

**Attachment K1**

**Transforming Undergraduate Education in Science, Technology,  
Engineering, and Mathematics (TUES)  
Monitoring System**

## **Table of Contents**

TUES: Crosswalk.....	3
TUES: Number of Respondents, Frequency of Response, and Annual Hour Burden.....	33
TUES: Hour Burden Estimates by Each Form and Aggregate Hour Burdens.....	34
TUES: Estimates of Annualized Cost to Respondents for the Hour Burdens.....	35
TUES: Estimates of Costs to Federal Government.....	36
TUES: Questions.....	37

**TUES: Crosswalk**

Common Collection Categories	Award Category			Staff and Project Participant Characteristics <sup>1</sup>	Project Implementation Characteristics <sup>2</sup>	Project Outputs <sup>3</sup>
	Single	Lead Collaborative	Non-Lead Collaborative			
Questions						
<p>Notes:</p> <ul style="list-style-type: none"> <li>• The System presents only those questions that are logically relevant to the type of award and previously answered questions. All questions pertain to the current reporting period’s participants, implementation, and outputs. All requested questions are required.</li> <li>• Three major categories drive the tailoring of the system to the award type. We have included columns to indicate these, which are: <ul style="list-style-type: none"> <li>• Single Award</li> <li>• Lead Collaborative Award (most questions)</li> <li>• Non-Lead Collaborative Award(fewest questions)</li> </ul> </li> <li>• For most questions respondents have the option to select a "don’t know” option or can enter "DK."</li> <li>• For most questions respondents have the option to add comments. The data elements associated with these comments are not shown in the crosswalk because the comments are entirely optional.</li> </ul>						
<p><b>i. Confirm Award Information</b></p> <p><i>Note: If any of the respondent’s answers in this section are inconsistent with the type of award that was preloaded, the data submission will be placed on hold. The respondent will receive the following notice: “This basic project information must be correct before you can begin entering data for this project. The TUESWeb Support Desk will contact you to find out what needs to be updated.”</i></p>						

<sup>1</sup> 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.

<sup>2</sup> Elements of these characteristics include: Sources and amount of funds, fellowships, scholarships, traineeships, partnerships, training, research methods.

<sup>3</sup> Elements of these characteristics include: research findings, publications, presentations, degrees granted, educational materials.

Questions	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Single	Lead Collaborative	Non-Lead Collaborative			
<p>Is [PI Name] the lead PI on Award No. [NSF Award Number]?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p>	X	X	X		X	
<p>What type of proposal was submitted for this award ?</p> <p><input type="radio"/> A Single Proposal that resulted in only this award (possibly including subawards for collaborating organizations)</p> <p><input type="radio"/> A Collaborative Proposal that included simultaneous linked proposals from investigators at different organizations, with each organization receiving its own TUES/CCLI award.</p>	X	X	X		X	
<p>Was this the Lead Award on the collaborative proposal?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p>		X	X		X	
<b>1. Tell Us About Your Awards</b>						
<b>1.1. Award Details</b>						
<i>Award information in this section is preloaded and displayed for verification purposes. PIs can contact the technical support team to report data that should be updated, but they cannot edit this data directly via the data collection instrument. Because some awards have supplemental awards, there may be more than one award associated with each report. The “embedded” awards are listed on each screen, but are not mentioned in the main questions.</i>						
NSF Award No.	X	X	X		X	
Award Title	X	X	X		X	
PI Organization	X	X	X	X		
<p>Official Grantee Institution</p> <p><i>This data element appears only if it differs from the PI Organization.</i></p>	X	X	X	X		
<p>Phase or Type</p> <p><i>The system will list one of the following types:</i></p> <ul style="list-style-type: none"> <li>• Phase 1/Type 1</li> <li>• Phase 2/Type 2</li> <li>• Phase 3/Type 2</li> <li>• Central Resource Project</li> </ul>	X	X	X		X	
Award Start Date	X	X	X		X	
For consolidated awards: First Award’s Start Date	X	X	X		X	
Award End Date	X	X	X		X	
Lead PI’s Name	X	X	X	X		
Lead PI’s Discipline	X	X	X	X		

Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Single	Lead Collaborative	Non-Lead Collaborative			
Questions						
TUES/CCLI Awards in this collaborative project: [[PI]], [[PI Organization]] – <b>Lead Award</b> [[PI a]], [[PI Organization a]] – Collaborating Award ... [[PI n]], [[PI Organization n]] – Collaborating Award		X	X		X	
Do you need to update any of this information? o Yes o No	X	X	X		X	
If yes, please describe the details you'd like to update:	X	X	X		X	
<b>1.2. About Your Institution</b>						
Type of institution: [PI institution name], [City], [State] has the following classification in <i>the Integrated Postsecondary Data System (IPEDS)</i> : [Institution Type] [Other specify value if present] If you believe this is incorrect, you can change it below. If you are not sure, use the IPEDS classification: o 2-year Institution o 2-year Institution on a 4-year College or University Campus o Bachelor's degree granting institution o Master's degree granting institution o Doctoral degree granting institution o Other U.S. Department of Education IPEDs Type o Don't know If Other: Please specify: _____  OR Type of Organization: (mark one or more) <input type="checkbox"/> Academic Consortium <input type="checkbox"/> Business <input type="checkbox"/> Consultant <input type="checkbox"/> National Laboratory <input type="checkbox"/> Museum <input type="checkbox"/> Nonprofit <input type="checkbox"/> Professional Society <input type="checkbox"/> Research Institute <input type="checkbox"/> Other (please specify): _____	X	X	X	X	X	
<b>1.3. Subawards</b>						

Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Single	Lead Collaborative	Non-Lead Collaborative			
Questions						
Were subaward funds expended or transferred from this award to any subawardees during the current reporting period? <input type="radio"/> Yes <input type="radio"/> No	X	X	X		X	
<b>Enter information for a subaward organization</b> <i>Provide the following information for the CCLI/TUES subaward institution. This subsection repeats for each institution</i>						
What type of organization received this subaward? <input type="radio"/> Academic institution (not including academic consortiums) <input type="radio"/> Other type of organization	X	X	X		X	
<b>Academic Subaward Institution</b>						
What is the name of the institution?	X	X	X	X		
Type of institution: [PI institution name], [City], [State] has the following classification in <i>the Integrated Postsecondary Data System (IPEDS)</i> : [Institution Type] [Other specify value if present] If you believe this is incorrect, you can change it below. If you are not sure, use the IPEDS classification: <input type="radio"/> 2-year Institution <input type="radio"/> 2-year Institution on a 4-year College or University Campus <input type="radio"/> Bachelor's degree granting institution <input type="radio"/> Master's degree granting institution <input type="radio"/> Doctoral degree granting institution <input type="radio"/> Other U.S. Department of Education IPEDs Type <input type="radio"/> Don't know If Other: Please specify: _____	X	X	X	X		
How many faculty from this institution were involved?	X	X	X		X	
How many students from this institution were involved?	X	X	X		X	
<b>Other Type of Subaward Organization</b>						

Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Single	Lead Collaborative	Non-Lead Collaborative			
Questions						
<p>Which of the following describes this organization? (mark one or more)</p> <input type="checkbox"/> Academic Consortium <input type="checkbox"/> Business <input type="checkbox"/> Consultant <input type="checkbox"/> National Laboratory <input type="checkbox"/> Museum <input type="checkbox"/> Nonprofit <input type="checkbox"/> Professional Society <input type="checkbox"/> Research Institute <input type="checkbox"/> Other (please specify): _____ <input type="checkbox"/> Don't Know	X	X	X	X		
<b>All Subaward Organization Types</b>						
<p>Approximately what amount of subaward funds did your award transfer to this organization during the current reporting period?</p>	X	X	X		X	
<p><i>Checkbox option (matching how this question can also be answered elsewhere in the instrument.)</i></p> <input type="checkbox"/> This organization houses or plans to house any laboratory instruments that BOTH: 1) Cost more than \$5,000 each, AND 2) Were purchased with TUES/CCLI funds during the current reporting period?	X	X	X			X
<b>1.4. Other Participating Organizations</b>						
<p>We are interested in the types of institutions that participate in TUES/CCLI projects. Did any other organizations participate significantly in your project during the current reporting period (not including your subawardees or other awardees in the collaborative project)?</p> <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Don't know	X	X	X		X	
<i>If no or don't know, skip the questions in this section.</i>						

Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs																																
	Single	Lead Collaborative	Non-Lead Collaborative																																			
<p><b>Questions</b></p> <p>Which of the following types of organizations participated significantly in your project? Put a check beside each type that participated. Then, for each type, indicate the number of organizations participating, numbers of faculty/professionals participating, and numbers of students that participated altogether for that type. It is okay to count the same organization or individual in multiple categories.</p> <ul style="list-style-type: none"> <li>• DO NOT include your organization, subawardee organizations, or organizations that should be independently reported by collaborating awardees.</li> <li>• Include organizations that received project funds, as well as organizations that did not.</li> <li>• Enter 0 for none. Enter DK for anything you don't know.</li> </ul> <p><i>The column headers for these tables are:</i></p> <p>A. How many of this type of organization participated significantly?</p> <p>B. How many faculty or professionals from this type of organization participated?</p> <p>C. How many students from this type of organization participated?</p>																																						
<table border="1"> <thead> <tr> <th></th> <th>A</th> <th>B</th> <th>C</th> </tr> </thead> <tbody> <tr> <td><b>U.S. academic institutions by highest degree granted:</b></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2-year Institutions</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2-year Institutions on a 4-year College or University Campus</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Bachelor's Degree Granting Institutions</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Master's Degree Granting Institutions</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Doctoral Degree Granting Institutions</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other U.S. Department of Education IPEDs type(s) (please specify): _____</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		A	B	C	<b>U.S. academic institutions by highest degree granted:</b>				2-year Institutions				2-year Institutions on a 4-year College or University Campus				Bachelor's Degree Granting Institutions				Master's Degree Granting Institutions				Doctoral Degree Granting Institutions				Other U.S. Department of Education IPEDs type(s) (please specify): _____							X		
	A	B	C																																			
<b>U.S. academic institutions by highest degree granted:</b>																																						
2-year Institutions																																						
2-year Institutions on a 4-year College or University Campus																																						
Bachelor's Degree Granting Institutions																																						
Master's Degree Granting Institutions																																						
Doctoral Degree Granting Institutions																																						
Other U.S. Department of Education IPEDs type(s) (please specify): _____																																						



Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Single	Lead Collaborative	Non-Lead Collaborative			
<b>Questions</b>  						
<b>U.S. academic institutions by enrollment demographics:</b> Institutions with High Disabilities Enrollment (>3% Undergraduates) Institutions with High American Indian or Alaska Native Enrollment (25% or more) – Not Tribally Controlled Institutions with High Black or African American Enrollment (non-Hispanic) (25% or more) Institutions with High Hispanic Enrollment (25% or more) Institutions with High Native Hawaiian or Other Pacific Islander Enrollment (25% or more)	A	B	C	X	X	
<b>U.S. academic institutions with special designations:</b> Historically Black Colleges or Universities American Indian Tribally Controlled Colleges or Universities	A	B	C	X	X	
  <b>Nonacademic organizations</b> Businesses Consultants National Laboratories Museums Non-profits Professional Societies Other type(s) of Nonacademic organizations (please specify): 	A	B	C	X	X	
<b>1.5. Uses of Award Funds</b>						

Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Single	Lead Collaborative	Non-Lead Collaborative			
Questions						
<b>Student Support</b>						
<p>During this reporting period, were funds from this award used to support students (undergraduate, graduate, or postdocs)?</p> <p> <input type="radio"/> Yes  <input type="radio"/> No  <input type="radio"/> Don't know </p> <p><i>If no or don't know, skip the remaining questions in this section</i></p>	X	X	X			X
<p>If yes, how many students were paid to work on the project using funds from this award?</p> <ul style="list-style-type: none"> <li>Number of undergraduate students paid:</li> <li>Number of graduate students paid:</li> <li>Number of postdocs paid:</li> </ul>	X	X	X			X
<b>Laboratory Instrument Purchases</b>						
<p>Did you purchase scientific instruments for laboratory improvement with this award during this reporting period?</p> <p> <input type="radio"/> Yes  <input type="radio"/> No  <input type="radio"/> Don't know </p> <p><i>If no or don't know, skip the remaining questions in this section</i></p>	X	X	X			X
<p>Total price of all laboratory instruments purchased with this award during this reporting period:</p> <p><i>If &lt;\$5,000, skip the remaining questions in this section.</i></p>	X	X	X			X
<p>Number of instruments purchased with this award that cost more than \$5,000:</p> <p><i>If 0, skip the next question.</i></p>	X	X	X			X

Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Single	Lead Collaborative	Non-Lead Collaborative			
<b>Questions</b>  Where are these new laboratory instruments (that cost \$5,000 or more) housed? (Or if they have not been received yet, where will they be housed?) (mark one or more) <input type="checkbox"/> At [name of PI's institution] <input type="checkbox"/> At [name of lead institution] <input type="checkbox"/> At [name of collaborating institution 1] <input type="checkbox"/> At [name of collaborating institution 2] [...list all collaborating institutions] <input type="checkbox"/> At [name of subawardee institution 1] <input type="checkbox"/> At [name of subawardee institution 2] [...list all subawardee institutions] <input type="checkbox"/> At other participating institutions <input type="checkbox"/> Other (please specify): _____ <input type="checkbox"/> Don't know	X	X	X			X
<b>1.6. Project Management and Evaluation</b>						
Were any project evaluations conducted during the current reporting period? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Don't Know <i>If no or don't know, skip the next question.</i>	X	X	X		X	
If Yes, How did you use the information from your project's evaluation? (mark one or more) <input type="checkbox"/> To improve the project <input type="checkbox"/> To document accomplishments <input type="checkbox"/> To assess changes in knowledge, skills, or attitudes of undergraduate students <input type="checkbox"/> To assess changes in knowledge, skills, or attitudes of graduate students <input type="checkbox"/> To assess changes in knowledge, skills, or attitudes of faculty <input type="checkbox"/> None of the above ( <i>if so, skip the next question</i> ) <input type="checkbox"/> Other (please specify): _____ <input type="checkbox"/> Don't know ( <i>if so, skip the next question</i> )	X	X	X		X	
Were the project activities supported by this award implemented in courses or course-related laboratory sections during the current reporting period? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Don't Know <i>If no or don't know, skip the rest of this question.</i>	X	X	X			X

Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Single	Lead Collaborative	Non-Lead Collaborative			
Questions						
In how many courses or course-related lab sections were project activities implemented during the current reporting period?	X	X	X			X
In all these courses or lab sections combined, approximately how many undergraduate students were exposed to the project's materials or instructional strategies?	X	X	X			X
In all these courses or lab sections combined, what percentage of students received a passing grade	X	X	X			X
<b>1.7. Reflection</b>						
What is the <b>single</b> most important project accomplishment for the reporting period? <i>(limit 500 characters)</i>	X	X	X			X
What is the <b>single</b> most significant challenge that the project faced during the reporting period? <i>(limit 500 characters)</i>	X	X	X		X	
What changes were made to the project, as outlined in the proposal, during the reporting period? <i>(limit 500 characters)</i>	X	X	X		X	
<b>2. Tell Us About Your Project's Activities</b>	X					
<b>Tell Us About The Project as a Whole</b>		X				
<b>Tell Us About Your Award's Independent Project Activities</b>			X			
<b>2.01. TUES/CCLI Program Components</b>						
During the current reporting period, did your institution, or any of your subawardee institutions, engage in any project activities or project work <i>independent of</i> the other awardee institutions in your TUES/CCLI Collaborative Project? o Yes, we or our subawardees engaged in independent project work. o No, all our work involved collaboration with other awardees in the TUES/CCLI Collaborative Project <i>(if no, skip the rest of this section, but to ensure accurate counts please be sure that the Lead PI knows about your involvement in any collaborative project activities, particularly if there are any where the Lead Organization was not directly involved)</i>			X		X	

Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Single	Lead Collaborative	Non-Lead Collaborative			
Questions						
<p>What is the primary way that your project contributes to the development of exemplary undergraduate STEM education? (mark one)</p> <ul style="list-style-type: none"> <li><input type="radio"/> Assessing and evaluating student achievement</li> <li><input type="radio"/> Conducting research on undergraduate STEM education</li> <li><input type="radio"/> Developing or adapting learning materials</li> <li><input type="radio"/> Developing, adapting, or implementing new instructional strategies</li> <li><input type="radio"/> Developing faculty expertise</li> </ul>	X	X			X	
<p>What other ways does your project contribute to the development of exemplary undergraduate STEM education? (mark one or more)</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Assessing and evaluating student achievement</li> <li><input type="checkbox"/> Conducting research on undergraduate STEM education</li> <li><input type="checkbox"/> Developing or adapting learning materials</li> <li><input type="checkbox"/> Developing, adapting, or implementing new instructional strategies</li> <li><input type="checkbox"/> Developing faculty expertise</li> <li><input type="checkbox"/> None of the above</li> </ul>	X	X			X	
<p>Did the <i>independent</i> project activities supported by your award(s) during the current reporting period include developing or adapting any of the following:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Instructional materials</li> <li><input type="checkbox"/> Instructional strategies</li> <li><input type="checkbox"/> Assessment instruments or processes to assess student achievement</li> <li><input type="checkbox"/> None of the above</li> </ul>			X			X
<p>Does a significant aspect of the project include the introduction of new disciplinary knowledge into undergraduate curricula?</p> <ul style="list-style-type: none"> <li><input type="radio"/> Yes</li> <li><input type="radio"/> No</li> <li><input type="radio"/> Don't Know</li> </ul>	X	X				X
<p>Did the project administer any publicly available assessment instruments (e.g., SALG, FCI, NSSE)?</p> <ul style="list-style-type: none"> <li><input type="radio"/> Yes</li> <li><input type="radio"/> No</li> <li><input type="radio"/> Don't Know</li> </ul>	X	X				X
<p><i>If no or don't know, skip the rest of this question.</i></p> <p>If yes, please list them here: (limit 500 characters)</p>	X	X				X
<b>2.02. Disciplinary Focus</b>						

Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Single	Lead Collaborative	Non-Lead Collaborative			
Questions						
<p>What is the <i>primary</i> disciplinary focus of the project? (mark one)</p> <p><input type="radio"/> Interdisciplinary</p> <p><input type="radio"/> Astronomy</p> <p><input type="radio"/> Biological Sciences</p> <p><input type="radio"/> Chemistry</p> <p><input type="radio"/> Computer Sciences</p> <p><input type="radio"/> Engineering</p> <p><input type="radio"/> Engineering Technology</p> <p><input type="radio"/> Geosciences</p> <p><input type="radio"/> Mathematical Sciences</p> <p><input type="radio"/> Physics</p> <p><input type="radio"/> Social and Behavioral Sciences</p> <p><input type="radio"/> Other, please specify: _____</p> <p><input type="radio"/> Don't Know</p>	X	X			X	
<p>What are the additional disciplinary focuses of the project? (mark one or more)</p> <p><input type="radio"/> Interdisciplinary</p> <p><input type="radio"/> Astronomy</p> <p><input type="radio"/> Biological Sciences</p> <p><input type="radio"/> Chemistry</p> <p><input type="radio"/> Computer Sciences</p> <p><input type="radio"/> Engineering</p> <p><input type="radio"/> Engineering Technology</p> <p><input type="radio"/> Geosciences</p> <p><input type="radio"/> Mathematical Sciences</p> <p><input type="radio"/> Physics</p> <p><input type="radio"/> Social and Behavioral Sciences</p> <p><input type="radio"/> Other, please specify: _____</p> <p><input type="radio"/> None</p> <p><input type="radio"/> Don't Know</p>	X	X			X	
<b>2.03. Target Audiences</b>						
<p>What course levels does your project address? (mark one or more)</p> <p><input type="checkbox"/> Upper division</p> <p><input type="checkbox"/> Lower division</p> <p><input type="checkbox"/> Developmental</p> <p><input type="checkbox"/> Don't Know</p>	X	X			X	

Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Single	Lead Collaborative	Non-Lead Collaborative			
Questions						
What groups are the primary focus of your project? (mark one or more) <input type="checkbox"/> Faculty (e.g., developing faculty expertise) <input type="checkbox"/> Preservice teachers <input type="checkbox"/> Instructional staff (e.g., graduate students, lab assistants, lab technicians, adjunct faculty) <input type="checkbox"/> Undergraduate STEM majors <input type="checkbox"/> Undergraduate majors other than STEM <input type="checkbox"/> Other (please specify): _____ <input type="checkbox"/> Don't Know	X	X			X	
Does the project foster scientific and/or technical literacy among students who are in majors other than STEM majors? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Don't Know	X	X				X
<b>2.04 Publications and Presentations</b>						
<b>Publications</b>	X	X				X

Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs																				
	Single	Lead Collaborative	Non-Lead Collaborative																							
<p><b>Questions</b></p> <p>Please provide the number of project-related outputs that were accepted for publication during the current reporting period for each of the categories described below. All fields below are required. Enter DK for anything you don't know.</p> <table border="1"> <thead> <tr> <th>Publication types</th> <th>Number accepted</th> <th>Formats produced</th> </tr> </thead> <tbody> <tr> <td>Peer-reviewed journal articles accepted for publication during the current reporting period</td> <td></td> <td> <input type="checkbox"/> Print  <input type="checkbox"/> Online  <input type="checkbox"/> Other electronic format </td> </tr> <tr> <td>Peer-reviewed conference papers or abstracts accepted for inclusion in conference proceedings during the current reporting period</td> <td></td> <td> <input type="checkbox"/> Print  <input type="checkbox"/> Online  <input type="checkbox"/> Other electronic format </td> </tr> <tr> <td>Conference papers or abstracts accepted without peer review during the current reporting period</td> <td></td> <td> <input type="checkbox"/> Print  <input type="checkbox"/> Online  <input type="checkbox"/> Other electronic format </td> </tr> <tr> <td>Book chapters in edited volumes accepted for publication during the current reporting period</td> <td></td> <td> <input type="checkbox"/> Print  <input type="checkbox"/> Online  <input type="checkbox"/> Other electronic format </td> </tr> <tr> <td>Monographs or books accepted for publication during the current reporting period</td> <td></td> <td> <input type="checkbox"/> Print  <input type="checkbox"/> Online  <input type="checkbox"/> Other electronic format </td> </tr> <tr> <td>Other publications (e.g., newsletters, magazines) accepted for publication during the current reporting period</td> <td></td> <td> <input type="checkbox"/> Print  <input type="checkbox"/> Online  <input type="checkbox"/> Other electronic format </td> </tr> </tbody> </table>	Publication types	Number accepted	Formats produced	Peer-reviewed journal articles accepted for publication during the current reporting period		<input type="checkbox"/> Print <input type="checkbox"/> Online <input type="checkbox"/> Other electronic format	Peer-reviewed conference papers or abstracts accepted for inclusion in conference proceedings during the current reporting period		<input type="checkbox"/> Print <input type="checkbox"/> Online <input type="checkbox"/> Other electronic format	Conference papers or abstracts accepted without peer review during the current reporting period		<input type="checkbox"/> Print <input type="checkbox"/> Online <input type="checkbox"/> Other electronic format	Book chapters in edited volumes accepted for publication during the current reporting period		<input type="checkbox"/> Print <input type="checkbox"/> Online <input type="checkbox"/> Other electronic format	Monographs or books accepted for publication during the current reporting period		<input type="checkbox"/> Print <input type="checkbox"/> Online <input type="checkbox"/> Other electronic format	Other publications (e.g., newsletters, magazines) accepted for publication during the current reporting period		<input type="checkbox"/> Print <input type="checkbox"/> Online <input type="checkbox"/> Other electronic format	X	X			X
Publication types	Number accepted	Formats produced																								
Peer-reviewed journal articles accepted for publication during the current reporting period		<input type="checkbox"/> Print <input type="checkbox"/> Online <input type="checkbox"/> Other electronic format																								
Peer-reviewed conference papers or abstracts accepted for inclusion in conference proceedings during the current reporting period		<input type="checkbox"/> Print <input type="checkbox"/> Online <input type="checkbox"/> Other electronic format																								
Conference papers or abstracts accepted without peer review during the current reporting period		<input type="checkbox"/> Print <input type="checkbox"/> Online <input type="checkbox"/> Other electronic format																								
Book chapters in edited volumes accepted for publication during the current reporting period		<input type="checkbox"/> Print <input type="checkbox"/> Online <input type="checkbox"/> Other electronic format																								
Monographs or books accepted for publication during the current reporting period		<input type="checkbox"/> Print <input type="checkbox"/> Online <input type="checkbox"/> Other electronic format																								
Other publications (e.g., newsletters, magazines) accepted for publication during the current reporting period		<input type="checkbox"/> Print <input type="checkbox"/> Online <input type="checkbox"/> Other electronic format																								
<b>Presentations</b>																										



Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs								
	Single	Lead Collaborative	Non-Lead Collaborative											
Questions														
<p>How many presentations or workshops on the project were delivered during the current reporting period? (Include presentations that were conducted by individuals trained by the project.) <b>All fields below are required. Enter DK for anything you don't know.</b></p> <table border="1"> <thead> <tr> <th>Presentation types</th> <th>No. of presentations</th> </tr> </thead> <tbody> <tr> <td>Peer-reviewed conference presentations</td> <td></td> </tr> <tr> <td>Invited conference or meeting presentations</td> <td></td> </tr> <tr> <td>Invited faculty development workshops</td> <td></td> </tr> </tbody> </table>	Presentation types	No. of presentations	Peer-reviewed conference presentations		Invited conference or meeting presentations		Invited faculty development workshops		X	X				X
Presentation types	No. of presentations													
Peer-reviewed conference presentations														
Invited conference or meeting presentations														
Invited faculty development workshops														
<b>2.05 Honors and Awards</b>														
<p><b>Did the project receive any honors or awards during the current reporting period?</b> (Include individuals recognized for their contributions to the project.)</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> <p><input type="radio"/> Don't Know</p> <p><i>If no or don't know, skip the rest of this question.</i></p>	X	X				X								
What honors or awards were received?														
<b>Honor or Award Form</b>														
Title	X	X				X								
Year	X	X				X								
Presenting Organization	X	X				X								
Reason for the honor or award	X	X				X								
<b>2.06. Institutionalization</b>														
<p>Are there plans to sustain the project after NSF funding ends?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> <p><input type="radio"/> Don't Know</p> <p><i>If no or don't know, skip the rest of this question.</i></p>	X	X			X									

Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Single	Lead Collaborative	Non-Lead Collaborative			
Questions						
<ul style="list-style-type: none"> <li><input type="radio"/> During the current reporting period, were steps taken to sustain the project's activities after NSF funding ends?</li> <li><input type="radio"/> Yes, some steps to sustain the project were taken.</li> <li><input type="radio"/> Yes, all of the necessary steps to sustain the project were completed.</li> <li><input type="radio"/> No, no steps to sustain the project were taken during the current reporting period. If no, when does the project plan to start? (enter month and year) ____ / ____</li> <li><input type="radio"/> Don't Know</li> </ul>	X	X			X	
<b>2.07. Dissemination</b>						
<p>Where else are the project's materials, strategies, faculty development activities, or assessment instruments/processes being used? (mark one or more)</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> At lead, collaborative, or subawardee institutions by people not directly involved with the project</li> <li><input type="checkbox"/> At the project's other participating institutions by people not directly involved with the project</li> <li><input type="checkbox"/> At other institutions across the U.S.</li> <li><input type="checkbox"/> At international institutions</li> <li><input type="checkbox"/> None of the above</li> <li><input type="checkbox"/> Don't know</li> </ul>	X	X				X
<b>2.08. Instructional Materials</b>						
<p>Did the project develop or adapt instructional materials during the current reporting period?</p> <ul style="list-style-type: none"> <li><input type="radio"/> Yes</li> <li><input type="radio"/> No</li> <li><input type="radio"/> Don't Know</li> </ul> <p><i>If no or don't know, skip the rest of this question.</i></p>	X	X				X

Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Single	Lead Collaborative	Non-Lead Collaborative			
<b>Questions</b> What types of instructional materials did the project develop or adapt? (mark one or more) <ul style="list-style-type: none"> <li><input type="checkbox"/> Case studies</li> <li><input type="checkbox"/> Demonstrations</li> <li><input type="checkbox"/> Educational games</li> <li><input type="checkbox"/> Field activity guides or manuals</li> <li><input type="checkbox"/> Instructor materials for adapting project activities or procedures to new settings</li> <li><input type="checkbox"/> Instructor guides or manuals to guide student activities</li> <li><input type="checkbox"/> Laboratory guides or manuals</li> <li><input type="checkbox"/> Lesson plans</li> <li><input type="checkbox"/> Practice problems or exercises for students</li> <li><input type="checkbox"/> Simulations</li> <li><input type="checkbox"/> Software tools including web-enhanced tools</li> <li><input type="checkbox"/> Student handbooks or workbooks</li> <li><input type="checkbox"/> Textbooks</li> <li><input type="checkbox"/> Tutorials</li> <li><input type="checkbox"/> Visualizations</li> <li><input type="checkbox"/> Workshop materials for training faculty</li> <li><input type="checkbox"/> Workshop materials for training students</li> <li><input type="checkbox"/> Other instructional materials (please specify): _____</li> </ul>	X	X				X
<i>Note to reviewers: The system will show the user the list of instructional materials above. The user will choose the materials from the list that apply to his or her project. For each item chosen, the system will display the following questions:</i> <ul style="list-style-type: none"> <li><input type="checkbox"/> Sample instructional material</li> </ul> <hr/> <i>During the current reporting period, our project:</i> <ul style="list-style-type: none"> <li><input type="checkbox"/> Developed or revised our own [[material type]]</li> <li><input type="checkbox"/> Adapted [[material type]] created by others</li> </ul> <i>In these formats:</i> <ul style="list-style-type: none"> <li><input type="checkbox"/> print    <input type="checkbox"/> online    <input type="checkbox"/> other electronic format</li> </ul>	X	X				X
<b>2.09. Instructional Strategies</b> Did the project develop or adapt instructional strategies during the current reporting period? <ul style="list-style-type: none"> <li><input type="radio"/> Yes</li> <li><input type="radio"/> No</li> <li><input type="radio"/> Don't Know</li> </ul> <i>If no or don't know, skip the rest of this question.</i>	X	X				X

Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Single	Lead Collaborative	Non-Lead Collaborative			
<b>Questions</b> What types of instructional strategies did the project develop or adapt? (mark one or more) <ul style="list-style-type: none"> <li><input type="checkbox"/> Case-based learning strategies</li> <li><input type="checkbox"/> Cooperative or collaborative learning strategies</li> <li><input type="checkbox"/> Design activities</li> <li><input type="checkbox"/> Field studies</li> <li><input type="checkbox"/> Hands-on activities (e.g., building or testing objects)</li> <li><input type="checkbox"/> Integrated courses</li> <li><input type="checkbox"/> Intelligent tutoring systems</li> <li><input type="checkbox"/> Laboratory experiences</li> <li><input type="checkbox"/> Learning communities (e.g., student cohorts)</li> <li><input type="checkbox"/> Lectures</li> <li><input type="checkbox"/> Linked courses</li> <li><input type="checkbox"/> Real-time modification strategies based on student performance (e.g., Just-in-Time Teaching)</li> <li><input type="checkbox"/> Peer-instruction strategies (e.g., peer tutoring, peer mentoring)</li> <li><input type="checkbox"/> Personal response systems (e.g., “clickers”)</li> <li><input type="checkbox"/> Problem-based learning strategies</li> <li><input type="checkbox"/> Quantitative computational approaches</li> <li><input type="checkbox"/> Strategies involving real-world examples, problems, or contexts</li> <li><input type="checkbox"/> Strategies involving remote laboratories</li> <li><input type="checkbox"/> Strategies involving formal research experience in classroom laboratories</li> <li><input type="checkbox"/> Service-learning strategies</li> <li><input type="checkbox"/> Studio-based strategies</li> <li><input type="checkbox"/> Web-enabled homework submission and grading systems</li> <li><input type="checkbox"/> Web-enabled instruction strategies</li> <li><input type="checkbox"/> Web-enabled repositories</li> <li><input type="checkbox"/> Web-enabled student collaboration/social networking tools</li> <li><input type="checkbox"/> Other instructional strategies (please specify): _____</li> </ul>	X	X			X	

Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Single	Lead Collaborative	Non-Lead Collaborative			
Questions						
<p>Note to reviewers: The system will show the user the list of instructional strategies above. The user will choose the materials from the list that apply to his or her project. For each item chosen, the system will display the following questions:</p> <p><input type="checkbox"/> Sample instructional strategy</p> <hr/> <p><i>During the current reporting period, our project:</i></p> <p><input type="checkbox"/> Developed or revised our own [[strategy type]]</p> <p><input type="checkbox"/> Adapted [[strategy type]] created by others</p>	X	X				X
<b>2.10. Assessment Instruments and Processes</b>						
<p>Did the project develop or adapt assessment instruments or processes during the current reporting period?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> <p><input type="radio"/> Don't Know</p> <p><i>If no or don't know, skip the rest of this question.</i></p>	X	X				X
<p>What types of assessment instruments or processes did the project develop or adapt? (mark one or more)</p> <p><input type="checkbox"/> Assessment of general knowledge or skill (e.g., critical thinking skills, problem-solving skills)</p> <p><input type="checkbox"/> Cognitive protocol interviews</p> <p><input type="checkbox"/> Concept inventories</p> <p><input type="checkbox"/> Course exams</p> <p><input type="checkbox"/> Standardized tests (e.g., Fundamentals of Engineering, American Chemical Society examinations)</p> <p><input type="checkbox"/> Performance assessment of skills (e.g., observation and rating of skills)</p> <p><input type="checkbox"/> Students' perceptions of their own learning</p> <p><input type="checkbox"/> Expert review</p> <p><input type="checkbox"/> Other instruments and processes to determine outcomes (please specify): _____</p>	X	X				X

Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Single	Lead Collaborative	Non-Lead Collaborative			
Questions						
<p>Note to reviewers: The system will show the user the list of instructional materials above. The user will choose the materials from the list that apply to his or her project. For each item chosen, the system will display the following questions:</p> <p><input type="checkbox"/> Sample assessment instrument or process</p> <hr/> <p><i>During the current reporting period, our project:</i></p> <p><input type="checkbox"/> Developed or revised our own [[assessment type]]</p> <p><input type="checkbox"/> Adapted [[assessment type]] created by others</p> <p><i>In these formats:</i></p> <p><input type="checkbox"/> print   <input type="checkbox"/> online   <input type="checkbox"/> other electronic format</p>	X	X				X
<b>2.11. Research On Undergraduate STEM Education</b>						
<p>Did the project conduct research on undergraduate STEM education during the current reporting period?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> <p><input type="radio"/> Don't Know</p> <p><i>If no or don't know, skip the rest of this section.</i></p>	X	X			X	
<p>What is the topic of your research on undergraduate STEM education? <i>(limit 500 characters)</i></p>	X	X			X	
<p>What type of research does your project employ? (mark one)</p> <p><input type="radio"/> Qualitative research design</p> <p><input type="radio"/> Quantitative research design</p> <p><input type="radio"/> Mixed method research design</p> <p><input type="radio"/> Don't Know</p>	X	X			X	
<b>2.12. Faculty Professional Development Component</b>						
<p>Did the project include a faculty professional development component ? (e.g., seminar, workshop, meeting session) that shared project approaches with other faculty members during the current reporting period?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> <p><input type="radio"/> Don't Know</p> <p><i>If no or don't know, skip the rest of this section.</i></p>	X	X			X	

Common Collection Categories					Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs																										
					Single	Lead Collaborative	Non-Lead Collaborative																													
Questions																																				
<p>If YES: With whom were these approaches shared during the current reporting period? (mark one or more)</p> <table border="1"> <tr> <td></td> <td>Graduate students or postdocs</td> <td>Faculty</td> <td>Instructional staff</td> <td>Other or unknown individuals</td> <td rowspan="4">X</td> <td rowspan="4">X</td> <td rowspan="4">X</td> <td rowspan="4"></td> <td rowspan="4"></td> <td rowspan="4"></td> </tr> <tr> <td>At the lead, collaborating, or subawardee institutions</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>At other institutions</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>						Graduate students or postdocs	Faculty	Instructional staff	Other or unknown individuals	X	X	X				At the lead, collaborating, or subawardee institutions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	At other institutions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						X	X				
	Graduate students or postdocs	Faculty	Instructional staff	Other or unknown individuals	X	X	X																													
At the lead, collaborating, or subawardee institutions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																
At other institutions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																
<p>If YES: which disciplines were the focus of the project's faculty professional development efforts during the current reporting period? (mark one or more)</p> <ul style="list-style-type: none"> <li><input type="radio"/> Interdisciplinary</li> <li><input type="radio"/> Astronomy</li> <li><input type="radio"/> Biological Sciences</li> <li><input type="radio"/> Chemistry</li> <li><input type="radio"/> Computer Sciences</li> <li><input type="radio"/> Engineering</li> <li><input type="radio"/> Engineering Technology</li> <li><input type="radio"/> Geosciences</li> <li><input type="radio"/> Mathematical Sciences</li> <li><input type="radio"/> Physics</li> <li><input type="radio"/> Social and Behavioral Sciences</li> <li><input type="radio"/> Other, please specify: _____</li> <li><input type="radio"/> Don't Know</li> <li><input checked="" type="radio"/> None</li> </ul>					X	X			X																											
<p>If YES: What types of institutions were represented at these efforts during the current reporting period (mark one or more)</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> 2-year Institutions</li> <li><input type="checkbox"/> Bachelor's degree granting institutions</li> <li><input type="checkbox"/> Master's degree granting institutions</li> <li><input type="checkbox"/> Doctoral degree granting institutions</li> <li><input type="checkbox"/> Nonacademic organizations</li> <li><input type="checkbox"/> Other (please specify): _____</li> <li><input type="checkbox"/> Don't know</li> <li><input type="checkbox"/> None</li> </ul>					X	X			X																											

Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Single	Lead Collaborative	Non-Lead Collaborative			
Questions						
<p>If YES: Did the institutions represented at the project’s faculty professional development efforts have any of the following demographics or special institutional designations? If yes, what types? (mark one or more)</p> <p><input type="checkbox"/> Historically Black College or University</p> <p><input type="checkbox"/> American Indian Tribally Controlled College or University</p> <p><input type="checkbox"/> Institution with High Disabilities Enrollment (&gt;3% Undergraduates)</p> <p><input checked="" type="checkbox"/> Institution with High American Indian or Alaska Native Enrollment (25% or more) – Not Tribally Controlled</p> <p><input type="checkbox"/> Institution with High Black or African American Enrollment (non-Hispanic) (25% or more)</p> <p><input type="checkbox"/> Institution with High Hispanic Enrollment (25% or more)</p> <p><input type="checkbox"/> Institution with High Native Hawaiian or Other Pacific Islander Enrollment (25% or more)</p> <p><input type="checkbox"/> None</p> <p><input type="checkbox"/> Not Reported/Don’t Know</p>	X	X		X		
<b>2.13. Involvement with Project Materials, Strategies, Instruments and Processes</b>						
<p>Do you know approximately how many students, faculty, and staff were impacted by your award’s efforts, or the joint efforts of collaborating awardees, during the current reporting period?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No (if no, skip the rest of this section)</p>	X	X	X		X	
<b>Student Counts</b>						



Common Collection Categories				Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
				Single	Lead Collaborative	Non-Lead Collaborative			
Questions									
<i>All fields below are required. Enter <b>DK</b> for anything you don't know.</i>									
			Number of students from institutions with minority enrollment of 25% or greater						
During the current reporting period approximately . . .	Total number of students	Number of students from 2-year institutions							
How many undergraduate students used the project's instructional materials?									
How many undergraduate students were taught using the project's instructional strategies?									
How many undergraduate students' knowledge, skills, or attitudes were assessed using the project's assessment instruments?									
<b>Faculty Counts</b>									

Common Collection Categories				Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
				Single	Lead Collaborative	Non-Lead Collaborative			
Questions									
<i>All fields below are required. Enter <b>DK</b> for anything you don't know.</i>									
During the current reporting period approximately . . .	Total number of faculty	Number of faculty from 2-year institutions	Number of faculty from institutions with minority enrollment of 25% or greater						
How many project faculty worked on the project's instructional materials?				X	X	X	X	X	
How many project faculty worked on the project's instructional strategies?									
How many project faculty worked on the project's assessment instruments or processes?									
<b>Staff Counts</b>									

Common Collection Categories				Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
				Single	Lead Collaborative	Non-Lead Collaborative			
Questions									
All fields below are required. Enter <b>DK</b> for anything you don't know.									
During the current reporting period approximately . . .	Total number of staff	Number of staff from 2-year institutions	Number of staff from institutions with minority enrollment of 25% or greater ?						
How many non-instructional professional staff worked on the project? (e.g., lab technicians, professional staff associated with Centers for Teaching and Learning and Centers for Institutional Research, Centers for Institutional Evaluation professional staff)?				X	X	X	X	X	
How many non-instructional professional staff used the project's materials, strategies, or assessment instruments with students?									

Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs																
	Single	Lead Collaborative	Non-Lead Collaborative																			
<p><b>Questions</b></p> <p>We are interested in whether participants who receive funding to attend faculty professional development activities are more or less likely to implement what they learn. Please estimate how many faculty professional development participants received funds from the project or their institution to attend. Of each group, please also indicate <i>approximately</i> how many are implementing the ideas shared.</p> <table border="1" data-bbox="165 800 803 1388"> <thead> <tr> <th></th> <th>Participants funded by the project</th> <th>Participants funded by their institution (if known)</th> <th>All other participants</th> </tr> </thead> <tbody> <tr> <td>Number of faculty members</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Number of institutions represented by those faculty members</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Number of faculty implementing what they learned</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p><i>Note: Your response to this question is optional this year, but may be required in future years</i></p>		Participants funded by the project	Participants funded by their institution (if known)	All other participants	Number of faculty members				Number of institutions represented by those faculty members				Number of faculty implementing what they learned				X	X		X	X	X
	Participants funded by the project	Participants funded by their institution (if known)	All other participants																			
Number of faculty members																						
Number of institutions represented by those faculty members																						
Number of faculty implementing what they learned																						
<b>2.14. Involvement with Faculty Professional Development</b>																						
<b><i>Faculty Professional Development Events</i></b>																						

Common Collection Categories				Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
				Single	Lead Collaborative	Non-Lead Collaborative			
Questions									
<p>During the current reporting period, were any faculty professional development events conducted [, either by your award or jointly among collaborating awardees]?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> <p><input type="radio"/> Don't Know</p> <p><i>If no or don't know, skip the rest of this section.</i></p> <p><i>If YES: All fields below are required. Enter <b>DK</b> for anything you don't know.</i></p>				X	X	X			X
<b>Faculty Professional Development Events Conducted</b>									
During the current reporting period approximately . . .	Total number of events	Number of events held at 2-year institutions	Number of events held at institutions with minority enrollment of 25% or greater	X	X	X		X	
How many faculty professional development events were supported by the project?									

Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs								
	Single	Lead Collaborative	Non-Lead Collaborative											
<p><b>Questions</b></p>														
<p><b><i>Faculty Involvement in Professional Development Events</i></b></p> <p>The following 8 questions appear in a table with the columns shown below:</p> <ul style="list-style-type: none"> <li>• How many faculty were involved in creating the project’s faculty professional development events?</li> <li>• How many faculty were involved in leading the project’s faculty professional development events?</li> <li>• How many faculty participated as learners in the project’s faculty professional development events?</li> <li>• <i>How many academic institutions do these learners represent?</i></li> <li>• How many faculty learners received project funding to attend the project’s faculty professional development events?</li> <li>• <i>How many academic institutions do these learners represent?</i></li> <li>• How many faculty learners at the project’s events went on to implement what they learned?</li> <li>• <i>How many academic institutions do these learners represent?</i></li> </ul>														
<table border="1"> <thead> <tr> <th>During the current reporting period approximately ...</th> <th>Total number of faculty</th> <th>Number of faculty from 2-year institutions</th> <th>Number of faculty from institutions with minority enrollment of 25% or greater</th> </tr> </thead> <tbody> <tr> <td>Sample Question</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	During the current reporting period approximately ...	Total number of faculty	Number of faculty from 2-year institutions	Number of faculty from institutions with minority enrollment of 25% or greater	Sample Question									
During the current reporting period approximately ...	Total number of faculty	Number of faculty from 2-year institutions	Number of faculty from institutions with minority enrollment of 25% or greater											
Sample Question														
	X	X	X	X		X								

Common Collection Categories				Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
				Single	Lead Collaborative	Non-Lead Collaborative			
Questions									
<b><i>Graduate Student and Postdoc Involvement in Professional Development Events</i></b>									
	Total number of graduate students and postdocs	Number of graduate students and postdocs from 2-year institutions	Number of graduate students and postdocs from institutions with minority enrollment of 25% or greater						
During the current reporting period approximately . . .									
How many graduate students and postdocs were involved in creating the project's faculty professional development events?				X	X	X	X	X	
How many graduate students and postdocs were involved in leading the project's faculty professional development events?									
How many graduate students and postdocs participated as learners in the project's faculty professional development events?									

Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Single	Lead Collaborative	Non-Lead Collaborative			
Questions						
<b>Nonacademic Involvement in the Project's Faculty Professional Development Events</b>						
During the current reporting period approximately . . .						
Total number of nonacademic learners						
How many representatives from nonacademic organizations (e.g., professional societies, industry, community organizations) participated as learners in your project's faculty professional development events?	X	X	X			X
How many organizations do these learners represent?						
<b>3. Submit your report to NSF</b>						
Congratulations! Your report appears complete. We have one last question:						
Approximately how many person-hours were required to complete this report? _____ person-hours (round up to a whole hour)	X	X	X			X
<b>4. Create New User Account</b>						
<i>Note: This data is only collected for participants who must use TUESWeb (usually only the PI and a data entry assistant). The data is collected in order to provide adequate technical support; it is not considered part of the data collection instrument.</i>						
E-mail Address	X	X	X	X		
Project Role						
o Co- primary Investigator						
o Data Entry Personnel	X	X	X		X	
o Project Coordinator						
o Other						
Name:						
o Honorific						
o First	X	X	X	X		
o Middle						
o Last						
o Suffix						
Phone	X	X	X	X		
Organization	X	X	X	X		
Alternate E-mail	X	X	X	X		
Alternate Phone	X	X	X	X		



Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Single	Lead Collaborative	Non-Lead Collaborative			
Questions						
<p>Access Privileges (mark all that apply)</p> <p><input checked="" type="checkbox"/> Can View Data</p> <p><input type="checkbox"/> Can Edit Data</p> <p><input type="checkbox"/> Can Manage User Access</p> <p><input type="checkbox"/> Receives Reminders (<i>automatically set to "yes" if Role=Project Coordinator</i>)</p> <p>(button): Remove from this report</p> <p><i>Note: The Lead PI's privileges are automatically set to "yes" for all privileges.</i></p>	X	X	X		X	

**TUES: Number of Respondents, Frequency of Response, and Annual Hour Burden**

The estimated average number of annual respondents is 1,210, with an estimated average annual response burden of 4,840 hours. The Web-based collection is an annual activity of the TUES program that opened for its first data collection cycle in February 2012. There will be approximately 1,210 active respondents at a given point in time, and new respondents will enter at approximately the same rate that respondents leave the program or projects as their funding expires.

The burden estimate is outlined below:

<b>Respondent Type</b>	<b>Estimated Average Annual No. of Respondents</b>	<b>Estimated Average Annual Burden Hours Per Respondent</b>	<b>Estimated Annual Burden Hour Total</b>
PIs	1,210	4	4,840
<b>Total</b>	<b>1,210</b>		<b>4,840</b>

**TUES: Hour Burden Estimates by Each Form and Aggregate Hour Burdens**

Respondents will be project PIs. The estimated total annual response burden is 4,840 hours. The annual burden by form was calculated as follows:

<b>Form Type</b>	<b>Respondent Type</b>	<b>No. of Respondents</b>	<b>Burden Hours Per Respondent</b>	<b>Total Burden Hours</b>
TUES data collection form	PIs	1,210	4	4,840
<b>Total</b>		<b>1,210</b>		<b>4,840</b>

## TUES: Estimates of Annualized Cost to Respondents for the Hour Burdens

The overall annualized cost to the respondents is estimated to be \$198,440. The following table shows the annualized estimates of costs to PI respondents, who are generally university professors. This estimated hourly rate is based on a report from the American Association of University Professors, “Annual Report on the Economic Status of the Profession, 2011-12,” *Academe*, March–April 2012, Survey Report Table 4. According to this [report](#), the average salary of an associate professor across all types of doctoral-granting institutions (public, private-independent, religiously affiliated) was \$86,319. When divided by the number of standard annual work hours (2,080), this calculates to approximately \$41 per hour.

<b>Respondent Type</b>	<b>No. of Respondents</b>	<b>Burden Hours Per Respondent</b>	<b>Average Hourly Rate</b>	<b>Estimated Annual Cost</b>
PIs	1,210	4	\$41	\$198,440
<b>Total</b>	<b>1,210</b>			<b>\$198,440</b>

### TUES: Estimates of Costs to Federal Government

Computing the annualized cost to NSF for the TUES data collection was done by taking the budgets for three years and calculating the costs for each of the following operational activities involved in producing, maintaining, and conducting the TUES data collection:

<b>Operational Activities</b>	<b>Cost Over Three Years</b>
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)	\$858,970
System Maintenance, Updates, and Technical Support (the 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)	\$370,536
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 DUE), and Followup Activities (e.g., providing data to other consultants)	\$454,749
<b>Three-Year Total for All Operational Activities</b>	<b>\$1,684,255</b>

The annualized cost was computed as one-third of the total three-year costs; thus, the annualized cost to NSF for the TUES data collection is \$561,418.

**TUES: Questions**

	<b>Award Category</b>		
	Single	Lead Collaborative	Non-Lead Collaborative
<p>Notes:</p> <ul style="list-style-type: none"> <li>The System presents only those questions that are logically relevant to the type of award and previously answered questions. All questions pertain to the current reporting period’s participants, implementation, and outputs. All requested questions are required.</li> <li>Three major categories drive the tailoring of the system to the award type. We have included columns to indicate these, which are: <ul style="list-style-type: none"> <li>Single Award</li> <li>Lead Collaborative Award (most questions)</li> <li>Non-Lead Collaborative Award(fewest questions)</li> </ul> </li> <li>For most questions respondents have the option to select a "don’t know” option or can enter "DK."</li> <li>For most questions respondents have the option to add comments. The data elements associated with these comments are not shown in the crosswalk because the comments are entirely optional.</li> </ul>			
<p><b>i. Confirm Award Information</b></p> <p><i>Note: If any of the respondent’s answers in this section are inconsistent with the type of award that was preloaded, the data submission will be placed on hold. The respondent will receive the following notice: “This basic project information must be correct before you can begin entering data for this project. The TUESWeb Support Desk will contact you to find out what needs to be updated.”</i></p>			
<p>Is [PI Name] the lead PI on Award No. [NSF Award Number]?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p>	X	X	X
<p>What type of proposal was submitted for this award ?</p> <p><input type="radio"/> A Single Proposal that resulted in only this award (possibly including subawards for collaborating organizations)</p> <p><input type="radio"/> A Collaborative Proposal that included simultaneous linked proposals from investigators at different organizations, with each organization receiving its own TUES/CCLI award.</p>	X	X	X
<p>Was this the Lead Award on the collaborative proposal?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p>		X	X
<b>2. Tell Us About Your Awards</b>			

<b>4.1. Award Details</b> <i>Award information in this section is preloaded and displayed for verification purposes. PIs can contact the technical support team to report data that should be updated, but they cannot edit this data directly via the data collection instrument. Because some awards have supplemental awards, there may be more than one award associated with each report. The “embedded” awards are listed on each screen, but are not mentioned in the main questions.</i>			
NSF Award No.	X	X	X
Award Title	X	X	X
PI Organization	X	X	X
Official Grantee Institution <i>This data element appears only if it differs from the PI Organization.</i>	X	X	X
Phase or Type <i>The system will list one of the following types:</i> <ul style="list-style-type: none"> <li>• Phase 1/Type 1</li> <li>• Phase 2/Type 2</li> <li>• Phase 3/Type 2</li> <li>• Central Resource Project</li> </ul>	X	X	X
Award Start Date	X	X	X
For consolidated awards: First Award’s Start Date	X	X	X
Award End Date	X	X	X
Lead PI’s Name	X	X	X
Lead PI’s Discipline	X	X	X
TUES/CCLI Awards in this collaborative project: [[PI]], [[PI Organization]] – <b>Lead Award</b> [[PI a]], [[PI Organization a]] – Collaborating Award ... [[PI n]], [[PI Organization n]] – Collaborating Award		X	X
Do you need to update any of this information? o Yes o No	X	X	X
If yes, please describe the details you’d like to update:	X	X	X
<b>4.2. About Your Institution</b>			

<p>Type of institution:  [PI institution name], [City], [State]  has the following classification in <i>the Integrated Postsecondary Data System (IPEDS)</i>:      [Institution Type]      [Other specify value if present]  If you believe this is incorrect, you can change it below. If you are not sure, use the IPEDS classification:</p> <ul style="list-style-type: none"> <li><input type="radio"/> 2-year Institution</li> <li><input type="radio"/> 2-year Institution on a 4-year College or University Campus</li> <li><input type="radio"/> Bachelor’s degree granting institution</li> <li><input type="radio"/> Master’s degree granting institution</li> <li><input type="radio"/> Doctoral degree granting institution</li> <li><input type="radio"/> Other U.S. Department of Education IPEDs Type</li> <li><input type="radio"/> Don’t know</li> </ul> <p>If Other: Please specify: _____</p> <p style="text-align: center;">OR</p> <p>Type of Organization: (mark one or more)</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Academic Consortium</li> <li><input type="checkbox"/> Business</li> <li><input type="checkbox"/> Consultant</li> <li><input type="checkbox"/> National Laboratory</li> <li><input type="checkbox"/> Museum</li> <li><input type="checkbox"/> Nonprofit</li> <li><input type="checkbox"/> Professional Society</li> <li><input type="checkbox"/> Research Institute</li> <li><input type="checkbox"/> Other (please specify): _____</li> </ul>	X	X	X
<b>4.3. Subawards</b>			
Were subaward funds expended or transferred from this award to any subawardees during the current reporting period? <ul style="list-style-type: none"> <li><input type="radio"/> Yes</li> <li><input type="radio"/> No</li> </ul>	X	X	X
<b>Enter information for a subaward organization</b> <i>Provide the following information for the CCLI/TUES subaward institution. This subsection repeats for each institution</i>			
What type of organization received this subaward? <ul style="list-style-type: none"> <li><input type="radio"/> Academic institution (not including academic consortiums)</li> <li><input type="radio"/> Other type of organization</li> </ul>	X	X	X
<b>Academic Subaward Institution</b>			
What is the name of the institution?	X	X	X



