fellows			
Average hours a week worked directly with GK-12 fellows		X	
How many of these hours, that you spent working directly with your GK-12 fellows, were spent on planning/preparation?		X	
Please check the activities of the GK-12 fellows with whom you worked (check all that apply) • Serving as a role model for students • Teaching/co-teaching lessons • Adapting scientific materials to the appropriate grade level • Working collaboratively with teachers • Working with students • Developing activities • Serving as a scientist in the classroom		X	

Using the following table, indicate how your GK-12 fellows incorporated their research into your classroom.

Item	Integration of Research (select one rating)				
	Not at All	One Time	Several Times	Ongoing	Incorporated Into Curriculum
*Developed module/ lesson plan	☐	☐	☐	☐	☐
*Special presentation	☐	☐	☐	☐	☐
*Involved teacher in research	☐	☐	☐	☐	☐
*Involved students in research	☐	☐	☐	☐	☐
Other (please specify) ___	☐	☐	☐	☐	☐

(This table corresponds to Project Outputs: X)

	Staff and Project Participant	Project Implementation	Project Outputs
6. Honors and Awards During GK-12 Project Participation			
☐ Declare nothing to report			X
Honor or Recognition			
Name of honor or recognition			X
Organization granting the award			X

Common Collection Categories Questions	Staff and Project Participant	Project Implementation	Project Outputs
Year earned			X
Other Award: Fellowship, Scholarship, or Grant Other Than GK-12			
Title of proposal			X
Awarding agency			X
Year awarded			X
7. Development Activities			
Average hours per week spent on GK-12 activities		X	

Did you participate in regular training throughout the year specific to your GK-12 project?
• Yes
   Format of training (check all that apply)
     • Courses
     • Seminars
     • Workshops
     • Other (please specify)
 	
• No
   Elaborate why not
		X	

Did you participate in a GK-12 summer institute?
• Yes
   How long did the summer institute last? (select one)
     • Less than 1 week
     • 1 week
     • 2 weeks
     • 3 weeks
     • 4 weeks
     • More than 4 weeks
     • Other (please specify) _____
• No
   Elaborate why not
		X	

Professional development activities associated with your GK-12 project during the reporting period. Because some of these activities were ongoing throughout the entire reporting period and others were limited to summer institutes, indicate when these professional development activities occurred. Check "Summer," "Yearlong," or both, if applicable. (check all that apply)		X	

Item	Summer	Yearlong
I participated in coursework/training sessions that helped increase my science content knowledge.	☐	☐
I participated in coursework/training leading to certification/recertification	☐	☐
I participated in coursework/training leading to an advanced degree.	☐	☐
I made presentations at academic/ professional conferences or meetings	☐	☐
I developed multimedia materials, Web sites, or other cyber-enabled	☐	☐

Common Collection Categories Questions	Staff and Project Participant Characteristics		Project Implementation	Project Outputs
tools for teaching/learning.				
I participated as a team member engaged in joint research.	☐	☐		
I received training in effective mentoring skills.	☐	☐		
I participated with fellows in a workshop that stressed teamwork and collaboration.	☐	☐		
I participated with fellows in content and pedagogy sessions.	☐	☐		
I participated in training in authoring, submitting, or publishing professional papers.	☐	☐		
I received other preparation in professional skills development (please specify): _____	☐	☐		
8. International Experience				
Did you visit a foreign country as part of your GK-12 experience? • Yes • No (If no, please skip the rest of this section)			X	
Experience per Country				
Country			X	
Main purpose of visit			X	
Length of international experience in weeks (1-52)			X	
As part of your international experience, did you (check all that apply) • Work in a university and share research with graduate students and professors overseas • Work on activities similar to GK-12 with international teachers and students • Develop ongoing international collaborations/projects • Participate in a Research for Teachers program • Take credit/certification/recertification coursework/training • Conduct research/field work • Participate in other international activities (please specify): _____			X	
Most beneficial professional or career related aspect of this international activity				X
Do you plan to continue with this international collaboration? • Yes • No			X	
Specify why you do or do not plan to continue with this international collaboration			X	
9. Professional Experience				
Has your professional practice in the following areas improved as a result of your participation in GK-12: (check all that apply) • Content knowledge of science or math • Access to innovative lesson plans • Ability to incorporate inquiry-based lessons in the future • Desire to continue your own education • Involvement in professional networks/partnerships with university scientists • Enthusiasm for science/math teaching				X

GK-12: Number of Respondents, Frequency of Response, and Annual Hour Burden

The estimated average number of annual respondents is 1,267, with an estimated average annual response burden of 3,529 hours. The Web-based collection is an annual activity of the GK-12 program. We estimate an annual average of 86 awards, 588 NSF-funded fellows, and 593 lead/NSF-supported cooperating teachers responding each year. The number of respondents was estimated using data from the current portfolio of GK-12 awards, and the estimated annual hour burden per respondent was determined using the burden information reported by respondents during the last collection cycle, when only NSF-funded fellows and lead/NSF-supported cooperating teachers reported data.

The burden estimated is outlined below.

Respondent Type	Estimated Average Annual No. of Respondents	Estimated Average Annual Burden Hours Per Respondent	Estimated Annual Burden Hour Total
Awardees	86	17	1,462
NSF-funded graduate fellows	588	1.7	1,000
Lead/NSF-supported cooperating teachers	593	1.8	1,067
Total	**1,267**		**3,529**

GK-12: Hour Burden Estimates by Each Form and Aggregate Hour Burdens

As mentioned above respondents will be awardees (as reported by the project's lead PI with help from the project coordinator), NSF-funded graduate fellows, and lead/NSF-supported cooperating teachers. The estimated total annual response burden is 3,529 hours. There is a different Web-based form for each respondent type. The annual burden by form was calculated as follows:

Form Type	Respondent Type	No. of Respondents	Burden Hours Per Respondent	Total Burden Hours
Award form	Awardees	86	17	1,462
Fellow form	NSF-funded graduate fellows	588	1.7	1,000
Teacher form	Lead/NSF-supported cooperating teachers	593	1.8	1,067
Total		**1,267**		**3,529**

GK-12: Estimates of Annualized Cost to Respondents for the Hour Burdens

The overall annualized cost to the respondents is estimated to be $108,515. The following table shows the annualized estimates of costs to respondents. The estimated hourly rate for PIs, who are generally university professors, is based on a report from the American Association of University Professors, "Annual Report on the Economic Status of the Profession, 2014-15," *Academe,* March–April 2015, Survey Report Table 4. According to this report, the average salary across all academic ranks and across all types of doctoral-granting institutions (public, private-independent, religiously affiliated) was $87,838. The hourly rate for fellows is based on their annual stipend of $30,000. The rate for cooperating teachers was established by using the Bureau of Labor Statistics' May 2015 National Occupational Employment and Wage Estimates, which estimates the mean annual wage for those in Education, Training, and Library Occupations to be $52,210. Each of these figures was then divided by the number of standard annual work hours (2,080) to determine an average hourly rate for each respondent type. Those rates and the corresponding total annual costs are indicated in the table below:

