

# ATE SURVEY 2024

Updated February 2024

## About the ATE Survey

This annual survey of the National Science Foundation's Advanced Technological Education (ATE) program grantees gathers information about the program's characteristics, activities, and achievements. The findings may be used by ATE grantees, grantseekers, and program officers to inform program and project planning and evaluation, and by STEM education researchers to investigate issues related to technician education. Some of the data collected from this survey will be shared in select ways to further ATE collaboration and research efforts.

## Structure of the Survey

There are twelve main sections to this survey: five are required for everyone, while the remaining seven sections are dependent on your project activities. You will be asked if your ATE project was involved in a particular activity, and if you answer *yes*, you will be presented with a series of questions about that aspect of your work. Please read the descriptions in these questions carefully. If you are unsure, please reach out to Erika Sturgis for clarifications (contact information below). It may be that not all activities pertain to your project.

## Survey Open and Close Deadlines

The survey will be open from **February 20 through March 22, 2024**. The survey is web-based; access information will be emailed to ATE principal investigators at the start of the survey period. We recommend that you review this printer-friendly version of the survey before responding to the online version so that you will have all the necessary information at hand to answer the questions.

## About this PDF Preview

In order to incorporate the branching and other automated parts of the online survey, this PDF version indicates branching logic in parentheses and other directions in brackets. In the online survey, some questions will auto-fill the information you provided to answer a previous question. In this PDF version, this is referred to as "piped text." **The survey questions are relatively consistent each year. Any updates or changes made to survey items are indicated with blue text color.**

## More Resources

The following resources to assist in your completion of the ATE Survey can be found at [atesurvey.evalu-ate.org/info](https://atesurvey.evalu-ate.org/info):

- FAQ document for more details about data protection and uses
- Tips and tricks from ATE PIs on completing the ATE Survey
- Guide to requesting data from your institutional research office

Thank you for participating in this survey. Additional information about the survey is available at [atesurvey.evalu-ate.org](https://atesurvey.evalu-ate.org). Questions should be directed to:

Erika Sturgis  
[atesurvey@evalu-ate.org](mailto:atesurvey@evalu-ate.org)  
(269) 387-5914

This is a PDF preview of the questions on the ATE Survey.  
The official survey is conducted online and will open on February 20, 2024.

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## Section 1: Grantee Characteristics and Practices

### 1.1. What type of award is your ATE grant?

- Project
- Small grant for institutions new to ATE
- National center
- Regional center
- Support/resource center
- Applied/targeted research on technician education
- Conference or meeting
- Coordination network
- Consortia for innovations in technical education
- Other type of award (describe) \_\_\_\_\_

**Note: In the remainder of this survey, your ATE work will be referred to as a “project” regardless of the type of award you received.**

### 1.2. Was 2023 the first year of your current grant?

- Yes
- No

#### 1.2.1. (If yes to Q1.2) Is your current grant a continuation of a previous ATE project?

- Yes
- No

### 1.3. Does your grant have any co-principal investigators (co-PIs)?

- Yes
- No

#### 1.3.1. (If yes to Q1.3) Co-PI name(s) and email address(es):

Co-PI \_\_\_\_\_  
Email address \_\_\_\_\_

Co-PI \_\_\_\_\_  
Email address \_\_\_\_\_

Co-PI \_\_\_\_\_  
Email address \_\_\_\_\_

Co-PI \_\_\_\_\_  
Email address \_\_\_\_\_

1.4. **At what type of institution is the PI for this project located?**

- 4-year college/university
- 2-year college or 2-year college system
- K-12 school or school system
- Nonprofit organization
- Other (describe) \_\_\_\_\_

1.4.1. (If 4-year college/university or 2-year college) **Is this institution designated as a minority-serving institution as defined in US law under Title III of the Higher Education Act of 1965?**

- Yes
- No
- Not sure

1.4.1.a. (If yes to Q1.4.1) **Which designations does your institution hold?**

	Yes	No
a. Hispanic-serving institution	<input type="radio"/>	<input type="radio"/>
b. Historically black college or university	<input type="radio"/>	<input type="radio"/>
c. Predominately black institution	<input type="radio"/>	<input type="radio"/>
d. Tribal college or university	<input type="radio"/>	<input type="radio"/>
e. Asian American and Native American Pacific Islander-serving institution	<input type="radio"/>	<input type="radio"/>
f. Alaska Native-serving institution and Native Hawaiian-serving institution	<input type="radio"/>	<input type="radio"/>
g. Native American-serving Nontribal institution	<input type="radio"/>	<input type="radio"/>
h. Other (describe)_____	<input type="radio"/>	<input type="radio"/>

1.5. **Project website:** http:// \_\_\_\_\_

1.6. **How many years does your grant cover?** \_\_\_\_\_

1.7. **What is the total value of the grant?** \$ \_\_\_\_\_

1.8. Which of the following best represents the primary disciplinary focus of your ATE project?

**Advanced Manufacturing Technologies**

- Automotive manufacturing
- General manufacturing
- Additive manufacturing
- Welding
- Supply chain automation
- Process manufacturing
- Robotics
- Aviation manufacturing
- Other Advanced Manufacturing Technologies (please specify)

**Agricultural and Environmental Technologies**

- Agricultural and aquaculture
- Energy technologies
- Environmental technologies
- Natural resources
- Other Agricultural and Environmental Technologies (please specify)

**Bio and Chemical Technologies**

- Biotechnology
- Chemical and process technologies
- Other Bio and Chemical Technologies (please specify)

**Engineering Technologies**

- Optics
- Electronics and controls
- Mechatronics
- Marine technologies
- General engineering
- Materials technologies
- Space technologies
- Logistics engineering technology
- Other Engineering Technologies (please specify)

**Information and Securities Technologies**

- Information and communication technologies
- Geospatial technologies
- Security, information assurance, and forensics
- Logistics
- Data science and data analytics
- Other Information and Securities Technologies (please specify)

**Micro and Nanotechnologies**

- Micro and nanotechnologies

**General or Interdisciplinary/Cross-Cutting Advanced Technological Education**

- Evaluation
- Learning research
- Teacher preparation

- Recruitment and/or retention
- Other General or Interdisciplinary/Cross-Cutting Advanced Technological Education (please specify)

**Other** (please specify)

1.9. **Does your ATE project have a secondary disciplinary focus you would like to report?**

- Yes
- No

1.9.1. (If yes to Q1.9) **Which of the following best represents the secondary disciplinary focus of your ATE project?**

**Advanced Manufacturing Technologies**

- Automotive manufacturing
- General manufacturing
- Additive manufacturing
- Welding
- Supply chain automation
- Process manufacturing
- Robotics
- Aviation manufacturing
- Other Advanced Manufacturing Technologies (please specify)

**Agricultural and Environmental Technologies**

- Agricultural and aquaculture
- Energy technologies
- Environmental technologies
- Natural resources
- Other Agricultural and Environmental Technologies (please specify)

**Bio and Chemical Technologies**

- Biotechnology
- Chemical and process technologies
- Other Bio and Chemical Technologies (please specify)

**Engineering Technologies**

- Optics
- Electronics and controls
- Mechatronics
- Marine technologies
- General engineering
- Materials technologies
- Space technologies
- Logistics engineering technology
- Other Engineering Technologies (please specify)

**Information and Securities Technologies**

- Information and communication technologies
- Geospatial technologies

- Security, information assurance, and forensics
- Logistics
- Data science and data analytics
- Other Information and Security Technologies (please specify)

**Micro and Nanotechnologies**

- Micro and nanotechnologies

**General or Interdisciplinary/Cross-Cutting Advanced Technological Education**

- Evaluation
- Learning research
- Teacher preparation
- Recruitment and/or retention
- Other General or Interdisciplinary/Cross-Cutting Advanced Technological Education (please specify)

**Other** (please specify)

**1.10. Does your project engage in any type of student recruitment?**

- Yes
- No (Skip to Q1.11)

**1.10.1. (If yes to Q1.10) How challenging is it to recruit students to participate in your project?**

- Not at all challenging
- Only slightly challenging
- Moderately challenging
- Very challenging
- Extremely challenging

**1.10.2. (If yes to Q1.10) Does your project explicitly aim to engage or recruit students from the following groups?**

	Yes	No	Unsure
a. Women	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Underrepresented racial or ethnic minorities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Veterans	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. First-generation college students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Low-income students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Individuals from rural areas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Persons with disabilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Dislocated workers (i.e., persons terminated as a result of workplace closure)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

In order to better understand the composition of the ATE community, the next few questions ask about the demographic characteristics of ATE PIs.

