Attachment K1

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

Table of Contents

Common Collection Categories / Questions	Award Category			Staff and Project Participant Characteristics[1]	Project Implementation Characteristics[2]	Project Outputs[3]
	Single	Lead Collaborative	Non-Lead Collaborative			

Notes:
 • 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.
 	
 • Three major categories drive the tailoring of the system to the award type. We have included columns to indicate these, which are:
    • Single Award
    • Lead Collaborative Award (most questions)
    • Non-Lead Collaborative Award(fewest questions)
 	
 • For most questions respondents have the option to select a "don't know" option or can enter "DK."
 	
 • 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.						

i. Confirm Award Information *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."*						

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

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

[3] 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
Common Collection Categories	Single	Lead Collaborative	Non-Lead Collaborative			
Is [PI Name] the lead PI on Award No. [NSF Award Number]? o Yes o No	x	x	x		X	

What type of proposal was submitted for this award ?
  o A Single Proposal that resulted in only this award (possibly including subawards for collaborating organizations)
  o A Collaborative Proposal that included simultaneous linked proposals from investigators at different organizations, with each organization receiving its own TUES/CCLI award.
	x	x	x		X	

Was this the Lead Award on the collaborative proposal? o Yes o No		x	x		X	
1. Tell Us About Your Awards						
1.1. Award Details *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.*						
NSF Award No.	x	x	x		X	
Award Title	x	x	x		X	
PI Organization	x	x	x	X		
Official Grantee Institution *This data element appears only if it differs from the PI Organization.*	x	x	x	X		

Phase or Type
The system will list one of the following types:
  • *Phase 1/Type 1*
  • *Phase 2/Type 2*
  • *Phase 3/Type 2*
  • *Central Resource Project*
	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 / Questions	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Single	Lead Collaborative	Non-Lead Collaborative			
TUES/CCLI Awards in this collaborative project: [[PI]], [[PI Organization]] – **Lead Award** [[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	
1.2. About Your Institution						

Type of institution:
[PI institution name], [City], [State]
has the following classification in *the Integrated Postsecondary Data System* (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: _____
 	
    OR
 	
Type of Organization: (mark one or more)
☐ Academic Consortium
☐ Business
☐ Consultant
☐ National Laboratory
☐ Museum
☐ Nonprofit
☐ Professional Society
☐ Research Institute
☐ Other (please specify): _____
	x	x	x	X	X	

1.3. Subawards						

Questions / Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Single	Lead Collaborative	Non-Lead Collaborative			

Were subaward funds expended or transferred from this award to any subawardees during the current reporting period?
  o Yes
  o No
	x	x	x		X	

Enter information for a subaward organization *Provide the following information for the CCLI/TUES subaward institution. This subsection repeats for each institution*						

What type of organization received this subaward?
  o Academic institution (not including academic consortiums)
  o Other type of organization
	x	x	x		X	

Academic Subaward Institution						
What is the name of the institution?	x	x	x	X		

Type of institution:
[PI institution name], [City], [State]
has the following classification in *the Integrated Postsecondary Data System* (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	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	
Other Type of Subaward Organization						

Questions	Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
		Single	Lead Collaborative	Non-Lead Collaborative			
Which of the following describes this organization? (mark one or more) ☐ Academic Consortium ☐ Business ☐ Consultant ☐ National Laboratory ☐ Museum ☐ Nonprofit ☐ Professional Society ☐ Research Institute ☐ Other (please specify): _____ ☐ Don't Know		x	x	x	X		
All Subaward Organization Types							
Approximately what amount of subaward funds did your award transfer to this organization during the current reporting period?		x	x	x		X	
Checkbox option (matching how this question can also be answered elsewhere in the instrument.) ☐ 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
1.4. Other Participating Organizations							
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)? o Yes o No o Don't know *If no or don't know, skip the questions in this section.*		x	x	x		X	

Questions / Common Collection Categories				Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
				Single	Lead Collaborative	Non-Lead Collaborative			
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. • DO NOT include your organization, subawardee organizations, or organizations that should be independently reported by collaborating awardees. • Include organizations that received project funds, as well as organizations that did not. • Enter 0 for none. Enter DK for anything you don't know. *The column headers for these tables are:* *A. How many of this type of organization participated significantly?* *B. How many faculty or professionals from this type of organization participated?* *C. How many students from this type of organization participated?*									

	A	B	C	Single	Lead Collaborative	Non-Lead Collaborative	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
U.S. academic institutions by highest degree granted:									
2-year Institutions									
2-year Institutions on a 4-year College or University Campus									
Bachelor's Degree Granting Institutions				x	x	x		X	
Master's Degree Granting Institutions									
Doctoral Degree Granting Institutions									
Other U.S. Department of Education IPEDs type(s) (please specify):_____									