Respondent Type	No. of Respondents	Burden Hours Per Respondent	Average Hourly Rate	Estimated Annual Cost
Awardees	86	17	$42	$61,404
NSF-funded graduate fellows	588	1.7	$14	$13,994
Lead/NSF-supported cooperating teachers	593	1.8	$25	$26,685
Total	**1,267**			**$102,083**

GK-12: Estimates of Costs to the Federal Government

Computing the annualized cost to NSF for the GK-12 data collection was done by taking the budget for the most recent year and calculating the costs for each of the following operational activities involved in producing, maintaining, and conducting the data collection:

Operational Activities	Cost Over Three Years
System Development (includes initial development of the database and Web-based application, and later changes requested by the program, e.g., increased reporting tools, additional validations)	$172,232
System Maintenance, Updates, and Technical Support (system requires updates each year before opening the collection; maintenance is required to keep the system current with technology, e.g., database servers, operating systems)	$75,700
Data Collection Opening and Support (e.g., online and telephone support to respondents and contacting respondents to encourage completion of the questions), Reporting (as defined by DGE), and Followup Activities (e.g., providing data to other consultants)	$129,111
Three-Year Total for All Operational Activities	**$377,044**

The annualized cost was computed as one-third of the total three-year costs; thus, the annualized cost to NSF for the GK-12 collection is $125,681.

GK-12: Questions – Awards Survey

1. Award Information
Award Status
NSF Award ID
Grantee Institution
Award Title
Award Start Date (Month, Day, Year)
Award End Date (Month, Day, Year)
Award Dollar Amount

Annual Carryover Funds:
    Dollar amount of current year of GK-12 support that will be carried over
    Total dollar amount that will be carried over
    Dollar amount of participant support costs that will be carried over
    Dollar amount of stipends that will be carried over

List the top three subdisciplines associated with your GK-12 project:
    Subdiscipline 1: _____
    Subdiscipline 2: _____
    Subdiscipline 3: _____

Award URL
2. Partnerships and Collaborations
U.S. Academic Institution
Institution Name
City
State
Zip Code
Non-U.S. Academic Institution
Institution Name
Country
Non Academic Institution
Institution Name
Institution Type (mark all that apply) • Museum • Science Center • Industrial Partner • Business Partner • Government Agency • National Laboratory • Nonprofit Organization • Other
3. Participating Schools In Your GK-12 Project
K-12 School
School Name

School Level (select one)
• Elementary (K–5/6) • Middle (6–8) • High school grades (9–12) • Pre-K/kindergarten through middle school (K–8) • Middle through high (7–12)
State
District Name
School Setting/Location (select one) • Rural • Urban • Suburban
School Type (mark all that apply) • Charter • Private • Public
Percentage of students who are eligible for free or reduced price lunch (select one) • Not applicable • 1–10% • 11–20% • 21–30% • 31–40% • 41–50% • 51–60% • 61–70% • 71–80% • 81–90% • 91–100%
4. Lead Principal Investigators and Co-Principal Investigator Information
PI/Co-PI

Name:
    Title
    First name
    Middle name
    Last name
    Suffix

☐ Lead PI
Institutional affiliation (Name and State)

Phone:
  Number
  Extension

Alternate Phone:
  Number
  Extension
  Type (mark one)
• U.S. number
• Non-U.S. number

E-mail Address
Should the system e-mail a user ID and password to this participant? • Yes • No

Will this participant have authority to enter data?
    • Yes
    • No

Should this participant receive announcements and reminders that are sent to the project's lead PI from this system and from the Technical Support staff??
    • Yes
    • No

Title (e.g. Professor)
Affiliation/Academic Department
In what roles, functions, and activities does this PI/co-PI serve the project?

Academic Disciplines (mark all that apply)
• Chemistry – Analytical • …see footnote 11 for complete list[11]… • STEM Education and Learning Research – Other (please specify): _____ • Other (please specify): _____

Does this co-PI belong to any of the following categories for education faculty?
 • Yes (mark all capacities that apply)
    · Education faculty in STEM department/college. For instance, she/he could be an education person who belongs to a Biology department; this person is   responsible for biological education related matters that could be biological education research and/or teaching in the department.
    · Education faculty in the school or college of   education

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[11] Academic disciplines used throughout the GK-12 surveys:

- Chemistry – Analytical
- Chemistry – Bio-inorganic
- Chemistry – Bio-organic
- Chemistry – Biophysical
- Chemistry – Environmental
- Chemistry – Inorganic
- Chemistry – Materials
- Chemistry – Physical
- Chemistry – Polymer
- Chemistry – Theoretical
- Chemistry – Other (please specify):
- Comp/IS/Eng – Artificial Intelligence (including Robotics, Computer Vision, and Human Language Processing)
- Comp/IS/Eng – Computer Architecture and Grids
- Comp/IS/Eng – Computer Science – Languages and Systems
- Comp/IS/Eng – Computer Science – Theoretical Foundations
- Comp/IS/Eng – Database Information Retrieval and Web Search
- Comp/IS/Eng – Graphics and Visualization
- Comp/IS/Eng – Human Computer Interaction
- Comp/IS/Eng – Information Security and Assurance
- Comp/IS/Eng – Information Technology and Organizations
- Comp/IS/Eng – Networks and Communications
- Comp/IS/Eng – Operating Systems and Middleware
- Comp/IS/Eng – Scientific Computing and Informatics
- Comp/IS/Eng – Software Engineering
- Comp/IS/Eng – Other (please specify):
- Engineering – Aeronautical and Aerospace
- Engineering – Agricultural
- Engineering – Bioengineering
- Engineering – Biomedical
- Engineering – Chemical
- Engineering – Civil
- Engineering – Computer Engineering
- Engineering – Electrical and Electronic
- Engineering – Energy
- Engineering – Engineering Mechanics
- Engineering – Engineering Science
- Engineering – Environmental
- Engineering – Industrial
- Engineering – Materials
- Engineering – Mechanical
- Engineering – Metallurgical
- Engineering – Nuclear
- Engineering – Ocean
- Engineering – Petroleum
- Engineering – Polymer

• Education and outreach director in a STEM department, college, university and/or research centers • Other educational faculty (please specify): _____   • No

Ethnicity (select one)
    • Not Hispanic or Latino
    • Hispanic or Latino
    • Not reported