1.11. **How does the PI identify their ethnicity?**

- Hispanic or Latino/Latina
- Non-Hispanic, non-Latino/Latina

1.12. **How does the PI identify their race?**

- American Indian or Alaska Native
- Asian
- Black or African American
- Multiracial
- Native Hawaiian or other Pacific Islander
- White
- Identity not listed \_\_\_\_\_

1.13. **How does the PI identify their gender?**

- Male
- Female
- Identity not listed

1.14. **What is the PI's age?**

- Under 25 years
- 25-34 years
- 35-44 years
- 45-54 years
- 55-64 years
- 65 years or older



## Project Activities

To ensure that you are presented only with questions that are pertinent to your ATE project, you will be asked if your project was involved in a particular activity in 2023. **Please read the descriptions carefully.** If you answer *yes*, the online survey will display questions that ask about that aspect of your work. If you answer *no* or that you are *planning to in the future*, you will not see these questions in the online survey.

## Section 2: Program, Course, and Materials Development

### Program Development

*Program Development* is the creation or substantial modification of a specific degree or certificate program for implementation at specific colleges or high schools.

*Do not* use this section of the survey to report on:

- Curricula developed only for use by other institutions
- Workshops to build capacity around program development or implementation

In 2023, did your ATE project create or substantially modify an academic degree or certificate program?

- Yes
- No ([skip this section](#))
- Planning to in the future ([skip this section](#))

2.1. **How many degree or certificate programs were created or modified by your ATE project in 2023? (If you have more than five programs, please contact Erika at [atesurvey@evaluate.org](mailto:atesurvey@evaluate.org)).**

\_\_\_\_\_ [text box]

2.2.	What is the name of the degree or certificate program?	Which type of credential is awarded by this program?
	_____ [text box]*	[drop-down box with the following options] <ul style="list-style-type: none"><li>- Certificate</li><li>- Associate degree</li><li>- Bachelor's degree</li><li>- Other</li></ul>

[\*The number of rows will automate to match the respondent's answer to 2.1. For example, if 4 programs were reported in 2.1., then 4 rows will appear and you will be asked to respond to these questions for each of your 4 programs.]

2.2.1. (If program is a certificate in 2.2) Which of the following best describes the main audience for this certificate [piped text from 2.2]?

- High school students
- Dual-enrolled high school and college students
- 2-year college students
- 4-year college students
- Incumbent workers
- Other (describe) \_\_\_\_\_

2.3. **How many students took at least one course in each certificate or degree program?**  
If no students enrolled, enter 0.

Program	Total number of students
[name of program, piped text from 2.2]*	_____
[name of program, piped text from 2.2]*	_____

[\*The number of rows will automate to match the respondent's answer to 2.1. For example, if 6 was reported in 2.1, then 6 rows will appear.]

The National Science Foundation is committed to broadening participation in STEM, especially among traditionally underrepresented students. The next few questions ask about student demographics to better understand the characteristics of students served and begin to identify who is – and is not – being served by ATE academic programs.

(Q2.4, Q2.5, and Q2.6 will repeat for each program listed in Q2.2.)

**2.4. How many students from each of the following demographic categories participated in [pipe text of degree name from Q2.2.] in 2023? (Please make sure your total number of students matches your response in Q2.3)**

	Program	
	a. [name of program, piped text from 2.2]*	b. [name of program, piped text from 2.2]*
American Indian or Alaska Native	_____	_____
Asian	_____	_____
Black or African American	_____	_____
Hispanic or Latino/Latina	_____	_____
Multiracial or Multiethnic	_____	_____
Native Hawaiian or other Pacific Islander	_____	_____
White	_____	_____
Racial or Ethnic Identity Unknown (e.g. student refused; data not captured by program)	_____	_____

[\*The number of rows will automate to match the respondent's answer to 2.1. For example, if 6 was reported in 2.1, then 6 rows will appear.]

2.5. **How many students of each of the following gender categories participated in [pipe text of degree name from Q2.2.] in 2023? (Please make sure your total number of students matches your responses in Q2.3).**

	Program	
	a. [name of program, piped text from 2.2]*	b. [name of program, piped text from 2.2]*
Men	_____	_____
Women	_____	_____
Other Gender Identities	_____	_____
Gender Identity Unknown (e.g. student refused; data not captured by program)	_____	_____

[\*The number of rows will automate to match the respondent’s answer to 2.1. For example, if 6 was reported in 2.1, then 6 rows will appear.]

2.6. **How many students in [pipe text of degree name from Q2.2.] requested accommodations under the Americans with Disabilities Act in 2023?**

\_\_\_\_\_ [text box]

2.7. **Did any students complete the following program(s) in 2023?**

	Yes	No
[name of program, piped text from Q2.2]*	<input type="radio"/>	<input type="radio"/>
[name of program, piped text from Q2.2]	<input type="radio"/>	<input type="radio"/>

[\*The number of rows will automate to match the respondent’s answer to Q2.1]

2.7.1. (If yes to Q2.7) **How many students completed each of the following program(s) in 2023?**

	Total number of students who completed program
[name of program, piped text from Q2.2]*	_____
[name of program, piped text from Q2.2]	_____

[\*The number of rows will automate to match the respondent's answer to Q2.1.]

2.7.2. **How does your project or institution define a student's "completion" of a program?**

\_\_\_\_\_ [text box]

2.8. **How many students across all programs listed are veterans or first generation to attend college? If you have not collected this data for 2023, you do not need to respond to this question.**

	Total number of students
a. Veterans	_____
b. First generation to attend college	_____

## Course Development

*Course Development* is the creation or substantial modification of sequenced, intentional learning experiences for students at specific colleges or high schools.

*Do not* use this section of the survey to report on:

- Course curricula developed only for use by other institutions
- Workshops to build capacity around program development or implementation

In 2023, did your ATE project create or substantially modify an academic course? (This course does not need to be associated with the development of an academic program.)

- Yes
- No ([skip this section](#))
- Planning to in the future ([skip this section](#))

2.9. **How many courses were created or modified by your ATE project in 2023?**

\_\_\_\_\_ [text box]

2.10.

What is the name of the course?	Which of the following best describes the main audience for this course?	Was this course offered in 2023?
_____ [text box]*	[drop-down box with the following options] <ul style="list-style-type: none"><li>- High school students</li><li>- 2-year college students</li><li>- 4-year college students</li><li>- Other</li></ul>	<input type="radio"/> Yes <input type="radio"/> No

[\*The number of rows will automate to match the respondent's answer to Q2.9.]