Questions / Common Collection Categories				Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
				Single	Lead Collaborative	Non-Lead Collaborative			
	A	B	C						
U.S. academic institutions by enrollment demographics:									
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		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						
U.S. academic institutions with special designations:									
Historically Black Colleges or Universities				x	x	x		X	
American Indian Tribally Controlled Colleges or Universities									
	A	B	C						
Nonacademic organizations									
Businesses									
Consultants									
National Laboratories				x	x	x		X	
Museums									
Non-profits									
Professional Societies									
Other type(s) of Nonacademic organizations (please specify): _____									

1.5.   Uses of Award Funds

Common Collection Categories / Questions	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Single	Lead Collaborative	Non-Lead Collaborative			
Student Support						
During this reporting period, were funds from this award used to support students (undergraduate, graduate, or postdocs)? o Yes o No o Don't know *If no or don't know, skip the remaining questions in this section*	x	x	x			X
If yes, how many students were paid to work on the project using funds from this award? • Number of undergraduate students paid: • Number of graduate students paid: • Number of postdocs paid:	x	x	x			X
Laboratory Instrument Purchases						
Did you purchase scientific instruments for laboratory improvement with this award during this reporting period? o Yes o No o Don't know *If no or don't know, skip the remaining questions in this section*	x	x	x			X
Total price of all laboratory instruments purchased with this award during this reporting period: *If <$5,000, skip the remaining questions in this section.*	x	x	x			X
Number of instruments purchased with this award that cost more than $5,000: *If 0, skip the next question.*	x	x	x			X

Questions / Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Single	Lead Collaborative	Non-Lead Collaborative			

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)
□ At [name of PI's institution]
□ At [name of lead institution]
□ At [name of collaborating institution 1]
□ At [name of collaborating institution 2]
   […list all collaborating institutions]
□ At [name of subawardee institution 1]
□ At [name of subawardee institution 2]
   […list all subawardee institutions]
□ At other participating institutions
□ Other (please specify): _____
□ Don't know
	x	x	x			X

1.6. Project Management and Evaluation						
Were any project evaluations conducted during the current reporting period? o Yes o No o Don't Know *If no or don't know, skip the next question.*	x	x	x		X	
If Yes, How did you use the information from your project's evaluation? (mark one or more) □ To improve the project □ To document accomplishments □ To assess changes in knowledge, skills, or attitudes of undergraduate students □ To assess changes in knowledge, skills, or attitudes of graduate students □ To assess changes in knowledge, skills, or attitudes of faculty □ None of the above *(if so, skip the next question)* □ Other (please specify): _____ □ Don't know *(if so, skip the next question)*	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? o Yes o No o Don't Know *If no or don't know, skip the rest of this question.*	x	x	x			X

Questions / Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Single	Lead Collaborative	Non-Lead Collaborative			
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
1.7. Reflection						
What is the **single** most important project accomplishment for the reporting period? *(limit 500 characters)*	x	x	x			X
What is the **single** most significant challenge that the project faced during the reporting period? *(limit 500 characters)*	x	x	x		X	
What changes were made to the project, as outlined in the proposal, during the reporting period? *(limit 500 characters)*	x	x	x		X	
2. Tell Us About Your Project's Activities	x					
Tell Us About The Project as a Whole		x				
Tell Us About Your Award's Independent Project Activities			x			
2.01. TUES/CCLI Program Components						
During the current reporting period, did your institution, or any of your subawardee institutions, engage in any project activities or project work *independent of* 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 *(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)*			x		X	

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

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

Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
Questions	Single	Lead Collaborative	Non-Lead Collaborative			
What groups are the primary focus of your project? (mark one or more) ☐ Faculty (e.g., developing faculty expertise) ☐ Preservice teachers ☐ Instructional staff (e.g., graduate students, lab assistants, lab technicians, adjunct faculty) ☐ Undergraduate STEM majors ☐ Undergraduate majors other than STEM ☐ Other (please specify): _____ ☐ 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? o Yes o No o Don't Know	x	x				X
2.04 Publications and Presentations						
Publications	x	x				X

Questions / **Common Collection Categories**			Single	Lead Collaborative	Non-Lead Collaborative	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
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.								