Race (Mark one or more)
    • American Indian or Alaska Native
    • Asian

_____

- Engineering – Systems Engineering
- Engineering – Other (please specify):
- Geosciences – Aeronomy
- Geosciences – Atmospheric Chemistry
- Geosciences – Chemical Oceanography
- Geosciences – Climate Dynamics
- Geosciences – Geochemistry
- Geosciences – Geology
- Geosciences – Geophysics
- Geosciences – Hydrologic Sciences
- Geosciences – Large Scale Dynamics Meteorology
- Geosciences – Magnetospheric Physics
- Geosciences – Marine Geology and Geophysics
- Geosciences – Mesoscale Dynamic Meteorology
- Geosciences – Paleoclimate
- Geosciences – Paleontology
- Geosciences – Physical Meteorology
- Geosciences – Physical Oceanography
- Geosciences – Solar-Terrestrial
- Geosciences – Other (please specify):
- Life Sciences – Agriculture
- Life Sciences – Agronomy
- Life Sciences – Anatomy
- Life Sciences – Animal Behavior
- Life Sciences – Animal Science
- Life Sciences – Biochemistry
- Life Sciences – Biological Oceanography
- Life Sciences – Biophysics
- Life Sciences – Botany (including Plant Physiology)
- Life Sciences – Cell Biology
- Life Sciences – Computational Biology
- Life Sciences – Developmental Biology
- Life Sciences – Ecology
- Life Sciences – Ecosystem Ecology
- Life Sciences – Entomology
- Life Sciences – Environmental Sciences
- Life Sciences – Evolutionary Biology
- Life Sciences – Fish and Wildlife
- Life Sciences – Forestry
- Life Sciences – Genetics
- Life Sciences – Horticulture
- Life Sciences – Immunology
- Life Sciences – Marine Biology
- Life Sciences – Microbiology
- Life Sciences – Molecular Biology
- Life Sciences – Neurosciences
- Life Sciences – Nutrition

• Black or African American • Native Hawaiian or Pacific Islander • White • Not reported

Gender (select one)
  • Female
  • Male
  • Not reported

Disability: (Select one)
  • Yes (Mark "yes" if any of the following apply:
    • Deaf or serious difficulty hearing
    • Blind or serious difficulty seeing even when wearing glasses

- Life Sciences – Pharmacology
- Life Sciences – Physiology
- Life Sciences – Plant Pathology
- Life Sciences – Population and Community Ecology
- Life Sciences – Soil Science
- Life Sciences – Structural Biology
- Life Sciences – Virology
- Life Sciences – Zoology
- Life Sciences – Other (please specify):
- Mathematical Sciences – Algebra or Number Theory
- Mathematical Sciences – Analysis
- Mathematical Sciences – Applications of Mathematics (including Biometrics and Biostatistics)
- Mathematical Sciences – Geometry
- Mathematical Sciences – Logic or Foundations of Mathematics
- Mathematical Sciences – Operations Research
- Mathematical Sciences – Probability and Statistics
- Mathematical Sciences – Topology
- Mathematical Sciences – Other (please specify):
- Physics and Astronomy – Astronomy
- Physics and Astronomy – Astrophysics
- Physics and Astronomy – Atomic and Molecular
- Physics and Astronomy – Condensed Matter Physics
- Physics and Astronomy – Nuclear
- Physics and Astronomy – Optics
- Physics and Astronomy – Particle Physics
- Physics and Astronomy – Physics of Fluids
- Physics and Astronomy – Plasma
- Physics and Astronomy – Solid State
- Physics and Astronomy – Theoretical Physics
- Physics and Astronomy – Other (please specify):
- Psychology – Cognitive
- Psychology – Cognitive Neuroscience
- Psychology – Computational Psychology
- Psychology – Developmental
- Psychology – Experimental or Comparative
- Psychology – Industrial/Organizational
- Psychology – Neuropsychology
- Psychology – Perception and Psychophysics
- Psychology – Personality and Individual Differences
- Psychology – Physiological
- Psychology – Psycholinguistics
- Psychology – Quantitative
- Psychology – Social
- Psychology – Other (please specify):
- Social Sciences – Archaeology
- Social Sciences – Cliometric History
- Social Sciences – Communications

• Serious difficulty walking or climbing stairs • Other serious disability related to a physical, mental, or emotional condition) 　• No 　• Do not wish to provide
5. Project Coordinator Information
☐ Mark the box if your project does not have a coordinator and skip the other questions in this section
Project Coordinator
Name: 　　Title 　　First name 　　Middle name 　　Last name 　　Suffix
Should the system e-mail a user ID and password to this Project Coordinator? 　• Yes 　• No
Will this participant have the authority to enter data? 　• Yes 　• No
Should this participant receive copies of announcements and reminders that are sent to your project's lead PI from this system and its Technical Support staff? 　• Yes 　• No
Phone:

- Social Sciences – Cultural Anthropology
- Social Sciences – Decision Making
- Social Sciences – Demography
- Social Sciences – Econometrics
- Social Sciences – Economics (except Business Administration)
- Social Sciences – Geography
- Social Sciences – History of Science
- Social Sciences – International Relations
- Social Sciences – Law and Social Science
- Social Sciences – Linguistics Anthropology
- Social Sciences – Linguistics
- Social Sciences – Medical Anthropology
- Social Sciences – Philosophy of Science
- Social Sciences – Physical Anthropology
- Social Sciences – Political Science
- Social Sciences – Public Policy
- Social Sciences – Risk Analysis
- Social Sciences – Science Policy
- Social Sciences – Sociology (except Social Work)
- Social Sciences – Urban and Regional Planning
- Social Sciences – Other (please specify):
- STEM Education and Learning Research – Engineering Education
- STEM Education and Learning Research – Mathematics Education
- STEM Education and Learning Research – Science Education
- STEM Education and Learning Research – Technology Education
- STEM Education and Learning Research – Other (please specify):
- Other (please specify):

Number
Extension
Alternate Phone:
Number
Extension
Type (mark one)
• U.S. number
• Non-U.S. number
E-Mail Address

6. Graduate Fellow Information

Graduate Fellow

Name:
Title
First name
Middle name
Last name
Suffix
Citizenship (select one)
• U.S. citizen
• Permanent resident
• U.S. national
• Non-U.S. citizen
Phone:
Number
Extension
Alternate Phone:
Number
Extension
Type (mark one)
• U.S. number
• Non-U.S. number
E-mail Address
Fellowship Start Date
Month
Year
Fellowship End Date
Month
Year
Total stipend received by graduate fellow
• Funded by NSF at the full rate of $30,000/yr
• Funded by other source(s), please specify:
If funded by other source(s):
Source(s) of non-NSF funding
$ Amount