2.10.1. (If yes to Q2.10.c, course was offered in 2023) **How many students completed this course in 2023?**

\_\_\_\_\_ [text box]

[\*The number of rows will automate to match the respondent's answer to Q2.10.]

2.11. **What was the primary delivery mode for the course(s) in 2023 (planned or offered)?**

	Face-to-face	Fully online	Hybrid
[name of course, piped text from Q2.10]*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
[name of course, piped text from Q2.10]	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Articulation Agreements

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*Articulation agreements* are formal agreements between education institutions that provide students with pathways and education access from secondary schools to two-year colleges and four-year colleges and universities.

In 2023, did your ATE project create new articulation agreements or maintain articulation agreements that were previously created through your project?

- Yes
- No ([skip this section](#))
- Planning to in the future ([skip this section](#))

**2.12. Report the number of articulation agreements, institutions, and students associated with each education level.**

	Education Level	
	High school to 2-year college	2-year college to 4-year college
a. Total number of articulation agreements <u>developed</u> in 2023	_____	_____
b. Total number of articulation agreements <u>in place</u> in 2023 (sequential and concurrent)	_____	_____
c. Number of <u>institutions</u> involved in all the agreements	_____	_____
d. Number of <u>students</u> who transferred in 2023 (enrolled at the higher education level under the terms of an articulation agreement)	_____	_____

## Educational Materials Development and Dissemination

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*Educational materials* include print or digital media designed for instructional or assessment purposes, such as—but not limited to—course and program curricula, tests, lab experiments, instructional modules, and textbooks for use in technician education.

*Do not* use this section of the survey to report on:

- Materials created for promotion or marketing purposes
- Instructional materials primarily used for faculty professional development

In 2023, did your ATE project create or substantially modify educational materials?

- Yes ([answer this section](#))
- No ([skip to next question](#))
- Planning to in the future ([skip to next question](#))

In 2023, did your ATE project disseminate educational materials previously created (in 2022 or earlier) by your project?

- Yes
- No ([skip this section](#))

(Answer Q2.13 – Q2.13.1 only if created educational materials in 2023.)

**2.13. How many of each of the following types of materials did you develop or modify in 2023?**

- \_\_\_\_\_ Assessment activity or test
- \_\_\_\_\_ Case study or problem set for problem-based learning
- \_\_\_\_\_ Curriculum for a program
- \_\_\_\_\_ Curriculum for a course
- \_\_\_\_\_ Instructor guide/manual
- \_\_\_\_\_ Interactive simulation
- \_\_\_\_\_ Lab experiment
- \_\_\_\_\_ Lesson plan
- \_\_\_\_\_ Module or instructional unit
- \_\_\_\_\_ Textbook
- \_\_\_\_\_ Videos
- \_\_\_\_\_ Other \_\_\_\_\_



2.14 Are you disseminating, or planning to disseminate, these materials in the following ways?

		Yes	No
a.	Commercial publication	<input type="radio"/>	<input type="radio"/>
b.	Project webpage or website	<input type="radio"/>	<input type="radio"/>
c.	Conference presentation or booth	<input type="radio"/>	<input type="radio"/>
d.	Workshop	<input type="radio"/>	<input type="radio"/>
e.	ATE Central	<input type="radio"/>	<input type="radio"/>
f.	Clearinghouse or repository maintained by an external organization other than ATE Central (describe)_____	<input type="radio"/>	<input type="radio"/>
g.	Other (describe)_____	<input type="radio"/>	<input type="radio"/>

(Answer Q2.14 – Q2.14.1 only if disseminate educational materials created in previous years.)

2.15. Which of the following types of materials previously created (in 2022 or earlier) by your project did you disseminate in 2023?

		Yes	No
a.	Assessment activity or test	<input type="radio"/>	<input type="radio"/>
b.	Case study or problem set for problem-based learning	<input type="radio"/>	<input type="radio"/>
c.	Curriculum for a program	<input type="radio"/>	<input type="radio"/>
d.	Curriculum for a course	<input type="radio"/>	<input type="radio"/>
e.	Instructor guide/manual	<input type="radio"/>	<input type="radio"/>
f.	Interactive simulation	<input type="radio"/>	<input type="radio"/>
g.	Lab experiment	<input type="radio"/>	<input type="radio"/>
h.	Lesson plan	<input type="radio"/>	<input type="radio"/>
i.	Module or instructional unit	<input type="radio"/>	<input type="radio"/>
j.	Textbook	<input type="radio"/>	<input type="radio"/>
k.	Videos	<input type="radio"/>	<input type="radio"/>
l.	Other (describe)_____	<input type="radio"/>	<input type="radio"/>

2.16. Did you disseminate these materials in the following ways?

		Yes	No
a.	Commercial publication	<input type="radio"/>	<input type="radio"/>
b.	Project webpage or website	<input type="radio"/>	<input type="radio"/>
c.	Conference presentation or booth	<input type="radio"/>	<input type="radio"/>
d.	Workshop	<input type="radio"/>	<input type="radio"/>
e.	ATE Central	<input type="radio"/>	<input type="radio"/>
f.	Clearinghouse or repository maintained by an external organization other than ATE Central (describe)_____	<input type="radio"/>	<input type="radio"/>
g.	Other (describe)_____	<input type="radio"/>	<input type="radio"/>

2.17. (If reported *curriculum for programs or courses* in Q2.13 and/or 2.14) **Does your ATE project track the number of other institutions that are using the program and/or course curriculum created by your project?**

- Yes
- No

2.17.1. (If *yes* to Q2.17) **How many other institutions are using the program and/or course curriculum created by your project?**

\_\_\_\_\_ [text box]

## Acquisition of Instrumentation and Equipment

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*Instrumentation and equipment* are physical items used in instruction in technical courses to help students learn processes, understand concepts, or how to perform tasks. [Some examples may include:](#)

- [Laboratory or field instrumentation](#)
- [Scientific or industrial machinery](#)
- [Computer related hardware or software](#)

*Do not* use this section of the survey to report on:

- Instrumentation and equipment that were donated to your project
- Instrumentation and equipment that were purchased with non-ATE funding

In 2023, did your ATE project purchase instrumentation and equipment for use in instruction with ATE funding?

- Yes
- No ([skip this section](#))
- Planning to in the future ([skip this section](#))

2.18. **How much did your project spend on instrumentation and equipment in 2023?**

\$ \_\_\_\_\_

2.19. **Which of the following best describes how your project uses this instrumentation and equipment?**

- Gives students hands-on experience with the actual instruments or equipment that are used in industry
- Allows students to perform technical tasks in a simulated context (such as through use of virtual reality or modified equipment)
- Enables students with disabilities to perform certain technical tasks or have experiences that otherwise would be difficult for them
- Other (describe) \_\_\_\_\_

2.20. **How many courses, students, and educators used this instrumentation or equipment in 2023?**

Courses \_\_\_\_\_

Students \_\_\_\_\_

Educators \_\_\_\_\_

2.21. **How did acquiring this instrumentation or equipment enhance student learning?**

\_\_\_\_\_ [text box]

## Section 3: Direct Student Engagement

### Business and Entrepreneurial Skills Development

*Business and entrepreneurial skills development* are systematic efforts that help students to develop their skills in areas such as—but not limited to—business development, marketing, networking, and understanding the global marketplace.