Type of institution: [PI institution name], [City], [State] has the following classification in the <i>Integrated Postsecondary Data System</i> (IPEDS): [Institution Type] [Other specify value if present] If you believe this is incorrect, you can change it below. If you are not sure, use the IPEDS classification: o 2-year Institution o 2-year Institution on a 4-year College or University Campus o Bachelor’s degree granting institution o Master’s degree granting institution o Doctoral degree granting institution o Other U.S. Department of Education IPEDs Type o Don’t know If Other: Please specify: _____	X	X	X
How many faculty from this institution were involved?	X	X	X
How many students from this institution were involved?	X	X	X
<b><i>Other Type of Subaward Organization</i></b>			
Which of the following describes this organization? (mark one or more) <input type="checkbox"/> Academic Consortium <input type="checkbox"/> Business <input type="checkbox"/> Consultant <input type="checkbox"/> National Laboratory <input type="checkbox"/> Museum <input type="checkbox"/> Nonprofit <input type="checkbox"/> Professional Society <input type="checkbox"/> Research Institute <input type="checkbox"/> Other (please specify): _____ <input type="checkbox"/> Don’t Know	X	X	X
<b><i>All Subaward Organization Types</i></b>			
Approximately what amount of subaward funds did your award transfer to this organization during the current reporting period?	X	X	X
<i>Checkbox option (matching how this question can also be answered elsewhere in the instrument.)</i> <input type="checkbox"/> This organization houses or plans to house any laboratory instruments that BOTH: 1) Cost more than \$5,000 each, AND 2) Were purchased with TUES/CCLI funds during the current reporting period?	X	X	X
<b>4.4. Other Participating Organizations</b>			

<p>We are interested in the types of institutions that participate in TUES/CCLI projects. Did any other organizations participate significantly in your project during the current reporting period (not including your subawardees or other awardees in the collaborative project)?</p> <p> <input type="radio"/> Yes  <input type="radio"/> No  <input type="radio"/> Don't know </p> <p><i>If no or don't know, skip the questions in this section.</i></p>	X	X	X																																
<p>Which of the following types of organizations participated significantly in your project? Put a check beside each type that participated. Then, for each type, indicate the number of organizations participating, numbers of faculty/professionals participating, and numbers of students that participated altogether for that type. It is okay to count the same organization or individual in multiple categories.</p> <ul style="list-style-type: none"> <li>• DO NOT include your organization, subawardee organizations, or organizations that should be independently reported by collaborating awardees.</li> <li>• Include organizations that received project funds, as well as organizations that did not.</li> <li>• Enter 0 for none. Enter DK for anything you don't know.</li> </ul> <p><i>The column headers for these tables are:</i></p> <p><i>D. How many of this type of organization participated significantly?</i></p> <p><i>E. How many faculty or professionals from this type of organization participated?</i></p> <p><i>F. How many students from this type of organization participated?</i></p>																																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;"></th> <th style="width: 10%; text-align: center;">A</th> <th style="width: 10%; text-align: center;">B</th> <th style="width: 10%; text-align: center;">C</th> </tr> </thead> <tbody> <tr> <td><b>U.S. academic institutions by highest degree granted:</b></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2-year Institutions</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2-year Institutions on a 4-year College or University Campus</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Bachelor's Degree Granting Institutions</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Master's Degree Granting Institutions</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Doctoral Degree Granting Institutions</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other U.S. Department of Education IPEDs type(s) (please specify): _____</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		A	B	C	<b>U.S. academic institutions by highest degree granted:</b>				2-year Institutions				2-year Institutions on a 4-year College or University Campus				Bachelor's Degree Granting Institutions				Master's Degree Granting Institutions				Doctoral Degree Granting Institutions				Other U.S. Department of Education IPEDs type(s) (please specify): _____				X	X	X
	A	B	C																																
<b>U.S. academic institutions by highest degree granted:</b>																																			
2-year Institutions																																			
2-year Institutions on a 4-year College or University Campus																																			
Bachelor's Degree Granting Institutions																																			
Master's Degree Granting Institutions																																			
Doctoral Degree Granting Institutions																																			
Other U.S. Department of Education IPEDs type(s) (please specify): _____																																			

	A	B	C			
<b>U.S. academic institutions by enrollment demographics:</b>						
Institutions with High Disabilities Enrollment (>3% Undergraduates)						
Institutions with High American Indian or Alaska Native Enrollment (25% or more) – Not Tribally Controlled				X	X	X
Institutions with High Black or African American Enrollment (non-Hispanic) (25% or more)						
Institutions with High Hispanic Enrollment (25% or more)						
Institutions with High Native Hawaiian or Other Pacific Islander Enrollment (25% or more)						
	A	B	C			
<b>U.S. academic institutions with special designations:</b>						
Historically Black Colleges or Universities				X	X	X
American Indian Tribally Controlled Colleges or Universities						
	A	B	C			
<b>Nonacademic organizations</b>						
Businesses						
Consultants						
National Laboratories				X	X	X
Museums						
Non-profits						
Professional Societies						
Other type(s) of Nonacademic organizations (please specify): _____						
<b>4.5. Uses of Award Funds</b>						
<b>Student Support</b>						
During this reporting period, were funds from this award used to support students (undergraduate, graduate, or postdocs)?						
o Yes				X	X	X
o No						
o Don't know						
<i>If no or don't know, skip the remaining questions in this section</i>						

<p>If yes, how many students were paid to work on the project using funds from this award?</p> <ul style="list-style-type: none"> <li>• Number of undergraduate students paid:</li> <li>• Number of graduate students paid:</li> <li>• Number of postdocs paid:</li> </ul>	X	X	X
<b>Laboratory Instrument Purchases</b>			
<p>Did you purchase scientific instruments for laboratory improvement with this award during this reporting period?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> <p><input type="radio"/> Don't know</p> <p><i>If no or don't know, skip the remaining questions in this section</i></p>	X	X	X
<p>Total price of all laboratory instruments purchased with this award during this reporting period:</p> <p><i>If &lt;\$5,000, skip the remaining questions in this section.</i></p>	X	X	X
<p>Number of instruments purchased with this award that cost more than \$5,000:</p> <p><i>If 0, skip the next question.</i></p>	X	X	X
<p>Where are these new laboratory instruments (that cost \$5,000 or more) housed? (Or if they have not been received yet, where will they be housed?) (mark one or more)</p> <p><input type="checkbox"/> At [name of PI's institution]</p> <p><input type="checkbox"/> At [name of lead institution]</p> <p><input type="checkbox"/> At [name of collaborating institution 1]</p> <p><input type="checkbox"/> At [name of collaborating institution 2]</p> <p>[...list all collaborating institutions]</p> <p><input type="checkbox"/> At [name of subawardee institution 1]</p> <p><input type="checkbox"/> At [name of subawardee institution 2]</p> <p>[...list all subawardee institutions]</p> <p><input type="checkbox"/> At other participating institutions</p> <p><input type="checkbox"/> Other (please specify): _____</p> <p><input type="checkbox"/> Don't know</p>	X	X	X
<b>4.6. Project Management and Evaluation</b>			
<p>Were any project evaluations conducted during the current reporting period?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> <p><input type="radio"/> Don't Know</p> <p><i>If no or don't know, skip the next question.</i></p>	X	X	X
<p>If Yes, How did you use the information from your project's evaluation? (mark one or more)</p> <p><input type="checkbox"/> To improve the project</p> <p><input type="checkbox"/> To document accomplishments</p> <p><input type="checkbox"/> To assess changes in knowledge, skills, or attitudes of undergraduate students</p> <p><input type="checkbox"/> To assess changes in knowledge, skills, or attitudes of graduate students</p> <p><input type="checkbox"/> To assess changes in knowledge, skills, or attitudes of faculty</p> <p><input type="checkbox"/> None of the above (<i>if so, skip the next question</i>)</p> <p><input type="checkbox"/> Other (please specify): _____</p> <p><input type="checkbox"/> Don't know (<i>if so, skip the next question</i>)</p>	X	X	X

<p>Were the project activities supported by this award implemented in courses or course-related laboratory sections during the current reporting period?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> <p><input type="radio"/> Don't Know</p> <p><i>If no or don't know, skip the rest of this question.</i></p>	X	X	X
In how many courses or course-related lab sections were project activities implemented during the current reporting period?	X	X	X
In all these courses or lab sections combined, approximately how many undergraduate students were exposed to the project's materials or instructional strategies?	X	X	X
In all these courses or lab sections combined, what percentage of students received a passing grade	X	X	X
<b>4.7. Reflection</b>			
What is the <b>single</b> most important project accomplishment for the reporting period? <i>(limit 500 characters)</i>	X	X	X
What is the <b>single</b> most significant challenge that the project faced during the reporting period? <i>(limit 500 characters)</i>	X	X	X
What changes were made to the project, as outlined in the proposal, during the reporting period? <i>(limit 500 characters)</i>	X	X	X
<b>5. Tell Us About Your Project's Activities</b>	X		
<b>Tell Us About The Project as a Whole</b>		X	
<b>Tell Us About Your Award's Independent Project Activities</b>			X
<b>2.01. TUES/CCLI Program Components</b>			
<p>During the current reporting period, did your institution, or any of your subawardee institutions, engage in any project activities or project work <i>independent of</i> the other awardee institutions in your TUES/CCLI Collaborative Project?</p> <p><input type="radio"/> Yes, we or our subawardees engaged in independent project work.</p> <p><input type="radio"/> No, all our work involved collaboration with other awardees in the TUES/CCLI Collaborative Project <i>(if no, skip the rest of this section, but to ensure accurate counts please be sure that the Lead PI knows about your involvement in any collaborative project activities, particularly if there are any where the Lead Organization was not directly involved)</i></p>			X
<p>What is the primary way that your project contributes to the development of exemplary undergraduate STEM education? (mark one)</p> <p><input type="radio"/> Assessing and evaluating student achievement</p> <p><input type="radio"/> Conducting research on undergraduate STEM education</p> <p><input type="radio"/> Developing or adapting learning materials</p> <p><input type="radio"/> Developing, adapting, or implementing new instructional strategies</p> <p><input type="radio"/> Developing faculty expertise</p>	X	X	

<p>What other ways does your project contribute to the development of exemplary undergraduate STEM education? (mark one or more)</p> <p><input type="checkbox"/> Assessing and evaluating student achievement</p> <p><input type="checkbox"/> Conducting research on undergraduate STEM education</p> <p><input type="checkbox"/> Developing or adapting learning materials</p> <p><input type="checkbox"/> Developing, adapting, or implementing new instructional strategies</p> <p><input type="checkbox"/> Developing faculty expertise</p> <p><input type="checkbox"/> None of the above</p>	X	X	
<p>Did the <i>independent</i> project activities supported by your award(s) during the current reporting period include developing or adapting any of the following:</p> <p><input type="checkbox"/> Instructional materials</p> <p><input type="checkbox"/> Instructional strategies</p> <p><input type="checkbox"/> Assessment instruments or processes to assess student achievement</p> <p><input type="checkbox"/> None of the above</p>			X
<p>Does a significant aspect of the project include the introduction of new disciplinary knowledge into undergraduate curricula?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> <p><input type="radio"/> Don't Know</p>	X	X	
<p>Did the project administer any publicly available assessment instruments (e.g., SALG, FCI, NSSE)?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> <p><input type="radio"/> Don't Know</p> <p><i>If no or don't know, skip the rest of this question.</i></p>	X	X	
<p>If yes, please list them here: <i>(limit 500 characters)</i></p>	X	X	
<p><b>2.02. Disciplinary Focus</b></p>			
<p>What is the <i>primary</i> disciplinary focus of the project? (mark one)</p> <p><input type="radio"/> Interdisciplinary</p> <p><input type="radio"/> Astronomy</p> <p><input type="radio"/> Biological Sciences</p> <p><input type="radio"/> Chemistry</p> <p><input type="radio"/> Computer Sciences</p> <p><input type="radio"/> Engineering</p> <p><input type="radio"/> Engineering Technology</p> <p><input type="radio"/> Geosciences</p> <p><input type="radio"/> Mathematical Sciences</p> <p><input type="radio"/> Physics</p> <p><input type="radio"/> Social and Behavioral Sciences</p> <p><input type="radio"/> Other, please specify: _____</p> <p><input type="radio"/> Don't Know</p>	X	X	