7. Cooperating Teacher Information

Cooperating Teacher

Name:
Title

First name Middle name Last name Suffix

Phone:
    Number
    Extension

Alternate Phone:
    Number
    Extension
    Type (mark one)
    • U.S. number
    • Non-U.S. Number

School E-mail Address
Other E-mail Address
☐ Lead teacher and/or NSF supported Teacher

What NSF GK-12 funds did this teacher receive during the current reporting period?
    Stipend $_____
    Travel Budget $_____
    Materials Budget $_____
    Other $_____ Please Explain: _____

8. Award Evaluator Information
Award Evaluator

Name:
    Title
    First name
    Middle name
    Last name
    Suffix

Phone:
    Number
    Extension

Alternate Phone:
    Number
    Extension
    Type (mark one)
    • U.S. number
    • Non-U.S. number

E-mail Address
Organization/Unit
9. Other Participant Information
Other Participant

Name:
    Title
    First name
    Middle name
    Last name
    Suffix

Should the system e-mail a user ID and password for this participant? • Yes • No
Will this participant have the authority to enter data? • Yes • No
Participant Role (select one) • Programmer • Technician • Other (Please specify) :_____

Phone:
   Number
   Extension

Alternate Phone:
   Number
   Extension
   Type (mark one)
• U.S. number
• Non-U.S. number

E-mail Address
10. Academic Achievements Related to GK-12 Activities and Themes
Achievement
Academic Achievement Product (select one) • Educational product – Educational research – Journals – Refereed • Educational product – Educational research – Journals – Non-refereed • Educational product – Educational research – Book • Educational product – Educational research – Book Chapter • Educational product – Institutional presentation – Conference presentation/poster • Educational product – Institutional presentation – Conference proceeding • Educational product – Institutional presentation – Invited talk/seminar • Educational product – Instructional product – Instructional materials • Educational product – Instructional product – Teaching modules • Educational product – Instructional product – Curriculums and lesson plans • Scientific Product – Refereed journal • Scientific Product – Non-refereed journal • Scientific Product – Book • Scientific Product – Book chapter • Scientific Product – Conference proceeding • Scientific Product – Conference presentation/poster • Scientific Product – Invited talk • Scientific Product – Seminar • Patent application • Patent awarded • Other (please specify): _____
Citation (with NSF-funded GK-12 fellows noted by "*" and cooperating teachers noted by "+")
11. Additional Funding Sources
Source
Source Name
Additional funding source type (select one) • Business

• Foundation • State government • Federal Government • Local government • Home institution • Other (please specify):_____	

Amount of additional funding $_____

Additional funding type (mark all that apply)
- Monetary contribution
- Materials and supplies
- Equipment
- Other (please specify):_____

12. Program Outreach Information

Outreach Activity

Activity Title

Activity description

13. Development Activities

Fellows' Developmental Activities:

Activity	Frequency (mark one per activity)				
	Summer	Weekly	Bimonthly	Monthly	Other (please specify)
Fellows took coursework/training (e.g., new courses, seminars) that included regular critique of and feedback on communication skills.	☐	☐	☐	☐	
Fellows received training in collaboration and team building.	☐	☐	☐	☐	
Fellows received training to develop their leadership skills.	☐	☐	☐	☐	
Fellows received training in pedagogy (definition: science of teaching, education, and instructional methods).	☐	☐	☐	☐	
Fellows participated with teachers in content and pedagogy sessions related to developing GK-12 activities.	☐	☐	☐	☐	
Fellows received training on effective time and task management.	☐	☐	☐	☐	
Fellows developed multimedia materials, Web sites, or other cyber-enabled tools to communicate their research activities to external audiences.	☐	☐	☐	☐	
Fellows had other preparation in professional skills development (please specify): _____	☐	☐	☐	☐	

Fellows' other development activities: (mark all that apply)
- Fellows participated with teachers in content and pedagogy sessions related to developing GK-12 activities
- Fellows developed multimedia materials or other cyber-enabled tools to communicate to external audiences
- Fellows developed and presented course and/or curriculum materials
- Fellows served as a mentor to others (e.g., graduate students, undergraduates, laboratory technicians)
- Fellows authored/coauthored and submitted grant proposals
- Fellows had professional interactions other than internships with non-academic employers (e.g.,

industry, government) in order to learn about carrier opportunities and requirements
- Fellows communicated, worked, or collaborated with scientists of other nationalities
- Fellows made presentations to non-academic public
- Fellows received other preparation in professional skills development (please specify): _____

Cooperating Teachers' Development Activities: (mark all that apply)

Activity	Summer	Yearlong
Teachers and fellows participated in content and pedagogy training related to developing GK-12 activities.	☐	☐
Teachers participated with fellows in training that stressed teamwork.	☐	☐
Teachers received training in effective mentoring skills.	☐	☐
Teachers participated in coursework/training sessions that helped increase their science content knowledge.	☐	☐
Teachers participated as team members engaged in joint research and educational efforts.	☐	☐
Teachers made presentations at academic/scientific professional conferences or meetings.	☐	☐
Teachers participated in the development of multimedia materials, Web sites, or other cyber-enabled tools for teaching/learning.	☐	☐
Teachers participated in training in authoring, submitting, or publishing professional papers.	☐	☐
Teachers had other preparation in professional skills development (please specify):_____	☐	☐

14. International Experience

☐ Mark the box if your project did not participate in an international experience and skip the other questions in this section.

What country or countries did any your project participants visit as part of the GK-12 international experience (select all that apply)
- Afghanistan
- Albania …

How many of your fellows engaged in an international experience through the GK-12 project during this reporting period:_____

How many of your teachers engaged in an international experience through the GK-12 project during this reporting period:_____

Identify the following international activities involving GK-12 fellows (mark all that apply)
- Fellow(s) worked in a university and conducted research overseas.
- Fellow(s) worked as a team with teachers and students overseas.
- Fellow(s) worked with their teachers overseas.
- Fellow(s) attended conferences/workshops.
- Other international activities (please specify):_____

Identify the following international activities involving GK-12 teachers (mark all that apply)
- Teacher(s) worked as a team with their fellow in similar to GK-12 activities with international teachers and students.
- Teacher(s) attended conferences/workshops.
- Teacher(s) took coursework/training.
- Teacher(s) worked or conducted research/field work with their fellow.
- Other international activities (please specify):_____

Identify the opportunities for PIs and co-PIs that resulted from the international experiences associated with the GK-12 project. (mark all that apply)
- Developed new collaborations
- Developed new access to facilities/skills
- Developed new opportunities for research/education/training
- Other (please specify): _____

Do you plan to maintain the collaborations developed from the international experience

- No
- Yes, please specify:_____

Please specify why your project does or does not plan to maintain collaborations developed from the international experiences:

Briefly identify up to three research or educational achievements resulting from the international component of your GK-12 project. Each achievement may involve a single fellow or a group of fellows.
Achievement 1:_____
Achievement 2:_____
Achievement 3:_____

15. Program Impact

Do you have an overall plan in place and active with a specific set of goals and timelines for recruitment and retention of GK-12 fellows, including specifics for broadening participation of groups underrepresented in science and engineering?
- Yes
- No

Regardless of your response to the previous question, please describe up to three of the best practices you employed to recruit qualified fellows to your GK-12 project during this reporting period.
   Best Practice 1:_____
   Best Practice 2:_____
   Best Practice 3:_____

Please describe the extent to which each of the following practices has been productive for recruiting fellows overall to your GK-12 project during this reporting period

Practice	Productive	Somewhat Productive	Not Productive	N/A
*Relationships with NSF programs that can provide an undergraduate pool of potential GK-12 fellows (e.g., REU's NSF Centers)	☐	☐	☐	☐
*Relationships with faculty and programs at other academic institutions	☐	☐	☐	☐
*Use of recruiting resources on the GK-12 campus (e.g., career service office, graduate studies office)	☐	☐	☐	☐
*Collaboration with other NSF-funded programs to improve recruitment	☐	☐	☐	☐
*Use of professional meetings, conferences, associations to communicate, research, and market to potential GK-12 fellows	☐	☐	☐	☐
Other (please specify): _____	☐	☐	☐	☐

Please describe the extent to which each of the following practices has been productive for recruiting underrepresented minority and women fellows overall to your GK-12 project during this reporting period.

Practice	Underrepresented Minorities				Women			
	Productive	*Somewhat*	*Not*	*N/A*	*Productive*	*Somewhat*	*Not*	*N/A*
*Relationships with NSF programs that specifically focus on broadening participation of women or underrepresented minorities in STEM (e.g., LSAMP, AGEP, TCUP, ADVANCE)	☐	☐	☐	☐	☐	☐	☐	☐
*Use of resources on the campus (e.g., academic development programs, offices for campus diversity, or minority and women's student groups)	☐	☐	☐	☐	☐	☐	☐	☐
*Interaction with professional associations, organizations, or committees serving women or underrepresented minority communities (e.g., National Action Council for Minorities in Engineering, Society of Women Engineers, committees in professional societies focused on minority communities and women)	☐	☐	☐	☐	☐	☐	☐	☐
*Bridge programs for entering graduate students	☐	☐	☐	☐	☐	☐	☐	☐
*Mentoring or advisement arrangements that take advantage of underrepresented minorities or women faculty or graduate students on campus	☐	☐	☐	☐	☐	☐	☐	☐
*Relationships with faculty and programs at minority-serving academic institutions (e.g., historically black colleges and universities, Hispanic-serving institutions, tribal colleges)	☐	☐	☐	☐	☐	☐	☐	☐
*Collaboration with other GK-12 projects for recruitment	☐	☐	☐	☐	☐	☐	☐	☐
Other (please specify): _____	☐	☐	☐	☐	☐	☐	☐	☐

16. Verify Fellows Interactions with K-12 Students

Approve/edit/add fellow-teacher pairs submitted by fellows and teachers

Teacher Names	Fellow Names								
Last, First	☐	☐	☐	☐	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐	☐	☐	☐	☐

Approve/edit/add in- classroom locations submitted by fellows

School	Class Name	Other Identifying Information	Subject(s)	GK-12 Teacher(s)	Fellow(s)	Grade(s)	# Students	Delete Class	
								☐	
								☐	
								☐	

Approve/edit/add out-of-classroom activities submitted by fellows

Location	Activity Type	Fellow(s)	# Teachers	# Students	Delete Activity
					☐
					☐
					☐

1. Contact Information
Some data will be pre-filled with data entered by the PI
Name:
Title
First name
Middle name
Last name
Suffix
Social Security Number: (select one)
I choose to report my full SSN:___-__-____
I choose to report the last 4 digits of my SSN: ____
Other (if blank system assigns 999-99-9999): _____
Current Address:
Street address 1
Street address 2
City
State
Zip or postal code
Phone:
Number
Extension
Alternate Phone:
Number
Extension
Type: (mark one)
• U.S. number
• Non-U.S. number
E-mail Address
2. Permanent Contact Information
Permanent Address:
Street address 1
Street address 2
City
State or country
Zip or postal code
Permanent Phone:
Number
Extension
Alternate Phone:
Number
Extension
Type: (mark one)
• U.S. number
• Non-U.S. number
Permanent E-mail Address

3. Demographic Information
Ethnicity: (select one) • Hispanic or Latino • Not Hispanic or Latino • Not reported
Race: (mark one or more) • American Indian or Alaska Native • Asian • Black or African American • Native Hawaiian or Other Pacific Islander • White • Not reported
Gender: • Female • Male • Not reported
Citizenship: (select one) • U.S. citizen • Permanent resident • U.S. national • Non-U.S. citizen
Permanent Resident since: [reported only by permanent residents] Month Year

Disability: (Select one)
• Yes (Mark "yes" if any of the following apply:
  • Deaf or serious difficulty hearing
  • Blind or serious difficulty seeing even when wearing glasses
  • Serious difficulty walking or climbing stairs
  • Other serious disability related to a physical, mental, or emotional condition)
• No
• Do not wish to provide

Place of Birth (U.S. State or Country)
4. Academic History
Name of high school/secondary school/institution from which you graduated/received a diploma
Location of High School (City, State or Country, and Zip or Postal code)
School type (select one) • Public • Private • Other (please specify): _____
Undergraduate Degree

Institution:
  U.S. Institution (Name and State)
  OR
  International Institution:
    Name
    Country

Degree: (select one) • B.A. • B.S.