*Do not* use this section of the survey to report on:

- Activities with a primary focus other than business or entrepreneurial skills development (such as courses or workshops on other topics that might also have an indirect effect on these skills)
- Activities that did not involve working with students directly.

In 2023, did your ATE project work with students specifically to develop their business and entrepreneurial skills?

- Yes
- No ([skip this section](#))
- Planning to in the future ([skip this section](#))

3.1. **Did your project work with students to develop their business and entrepreneurial skills in the following ways?**

	Yes	No
a. Activity/course unit	<input type="radio"/>	<input type="radio"/>
b. Club	<input type="radio"/>	<input type="radio"/>
c. Entire course	<input type="radio"/>	<input type="radio"/>
d. Incubator program	<input type="radio"/>	<input type="radio"/>
e. Mentoring or coaching	<input type="radio"/>	<input type="radio"/>
f. Online lesson or material	<input type="radio"/>	<input type="radio"/>
g. Workshop	<input type="radio"/>	<input type="radio"/>
h. Other (describe) _____	<input type="radio"/>	<input type="radio"/>

3.2. **How many students participated in business and entrepreneurial skills development provided by your project in 2023?**

Total students \_\_\_\_\_

## Workplace-Based Learning

*Workplace-based learning* includes any situation in which a student gains experience at a work site, such as internships, apprenticeships, job shadowing, and field trips to industry sites.

Do not use this section of the survey to report on:

- Activities that took place in a school setting

In 2023, did your ATE project offer workplace-based learning to students?

- Yes
- No (skip this section)
- Planning to in the future (skip this section)

### 3.3. Did your ATE project offer the following workplace-based learning opportunities in 2023?

	Yes	No
a. Field trips to business/industry sites	<input type="radio"/>	<input type="radio"/>
b. Job shadowing	<input type="radio"/>	<input type="radio"/>
c. Apprenticeships	<input type="radio"/>	<input type="radio"/>
d. Externships	<input type="radio"/>	<input type="radio"/>
e. Internships	<input type="radio"/>	<input type="radio"/>
f. Co-op learning	<input type="radio"/>	<input type="radio"/>
g. Other (describe)_____	<input type="radio"/>	<input type="radio"/>

3.3.1. (Only if apprenticeships were selected in Q3.3) **Were any of your apprenticeships offered in 2023 registered with the U.S. Department of Labor or a state apprenticeship agency (i.e., a “registered apprenticeship”)?**

- Yes
- No
- Unsure

3.4. (Skip if only Field trips to business/industry sites to Q3.3 was selected) **About how much time did a student typically commit to each type of workplace-based learning offered by your project?**

Type of Workplace-Based Learning	How many <u>hours</u> per week did a student commit to this activity?	How many <u>weeks</u> per year did a student commit to this activity?
[piped text from choices in Q3.3]	_____ [text box]	_____ [text box]

3.5. (Skip if only Field trips to business/industry sites to Q3.3 was selected) **Which of these characteristics apply to the workplace-based learning opportunities offered by your project?**

(If selected in Q3.3)	Students received payment	Students received academic credit	Coupled with specific course(s)	Student participation required by program
Job shadowing	[drop down, Yes or No]	[drop down, Yes or No]	[drop down, Yes or No]	[drop down, Yes or No]
Apprenticeships	[drop down, Yes or No]	[drop down, Yes or No]	[drop down, Yes or No]	[drop down, Yes or No]
Externships	[drop down, Yes or No]	[drop down, Yes or No]	[drop down, Yes or No]	[drop down, Yes or No]
Internships	[drop down, Yes or No]	[drop down, Yes or No]	[drop down, Yes or No]	[drop down, Yes or No]
Co-op learning	[drop down, Yes or No]	[drop down, Yes or No]	[drop down, Yes or No]	[drop down, Yes or No]
Other	[drop down, Yes or No]	[drop down, Yes or No]	[drop down, Yes or No]	[drop down, Yes or No]

3.6. **How many students participated in each type of workplace-based learning provided by your project in 2023?**

Field trips to business/industry sites \_\_\_\_\_ students

Job shadowing \_\_\_\_\_ students

Apprenticeships \_\_\_\_\_ students

Externships \_\_\_\_\_ students

Internships \_\_\_\_\_ students

Co-op Learning \_\_\_\_\_ students

Other types of workplace-based learning \_\_\_\_\_ students

3.7. **What are the most valuable aspects of workplace-based learning for your students?**  
 \_\_\_\_\_ [text box]

## Student Mentoring

---

*Student mentoring* involves an experienced industry professional, educator, or advanced student providing guidance and advice to help a less experienced student develop the skills and knowledge they need to enhance their academic and professional growth.

*Do not* use this section of the survey to report on:

- Mentoring or coaching intended for educators or other professionals
- Mentoring provided to students on an informal or ad hoc basis

In 2023, did your ATE project offer formal mentoring or coaching opportunities to students?

- Yes
- No ([skip this section](#))
- Planning to in the future ([skip this section](#))

3.8. **Did the following types of individuals provide mentoring or coaching through your ATE project (i.e., served as the mentors)?**

	Yes	No
a. Business and industry professionals	<input type="radio"/>	<input type="radio"/>
b. Educational faculty or staff	<input type="radio"/>	<input type="radio"/>
c. Students/peers	<input type="radio"/>	<input type="radio"/>
e. Other (describe)_____	<input type="radio"/>	<input type="radio"/>

3.9. **Are the mentors trained in mentoring by your project?**

- Yes
- No

3.10. **How many students received mentoring or coaching through your ATE project in 2023?**

\_\_\_\_\_ High school students  
\_\_\_\_\_ 2-year college students  
\_\_\_\_\_ 4-year college students  
\_\_\_\_\_ Other (describe) \_\_\_\_\_

## Student Competitions

---

*Student competitions* are events at which students compete as individuals or teams using skills related to a STEM discipline or industry.

*Do not* use this section to report on:

- Student involvement in competitions not hosted or organized by your project

In 2023, did your ATE project host or organize a student competition?

- Yes
- No ([skip this section](#))
- Planning to in the future ([skip this section](#))

3.11. How many competitions were hosted or organized by your ATE project in 2023?

\_\_\_\_\_ [text box]

3.12. How many students participated in the competitions hosted or organized by your ATE project in 2023?

\_\_\_\_\_ [text box]



## Programs to Support Transition into College

---

*Programs to support transition into college* are systematic efforts to equip students with the skills they need to successfully navigate college. Examples include—but are not limited to—summer bridge programs, college readiness workshops or classes, first-year programs, support for non-traditional students, or other activities.

Do not use this section of the survey to report on:

- Support provided to transitioning students on an ad hoc or informal basis
- Indirect support (such as guidance for faculty or staff on how to support transitioning students)

In 2023, did your project offer formal programs to help students transition into college?

- Yes
- No ([skip this section](#))
- Planning to in the future ([skip this section](#))

3.13. **How many transition programs were supported by your ATE project in 2023?**

\_\_\_\_\_ [text box]

3.14. **List the transition programs supported by your ATE project in 2023.**

What is the name of the program?	Who is the primary audience?	How many students participated?
_____ [text box]*	[drop-down box with the following options] <ul style="list-style-type: none"><li>- High school students</li><li>- Recent high school graduates (e.g., summer programs)</li><li>- First-year college students</li><li>- Non-traditional students</li><li>- Other</li></ul>	_____ [text box]

[\*The number of rows will automate to match the respondent's answer to Q3.12.]