Publication types	Number accepted	Formats produced						
Peer-reviewed journal articles accepted for publication during the current reporting period		☐ Print ☐ Online ☐ Other electronic format						
Peer-reviewed conference papers or abstracts accepted for inclusion in conference proceedings during the current reporting period		☐ Print ☐ Online ☐ Other electronic format						
Conference papers or abstracts accepted without peer review during the current reporting period		☐ Print ☐ Online ☐ Other electronic format	x	x				X
Book chapters in edited volumes accepted for publication during the current reporting period		☐ Print ☐ Online ☐ Other electronic format						
Monographs or books accepted for publication during the current reporting period		☐ Print ☐ Online ☐ Other electronic format						
Other publications (e.g., newsletters, magazines) accepted for publication during the current reporting period		☐ Print ☐ Online ☐ Other electronic format						

Presentations								

Questions	Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
		Single	Lead Collaborative	Non-Lead Collaborative			
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.**		x	x				X
<table><tr><td>Presentation types</td><td>No. of presentations</td></tr><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></table>							
2.05 Honors and Awards							
Did the project receive any honors or awards during the current reporting period? (Include individuals recognized for their contributions to the project.) o Yes o No o Don't Know *If no or don't know, skip the rest of this question.*		x	x				X
What honors or awards were received?							
Honor or Award Form							
Title		x	x				X
Year		x	x				X
Presenting Organization		x	x				X
Reason for the honor or award		x	x				X
2.06. Institutionalization							
Are there plans to sustain the project after NSF funding ends? o Yes o No o Don't Know *If no or don't know, skip the rest of this question.*		x	x			X	

Questions / Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Single	Lead Collaborative	Non-Lead Collaborative			
o During the current reporting period, were steps taken to sustain the project's activities after NSF funding ends? o Yes, some steps to sustain the project were taken. o Yes, all of the necessary steps to sustain the project were completed. o 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) ____ / ____ o Don't Know	x	x			X	
2.07. Dissemination						
Where else are the project's materials, strategies, faculty development activities, or assessment instruments/processes being used? (mark one or more) ☐ At lead, collaborative, or subawardee institutions by people not directly involved with the project ☐ At the project's other participating institutions by people not directly involved with the project ☐ At other institutions across the U.S. ☐ At international institutions ☐ None of the above ☐ Don't know	x	x				X
2.08. Instructional Materials						
Did the project develop or adapt instructional materials during the current reporting period? o Yes o No o Don't Know *If no or don't know, skip the rest of this question.*	x	x				X

Questions / Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Single	Lead Collaborative	Non-Lead Collaborative			
What types of instructional materials did the project develop or adapt? (mark one or more) ☐ Case studies ☐ Demonstrations ☐ Educational games ☐ Field activity guides or manuals ☐ Instructor materials for adapting project activities or procedures to new settings ☐ Instructor guides or manuals to guide student activities ☐ Laboratory guides or manuals ☐ Lesson plans ☐ Practice problems or exercises for students ☐ Simulations ☐ Software tools including web-enhanced tools ☐ Student handbooks or workbooks ☐ Textbooks ☐ Tutorials ☐ Visualizations ☐ Workshop materials for training faculty ☐ Workshop materials for training students ☐ Other instructional materials (please specify): _____	x	x				X
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: ☐ Sample instructional material *During the current reporting period, our project:* ☐ Developed or revised our own [[material type]] ☐ Adapted [[material type]] created by others *In these formats:* ☐ print ☐ online ☐ other electronic format	x	x				X
2.09. Instructional Strategies						
Did the project develop or adapt instructional strategies during the current reporting period? o Yes o No o Don't Know *If no or don't know, skip the rest of this question.*	x	x				X

Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
Questions	Single	Lead Collaborative	Non-Lead Collaborative			
What types of instructional strategies did the project develop or adapt? (mark one or more) ☐ Case-based learning strategies ☐ Cooperative or collaborative learning strategies ☐ Design activities ☐ Field studies ☐ Hands-on activities (e.g., building or testing objects) ☐ Integrated courses ☐ Intelligent tutoring systems ☐ Laboratory experiences ☐ Learning communities (e.g., student cohorts) ☐ Lectures ☐ Linked courses ☐ Real-time modification strategies based on student performance (e.g., Just-in-Time Teaching) ☐ Peer-instruction strategies (e.g., peer tutoring, peer mentoring) ☐ Personal response systems (e.g., "clickers") ☐ Problem-based learning strategies ☐ Quantitative computational approaches ☐ Strategies involving real-world examples, problems, or contexts ☐ Strategies involving remote laboratories ☐ Strategies involving formal research experience in classroom laboratories ☐ Service-learning strategies ☐ Studio-based strategies ☐ Web-enabled homework submission and grading systems ☐ Web-enabled instruction strategies ☐ Web-enabled repositories ☐ Web-enabled student collaboration/social networking tools ☐ Other instructional strategies (please specify): _____	x	x				X