<p>What are the additional disciplinary focuses of the project? (mark one or more)</p> <ul style="list-style-type: none"> <li><input type="radio"/> Interdisciplinary</li> <li><input type="radio"/> Astronomy</li> <li><input type="radio"/> Biological Sciences</li> <li><input type="radio"/> Chemistry</li> <li><input type="radio"/> Computer Sciences</li> <li><input type="radio"/> Engineering</li> <li><input type="radio"/> Engineering Technology</li> <li><input type="radio"/> Geosciences</li> <li><input type="radio"/> Mathematical Sciences</li> <li><input type="radio"/> Physics</li> <li><input type="radio"/> Social and Behavioral Sciences</li> <li><input type="radio"/> Other, please specify: _____</li> <li><input type="radio"/> None</li> <li><input type="radio"/> Don't Know</li> </ul>	X	X	
<b>2.03. Target Audiences</b>			
<p>What course levels does your project address? (mark one or more)</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Upper division</li> <li><input checked="" type="checkbox"/> Lower division</li> <li><input type="checkbox"/> Developmental</li> <li><input type="checkbox"/> Don't Know</li> </ul>	X	X	
<p>What groups are the primary focus of your project? (mark one or more)</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Faculty (e.g., developing faculty expertise)</li> <li><input type="checkbox"/> Preservice teachers</li> <li><input checked="" type="checkbox"/> Instructional staff (e.g., graduate students, lab assistants, lab technicians, adjunct faculty)</li> <li><input type="checkbox"/> Undergraduate STEM majors</li> <li><input type="checkbox"/> Undergraduate majors other than STEM</li> <li><input type="checkbox"/> Other (please specify): _____</li> <li><input type="checkbox"/> Don't Know</li> </ul>	X	X	
<p>Does the project foster scientific and/or technical literacy among students who are in majors other than STEM majors?</p> <ul style="list-style-type: none"> <li><input checked="" type="radio"/> Yes</li> <li><input type="radio"/> No</li> <li><input type="radio"/> Don't Know</li> </ul>	X	X	
<b>2.04 Publications and Presentations</b>			
<b>Publications</b>	X	X	

Please provide the number of project-related outputs that were accepted for publication during the current reporting period for each of the categories described below. All fields below are required. Enter DK for anything you don't know.					
<b>Publication types</b>	<b>Number accepted</b>	<b>Formats produced</b>			
Peer-reviewed journal articles accepted for publication during the current reporting period		<input type="checkbox"/> Print <input type="checkbox"/> Online <input type="checkbox"/> Other electronic format			
Peer-reviewed conference papers or abstracts accepted for inclusion in conference proceedings during the current reporting period		<input type="checkbox"/> Print <input type="checkbox"/> Online <input type="checkbox"/> Other electronic format			
Conference papers or abstracts accepted without peer review during the current reporting period		<input type="checkbox"/> Print <input type="checkbox"/> Online <input type="checkbox"/> Other electronic format	X	X	
Book chapters in edited volumes accepted for publication during the current reporting period		<input type="checkbox"/> Print <input type="checkbox"/> Online <input type="checkbox"/> Other electronic format			
Monographs or books accepted for publication during the current reporting period		<input type="checkbox"/> Print <input type="checkbox"/> Online <input type="checkbox"/> Other electronic format			
Other publications (e.g., newsletters, magazines) accepted for publication during the current reporting period		<input type="checkbox"/> Print <input type="checkbox"/> Online <input type="checkbox"/> Other electronic format			
<b>Presentations</b>					
How many presentations or workshops on the project were delivered during the current reporting period? (Include presentations that were conducted by individuals trained by the project.) All fields below are required. Enter DK for anything you don't know.					
<b>Presentation types</b>	<b>No. of presentations</b>				
Peer-reviewed conference presentations			X	X	
Invited conference or meeting presentations					
Invited faculty development workshops					
<b>2.05 Honors and Awards</b>					



<p><b>Did the project receive any honors or awards during the current reporting period?</b> (Include individuals recognized for their contributions to the project.)</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> <p><input type="radio"/> Don't Know</p> <p><i>If no or don't know, skip the rest of this question.</i></p>	X	X	
What honors or awards were received?			
<b>Honor or Award Form</b>			
Title	X	X	
Year	X	X	
Presenting Organization	X	X	
Reason for the honor or award	X	X	
<b>2.06. Institutionalization</b>			
<p>Are there plans to sustain the project after NSF funding ends?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> <p><input type="radio"/> Don't Know</p> <p><i>If no or don't know, skip the rest of this question.</i></p>	X	X	
<p><input type="radio"/> During the current reporting period, were steps taken to sustain the project's activities after NSF funding ends?</p> <p><input type="radio"/> Yes, some steps to sustain the project were taken.</p> <p><input type="radio"/> Yes, all of the necessary steps to sustain the project were completed.</p> <p><input type="radio"/> No, no steps to sustain the project were taken during the current reporting period. If no, when does the project plan to start? (enter month and year) ____ / ____</p> <p><input type="radio"/> Don't Know</p>	X	X	
<b>2.07. Dissemination</b>			
<p>Where else are the project's materials, strategies, faculty development activities, or assessment instruments/processes being used? (mark one or more)</p> <p><input type="checkbox"/> At lead, collaborative, or subawardee institutions by people not directly involved with the project</p> <p><input type="checkbox"/> At the project's other participating institutions by people not directly involved with the project</p> <p><input type="checkbox"/> At other institutions across the U.S.</p> <p><input type="checkbox"/> At international institutions</p> <p><input type="checkbox"/> None of the above</p> <p><input type="checkbox"/> Don't know</p>	X	X	
<b>2.08. Instructional Materials</b>			
<p>Did the project develop or adapt instructional materials during the current reporting period?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> <p><input type="radio"/> Don't Know</p> <p><i>If no or don't know, skip the rest of this question.</i></p>	X	X	

<p>What types of instructional materials did the project develop or adapt? (mark one or more)</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Case studies</li> <li><input type="checkbox"/> Demonstrations</li> <li><input type="checkbox"/> Educational games</li> <li><input type="checkbox"/> Field activity guides or manuals</li> <li><input type="checkbox"/> Instructor materials for adapting project activities or procedures to new settings</li> <li><input type="checkbox"/> Instructor guides or manuals to guide student activities</li> <li><input type="checkbox"/> Laboratory guides or manuals</li> <li><input type="checkbox"/> Lesson plans</li> <li><input type="checkbox"/> Practice problems or exercises for students</li> <li><input type="checkbox"/> Simulations</li> <li><input type="checkbox"/> Software tools including web-enhanced tools</li> <li><input type="checkbox"/> Student handbooks or workbooks</li> <li><input type="checkbox"/> Textbooks</li> <li><input type="checkbox"/> Tutorials</li> <li><input type="checkbox"/> Visualizations</li> <li><input type="checkbox"/> Workshop materials for training faculty</li> <li><input type="checkbox"/> Workshop materials for training students</li> <li><input type="checkbox"/> Other instructional materials (please specify): _____</li> </ul>	X	X	
<p><i>Note to reviewers: The system will show the user the list of instructional materials above. The user will choose the materials from the list that apply to his or her project. For each item chosen, the system will display the following questions:</i></p> <hr/> <p><input type="checkbox"/> Sample instructional material</p> <hr/> <p><i>During the current reporting period, our project:</i></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Developed or revised our own [[material type]]</li> <li><input type="checkbox"/> Adapted [[material type]] created by others</li> </ul> <p><i>In these formats:</i></p> <p><input type="checkbox"/> print    <input type="checkbox"/> online    <input type="checkbox"/> other electronic format</p>	X	X	
<b>2.09. Instructional Strategies</b>			
<p>Did the project develop or adapt instructional strategies during the current reporting period?</p> <ul style="list-style-type: none"> <li><input checked="" type="radio"/> Yes</li> <li><input type="radio"/> No</li> <li><input type="radio"/> Don't Know</li> </ul> <p><i>If no or don't know, skip the rest of this question.</i></p>	X	X	

<p>What types of instructional strategies did the project develop or adapt? (mark one or more)</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Case-based learning strategies</li> <li><input type="checkbox"/> Cooperative or collaborative learning strategies</li> <li><input type="checkbox"/> Design activities</li> <li><input type="checkbox"/> Field studies</li> <li><input type="checkbox"/> Hands-on activities (e.g., building or testing objects)</li> <li><input type="checkbox"/> Integrated courses</li> <li><input type="checkbox"/> Intelligent tutoring systems</li> <li><input type="checkbox"/> Laboratory experiences</li> <li><input type="checkbox"/> Learning communities (e.g., student cohorts)</li> <li><input type="checkbox"/> Lectures</li> <li><input type="checkbox"/> Linked courses</li> <li><input type="checkbox"/> Real-time modification strategies based on student performance (e.g., Just-in-Time Teaching)</li> <li><input type="checkbox"/> Peer-instruction strategies (e.g., peer tutoring, peer mentoring)</li> <li><input type="checkbox"/> Personal response systems (e.g., “clickers”)</li> <li><input type="checkbox"/> Problem-based learning strategies</li> <li><input type="checkbox"/> Quantitative computational approaches</li> <li><input type="checkbox"/> Strategies involving real-world examples, problems, or contexts</li> <li><input type="checkbox"/> Strategies involving remote laboratories</li> <li><input type="checkbox"/> Strategies involving formal research experience in classroom laboratories</li> <li><input type="checkbox"/> Service-learning strategies</li> <li><input type="checkbox"/> Studio-based strategies</li> <li><input type="checkbox"/> Web-enabled homework submission and grading systems</li> <li><input type="checkbox"/> Web-enabled instruction strategies</li> <li><input type="checkbox"/> Web-enabled repositories</li> <li><input type="checkbox"/> Web-enabled student collaboration/social networking tools</li> <li><input type="checkbox"/> Other instructional strategies (please specify): _____</li> </ul>	X	X	
<p>Note to reviewers: The system will show the user the list of instructional strategies above. The user will choose the materials from the list that apply to his or her project. For each item chosen, the system will display the following questions:</p> <hr/> <ul style="list-style-type: none"> <li><input type="checkbox"/> Sample instructional strategy</li> </ul> <hr/> <p style="margin-left: 20px;"><i>During the current reporting period, our project:</i></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Developed or revised our own [[strategy type]]</li> <li><input type="checkbox"/> Adapted [[strategy type]] created by others</li> </ul> <hr/>	X	X	
<b>2.10. Assessment Instruments and Processes</b>			
<p>Did the project develop or adapt assessment instruments or processes during the current reporting period?</p> <ul style="list-style-type: none"> <li><input type="radio"/> Yes</li> <li><input type="radio"/> No</li> <li><input type="radio"/> Don't Know</li> </ul> <p><i>If no or don't know, skip the rest of this question.</i></p>	X	X	

