

APPENDIX B3

GK-12 Monitoring System Crosswalk: Teacher

DATA ELEMENTS OF THE GRADUATE STEM FELLOWS IN K-12 EDUCATION

MONITORING SYSTEM (GK-12): TEACHER

(Data Collected Annually from Lead/NSF-Supported Teachers)

New Elements	Common Collection Categories	Staff and Project Participant	Project Implementation	Project Outputs ⁱⁱⁱ
	1. Contact Information <i>Some data will be pre-filled with data entered by PI</i>			
	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		
X	Alternate Phone: Number Extension Type: (mark one) • U.S. number • Non-U.S. number	X		
	School E-mail Address	X		
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		
	Race: (mark one or more) • American Indian or Alaska Native • Asian	X		

New Elements	Common Collection Categories	Staff and Project Participant	Project Implementation	Project Outputs
Questions	<ul style="list-style-type: none"> • Black or African American • Native Hawaiian or Other Pacific Islander • White • Not reported 			
	Gender: <ul style="list-style-type: none"> • Female • Male • Not reported 	X		
	Disability Status: (mark one or more) <ul style="list-style-type: none"> • None • Hearing impairment • Mobility or orthopedic impairment • Visual impairment • Not reported • Other (please specify) _____ 	X		
	3. Degrees			
	Undergraduate Degree			
	Institution: U.S. Institution (Name and State) OR International Institution: Name Country	X		
	Degree: (select one) <ul style="list-style-type: none"> • B.A. • B.S. • Other (please specify) _____ 	X		
	Discipline: (select one) <ul style="list-style-type: none"> • Education—Early childhood • Education—Elementary • Education—Middle • Education—High • Education—Other • Chemistry - Analytical • ...see endnotes for complete list (other than Education-...)iv... • STEM Education and Learning Research – Other (please specify): _____ • Other (please specify): _____ 	X		
	Date of Completion: Month Year	X		
	Graduate Degree			

New Elements	Common Collection Categories	Staff and Project Participant	Project Implementation	Project Outputs
Questions	Institution: U.S. Institution (Name and State) OR International Institution: Name Country	X		
	Degree: (select one) <ul style="list-style-type: none"> • M.A. • M.S. • Ed.D. • Ph.D. • Other Postbaccalaureate Degree (please specify) _____ 	X		
	Discipline: (select one) <ul style="list-style-type: none"> • Education—Early childhood • Education—Elementary • Education—Middle • Education—High • Education—Other • Chemistry - Analytical • ...see endnotes 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		
X	Do you have any K-12 teaching certification? <ul style="list-style-type: none"> • 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) <ul style="list-style-type: none"> • Early childhood • Elementary • Middle/junior high • High school 	X		
	Subjects certified to teach: (select all that apply) <ul style="list-style-type: none"> • Mathematics • Computer/technology • General studies • Science-Biology • Science-Chemistry • Science-Earth science • Science-Elementary science 	X		

New Elements	Common Collection Categories	Staff and Project Participant	Project Implementation	Project Outputs
	Questions <ul style="list-style-type: none"> • Science-General science • Science-Integrated science • Science-Physical science • Science-Physics • Other (please specify) _____ 			
X	Did you receive your certification through an alternative certification program? (e.g., Teach for America) <ul style="list-style-type: none"> • Yes • No 	X		
	5. Experience Working With GK-12 Fellows			
X	Graduate fellows you worked with as part of your GK-12 participation		X	
	Fellow			
X	Fellow Name (Select names from fellow list pre-populated with data entered by the PI)		X	
X	Subjects (check all that apply) <ul style="list-style-type: none"> • 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	
X	# Male students			X
X	# Female students			X
X	# Underrepresented minority students			X
	Activity/Lesson Written/Developed in Classroom Using Fellows as Scientific Experts			
X	Grade level(s) for activity/lesson developed (mark all that apply) <ul style="list-style-type: none"> • Elementary • Middle school • High school • Other (please specify) _____ 			X
X	Academic Disciplines (mark all that apply) <ul style="list-style-type: none"> • Mathematics—Algebra I 			X

New Elements	Common Collection Categories Questions	Staff and Project Participant	Project Implementation	Project Outputs																																									
	<ul style="list-style-type: none"> • 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): _____ 																																												
X	Brief Description			X																																									
	Overall Experience Working with Fellows																																												
X	Average hours a week worked directly with GK-12 fellows		X																																										
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) <ul style="list-style-type: none"> • 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																																										
X	Using the following table, indicate how your GK-12 fellows incorporated their research into your classroom. <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th rowspan="2" style="width: 30%;"><i>Item</i></th> <th colspan="5" style="text-align: center;"><i>Integration of Research (select one rating)</i></th> </tr> <tr> <th style="text-align: center;"><i>Not at All</i></th> <th style="text-align: center;"><i>One Time</i></th> <th style="text-align: center;"><i>Several Times</i></th> <th style="text-align: center;"><i>Ongoing</i></th> <th style="text-align: center;"><i>Incorporated Into Curriculum</i></th> </tr> </thead> <tbody> <tr> <td>*Developed module/ lesson plan</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>*Special presentation</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>*Involved teacher in research</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>*Involved students in research</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Other (please specify) ____</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </tbody> </table>	<i>Item</i>	<i>Integration of Research (select one rating)</i>					<i>Not at All</i>	<i>One Time</i>	<i>Several Times</i>	<i>Ongoing</i>	<i>Incorporated Into Curriculum</i>	*Developed module/ lesson plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	*Special presentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	*Involved teacher in research	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	*Involved students in research	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Other (please specify) ____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			X
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	6. Honors and Awards During GK-12 Project Participation																																												