Questions	Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
		Single	Lead Collaborative	Non-Lead Collaborative			
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: □ Sample instructional strategy *During the current reporting period, our project:* □ Developed or revised our own [[strategy type]] □ Adapted [[strategy type]] created by others		x	x				X
2.10. Assessment Instruments and Processes							
Did the project develop or adapt assessment instruments or processes during the current reporting period? o Yes o No o Don't Know *If no or don't know, skip the rest of this question.*		x	x				X
What types of assessment instruments or processes did the project develop or adapt? (mark one or more) □ Assessment of general knowledge or skill (e.g., critical thinking skills, problem-solving skills) □ Cognitive protocol interviews □ Concept inventories □ Course exams □ Standardized tests (e.g., Fundamentals of Engineering, American Chemical Society examinations) □ Performance assessment of skills (e.g., observation and rating of skills) □ Students' perceptions of their own learning □ Expert review □ Other instruments and processes to determine outcomes (please specify): _____		x	x				X

Common Collection Categories / Questions	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Single	Lead Collaborative	Non-Lead Collaborative			
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: ☐ Sample assessment instrument or process *During the current reporting period, our project:* ☐ Developed or revised our own [[assessment type]] ☐ Adapted [[assessment type]] created by others *In these formats:* ☐ print ☐ online ☐ other electronic format	x	x				X
2.11. Research On Undergraduate STEM Education						
Did the project conduct research on undergraduate STEM education during the current reporting period? o Yes o No o Don't Know *If no or don't know, skip the rest of this section.*	x	x			X	
What is the topic of your research on undergraduate STEM education? *(limit 500 characters)*	x	x			X	
What type of research does your project employ? (mark one) o Qualitative research design o Quantitative research design o Mixed method research design o Don't Know	x	x			X	
2.12. Faculty Professional Development Component						
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? o Yes o No o Don't Know *If no or don't know, skip the rest of this section.*	x	x			X	

Questions	Common Collection Categories				Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
					Single	Lead Collaborative	Non-Lead Collaborative			
If YES: With whom were these approaches shared during the current reporting period? (mark one or more)					x	x		X		

	Graduate students or postdocs	Faculty	Instructional staff	Other or unknown individuals
At the lead, collaborating, or subawardee institutions	☐	☐	☐	☐
At other institutions	☐	☐	☐	☐

Questions	Single	Lead Collaborative	Non-Lead Collaborative	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
If YES: which disciplines were the focus of the project's faculty professional development efforts during the current reporting period? (mark one or more) o Interdisciplinary o Astronomy o Biological Sciences o Chemistry o Computer Sciences o Engineering o Engineering Technology o Geosciences o Mathematical Sciences o Physics o Social and Behavioral Sciences o Other, please specify: _____ o Don't Know o None	x	x			X	
If YES: What types of institutions were represented at these efforts during the current reporting period (mark one or more) ☐ 2-year Institutions ☐ Bachelor's degree granting institutions ☐ Master's degree granting institutions ☐ Doctoral degree granting institutions ☐ Nonacademic organizations ☐ Other (please specify): _____ ☐ Don't know ☐ None	x	x		X		

Questions / Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Single	Lead Collaborative	Non-Lead Collaborative			
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) ☐ Historically Black College or University ☐ American Indian Tribally Controlled College or University ☐ Institution with High Disabilities Enrollment (>3% Undergraduates) ☐ Institution with High American Indian or Alaska Native Enrollment (25% or more) – Not Tribally Controlled ☐ Institution with High Black or African American Enrollment (non-Hispanic) (25% or more) ☐ Institution with High Hispanic Enrollment (25% or more) ☐ Institution with High Native Hawaiian or Other Pacific Islander Enrollment (25% or more) ☐ None ☐ Not Reported/Don't Know	x	x		X		
2.13. Involvement with Project Materials, Strategies, Instruments and Processes						
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? o Yes O No *(if no, skip the rest of this section)*	x	x	x		X	
Student Counts						

Questions / **Common Collection Categories**				**Award Category**			**Staff and Project Participant Characteristics**	**Project Implementation Characteristics**	**Project Outputs**
				Single	Lead Collaborative	Non-Lead Collaborative			
All fields below are required. Enter **DK** for anything you don't know.									
During the current reporting period approximately . . .	Total number of students	Number of students from 2-year institutions	Number of students from institutions with minority enrollment of 25% or greater						
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?									
Faculty Counts									

Questions / Common Collection Categories				Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
				Single	Lead Collaborative	Non-Lead Collaborative			
*All fields below are required. Enter **DK** for anything you don't know.*									
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	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?									
Staff Counts									

Questions	Common Collection Categories				Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
					Single	Lead Collaborative	Non-Lead Collaborative			
*All fields below are required. Enter **DK** 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	X
How many non-instructional professional staff used the project's materials, strategies, or assessment instruments with students?										