## Activities to Help Students Obtain Industry-Recognized Certifications or Licensing

---

*Industry-recognized certifications or licenses* serve as evidence that a person has specific skills or knowledge. Certifications are typically awarded by non-governmental agencies; licenses are regulated by the government.

*Do not* use this section to report on

- Academic certificates or badges awarded by a college
- General academic preparation to work in industry

In 2023, did your ATE project work with students to support them in obtaining specific industry-recognized certifications or licenses?

- Yes (answer this section)
- No (skip to next question)
- Planning to in the future (skip to next question)

Are there industry-validated certifications relevant to the jobs your project prepares students for?

- Yes
- No (skip this section)
- Unsure (skip this section)
- Not relevant to my project, as we do not prepare students for jobs (skip this section)

(Answer Q3.15 – Q3.16 only if your project supported students in obtaining specific industry-recognized certifications or licenses.)

**3.15. Did your ATE project support students in obtaining these certifications or licenses in the following ways?**

	Yes	No
a. Provide financial assistance for testing fees	<input type="radio"/>	<input type="radio"/>
b. Serve as a testing center	<input type="radio"/>	<input type="radio"/>
c. Provide specific test preparation workshops or learning modules	<input type="radio"/>	<input type="radio"/>
d. Review students' certification or license applications	<input type="radio"/>	<input type="radio"/>
e. Existing courses aligned with license or certification requirements	<input type="radio"/>	<input type="radio"/>
f. Other (describe)_____	<input type="radio"/>	<input type="radio"/>

3.16. **Did the following types of organization(s) award the licenses or certifications that your project helps students obtain?**

	<b>Yes</b>	<b>No</b>
a. Government agency	<input type="radio"/>	<input type="radio"/>
b. Non-governmental organization (e.g., professional society, industry group)	<input type="radio"/>	<input type="radio"/>
c. For-profit corporation or company	<input type="radio"/>	<input type="radio"/>
d. Other (describe)_____	<input type="radio"/>	<input type="radio"/>

(Answer Q3.17 – Q3.19.a only if there are industry-validated certifications relevant to the jobs your project prepares students for.)

3.17 **What are the name(s) of the certification(s) relevant to jobs your project prepares students for?**

\_\_\_\_\_ [text box]

3.18 **Do you include information in your program or courses to support students gaining this certification?**

- Yes
- No

3.19 **Does your regional industry list this certification(s) in job announcements?**

- Yes
- No
- Unsure

3.19.a (If Yes to 3.19) **Please name the industry and the certification(s) they list.**

\_\_\_\_\_ [text box]

## Section 4: Professional Development for Educators or Future Educators

*Professional development for educators* involves systematic efforts to work with secondary school teachers, college faculty, or preservice teachers to enhance their disciplinary capabilities, teaching skills, or understanding of current technologies and practices in ways that will directly impact technician education.

*Do not* use this section of the survey to report on:

- Professional development or training for ATE program grantseekers or current grantees (that is addressed in Section 8: ATE Program Services and Support)
- Activities that are not intentionally geared towards educators or future educators
- Conference presentations or other outreach activities (e.g., webinar, information sessions, video, keynote)

In 2023, did your ATE project provide training or professional development to current or future educators?

- Yes
- No ([skip this section](#))
- Planning to in the future ([skip this section](#))

### 4.1. How many professional development activities of each length listed below were offered by your project in 2023?

Type of Professional Development Activity	Total Number of Activities Offered
a. Instructional activities of one day or less (e.g., one-day workshop)	_____
b. Instructional activities that lasted more than one day but less than one week (e.g., workshop, online module)	_____
c. Instructional activities that lasted from one to several weeks (e.g., course, summer institute)	_____
d. Long-term periodic instructional activities (e.g., internship, peer coaching)	_____

4.2. **How many individuals were served by these professional development activities in 2023?**

Length of Professional Development Activity	Number of Participants				
	Preservice Teachers	High School Teachers	2-Year College Faculty	4-Year College Faculty	Other or Unknown
(only items indicated in Q4.1 will appear)					
a. Instructional activities of one day or less (e.g., one-day workshop)	_____	_____	_____	_____	_____
b. Instructional activities that lasted more than one day, but less than one week (e.g., workshop, online module)	_____	_____	_____	_____	_____
c. Instructional activities that lasted from one to several weeks (e.g., course, summer institute)	_____	_____	_____	_____	_____
d. Long-term periodic instructional activities (e.g., internship, peer coaching)	_____	_____	_____	_____	_____

4.3. **Are the following topics covered by your professional development?**

	Yes	No
a. Pedagogy	<input type="radio"/>	<input type="radio"/>
b. Discipline- or industry-specific knowledge or skills	<input type="radio"/>	<input type="radio"/>
c. Recruitment or retention of students	<input type="radio"/>	<input type="radio"/>
d. Training on specific equipment	<input type="radio"/>	<input type="radio"/>
e. Addressing issues of equity, diversity, or inclusion	<input type="radio"/>	<input type="radio"/>
f. Employability skills (i.e., leadership, communication, teamwork, critical and creative thinking, human behavior)	<input type="radio"/>	<input type="radio"/>
g. Other (describe)_____	<input type="radio"/>	<input type="radio"/>

4.4. **Does your project collect data about the number of students taught by the educators who participated in professional development provided by your project?**

- Yes
- No

4.4.1. **How many students were taught by the educators who participated in the professional development offered by your ATE project in 2023?**  
(If yes to Q4.4)

\_\_\_\_\_ students

## Section 5: Conferences or Meetings

ATE-related *conferences or meetings* are events held for the purpose of professional exchange about issues related to advanced technological education.

*Do not* use this section of the survey to report on:

- Attendance or presentations at conferences (e.g., presenting at HI-TEC or ATE PI Conference)
- Events held primarily for training purposes
- Typical management or advisory meetings that most projects hold as part of their normal operations (e.g., advisory committee meetings, partner meetings, BILT meetings)

In 2023, did your ATE project organize a conference or meeting?

- Yes
- No ([skip this section](#))
- Planning to in the future ([skip this section](#))

5.1. **Was hosting a conference the main purpose of your project (i.e., project was funded with a “conference” grant)?**

- Yes
- No (go to end of section)

5.2. **How many conferences, meetings, or other events did your project organize in 2023?**

\_\_\_\_\_ [text box]

5.3. **What was the name of each conference, meeting, or other event your project organized in 2023?**

\_\_\_\_\_ [Number of text boxes determined by Q5.2.]

5.4. **How many people attended each event?**

Event Name	Number of Attendees
[piped text from 5.3]*	_____ [text box]
[piped text from 5.3]	_____ [text box]

[\*The number of rows will automate to match the respondent’s answer to Q5.3]

## Section 6: Research and Publications

### Applied Research

*Applied or targeted research* is research intended to build the knowledge base about the education and development of the skilled technical workforce in STEM fields.

*Do not* use this section of the survey to report on:

- Your project's evaluation, which may utilize research methods
- General background research to inform your project's implementation

In 2023, did your ATE project conduct applied research?

- Yes
- No ([skip this section](#))
- Planning to in the future ([skip this section](#))

6.1. **How many research studies has your project conducted in 2023?**

\_\_\_\_\_ [Text box]

6.2. **What is/are the name(s) of the research study(ies) conducted in 2023?**

\_\_\_\_\_ [Number of text boxes determined by Q6.1.]