• Other (please specify) _____
Discipline: (select one)   • Chemistry – Analytical   • …see footnote 11 for complete list…   • STEM Education and Learning Research – Other (please specify): _____   • Other (please specify): _____
Academic Department

Date of Completion:
    Month
    Year

Graduate Degree

Institution:
    U.S. Institution (Name and State)
    OR
    International Institution:
      Name
      Country

Degree: (select one)   • M.A.   • M.S.   • Ph.D.   • Other Postbaccalaureate Degree(please specify) _____
Discipline: (select one)   • Chemistry – Analytical   • …see footnote 11 for complete list…   • STEM Education and Learning Research – Other (please specify): _____   • Other (please specify): _____
Academic Department

Date of Completion:
    Month
    Year

5. Previous Employment and Teaching Experience
Do you have a K-12 teaching certification?   • Yes, please specify _____   • No
Do you have any prior K-12 teaching experience?   • Yes, please specify _____   • No
Have you taken/are you taking any education certification courses?   • Yes, please specify _____   • No
Were you employed in the public or private sector for 1 or more years after receiving your first undergraduate degree and prior to becoming a GK-12 fellow?   • Yes   • No
Total number of years (equal to or greater than 1 year, to the nearest year) you were employed in the public or private sector after receiving your first undergraduate degree and prior to becoming a GK-12 fellow
6. Current Graduate Work
Current Graduate Institution:_____

Date when you started your program:
   Month
   Year

Expected Graduation Date
   Month
   Year

If you expect to graduate within one year, what type of employment are you pursuing? (check all that apply)
  • Government - Postdoc
  • Government - Full-time position
  • Government - Part-time position
  • Industry/Business - Postdoc
  • Industry/Business - Full-time position
  • Industry/Business - Part-time position
  • Educational Institution (college, University, or K-12) - Postdoc
  • Educational Institution (college, University, or K-12) - Tenure-track faculty
  • Educational Institution (college, University, or K-12) - Non-tenure-track faculty
  • Educational Institution (college, University, or K-12) - Staff
  • Nonprofit - Postdoc
  • Nonprofit - Full-time position
  • Nonprofit - Part-time position
  • Self-employed/Entrepreneur

If you expect to graduate within one year, what type of employment would you prefer most? (check one)
  • Government - Postdoc
  • Government - Full-time position
  • Government - Part-time position
  • Industry/Business - Postdoc
  • Industry/Business - Full-time position
  • Industry/Business - Part-time position
  • Educational Institution (college, University, or K-12) - Postdoc
  • Educational Institution (college, University, or K-12) - Tenure-track faculty
  • Educational Institution (college, University, or K-12) - Non-tenure-track faculty
  • Educational Institution (college, University, or K-12) - Staff
  • Nonprofit - Postdoc
  • Nonprofit - Full-time position
  • Nonprofit - Part-time position
  • Self-employed/Entrepreneur

Academic level during fellowship year: (select one)
  • Master's 1st year
  • Master's 2nd year
  • Master's 3rd year
  • Doctorate 1st year
  • Doctorate 2nd year
  • Doctorate 3rd year
  • Doctorate 4th year
  • Doctorate 5th year
  • Other (please specify level and year) _____

Discipline: (select one)
  • Chemistry – Analytical
  • …see footnote 11 for complete list…
  • STEM Education and Learning Research – Other (please specify): _____
  • Other (please specify): _____

Academic Department
Amount of NSF funds in your GK-12 stipend for the current academic year: (select one)   • $30,000 stipend

• $10,500 cost of education
• Less than $10,500; specify the amount:$_____

Did you have to pay tuition and fees in excess of the $10,500 allowance for the cost of education?
• Yes
• No
If yes, how much did you have to pay?

How does your fellowship stipend compare to stipends received by regular teaching or research fellowships at your institution?
• Greater than others
• Equal to others
• Less than others
• Do not know

What is your research topic? *(research topic does not have to be related to GK-12)*

Does your research involve the following: (check all that apply)
• Bioinformatics
• Biotechnology
• Civil Infrastructure
• Climate change
• Computational Science and Engineering
• Cyber infrastructure Enabled Discovery and Learning
• Device Development
• Energy and Alternative Energy
• Entrepreneurialism
• Evolution and Development
• Materials Science and Engineering
• Nanoscience and Nanotechnology
• Neuroscience: Biology and Psychology
• Sensing, Signals, Imaging and Signal Processing
• Social and Behavioral Sciences
• Sustainability, Ecology and the Environment
• Water and water quality
• Other leading-edge science (please specify): _____

7. Research Advisor Information

Advisor's Name:
Title
First name
Middle name
Last name
Suffix

Advisor's Academic Discipline: (select one)
• Chemistry – Analytical
• …see footnote 11 for complete list…
• STEM Education and Learning Research – Other (please specify): _____
• Other (please specify): _____

Advisor's Academic Department

Advisor's phone:
Number
Extension

Advisor's E-mail Address

8. Interactions with K-12 Students
Teachers you worked with as part of your GK-12 participation: (select all that apply) • Teacher 1 • Teacher 2 …
Schools, organizations and other locations you worked with as part of your GK-12 participation: (select all that apply) • School/organization 1 • School/organization 2 …
Class You Worked With as Part of Your GK-12 Participation
School
Teacher(s) of This Class (select all that apply) • Teacher 1 • Teacher 2 • …
Class Name
Additional Identifying Information (e.g. period, time, marking period)
Grade of students (mark all that apply) • K—Kindergarten • 1--1st grade • 2 --2nd grade • 3---3rd grade • 4 --4th grade • 5 --5th grade • 6 --6th grade • 7--7th grade • 8 --8th grade • 9-- 9th grade • 10 --10th grade • 11 --11th grade • 12 --12th grade
Subjects (select one) • Mathematics—Elementary • Mathematics—General • Mathematics—Middle school • Mathematics—High school (secondary) • Science—Elementary school • Science—General • Science—Integrated science • Science—Biology • Science—Chemistry • Science—Earth science • Science—Physical science • Science—Physics • Science—Social • Computer science • Other (please specify) _____
How is this course considered? • Honors/AP/IP • Academic • Non-Academic
Number of students
Out-of-Classroom GK-12 Activity
Schools and organizations you worked with as part of your GK-12 participation in this out-of-classroom activity with K-12 students: (select all that apply from preloaded list and add

nonpartners)
- School/organization 1
- School/organization 2 …

Organizations not partnered with project

Activity Type(s): (check all that apply)
- After school science club   - Community outreach on STEM   - Field trips   - Informal science education activities   - Science fair   - Schoolyard activities   - University/laboratory visits   - Other (please specify): _____

Number of K-12 teachers you worked with as part of your out-of-classroom GK-12 activity

Number of K-12 students you worked with as part of your out-of-classroom GK-12 activity

Overall Classroom Experience

To what extent did you integrate your research into the GK-12 classroom experience for each of the items listed below (for each item choose one rating)

	Integration of Research				
Item	*Not at All*				
Developed module/lesson plan	☐	☐	☐	☐	☐
Special presentation	☐	☐	☐	☐	☐
Involved teacher in research	☐	☐	☐	☐	☐
Involved students in research	☐	☐	☐	☐	☐
Other (please specify)_____	☐	☐	☐	☐	☐

Please check the activities that you participated in while in the classroom: (check all that apply)
- Serving as a role model for students
- Adapting scientific expertise to the appropriate grade level
- Working collaboratively with teachers
- Working with students during class
- Enhancing lessons/curriculum
- Serving as a scientist in the classroom
- Showing teachers and students how to use new tools, technology, instrumentation, and measurement
- Other (please specify): _____