<p>What types of assessment instruments or processes did the project develop or adapt? (mark one or more)</p> <p><input type="checkbox"/> Assessment of general knowledge or skill (e.g., critical thinking skills, problem-solving skills)</p> <p><input type="checkbox"/> Cognitive protocol interviews</p> <p><input type="checkbox"/> Concept inventories</p> <p><input type="checkbox"/> Course exams</p> <p><input type="checkbox"/> Standardized tests (e.g., Fundamentals of Engineering, American Chemical Society examinations)</p> <p><input type="checkbox"/> Performance assessment of skills (e.g., observation and rating of skills)</p> <p><input type="checkbox"/> Students' perceptions of their own learning</p> <p><input type="checkbox"/> Expert review</p> <p><input type="checkbox"/> Other instruments and processes to determine outcomes (please specify): _____</p>	X	X	
<p>Note to reviewers: The system will show the user the list of instructional materials above. The user will choose the materials from the list that apply to his or her project. For each item chosen, the system will display the following questions:</p> <hr/> <p><input type="checkbox"/> Sample assessment instrument or process</p> <p><i>During the current reporting period, our project:</i></p> <p><input type="checkbox"/> Developed or revised our own [[assessment type]]</p> <p><input type="checkbox"/> Adapted [[assessment type]] created by others</p> <p><i>In these formats:</i></p> <p><input type="checkbox"/> print   <input type="checkbox"/> online   <input type="checkbox"/> other electronic format</p>	X	X	
<b>2.11. Research On Undergraduate STEM Education</b>			
<p>Did the project conduct research on undergraduate STEM education during the current reporting period?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> <p><input type="radio"/> Don't Know</p> <p><i>If no or don't know, skip the rest of this section.</i></p>	X	X	
<p>What is the topic of your research on undergraduate STEM education? (limit 500 characters)</p>	X	X	
<p>What type of research does your project employ? (mark one)</p> <p><input type="radio"/> Qualitative research design</p> <p><input type="radio"/> Quantitative research design</p> <p><input type="radio"/> Mixed method research design</p> <p><input type="radio"/> Don't Know</p>	X	X	
<b>2.12. Faculty Professional Development Component</b>			
<p>Did the project include a faculty professional development component ? (e.g., seminar, workshop, meeting session) that shared project approaches with other faculty members during the current reporting period?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> <p><input type="radio"/> Don't Know</p> <p><i>If no or don't know, skip the rest of this section.</i></p>	X	X	

If YES: With whom were these approaches shared during the current reporting period? (mark one or more)							
	Graduate students or postdocs	Faculty	Instructional staff	Other or unknown individuals			
At the lead, collaborating, or subawardee institutions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	X	
At other institutions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
If YES: which disciplines were the focus of the project's faculty professional development efforts during the current reporting period? (mark one or more) <ul style="list-style-type: none"> <li><input type="radio"/> Interdisciplinary</li> <li><input type="radio"/> Astronomy</li> <li><input type="radio"/> Biological Sciences</li> <li><input type="radio"/> Chemistry</li> <li><input type="radio"/> Computer Sciences</li> <li><input type="radio"/> Engineering</li> <li><input type="radio"/> Engineering Technology</li> <li><input type="radio"/> Geosciences</li> <li><input type="radio"/> Mathematical Sciences</li> <li><input type="radio"/> Physics</li> <li><input type="radio"/> Social and Behavioral Sciences</li> <li><input type="radio"/> Other, please specify: _____</li> <li><input type="radio"/> Don't Know</li> <li><input checked="" type="radio"/> None</li> </ul>							
If YES: What types of institutions were represented at these efforts during the current reporting period (mark one or more) <ul style="list-style-type: none"> <li><input type="checkbox"/> 2-year Institutions</li> <li><input type="checkbox"/> Bachelor's degree granting institutions</li> <li><input type="checkbox"/> Master's degree granting institutions</li> <li><input type="checkbox"/> Doctoral degree granting institutions</li> <li><input type="checkbox"/> Nonacademic organizations</li> <li><input type="checkbox"/> Other (please specify): _____</li> <li><input type="checkbox"/> Don't know</li> <li><input type="checkbox"/> None</li> </ul>							
					X	X	

<p>If YES: Did the institutions represented at the project’s faculty professional development efforts have any of the following demographics or special institutional designations? If yes, what types? (mark one or more)</p> <p><input type="checkbox"/> Historically Black College or University</p> <p><input type="checkbox"/> American Indian Tribally Controlled College or University</p> <p><input type="checkbox"/> Institution with High Disabilities Enrollment (&gt;3% Undergraduates)</p> <p><input type="checkbox"/> Institution with High American Indian or Alaska Native Enrollment (25% or more) – Not Tribally Controlled</p> <p><input type="checkbox"/> Institution with High Black or African American Enrollment (non-Hispanic) (25% or more)</p> <p><input type="checkbox"/> Institution with High Hispanic Enrollment (25% or more)</p> <p><input type="checkbox"/> Institution with High Native Hawaiian or Other Pacific Islander Enrollment (25% or more)</p> <p><input type="checkbox"/> None</p> <p><input type="checkbox"/> Not Reported/Don’t Know</p>				X	X	
<b>2.13. Involvement with Project Materials, Strategies, Instruments and Processes</b>						
<p>Do you know approximately how many students, faculty, and staff were impacted by your award’s efforts, or the joint efforts of collaborating awardees, during the current reporting period?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No (if no, skip the rest of this section)</p>				X	X	X
<b>Student Counts</b>						
<i>All fields below are required. Enter DK for anything you don’t know.</i>						
	Total number of students	Number of students from 2-year institutions	Number of students from institutions with minority enrollment of 25% or greater			
During the current reporting period approximately . . .						
How many undergraduate students used the project’s instructional materials?						
How many undergraduate students were taught using the project’s instructional strategies?						
How many undergraduate students’ knowledge, skills, or attitudes were assessed using the project’s assessment instruments?						
<b>Faculty Counts</b>						

<i>All fields below are required. Enter <b>DK</b> for anything you don't know.</i>						
During the current reporting period approximately . . .	Total number of faculty	Number of faculty from 2-year institutions	Number of faculty from institutions with minority enrollment of 25% or greater			
How many project faculty worked on the project's instructional materials?				X	X	X
How many project faculty worked on the project's instructional strategies?						
How many project faculty worked on the project's assessment instruments or processes?						
<b>Staff Counts</b>						
<i>All fields below are required. Enter <b>DK</b> for anything you don't know.</i>						
During the current reporting period approximately . . .	Total number of staff	Number of staff from 2-year institutions	Number of staff from institutions with minority enrollment of 25% or greater ?			
How many non-instructional professional staff worked on the project? (e.g., lab technicians, professional staff associated with Centers for Teaching and Learning and Centers for Institutional Research, Centers for Institutional Evaluation professional staff)?				X	X	X
How many non-instructional professional staff used the project's materials, strategies, or assessment instruments with students?						

<p>We are interested in whether participants who receive funding to attend faculty professional development activities are more or less likely to implement what they learn. Please estimate how many faculty professional development participants received funds from the project or their institution to attend. Of each group, please also indicate <i>approximately</i> how many are implementing the ideas shared.</p>						
	Participants funded by the project	Participants funded by their institution (if known)	All other participants			
Number of faculty members				X	X	
Number of institutions represented by those faculty members						
Number of faculty implementing what they learned						
<p><i>Note: Your response to this question is optional this year, but may be required in future years</i></p>						
<p><b>2.14. Involvement with Faculty Professional Development</b></p>						
<p><b><i>Faculty Professional Development Events</i></b></p>						
<p>During the current reporting period, were any faculty professional development events conducted [, either by your award or jointly among collaborating awardees]?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> <p><input type="radio"/> Don't Know</p> <p><i>If no or don't know, skip the rest of this section.</i></p> <p><i>If YES: All fields below are required. Enter <b>DK</b> for anything you don't know.</i></p>				X	X	X
<p><b><i>Faculty Professional Development Events Conducted</i></b></p>						
During the current reporting period approximately . . .	Total number of events	Number of events held at 2-year institutions	Number of events held at institutions with minority enrollment of 25% or greater	X	X	X
How many faculty professional development events were supported by the project?						



***Faculty Involvement in Professional Development Events***

The following 8 questions appear in a table with the columns shown below:

- How many faculty were involved in creating the project’s faculty professional development events?
- How many faculty were involved in leading the project’s faculty professional development events?
- How many faculty participated as learners in the project’s faculty professional development events?
- *How many academic institutions do these learners represent?*
- How many faculty learners received project funding to attend the project’s faculty professional development events?
- *How many academic institutions do these learners represent?*
- How many faculty learners at the project’s events went on to implement what they learned?
- *How many academic institutions do these learners represent?*

x

x

x

During the current reporting period approximately . . .	Total number of faculty	Number of faculty from 2-year institutions	Number of faculty from institutions with minority enrollment of 25% or greater
Sample Question			

<b>Graduate Student and Postdoc Involvement in Professional Development Events</b>						
During the current reporting period approximately . . .	Total number of graduate students and postdocs	Number of graduate students and postdocs from 2-year institutions	Number of graduate students and postdocs from institutions with minority enrollment of 25% or greater			
How many graduate students and postdocs were involved in creating the project's faculty professional development events?				X	X	X
How many graduate students and postdocs were involved in leading the project's faculty professional development events?						
How many graduate students and postdocs participated as learners in the project's faculty professional development events?						
<b>Nonacademic Involvement in the Project's Faculty Professional Development Events</b>						
During the current reporting period approximately . . .	Total number of nonacademic learners			X	X	X
How many representatives from nonacademic organizations (e.g., professional societies, industry, community organizations) participated as learners in your project's faculty professional development events?						
<i>How many organizations do these learners represent?</i>						
<b>6. Submit your report to NSF</b>						
Congratulations! Your report appears complete. We have one last question: Approximately how many person-hours were required to complete this report? _____ <i>person-hours (round up to a whole hour)</i>				X	X	X
<b>7. Create New User Account</b>						
<i>Note: This data is only collected for participants who must use TUESWeb (usually only the PI and a data entry assistant). The data is collected in order to provide adequate technical support; it is not considered part of the data collection instrument.</i>						

E-mail Address	X	X	X
Project Role			
o Co- primary Investigator			
o Data Entry Personnel	X	X	X
o Project Coordinator			
o Other			
Name:			
Honorific			
First			
Middle	X	X	X
Last			
Suffix			
Phone	X	X	X
Organization	X	X	X
Alternate E-mail	X	X	X
Alternate Phone	X	X	X
Access Privileges (mark all that apply)			
<input checked="" type="checkbox"/> Can View Data			
<input type="checkbox"/> Can Edit Data			
<input type="checkbox"/> Can Manage User Access			
<input type="checkbox"/> Receives Reminders ( <i>automatically set to "yes" if Role=Project Coordinator</i> )	X	X	X
(button): Remove from this report			
<i>Note: The Lead PI's privileges are automatically set to "yes" for all privileges.</i>			