6.3. **Which of the following best describes the current stage of your study entitled [Pipe in name of study listed in Q6.2]?\***

- Planning phase
- Collecting data
- Analyzing data
- Writing up results
- Findings published or submitted for publication

6.4. **Briefly describe the primary research questions of your study entitled [Pipe in name of study listed in Q6.2] (i.e., overarching questions that guide your research study, not specific data collection questions).\*** (max 1,000 characters)

\_\_\_\_\_ [text box]

6.5. **Who is the target population of your research study [Pipe in name of study listed in Q6.2] (i.e., what population does your sample represent)?\*** (max 600 characters)

\_\_\_\_\_ [text box]



6.6. Which of the following research designs are being used in your research study [Pipe in name of study listed in Q6.2]?\*

- Descriptive (e.g., case study, naturalistic observation, survey)
- Correlational (e.g., case-control study, longitudinal analysis)
- Experimental or quasi-experimental
- Review (e.g., literature review or systematic review)
- Meta-analytic
- Other (describe) \_\_\_\_\_

6.7. (If writing up results or findings published or submitted for publication in Q6.1.) Briefly summarize the main results from your research study [Pipe in name of study listed in Q6.2].\*

\_\_\_\_\_ [text box]

6.8. Are you disseminating or planning on disseminating the results of your research study [Pipe in name of study listed in Q6.2] in the following ways?

	Yes	No
a. Article in an academic journal	<input type="radio"/>	<input type="radio"/>
b. Article in a practitioner journal	<input type="radio"/>	<input type="radio"/>
c. Article in a magazine	<input type="radio"/>	<input type="radio"/>
d. Report available for free online (e.g., white paper or working paper)	<input type="radio"/>	<input type="radio"/>
e. Conference presentation	<input type="radio"/>	<input type="radio"/>
f. Blog or newsletter	<input type="radio"/>	<input type="radio"/>
g. Other (describe)_____	<input type="radio"/>	<input type="radio"/>

6.9. If any of your research results are published online, please provide a URL:

\_\_\_\_\_ [text box]

\*[Q6.3 – 6.9 will repeat for each study named in Q6.2]

## Publications

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*Publications* include articles, reports, white papers, or other documents of publishable quality or manuscripts intended for publication.

*Do not* use this section of the survey to report on:

- Annual reports prepared for NSF
- Evaluation reports
- Conference presentations, roundtables, or posters

In 2023, did your ATE project develop articles, reports, or white papers for publication?

- Yes
- No ([skip this section](#))
- Planning to in the future ([skip this section](#))

### 6.10. How many of each type of publication did your project develop in 2023?

	Total Number of Publications Developed
a. Manuscript for publication in academic journal	_____
b. Manuscript for publication in practitioner journal	_____
c. Report ( <i>not</i> including evaluation reports or annual reports prepared for NSF)	_____
d. Magazine article	_____
e. Other (describe) _____	_____

## Section 7: Coordination Network & Consortia

A *coordination network* is a specific strategy for sharing information and ideas, fostering synthesis and new collaborations, developing common standards or industry-validated certifications, or otherwise advancing science and technician education through regular communication and sharing of ideas.

*Consortia for innovation* is an ATE funding track that focuses on collaborations to strengthen partnerships between two-year institutions to advance education of the skilled technical workforce.

Do not use this section of the survey to report on:

- Activities focused on communication among project partners
- Informal or ad hoc interactions with colleagues
- Professional networking or training events

In 2023, did your ATE project coordinate a network or a consortium to facilitate exchange or cooperation around research, training, or educational activities?

- Yes
- No ([skip this section](#))
- Planning to in the future ([skip this section](#))

7.1. Was organizing a coordination network or consortium the primary purpose of your grant?

- Yes
- No (skip to the next section)

7.2. **Briefly summarize the purpose of your coordination network or consortium.** (max 600 characters)

\_\_\_\_\_ [text box]

7.3. **Briefly summarize the target audiences involved in your coordination network or consortium.** (max 600 characters)

\_\_\_\_\_ [text box]

7.4. **Briefly summarize the intended outcomes of your coordination network or consortium.** (max 600 characters)

\_\_\_\_\_ [text box]

## Section 8: ATE Program Services and Support

ATE program services involve the provision of activities, materials, or services to ATE program grantseekers, current grantees, and other participants and stakeholders to enhance their capacity to plan and conduct successful ATE projects.

Do not use this section of the survey to report on:

- Discipline-specific activities that could be of interest to the ATE community
- Research that could be of interest to the ATE community
- Any other activities not specifically developed for ATE grantseekers and grantees

In 2023, did your ATE project provide services specifically for the ATE community?

- Yes
- No (skip this section)
- Planning to in the future (skip this section)

8.1. Did your project support the ATE community in the following ways?

	Yes	No
a. Resource materials (e.g., guides, tutorials, videos)	<input type="radio"/>	<input type="radio"/>
b. Workshops	<input type="radio"/>	<input type="radio"/>
c. Webinars	<input type="radio"/>	<input type="radio"/>
d. One-on-one technical assistance or advice	<input type="radio"/>	<input type="radio"/>
e. Technical service (e.g., website hosting, webinar delivery, archiving)	<input type="radio"/>	<input type="radio"/>
f. Other (describe)_____	<input type="radio"/>	<input type="radio"/>

8.2. (If chose *workshops* in Q8.1.) How many workshops did your project provide in 2023?

\_\_\_\_\_ [text box]

8.3. (If chose *workshops* in Q8.1.) On average, how many people attended per workshop?

\_\_\_\_\_ [text box]

8.4. (If chose *webinars* in Q8.1.) How many webinars did your project provide in 2023?

\_\_\_\_\_ [text box]

8.5. (If chose *webinars* in Q8.1.) On average, how many people attended per webinar?

\_\_\_\_\_ [text box]

8.6. (If chose *one-on-one technical assistance or advice* in Q8.1.) **How many people received one-on-one technical assistance or advice from your project in 2023?**

\_\_\_\_\_ [text box]

## Section 9: Collaboration

(Completed by all)

*Collaboration* is a relationship with another institution, business, or group that provides monetary or other support (e.g., volunteer instruction, donated materials) to your ATE project. Collaborators are not funded by the grant.

- 9.1. **For each type of collaborating organization listed below, report the number of different organizations you collaborated with in 2023.**

\_\_\_\_\_ Business/industry

\_\_\_\_\_ Within your host institution (*not for grant management purposes*)

\_\_\_\_\_ 2- or 4-year colleges

\_\_\_\_\_ K-12 schools or school system

\_\_\_\_\_ Public agencies (e.g., government agencies)

\_\_\_\_\_ Other ATE projects

\_\_\_\_\_ Other (describe) \_\_\_\_\_

- 9.2. **What is the most important benefit your project derived from collaboration with all groups or organizations?**

\_\_\_\_\_ [text box]

9.3. (Only if indicated collaborated with business/industry in Q9.1) **Did your ATE project engage with individuals or groups from business and industry in any of the following ways in 2023?**

	Yes	No	Planning to in the Future	Role of Business or Industry Person/Group
a.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Serve on an advisory board
b.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Review or advise on curriculum
c.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Provide educators with occupational experience and training (e.g., externships, mentoring, equipment access, demonstrations)
d.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Support business incubation or entrepreneurship
e.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Assist with instruction (e.g., guest lectures, classroom teaching, serve as panelists or judges, conduct site tours)
f.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Provide monetary or in-kind support for program sustainability or enhancement (e.g., financial support, equipment donation, marketing assistance)
g.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Sponsor research
h.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Provide opportunities for workplace-based learning (e.g., internships, apprenticeships, co-op learning)
i.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Identify workforce needs