Questions / Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Single	Lead Collaborative	Non-Lead Collaborative			
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 *approximately* how many are implementing the ideas shared. *table below* *Note: Your response to this question is optional this year, but may be required in future years*	x	x		X	X	X
2.14. Involvement with Faculty Professional Development						
Faculty Professional Development Events						

Inner table within the first question row:

	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			

Questions / Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Single	Lead Collaborative	Non-Lead Collaborative			
During the current reporting period, were any faculty professional development events conducted [, either by your award or jointly among collaborating awardees]? o Yes o No O Don't Know *If no or don't know, skip the rest of this section.* *If YES: All fields below are required. Enter DK for anything you don't know.*	x	x	x			X

Faculty Professional Development Events Conducted

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	Single	Lead Collaborative	Non-Lead Collaborative	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
How many faculty professional development events were supported by the project?				x	x	x		X	X

Questions / Common Collection Categories	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Single	Lead Collaborative	Non-Lead Collaborative			
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	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			

Questions	Common Collection Categories			Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
				Single	Lead Collaborative	Non-Lead Collaborative			
Graduate Student and Postdoc Involvement in Professional Development Events									
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	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 / Questions	Award Category			Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
	Single	Lead Collaborative	Non-Lead Collaborative			
Nonacademic Involvement in the Project's Faculty Professional Development Events						
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? *How many organizations do these learners represent?*	x	x	x			X
3. Submit your report to NSF						
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
4. Create New User Account *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.*						
E-mail Address	x	x	x	X		
Project Role o Co- primary Investigator o Data Entry Personnel o Project Coordinator o Other	x	x	x		X	
Name: Honorific First Middle Last Suffix	x	x	x	X		
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
Questions	Single	Lead Collaborative	Non-Lead Collaborative			
Access Privileges (mark all that apply) ☑ Can View Data ☐ Can Edit Data ☐ Can Manage User Access ☐ Receives Reminders *(automatically set to "yes" if Role=Project Coordinator)* (button): Remove from this report *Note: The Lead PI's privileges are automatically set to "yes" for all privileges.*	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:

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

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:

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

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.

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

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:

Operational Activities	Cost Over Three Years
System Development (includes initial development of the database and Web-based application, and later changes requested by the program, e.g., increased reporting tools, additional validations)	$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
Three-Year Total for All Operational Activities	**$1,684,255**

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.

	Award Category		
	Single	Lead Collaborative	Non-Lead Collaborative

Notes:
• 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.
 	
• Three major categories drive the tailoring of the system to the award type. We have included columns to indicate these, which are:
  • Single Award
  • Lead Collaborative Award (most questions)
  • Non-Lead Collaborative Award(fewest questions)
 	
• For most questions respondents have the option to select a "don't know" option or can enter "DK."
 	
• 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.			

i. Confirm Award Information *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."*			
Is [PI Name] the lead PI on Award No. [NSF Award Number]? o Yes o No	x	x	x

What type of proposal was submitted for this award ?
  o A Single Proposal that resulted in only this award (possibly including subawards for collaborating organizations)
  o A Collaborative Proposal that included simultaneous linked proposals from investigators at different organizations, with each organization receiving its own TUES/CCLI award.
	x	x	x

Was this the Lead Award on the collaborative proposal?
  o Yes
  o No
		x	x

2. Tell Us About Your Awards			

4.1. Award Details *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.*			
NSF Award No.	x	x	x
Award Title	x	x	x
PI Organization	x	x	x
Official Grantee Institution *This data element appears only if it differs from the PI Organization.*	x	x	x
Phase or Type *The system will list one of the following types:* • *Phase 1/Type 1* • *Phase 2/Type 2* • *Phase 3/Type 2* • *Central Resource Project*	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]] – **Lead Award** [[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
4.2. About Your Institution			

Type of institution:
[PI institution name], [City], [State]
has the following classification in *the Integrated Postsecondary Data System* (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: _____
 	
       OR
 	
Type of Organization: (mark one or more)
☐ Academic Consortium
☐ Business
☐ Consultant
☐ National Laboratory
☐ Museum
☐ Nonprofit
☐ Professional Society
☐ Research Institute
☐ Other (please specify): _____
	x	x	x

