

**Western Michigan University**



**Sustainability of ATE Projects and Centers**

**Advanced Technological Education (ATE) Program Evaluation**

The purpose of this survey is to assess the extent to which the influence of an Advanced Technological Education (ATE) project continues (is sustained) beyond the period of funding by the National Science Foundation (NSF). We anticipate that NSF will use our input to help them improve the quality of the program and better serve technical education. This survey asks questions about

1. Your project or center's most significant accomplishments
2. The elements of those accomplishments that have been sustained
3. The factors that have contributed to or hindered that sustainment

Please be candid in what you relate to us. We need complete and accurate answers if we are to meet our goal of understanding ATE sustainability. Be assured that we will keep your answers confidential. NSF and others will see only aggregate information across respondents.

Our sample is small, so your responses count a great deal. If you think that someone else associated with the project would be in a better position to respond to these questions, please reply to this e-mail and we will contact the person you recommend to request her or his participation.

For more information about the ATE Program evaluation project, please visit our Web site: <http://www.wmich.edu/evalctr/ate/>

If we can answer any questions for you prior to beginning this survey, please do not hesitate to contact

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## Survey Instructions

1. Survey completion time is 30 minutes.
2. "Next Page" saves responses to our server and advances to the next page.
3. "Finish Later" logs out and lets you return. Responses are preserved.
4. You can "Reset" a page and change responses.
5. To backtrack and change responses, use your browser's "Back" button.
6. For a paper copy to assist in completing the survey, go to:  
[http://www.wmich.edu/evalctr/ate/ATE\\_Sustainability\\_Survey.pdf](http://www.wmich.edu/evalctr/ate/ATE_Sustainability_Survey.pdf)
7. Upon completion, you will receive an e-mail containing your responses. It will omit section headings and noncompleted questions. To preserve online format, please print each page from your browser.

### Project/Center Information

Above is information on your ATE award(s). Please answer this questionnaire with respect to the ENTIRE body of work. If the grants focused on significantly different topics, indicate the award number(s) that your response(s) will relate to.

## Project/Center Accomplishments

Briefly describe your project/center's efforts and/or accomplishments during the period you received ATE funding.

On which education level(s) did your work focus? SELECT ALL THAT APPLY.

- High school
- 2-year college
- 4-year college
- Business & industry
- None of the above

What was the primary intended impact/level of influence for the major work produced through your project/center? SELECT ALL THAT APPLY.

- Improve the work of our ATE project
- Help enact changes in technological curricula
- Influence technological education within our department
- Influence technological education within our institution
- Influence technological education in the marketplace, e.g., regionally or nationally
- Other

Other. Please describe.

Which of the following describe why your project/center stopped receiving funding from the NSF ATE program? SELECT ALL THAT APPLY.

- We completed all the work we planned
- Chose not to pursue additional funding from ATE
- PI retired/left organization
- Lack of support by ATE program officer
- No resources to pursue additional funding
- Loss of key project staff
- Lack of faculty support
- Follow-up proposals not favorably reviewed
- Institutional priorities changed
- Market demand for project-related technologies declined
- Failed to achieve project/center objectives
- NSF monitoring processes were too cumbersome
- Other
- None of the above

Other. Please describe.

Looking back on the period when you received ATE funding, how would you characterize your relationship with NSF? SELECT ALL THAT APPLY.

- NSF staff encouraged our efforts
- NSF staff provided constructive feedback and guidance
- NSF staff monitored our activities, but were not strong facilitators or inhibitors of our activities
- NSF staff took a “hands off” stance toward our activities
- NSF staff provided us with advice and guidance that proved counterproductive
- None of the above

## Collaboration

Collaboration is defined as an **ongoing** relationship with another institution, business, or group that provides money and/or other support to your project, center, or partnership. Collaborators may include local businesses; other educational institutions; public agencies; industry groups; other ATE projects, centers, and partnerships; and your host institution.