9. Honors and Awards During GK-12 Project Participation

☐ Select if no honors or awards to report

Honor or Recognition

Name of honor or recognition

Organization granting the award

Year earned

Other Award: Fellowship, Scholarship, or Grant Other Than GK-12
Title of the proposal
Awarding agency
Year awarded

10. Development Activities

Average hours per week spent on GK-12 activities

Did you participate in regular training throughout the year specific to your GK-12 project
- Yes
- No, Elaborate why not (and skip the next two questions)

Format of training (check all that apply)
- Courses
- Seminars
- Workshops
- Other (please specify): _____

Training received:

Activity	Frequency (mark one frequency per activity)				
	Summer	Weekly	Bimonthly	Monthly	Other (please specify)
I took coursework/training (e.g., new courses, seminars) that included regular critique of and feedback on communication skills	☐	☐	☐	☐	
I received training in collaboration and team building	☐	☐	☐	☐	
I received training in developing leadership skills	☐	☐	☐	☐	
I received training in pedagogy (i.e., science of teaching, education, and instructional methods)	☐	☐	☐	☐	
I received training dealing with effective time and task management	☐	☐	☐	☐	
I received other training (please specify):_____	☐	☐	☐	☐	

Did you participate in a GK-12 summer institute?
- Yes,
- No, Elaborate why not (and skip the next question)

How long did the summer institute last? (select one)
- Less than 1 week
- 1 week
- 2 weeks
- 3 weeks
- 4 weeks
- More than 4 weeks
  Other (please specify): _____

Professional development activities associated with your GK-12 project during the reporting period. (check all that apply)

Item	Summer	Yearlong
I participated with teachers in content and pedagogy training related to developing GK-12 activities.	☐	☐
I developed multimedia materials or other cyber-enabled tools to communicate to external audiences.	☐	☐

I developed and presented course and/or curriculum materials.	☐	☐
I served as a mentor to others (e.g., graduate students, undergraduates, laboratory technicians).	☐	☐
I authored/coauthored and submitted grant proposals.	☐	☐
I had professional interactions other than internships with non-academic employers (e.g., industry, government) in order to learn about carrier opportunities and requirements.	☐	☐
I communicated, worked, or collaborated with scientists of other nationalities.	☐	☐
I made presentations to non-academic public.	☐	☐
I received other preparation in professional skills development (please specify):_____	☐	☐

11. International Experience

Did you visit a foreign country as part of your GK-12 fellowship?
- Yes
- No, skip the following questions in this section

Experience per Country

Country

Main purpose of visit

Length of international experience in weeks (1-52)

Activities that you participated in as part of your international experience (check all that apply)
- Attended a conference/workshop outside of the U.S.
- Undertook coursework/training outside of the U.S.
- Worked as a team with teachers and students overseas
- Worked, conducted research/field work, or interned outside of the U.S.
- Worked with my classroom teacher overseas
- Participated in other international activities (please specify): _____

Is this international experience related to your current graduate research? (select one)
- Yes
- No

Most beneficial professional or career related aspect of this international activity

Were you prepared for your international experience?
- Yes
- No

How were you prepared prior to the international visit? (check all that apply)
- Course
- Seminar
- Workshop
- Other (please specify): _____

What experiences were included in the preparation for your international experience? (check all that apply)
- How to work in a foreign laboratory/field work
- Graduate education/Education/ laboratory differences in country to be visited
- Language
- Cultural differences
- Learning about the area
- Other (please specify): _____

What did you accomplish?

What types of accomplishments apply to your international experience? (check all that apply)
- Awards/Honors/Recognitions
- Invention/Patent
- Presentations
- Publications
- Other (please specify): _____

Do you plan to continue with this international collaboration?

• Yes
• No

Specify why you do or do not plan to continue with this international collaboration

12. Research and Professional Experience

How involved was your faculty advisor in your GK-12 activities? (select one)
- Not involved
- Somewhat involved
- Involved
- Regularly involved

How did participation in GK-12 activities affect your graduate research productivity? (check all that apply)
- I am better organized.
- I find my work time is too fragmented.
- I am better able to write about my research results.
- I am better able to focus on my research.
- I have less time to focus on my research.
- I am better prepared to present research findings to broad (scientific and nonscientific) audiences.
- Other (please specify): _____

How did your GK-12 participation affect your professional pursuits and career goals as a scientist? (check all that apply)
- I have been better able to figure out what I want to pursue as a career.
- I am better prepared for a career in academia.
- I am better prepared to pursue a career that involves research and teaching.
- I will now consider a wider array of career paths than I did before GK-12.
- I am committed to contributing to K–12 STEM education at some point in my career.
- I better understand the importance of the role of a scientist in K–12 education.
- I am a more globally engaged scientist.
- Other (please specify): _____

Check the areas in which your knowledge/skills have improved as a result of your GK-12 participation. (check all that apply)
- Professional and academic writing skills
- Pedagogy/teaching skills
- Professional speaking or presentation skills
- Team building/collaboration skills
- Communicating science or math concepts to diverse audiences
- Communicating my research and/or area of expertise
- Other (please specify): _____

Involvement with the GK-12 program

Most important thing you gained from participating in the GK-12 program

Most important contribution you made to the GK-12 program

List up to two concerns about or areas of improvement for the GK-12 program or your experience with the program.
- Concern 1
- Concern 2

1. Contact Information

Some data will be pre-filled with data entered by PI

Name:
    Title
    First name
    Middle name
    Last name
    Suffix

Address:
    Street address 1
    Street address 2
    City
    State
    Zip or postal code

Phone:
    Number
    Extension

Alternate Phone:
    Number
    Extension
    Type: (mark one)
- U.S. number
- Non-U.S. number

School E-mail Address

Other E-mail Address

School Name(s)

2. Demographic Information

Ethnicity: (select one)
- Hispanic or Latino
- Not Hispanic or Latino
- Not reported

Race: (Mark one or more)
- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander
- White
- Not reported

Gender:
- Female
- Male
- Not reported

Disability: (Select one)
- Yes (Mark "yes" if any of the following apply:
  - Deaf or serious difficulty hearing
  - Blind or serious difficulty seeing even when wearing glasses
  - Serious difficulty walking or climbing stairs
  - Other serious disability related to a physical, mental, or emotional condition)
- No
- Do not wish to provide

3. Degrees

Undergraduate Degree

Institution:
   U.S. Institution (Name and State)
   OR
   International Institution:
      Name
      Country

Degree: (select one)
- B.A.
- B.S.
- Other (please specify) _____

Discipline: (select one)
- Education – Early childhood
- Education – Elementary
- Education – Middle
- Education – High
- Education – Other
- Chemistry – Analytical
- …see footnote 4 for complete list (other than Education –…)…
- STEM Education and Learning Research – Other (please specify): _____
- Other (please specify): _____