4.3. Subawards			
Were subaward funds expended or transferred from this award to any subawardees during the current reporting period? o Yes o No	x	x	x
Enter information for a subaward organization *Provide the following information for the CCLI/TUES subaward institution. This subsection repeats for each institution*			
What type of organization received this subaward? o Academic institution (not including academic consortiums) o Other type of organization	x	x	x
Academic Subaward Institution			
What is the name of the institution?	x	x	x

Type of institution: [PI institution name], [City], [State] has the following classification in *the Integrated Postsecondary Data System* (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
Other Type of Subaward Organization			
Which of the following describes this organization? (mark one or more) ☐ Academic Consortium ☐ Business ☐ Consultant ☐ National Laboratory ☐ Museum ☐ Nonprofit ☐ Professional Society ☐ Research Institute ☐ Other (please specify): _____ ☐ Don't Know	x	x	x
All Subaward Organization Types			
Approximately what amount of subaward funds did your award transfer to this organization during the current reporting period?	x	x	x
Checkbox option (matching how this question can also be answered elsewhere in the instrument.) ☐ 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
4.4.　　Other Participating Organizations			

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)? o Yes o No o Don't know *If no or don't know, skip the questions in this section.*	x	x	x

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.
- DO NOT include your organization, subawardee organizations, or organizations that should be independently reported by collaborating awardees.
- Include organizations that received project funds, as well as organizations that did not.
- Enter 0 for none. Enter DK for anything you don't know.

The column headers for these tables are:
D. How many of this type of organization participated significantly?
E. How many faculty or professionals from this type of organization participated?
F. How many students from this type of organization participated?

	A	B	C			
U.S. academic institutions by highest degree granted:						
2-year Institutions						
2-year Institutions on a 4-year College or University Campus						
Bachelor's Degree Granting Institutions				x	x	x
Master's Degree Granting Institutions						
Doctoral Degree Granting Institutions						
Other U.S. Department of Education IPEDs type(s) (please specify):_____						

	A	B	C				
U.S. academic institutions by enrollment demographics:							
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				
U.S. academic institutions with special designations:							
Historically Black Colleges or Universities					x	x	X
American Indian Tribally Controlled Colleges or Universities							
	A	B	C				
Nonacademic organizations							
Businesses							
Consultants							
National Laboratories					x	x	x
Museums							
Non-profits							
Professional Societies							
Other type(s) of Nonacademic organizations (please specify): _____							

4.5.   Uses of Award Funds

Student Support

During this reporting period, were funds from this award used to support students (undergraduate, graduate, or postdocs)?
o   Yes
o   No
o   Don't know

If no or don't know, skip the remaining questions in this section

x	x	x

If yes, how many students were paid to work on the project using funds from this award? • Number of undergraduate students paid: • Number of graduate students paid: • Number of postdocs paid:	x	x	x
Laboratory Instrument Purchases			
Did you purchase scientific instruments for laboratory improvement with this award during this reporting period? o Yes o No o Don't know *If no or don't know, skip the remaining questions in this section*	x	x	x
Total price of all laboratory instruments purchased with this award during this reporting period: *If <$5,000, skip the remaining questions in this section.*	x	x	x
Number of instruments purchased with this award that cost more than $5,000: *If 0, skip the next question.*	x	x	x
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) ☐ At [name of PI's institution] ☐ At [name of lead institution] ☐ At [name of collaborating institution 1] ☐ At [name of collaborating institution 2] […list all collaborating institutions] ☐ At [name of subawardee institution 1] ☐ At [name of subawardee institution 2] […list all subawardee institutions] ☐ At other participating institutions ☐ Other (please specify): _____ ☐ Don't know	x	x	x
4.6. Project Management and Evaluation			
Were any project evaluations conducted during the current reporting period? o Yes o No o Don't Know *If no or don't know, skip the next question.*	x	x	x
If Yes, How did you use the information from your project's evaluation? (mark one or more) ☐ To improve the project ☐ To document accomplishments ☐ To assess changes in knowledge, skills, or attitudes of undergraduate students ☐ To assess changes in knowledge, skills, or attitudes of graduate students ☐ To assess changes in knowledge, skills, or attitudes of faculty ☐ None of the above *(if so, skip the next question)* ☐ Other (please specify): _____ ☐ Don't know *(if so, skip the next question)*	x	x	x