### During the LAST year you received ATE funding...

a. Approximately how many different organizations did you collaborate with in a way that substantially impacted your ATE-funded activities? SELECT ONE.

- None
- 1-5
- 6-10
- 11-15
- 16-20
- 20+
- Don't know

b. What types of institutions did you collaborate with? SELECT ALL THAT APPLY.

- Business & industry
- Other education institutions
- Public agencies
- Other ATE projects/centers
- Trade organizations
- Private Foundations
- Civic Groups (e.g., Chamber of Commerce)
- Other types

c. What were the purposes for collaboration with these organizations? SELECT ALL THAT APPLY.

- Developing program content
- Facilitating service delivery
- Building community support
- Access to decision makers
- Access to program target populations
- Other

Other. Please describe.

d. Approximately how much direct monetary support (e.g., cash contributions, other grants) did you receive from these collaborators? PLEASE INDICATE FULL \$ AMOUNTS, NUMBERS ONLY (e.g., 1000 or 25000). If NONE, please enter 0.

e. Approximately how much direct in-kind support (e.g., personnel, equipment, space) did you receive from these collaborators? PLEASE INDICATE FULL \$ AMOUNTS, NUMBERS ONLY (e.g., 1000 or 25000). If NONE, please enter 0.

**During the year IMMEDIATELY FOLLOWING the end of your ATE funding...**

a. Approximately how many different organizations did you collaborate with in a way that substantially impacted your ATE-funded activities? SELECT ONE.

- None
- 1-5
- 6-10
- 11-15
- 16-20
- 20+
- Don't know

b. What types of institutions did you collaborate with? SELECT ALL THAT APPLY.

- Business & industry
- Other education institutions
- Public agencies
- Other ATE projects/centers
- Trade organizations
- Private foundations
- Civic groups (e.g., Chamber of Commerce)
- Other types

c. What were the purposes for collaboration with these organizations? SELECT ALL THAT APPLY.

- Developing program content
- Facilitating service delivery
- Building community support
- Access to decision makers
- Access to program target populations
- Other

Other. Please describe.

d. Approximately how much direct monetary support (e.g., cash contributions, other grants) did you receive from these collaborators? PLEASE INDICATE FULL \$ AMOUNTS, NUMBERS ONLY (e.g., 1000 or 25000). If NONE, please enter 0.

e. Approximately how much direct in-kind support (e.g., personnel, equipment, space) did you receive from these collaborators? PLEASE INDICATE FULL \$ AMOUNTS, NUMBERS ONLY (e.g., 1000 or 25000). If NONE, please enter 0.

To the best of your knowledge, during the 2004-2005 academic year...

a. Approximately how many different organizations did you collaborate with in a way that substantially impacted your ATE-funded activities? SELECT ONE.

- None
- 1-5
- 6-10
- 11-15
- 16-20
- 20+
- Don't know

b. What types of institutions did you collaborate with? SELECT ALL THAT APPLY.

- Business & industry
- Other education institutions
- Public agencies
- Other ATE projects/centers
- Trade organizations
- Private foundations
- Civic groups (e.g., Chamber of Commerce)
- Other types

c. What were the purposes for collaboration with these organizations? SELECT ALL THAT APPLY.

- Developing program content
- Facilitating service delivery
- Building community support
- Access to decision makers
- Access to program target populations
- Other

Other. Please describe.

d. Approximately how much direct monetary support (e.g., cash contributions, other grants) did you receive from these collaborators? PLEASE INDICATE FULL \$ AMOUNTS, NUMBERS ONLY (e.g., 1000 or 25000). If NONE, please enter 0.

e. Approximately how much direct in-kind support (e.g., personnel, equipment, space) did you receive from these collaborators? PLEASE INDICATE FULL \$ AMOUNTS, NUMBERS ONLY (e.g., 1000 or 25000). If NONE, please enter 0.