9.4. **What is the total dollar value of monetary and in-kind support received by your project from all sources other than your ATE award in 2023? (round to the nearest thousand dollars)**

- a. Monetary support     \$ \_\_\_\_\_
- b. In-kind support        \$ \_\_\_\_\_

9.4.1. (If entered non-zero-dollar amount in Q9.4.b) **Did your project receive the following in-kind support in 2023?**

	Yes	No
a. Staff time	<input type="radio"/>	<input type="radio"/>
b. Equipment	<input type="radio"/>	<input type="radio"/>
c. Other (describe)_____	<input type="radio"/>	<input type="radio"/>

## Advisory Boards

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(Complete only if responded yes to Q9.3.a)

9.5. **How many hours did your advisory board meet in 2023?**

- Less than 2 hours
- 2–5 hours
- 6–16 hours (1–2 days)
- 17–36 hours (3–4 days)
- 37 hours or more



## Section 10: Evaluation

(Completed by all)

All ATE projects are required to evaluate their projects. *Evaluation* is intended to support project improvement and accountability. The following section asks several questions about the characteristics of your evaluation, including who conducts it, how evaluation information is used, and the nature of strategies employed.

10.1. **Did your project have an evaluator in 2023?**

- Yes (skip to Q10.2)
- No

10.1.a **Why did you not work with an evaluator in 2023?**

\_\_\_\_\_ [text box] (Skip to section 11)

10.2. **Which type of evaluator(s) did your project have in 2023?**

- External evaluator only
- Internal evaluator only (i.e., is a member of your staff)
- Both internal and external evaluators

10.2.1. (Only if *external* or *both internal and external evaluators* are selected in Q10.2)

**How frequently did your external evaluator interact with your project's staff (e.g., by email, teleconference, face-to-face) in 2023?**

- Rarely (annually or semiannually)
- Infrequently (not every month but at least quarterly)
- Occasionally (more often than quarterly and as much as monthly)
- Often (more often than monthly and as much as biweekly)
- Continually (nearly weekly, weekly, or more often)

10.3. **What type of report(s) did you receive from your evaluator in 2023?**

- Written
- Oral
- Both oral and written
- None (skip to question 10.8)

10.4. **If you have any information related to the evaluation of your project online (e.g., plans, instruments, reports), please provide the URL where they can be located:**

http:// \_\_\_\_\_

- Evaluation reports are not available online but would be willing to share

10.5. **Has your project’s evaluation findings or working with your evaluator caused you to make any of the following changes to your ATE project in 2023?** (Please select all that apply)

- Alter the timing of project activities
- Change the content of curriculum or training materials
- Identify ways to sustain the project after ATE funding has ended
- Modify project goals or objectives (e.g., adding or eliminating project goals)
- Modify the target audience for project activities
- Redesign marketing, recruitment, or outreach activities (aimed at students, faculty, or industry)
- Start, stop, or add project activities
- Other (describe)\_\_\_\_\_

10.6. **Has your project’s evaluation findings or working with your evaluator caused you to engage in any of the following in 2023?** (Please select all that apply)

- Advocate for change within your program or institution
- Apply for another ATE grant
- Apply for a non-ATE grant
- Inform the implementation of other non-ATE projects or work
- Learn more about the evaluation field, approaches, or practices
- Other (describe)\_\_\_\_\_

10.7. **With whom have you shared your current project’s evaluation results?**  
(If a group does not apply to your project, select “NA” for *not applicable*.)

	Yes	No	Unsure	NA
NSF program officer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Project advisory committee	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Executive administrators in your organization (e.g., CEO, president, vice president, dean, department chairperson)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Faculty or staff at your project's host institution	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Current project partners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prospective project partners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prospective students or parents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Educators or professionals outside of your project and institution (e.g., at conferences, in journals, or during webinars)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (describe)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10.8. **How would you rate the usefulness of your project's *interaction* with your current evaluator?**

- Not useful
- Somewhat useful
- Useful
- Essential to our work

**10.8.1. In a few sentences, please describe why your interaction with your evaluator was <<insert 10.8 answer here>>.** (Your responses will not be shared with your evaluator or NSF program officer and will only be reported in the aggregate or de-identified.)

10.9. **How would you rate the usefulness of the *evaluation findings* to your project?**

- Not useful
- Somewhat useful
- Useful
- Essential to our work

**10.9.1. In a few sentences, please describe why your evaluation was <<insert 10.9 answer here>>.** (Your responses will not be shared with your evaluator or NSF program officer and will only be reported in the aggregate or de-identified.)

10.10. **What is your primary evaluator's name, email, and organizational affiliation (e.g., Jane Smith, jane.smith@wmich.edu, Western Michigan University)?**

Evaluator first and last name: [text box]

Evaluator email address:

Organizational affiliation:

10.11. **Are there additional people on your evaluation team?**

- Yes
- No (skip to 10.12)

10.11.1. (If yes to Q10.11) **Please provide additional name(s), email address(es), and organization affiliation(s).**

Evaluator first and last name: [text box]

Evaluator email address:

Organizational affiliation:

Evaluator first and last name: [text box]

Evaluator email address:

Organizational affiliation:

Evaluator first and last name: [text box]

Evaluator email address:

Organizational affiliation:

Evaluator first and last name: [text box]

Evaluator email address:

Organizational affiliation:

10.12. **How long has your ATE project worked with this evaluator (or evaluation team)?**

- Less than one year
- 1-2 years
- 3-4 years
- 5 or more years

10.13. **Has your team worked with this evaluator (or evaluation team) on previous ATE or non-ATE grants?**

- Yes
- No
- Unsure

10.14. EvaluATE is working with ATE Central to make information about ATE evaluators available on the ATE Central website ([www.atecentral.net](http://www.atecentral.net)). ***If the evaluator you named above approves, may we identify them as your evaluator on the ATE Central website?***

- Yes
- No

## Section 11: Project Highlights

(Completed by all)

11.1. **What was your project's most important achievement in 2023?**

\_\_\_\_\_ [text box]

11.1.1. **Did you gather data about this achievement?**

Yes

No

11.1.1.a. [if yes to Q11.1.1] **What kind of data and how was it collected?**

\_\_\_\_\_ [text box]

11.2. **What are one or two promising practices from your ATE work that can be shared with the ATE community?**

\_\_\_\_\_ [text box]

## Section 12: Special Topics

(Completed by all)

This section of the ATE Survey addresses emerging topics of interest to the ATE community. All respondents are asked to complete this section. Questions in this section will be asked in the 2024 ATE Survey only and will not require additional data collection on behalf of projects.

## RECITE-Extended Reality

The following questions are added by Resource Collaborative for Immersive Technologies (RECITE) for the purpose of learning about the use and barriers of extended reality technologies in ATE projects. RECITE seeks to understand which projects are using extended reality technologies, for what purpose, what types of extended reality technologies are being used, and why projects might not be using them.

Definitions (based on Rauschnabel et al., 2022):

**Extended Reality** technologies include augmented reality (AR) and virtual reality (VR).

- **VR** includes technologies that disconnect the user from the physical world and can be either immersive, using a head-mounted device (e.g., Quest 2, Valve Index, HTC Vive Pro, Google Cardboard), or non-immersive on a screen.
- **AR** includes technologies that blend the physical and virtual environments and can be experienced with mobile devices such as tablet/smartphones (e.g., the Pokémon Go app), with headsets that use clear lenses with virtual content (e.g., Microsoft HoloLens), or headsets that use pass-through technologies where cameras capture the physical environment and display it inside the headset (e.g., Quest Pro & 3, Varjo XR-3).