Were the project activities supported by this award implemented in courses or course-related laboratory sections during the current reporting period? o Yes o No o Don't Know *If no or don't know, skip the rest of this question.*	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
4.7. Reflection			
What is the **single** most important project accomplishment for the reporting period? *(limit 500 characters)*	x	x	x
What is the **single** most significant challenge that the project faced during the reporting period? *(limit 500 characters)*	x	x	x
What changes were made to the project, as outlined in the proposal, during the reporting period? *(limit 500 characters)*	x	x	x
5. Tell Us About Your Project's Activities	x		
Tell Us About The Project as a Whole		x	
Tell Us About Your Award's Independent Project Activities			x
2.01. TUES/CCLI Program Components			
During the current reporting period, did your institution, or any of your subawardee institutions, engage in any project activities or project work *independent of* 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 *(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)*			x
What is the primary way that your project contributes to the development of exemplary undergraduate STEM education? (mark one) o Assessing and evaluating student achievement o Conducting research on undergraduate STEM education o Developing or adapting learning materials o Developing, adapting, or implementing new instructional strategies o Developing faculty expertise	x	x	

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

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

Publication types	Number accepted	Formats produced		
Peer-reviewed journal articles accepted for publication during the current reporting period		☐ Print ☐ Online ☐ Other electronic format		
Peer-reviewed conference papers or abstracts accepted for inclusion in conference proceedings during the current reporting period		☐ Print ☐ Online ☐ Other electronic format		
Conference papers or abstracts accepted without peer review during the current reporting period		☐ Print ☐ Online ☐ Other electronic format	X	X
Book chapters in edited volumes accepted for publication during the current reporting period		☐ Print ☐ Online ☐ Other electronic format		
Monographs or books accepted for publication during the current reporting period		☐ Print ☐ Online ☐ Other electronic format		
Other publications (e.g., newsletters, magazines) accepted for publication during the current reporting period		☐ Print ☐ Online ☐ Other electronic format		

Presentations

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.

Presentation types	No. of presentations			
Peer-reviewed conference presentations			X	X
Invited conference or meeting presentations				
Invited faculty development workshops				

2.05 Honors and Awards

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

What types of instructional materials did the project develop or adapt? (mark one or more) ☐ Case studies ☐ Demonstrations ☐ Educational games ☐ Field activity guides or manuals ☐ Instructor materials for adapting project activities or procedures to new settings ☐ Instructor guides or manuals to guide student activities ☐ Laboratory guides or manuals ☐ Lesson plans ☐ Practice problems or exercises for students ☐ Simulations ☐ Software tools including web-enhanced tools ☐ Student handbooks or workbooks ☐ Textbooks ☐ Tutorials ☐ Visualizations ☐ Workshop materials for training faculty ☐ Workshop materials for training students ☐ Other instructional materials (please specify): _____	X	X	

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:
  ☐ Sample instructional material
    During the current reporting period, our project:
  ☐ Developed or revised our own [[material type]]
  ☐ Adapted [[material type]] created by others
  In these formats:
  ☐ print ☐ online ☐ other electronic format
	X	X	

2.09. Instructional Strategies			
Did the project develop or adapt instructional strategies during the current reporting period? o Yes o No o Don't Know *If no or don't know, skip the rest of this question.*	X	X	

What types of instructional strategies did the project develop or adapt? (mark one or more) ☐ Case-based learning strategies ☐ Cooperative or collaborative learning strategies ☐ Design activities ☐ Field studies ☐ Hands-on activities (e.g., building or testing objects) ☐ Integrated courses ☐ Intelligent tutoring systems ☐ Laboratory experiences ☐ Learning communities (e.g., student cohorts) ☐ Lectures ☐ Linked courses ☐ Real-time modification strategies based on student performance (e.g., Just-in-Time Teaching) ☐ Peer-instruction strategies (e.g., peer tutoring, peer mentoring) ☐ Personal response systems (e.g., "clickers") ☐ Problem-based learning strategies ☐ Quantitative computational approaches ☐ Strategies involving real-world examples, problems, or contexts ☐ Strategies involving remote laboratories ☐ Strategies involving formal research experience in classroom laboratories ☐ Service-learning strategies ☐ Studio-based strategies ☐ Web-enabled homework submission and grading systems ☐ Web-enabled instruction strategies ☐ Web-enabled repositories ☐ Web-enabled student collaboration/social networking tools ☐ Other instructional strategies (please specify): _____	x	x	
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: ☐ Sample instructional strategy *During the current reporting period, our project:* ☐ Developed or revised our own [[strategy type]] ☐ Adapted [[strategy type]] created by others	x	x	
2.10. Assessment Instruments and Processes			
Did the project develop or adapt assessment instruments or processes during the current reporting period? o Yes o No o Don't Know *If no or don't know, skip the rest of this question.*	x	x	