Date of Completion:
   Month
   Year

Graduate Degree

Institution:
   U.S. Institution (Name and State)
   OR
   International Institution:
      Name
      Country

Degree: (select one)
- M.A.
- M.S.
- Ed.D.
- Ph.D.
- Other Postbaccalaureate Degree (please specify) _____

Discipline: (select one)
- Education – Early childhood
- Education – Elementary
- Education – Middle
- Education – High
- Education – Other
- Chemistry – Analytical

- …see footnote 4 for complete list (other than Education –…)…
- STEM Education and Learning Research – Other (please specify): _____
- Other (please specify): _____

Date of Completion:
  Month
  Year

4. Teaching Experience and Credentials

Total number of years teaching (at any K–12 school)

Do you have any K-12 teaching certification?
- Yes, complete the following questions in this section
- No, skip the following questions in this section

Grades certified to teach: (select all that apply)
- Early childhood
- Elementary
- Middle/junior high
- High school

Subjects certified to teach: (select all that apply)
- Mathematics
- Computer/technology
- General studies
- Science-Biology
- Science-Chemistry
- Science-Earth science
- Science-Elementary science
- Science-General science
- Science-Integrated science
- Science-Physical science
- Science-Physics
- Other (please specify) _____

Did you receive your certification through an alternative certification program? (e.g., Teach for America)
- Yes
- No

5. Experience Working With GK-12 Fellows

Graduate fellows you worked with as part of your GK-12 participation

Fellow

Fellow Name (Select names from fellow list pre-populated with data entered by the PI)

Subjects (check all that apply)
- Mathematics—Elementary
- Mathematics—General
- Mathematics—Middle school
- Mathematics—High school (secondary)
- Science—Elementary school
- Science—General
- Science—Integrated science
- Science—Biology
- Science—Chemistry
- Science—Earth science
- Science—Physical science
- Science—Physics
- Science—Social

- Computer science   - Other (please specify) _____
Male students
Female students
Underrepresented minority students
Activity/Lesson Written/Developed in Classroom Using Fellows as Scientific Experts
Grade level(s) for activity/lesson developed (mark all that apply)   - Elementary   - Middle school   - High school   - Other (please specify) _____
Academic Disciplines (mark all that apply)   - Mathematics—Algebra I   - Mathematics—Algebra II   - Mathematics—Elementary school   - Mathematics—Geometry   - Science—General   - Science—Integrated   - Science—Biology   - Science—Chemistry   - Science—Computer   - Science—Earth/space   - Science—Engineering   - Science—Physical science   - Science—Physics   - Other (please specify): _____
Brief Description
Overall Experience Working with Fellows
Average hours a week worked directly with GK-12 fellows
How many of these hours, that you spent working directly with your GK-12 fellows, were spent on planning/preparation?
Please check the activities of the GK-12 fellows with whom you worked (check all that apply)   - Serving as a role model for students   - Teaching/co-teaching lessons   - Adapting scientific materials to the appropriate grade level   - Working collaboratively with teachers   - Working with students   - Developing activities   - Serving as a scientist in the classroom

Using the following table, indicate how your GK-12 fellows incorporated their research into your classroom.

Item	*Integration of Research (select one rating)*				
	Not at All	*One Time*	*Several Times*	*Ongoing*	*Incorporated Into Curriculum*
*Developed module/ lesson plan	☐	☐	☐	☐	☐
*Special presentation	☐	☐	☐	☐	☐
*Involved teacher in research	☐	☐	☐	☐	☐
*Involved students in research	☐	☐	☐	☐	☐
Other (please specify) ___	☐	☐	☐	☐	☐

6. Honors and Awards During GK-12 Project Participation

☐ Declare nothing to report

Honor or Recognition

Name of honor or recognition

Organization granting the award

Year earned

Other Award: Fellowship, Scholarship, or Grant Other Than GK-12

Title of proposal

Awarding agency

Year awarded

7. Development Activities

Average hours per week spent on GK-12 activities

Did you participate in regular training throughout the year specific to your GK-12 project?
- Yes

    Format of training (check all that apply)
    - Courses
    - Seminars
    - Workshops
    - Other (please specify)

- No

    Elaborate why not

Did you participate in a GK-12 summer institute?
- Yes

    How long did the summer institute last? (select one)
    - Less than 1 week
    - 1 week
    - 2 weeks
    - 3 weeks
    - 4 weeks
    - More than 4 weeks
    - Other (please specify) _____
- No

    Elaborate why not

Professional development activities associated with your GK-12 project during the reporting period. Because some of these activities were ongoing throughout the entire reporting period and others were limited to summer institutes, indicate when these professional development activities occurred. Check "Summer," "Yearlong," or both, if applicable. (check all that apply)

Item	Summer	Yearlong
I participated in coursework/training sessions that helped increase my science content knowledge.	☐	☐
I participated in coursework/training leading to certification/recertification	☐	☐
I participated in coursework/training leading to an advanced degree.	☐	☐
I made presentations at academic/ professional conferences or meetings	☐	☐
I developed multimedia materials, Web sites, or other cyber-enabled tools for teaching/learning.	☐	☐
I participated as a team member engaged in joint research.	☐	☐
I received training in effective mentoring skills.	☐	☐
I participated with fellows in a workshop that stressed teamwork and collaboration.	☐	☐
I participated with fellows in content and pedagogy sessions.	☐	☐
I participated in training in authoring, submitting, or publishing professional papers.	☐	☐
I received other preparation in professional skills development (please specify): _____	☐	☐

8. International Experience

Did you visit a foreign country as part of your GK-12 experience?
- Yes
- No (If no, please skip the rest of this section)

Experience per Country

Country

Main purpose of visit

Length of international experience in weeks (1-52)

As part of your international experience, did you (check all that apply)
- Work in a university and share research with graduate students and professors overseas
- Work on activities similar to GK-12 with international teachers and students
- Develop ongoing international collaborations/projects
- Participate in a Research for Teachers program
- Take credit/certification/recertification coursework/training
- Conduct research/field work
- Participate in other international activities (please specify): _____

Most beneficial professional or career related aspect of this international activity

Do you plan to continue with this international collaboration?
- Yes
- No

Specify why you do or do not plan to continue with this international collaboration

9. Professional Experience

Has your professional practice in the following areas improved as a result of your participation in GK-12: (check all that apply)
- Content knowledge of science or math
- Access to innovative lesson plans
- Ability to incorporate inquiry-based lessons in the future
- Desire to continue your own education
- Involvement in professional networks/partnerships with university scientists
- Enthusiasm for science/math teaching