### Filter:

1. **Does your project include an extended reality technology component?**

- a. Yes (if yes, skip to Q2\_Yes)
- b. No (if no, skip to Q2\_No)

### No

2. **(Display if no is selected Q1) Which of the following are reasons why your project does not include an extended reality technology component?** (Please select all that apply)

- Not relevant to my ATE project
- Don't know enough about it
- Extended reality hardware is too expensive
- Extended reality content is too expensive
- Lack of physical space to house and use extended reality technologies
- Insufficient time for staff to learn and/or integrate extended reality technologies
- Lack of support by college administrators
- Lack of relevant extended reality content
- Other (describe)\_\_\_\_\_

3. For each reason selected (from Q2\_No), indicate how much of a barrier it is to your project's inclusion of extended reality technologies.

Program	Minimal barrier	Moderate barrier	Significant barrier
[selected response, carry forward from Q2_No]*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
[selected response, carry forward from Q2_No]*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[\*The number of rows will automate to match the respondent's answer to 2.]

**Yes**

2. (Display if yes is selected Q1) For what purpose(s) does your project use extended reality technologies? (Please select all that apply)

- Company tours
- Teaching abstract concepts
- Developing hands-on skills
- Improving responses to realistic scenarios (e.g., emergency response, soft skills training)
- Training on machines (e.g., expensive and/or inaccessible equipment, safety training)
- Other (describe) \_\_\_\_\_

3. (For each reason selected from Q2\_yes) How is your project obtaining the extended reality content it is using?

Program	We are using existing content	We are creating the content ourselves	We are hiring a company to make the content for us	We are partnering with another educational institution to make the content for us
[selected response, carry forward from Q2_Yes]*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
[selected response, carry forward from Q2_Yes]*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[\*The number of rows will automate to match the respondent's answer to 2.]



4. **Which of these extended reality technologies are a part of your project?** (Please select all that apply)
- AR – tablet/smartphone
  - AR – clear lenses
  - AR – passthrough
  - VR – desktop only
  - VR – head-mounted display only
  - VR – desktop combined with head-mounted display
  - Other (describe) \_\_\_\_\_
5. [If yes to filter question] **Would you be willing to discuss these topics further with the RECITE research team?**
- Yes
  - No
6. (Answered by all) **Would your project like assistance incorporating extended reality technologies into your ATE project?**
- a. Yes
  - b. No

## Professional Development

The following questions are added by Technician Workforce Immersive Teaching & Learning Resources for the purpose of learning about the experience of ATE projects in developing and implementing professional development resources. The purpose of these questions is to understand what professional development avenues ATE projects use to teach technician faculty about their work, the recruitment strategies they use to attract participants, and the barriers they encounter regarding their professional development activities.

### Filter:

1. (If yes to Professional Development for Educators screener question) **Does your project include a professional development component?**
  - a. Yes
  - b. No (skip to next section)

### Yes

2. **What types of professional development opportunities has your project developed?**  
(Please select all that apply)

- Online course(s)
- Face-to-face course(s)
- Hybrid course(s)
- Massive Open Online Course(s) (MOOC)
- Conference(s)
- Webinar(s)
- Other (describe)\_\_\_\_\_

3. (For each response selected from Q2) **How often has your project implemented each professional development opportunity?**

	Once a year	2-4 times per year	5-12 times per year	More than 12 times per year
[selected response, carry forward from Q2]*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
[selected response, carry forward from Q2]*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[\*The number of rows will automate to match the respondent's answer to 2.]

4. **What barriers has your project encountered while implementing professional development?** (Please select all that apply)

- Finding NSF ATE community participants
- Finding non-NSF ATE community participants
- Communication with participants
- Implementation costs
- Participant costs
- Institutional barriers on my campus
- Institutional barriers on participants' campus
- Other (describe)\_\_\_\_\_

5. (For each response selected from Q4) **Please rate the level of significance of each barrier below as it relates to the implementation of your project's professional development activities.**

	Very significant	Significant	Somewhat significant	Minimally significant
[selected response, carry forward from Q4]*	○	○	○	○
[selected response, carry forward from Q4]*	○	○	○	○

[\*The number of rows will automate to match the respondent's answer to 4.]

6. **What strategies has your project used to recruit participants for professional development activities?** (Please select all that apply)

- Newsletters
- Flyers
- Website
- Direct email to potential participants
- System-Administration forwarded email
- Face-to-face communication
- Referrals
- Departmental or School communications
- Facebook
- LinkedIn
- TikTok
- Instagram
- X (Twitter)
- Contracted professional communications team
- Professional communications team member
- Other (describe)\_\_\_\_\_

7. (For each response selected from Q6) **Please rate the success level of each strategy used to recruit participants for professional development activities.**

	Very successful	Successful	Somewhat successful	Minimally successful	Not successful
[selected response, carry forward from Q6]*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
[selected response, carry forward from Q6]*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[\*The number of rows will automate to match the respondent's answer to 6.]

8. **How prepared was your team to *create* recruitment materials for professional development activities?**

- Very prepared
- Prepared
- Somewhat prepared
- Not prepared at all

9. **How prepared was your team to *disseminate* recruitment materials for professional development activities? M/C**

- Very prepared
- Prepared
- Somewhat prepared
- Not prepared at all

10. **What percentage of your professional development participants would you estimate are working with an active NSF ATE project?**

Slider from 0-100%

## Mentor-Connect

The following questions are added by Mentor-Connect, Project Vision, and Grant Insights for the purpose of learning about the extent ATE projects engaged in ATE mentoring initiatives, how important that experience was in supporting their proposal, and whether it affects their willingness to apply for another grant.

**1. Did your project receive some kind of external mentoring support or assistance while developing the proposal for [piped text-project title]?**

- Yes
- No (skip to Q3)

**1.1. (If yes to Q1) Please indicate the type of support received while developing the proposal for [piped text-project title]. (Please select all that apply)**

- Support from an ATE Mentoring project organization (e.g., Mentor-Connect, Mentor Up, MentorLinks, FORCCE-ATE, Project Vision, Grant-Seeker Academy)
- Support from an ATE Center
- Support from an independent grant-writing consultant or company
- Other (describe)\_\_\_\_\_

**1.1.a. (Only if support from an ATE Mentoring project organization is selected)**

**Which ATE Mentoring project organization helped you?** (Please select all that apply)

- Mentor-Connect
- Mentor Up
- MentorLinks
- FORCCE-ATE
- Project Vision
- Grant-Seeker Academy
- Other (describe)\_\_\_\_\_

**1.1.b. (Only if support from an ATE Center is selected) Which ATE Center helped you?**

\_\_\_\_\_ [text box]

**1.1.c. (Only if support from an independent grant-writing consultant or company is selected) Which independent grant-writing consultant or company helped you?**

\_\_\_\_\_ [text box]

2. (If yes to Q1) **Would you have applied to the NSF ATE program without that mentoring or assistance?**

- Very likely
- Likely
- Unlikely
- Very unlikely
- Unsure

3. **Do you anticipate applying for another NSF ATE proposal?**

- Very likely
- Likely
- Unlikely
- Very unlikely
- Unsure

3.1 **Please briefly explain why you answered [piped text from Q3] to the previous question.**

\_\_\_\_\_ [text box]

4. **Would you be willing to discuss these topics further with the research teams?**

- Yes
- No