What types of assessment instruments or processes did the project develop or adapt? (mark one or more) ☐ Assessment of general knowledge or skill (e.g., critical thinking skills, problem-solving skills) ☐ Cognitive protocol interviews ☐ Concept inventories ☐ Course exams ☐ Standardized tests (e.g., Fundamentals of Engineering, American Chemical Society examinations) ☐ Performance assessment of skills (e.g., observation and rating of skills) ☐ Students' perceptions of their own learning ☐ Expert review ☐ Other instruments and processes to determine outcomes (please specify): _____	x	x	
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: ☐ Sample assessment instrument or process *During the current reporting period, our project:* ☐ Developed or revised our own [[assessment type]] ☐ Adapted [[assessment type]] created by others *In these formats:* ☐ print ☐ online ☐ other electronic format	x	x	
2.11. Research On Undergraduate STEM Education			
Did the project conduct research on undergraduate STEM education during the current reporting period? o Yes o No o Don't Know *If no or don't know, skip the rest of this section.*	x	x	
What is the topic of your research on undergraduate STEM education? *(limit 500 characters)*	x	x	
What type of research does your project employ? (mark one) o Qualitative research design o Quantitative research design o Mixed method research design o Don't Know	x	x	
2.12. Faculty Professional Development Component			
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? o Yes o No o Don't Know *If no or don't know, skip the rest of this section.*	x	x	

	Graduate students or postdocs	Faculty	Instructional staff	Other or unknown individuals			
If YES: With whom were these approaches shared during the current reporting period? (mark one or more)					x	x	
At the lead, collaborating, or subawardee institutions	☐	☐	☐	☐			
At other institutions	☐	☐	☐	☐			

If YES: which disciplines were the focus of the project's faculty professional development efforts during the current reporting period? (mark one or more) o Interdisciplinary o Astronomy o Biological Sciences o Chemistry o Computer Sciences o Engineering o Engineering Technology o Geosciences o Mathematical Sciences o Physics o Social and Behavioral Sciences o Other, please specify: _____ o Don't Know **o None**	x	x	
If YES: What types of institutions were represented at these efforts during the current reporting period (mark one or more) ☐ 2-year Institutions ☐ Bachelor's degree granting institutions ☐ Master's degree granting institutions ☐ Doctoral degree granting institutions ☐ Nonacademic organizations ☐ Other (please specify): _____ ☐ Don't know ☐ None	x	x	

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) ☐ Historically Black College or University ☐ American Indian Tribally Controlled College or University ☐ Institution with High Disabilities Enrollment (>3% Undergraduates) ☐ Institution with High American Indian or Alaska Native Enrollment (25% or more) – Not Tribally Controlled ☐ Institution with High Black or African American Enrollment (non-Hispanic) (25% or more) ☐ Institution with High Hispanic Enrollment (25% or more) ☐ Institution with High Native Hawaiian or Other Pacific Islander Enrollment (25% or more) ☐ None ☐ Not Reported/Don't Know	X	X	
2.13. Involvement with Project Materials, Strategies, Instruments and Processes			
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? o Yes o No *(if no, skip the rest of this section)*	X	X	X
Student Counts			
All fields below are required. Enter **DK** for anything you don't know.			

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

Faculty Counts			

All fields below are required. Enter **DK** for anything you don't know.						
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?						

Staff Counts

All fields below are required. Enter **DK** 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
How many non-instructional professional staff used the project's materials, strategies, or assessment instruments with students?						

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 *approximately* how many are implementing the ideas shared.

	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			

Note: Your response to this question is optional this year, but may be required in future years

2.14. Involvement with Faculty Professional Development

Faculty Professional Development Events

During the current reporting period, were any faculty professional development events conducted [, either by your award or jointly among collaborating awardees]?

o   Yes
O   No
O   Don't Know

If no or don't know, skip the rest of this section.

If YES: All fields below are required. Enter **DK** *for anything you don't know.*

Faculty Professional Development Events Conducted

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
How many faculty professional development events were supported by the project?			

(The right-hand marker columns contain: first content block — X, X; second and third content blocks — X, X, X)

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			

Graduate Student and Postdoc Involvement in Professional Development Events				X	X	X

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?			
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?			

Nonacademic Involvement in the Project's Faculty Professional Development Events		X	X	X

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?	
How many organizations do these learners represent?	

6. Submit your report to NSF			
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
7. Create New User Account *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.*			

E-mail Address	x	x	x
Project Role o Co- primary Investigator o Data Entry Personnel o Project Coordinator o Other	x	x	x

Name:
      Honorific
      First
      Middle
      Last
      Suffix
	x	x	x

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) ☑ Can View Data ☐ Can Edit Data ☐ Can Manage User Access ☐ Receives Reminders *(automatically set to "yes" if Role=Project Coordinator)* (button): Remove from this report *Note: The Lead PI's privileges are automatically set to "yes" for all privileges.*	x	x	x