New Elements	Common Collection Categories	Staff and Project Participant	Project Implementation	Project Outputs						
	<p>Questions</p> <p><input type="checkbox"/> Declare nothing to report</p>			X						
	Honor or Recognition									
	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 proposal			X						
	Awarding agency			X						
	Year awarded			X						
	7. Development Activities									
	Average hours per week spent on GK-12 activities		X							
X	<p>Did you participate in regular training throughout the year specific to your GK-12 project?</p> <ul style="list-style-type: none"> • Yes <p>Format of training (check all that apply)</p> <ul style="list-style-type: none"> • Courses • Seminars • Workshops • Other (please specify) • No <p>Elaborate why not</p> 		X							
X	<p>Did you participate in a GK-12 summer institute?</p> <ul style="list-style-type: none"> • Yes <p>How long did the summer institute last? (select one)</p> <ul style="list-style-type: none"> • Less than 1 week • 1 week • 2 weeks • 3 weeks • 4 weeks • More than 4 weeks • Other (please specify) _____ • No <p>Elaborate why not</p> 		X							
X	<p>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)</p> <table border="1" data-bbox="168 1801 1198 1864"> <thead> <tr> <th data-bbox="168 1801 954 1835"><i>Item</i></th> <th data-bbox="954 1801 1068 1835"><i>Summer</i></th> <th data-bbox="1068 1801 1198 1835"><i>Yearlong</i></th> </tr> </thead> <tbody> <tr> <td data-bbox="168 1835 954 1864">I participated in coursework/training sessions that helped increase my</td> <td data-bbox="954 1835 1068 1864" style="text-align: center;"><input type="checkbox"/></td> <td data-bbox="1068 1835 1198 1864" style="text-align: center;"><input type="checkbox"/></td> </tr> </tbody> </table>	<i>Item</i>	<i>Summer</i>	<i>Yearlong</i>	I participated in coursework/training sessions that helped increase my	<input type="checkbox"/>	<input type="checkbox"/>		X	
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New Elements	Common Collection Categories		Staff and Project Participant	Project Implementation	Project Outputs
	Questions				
	science content knowledge.				
	I participated in coursework/training leading to certification/recertification	<input type="checkbox"/>	<input type="checkbox"/>		
	I participated in coursework/training leading to an advanced degree.	<input type="checkbox"/>	<input type="checkbox"/>		
	I made presentations at academic/ professional conferences or meetings	<input type="checkbox"/>	<input type="checkbox"/>		
	I developed multimedia materials, Web sites, or other cyber-enabled tools for teaching/learning.	<input type="checkbox"/>	<input type="checkbox"/>		
	I participated as a team member engaged in joint research.	<input type="checkbox"/>	<input type="checkbox"/>		
	I received training in effective mentoring skills.	<input type="checkbox"/>	<input type="checkbox"/>		
	I participated with fellows in a workshop that stressed teamwork and collaboration.	<input type="checkbox"/>	<input type="checkbox"/>		
	I participated with fellows in content and pedagogy sessions.	<input type="checkbox"/>	<input type="checkbox"/>		
	I participated in training in authoring, submitting, or publishing professional papers.	<input type="checkbox"/>	<input type="checkbox"/>		
	I received other preparation in professional skills development (please specify): _____	<input type="checkbox"/>	<input type="checkbox"/>		
	8. International Experience				
X	Did you visit a foreign country as part of your GK-12 experience? <ul style="list-style-type: none"> • Yes • No (If no, please skip the rest of this section) 			X	
	Experience per Country				
X	Country			X	
X	Main purpose of visit			X	
X	Length of international experience in weeks (1-52)			X	
X	As part of your international experience, did you (check all that apply) <ul style="list-style-type: none"> • 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	
X	Most beneficial professional or career related aspect of this international activity				X
X	Do you plan to continue with this international collaboration? <ul style="list-style-type: none"> • Yes • No 			X	
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				X

New Elements	<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	Staff and Project Participant	Implementation Characteristics	Project Outputs
	your participation in GK-12: (check all that apply) <ul style="list-style-type: none"> • 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 			
	Has your involvement in the GK-12 program resulted in any of the following: (check all that apply) <ul style="list-style-type: none"> • Opportunities to attend conferences • Opportunities to make presentations at conferences • Awards received 			X
	As a result of your participation in GK-12 have you observed improvement in your students in the following areas: (check all that apply) <ul style="list-style-type: none"> • Content knowledge of science or math • Enthusiasm about science or math • Understanding of how to think like a scientist • Interest in pursuing science or math in the future • Interest in pursuing higher education • Other (please specify) _____ 			X
	Involvement with the GK-12 program			
X	Most important thing you gained from participating in the GK-12 program			X
X	Most important contribution you made to the GK-12 program			X
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