Describe the most noteworthy results of your collaboration efforts and their impact on technological education

**Collaboration: Sustainability Enablers and Barriers**

Please indicate the extent to which the presence or absence of these conditions acted as CONTRIBUTING or INHIBITING factors in the sustainment of your collaboration efforts. SELECT ONE FOR EACH QUESTION.

	Major Contributor	Minor Contributor	Not a Factor	Minor Inhibitor	Major Inhibitor
Personal relationships among staff across organizations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Institutional program approval	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Formal organizational agreements, e.g., sharing staff, contracts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cross organizational processes, e.g., regular meetings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Track record of previous work together	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shared goals/objectives/priorities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Complementary skills and resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Changeovers in faculty and staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Changes in amount of institutional support received	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide any additional information about the most important contributors or inhibitors to help us understand why your collaborations were or were not sustained after the conclusion of ATE funding?

## ATE Program Activities

The following questions relate to the ATE activities you focused on. Corresponding to your answers, the survey will proceed with questions targeted toward your ATE activities.

Which of the following ATE program activities best describe your primary work efforts? **SELECT TWO.**

- Program improvement, i.e., course development, curriculum development
- Professional development, i.e., training for faculty members
- Materials development, i.e., creation of course materials, textbooks, videos, etc.
- Articulation agreements, i.e., establishing student pathways between education levels
- Research, i.e., contributing to the body of knowledge about technological education

## Program Improvement

ATE program guidelines indicate that program improvement “activities should enhance a curriculum in multiple ways, producing a coherent sequence of classes, laboratories, and work-based educational experiences that revitalize the learning environment, course content, and experience of instruction for students preparing to be science and engineering technicians. The improved program leads students to an appropriate degree, certification, or occupational competency point and provides industry with a larger pool of skilled technicians.”

Please consider the following definitions when responding to questions in this section.

<b>Course</b>	An intact educational experience for which a student may receive “credit” toward a degree or certificate
<b>Curriculum Program</b>	A <u>series</u> of courses or experiences that leads directly to a degree or certificate program

### Course development

Were courses developed or modified as part of your program improvement efforts?

- Yes
- No

How many courses were developed or modified? SELECT ONE.

- 1-2
- 3-4
- 5-6
- 7-8
- 9-10
- 11+
- Don't know

Did your institution require special approval for the course(s) to be taught?

- Yes
- No

Please briefly describe the nature of approval required, e.g., the approval process and criteria.

If any of the courses that were developed or modified with ATE funding are no longer offered, please indicate why. SELECT ALL THAT APPLY.

- Does not apply—all courses are still offered on a regular basis.
- Lack of student interest
- Lack of financial resources
- Lack of instructional resources (e.g., computers, lab facilities)
- Lack of qualified instructors
- Entire program dropped
- Material no longer relevant
- Other

Other. Please describe.

Please select your BEST estimate for each question.

	Decreased a lot (> 20%)	Decreased a little (~10%)	Stayed the same	Increased a little (~ 10%)	Increased a lot (> 20%)	Don't know
In the year IMMEDIATELY AFTER your ATE funding ended, how did the number of students enrolled in the courses developed with ATE support change?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
As of the 2004-2005 academic year, how has the number of students enrolled in the courses developed with ATE support changed since your final year of funding?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To the best of your knowledge, approximately how many of the COURSES you developed with ATE funding have been at least partially adopted at other institutions? SELECT ONE.

- None have been adopted elsewhere
- 1-2
- 2-3
- 3-5
- 6-10
- 10+
- All the courses have been adopted elsewhere

To the best of your knowledge, approximately how many INSTITUTIONS have adopted at least one of the courses you developed with ATE funding? SELECT ONE.

- 0
- 1-10
- 11-20
- 21-50
- 51+
- Don't know

**Curriculum development**

Was a curriculum program (i.e., a series of courses) developed or modified as part of your program improvement efforts?

- Yes
- No

How many curriculum programs were developed or modified? SELECT ONE.

- 1
- 2
- 3
- 4
- 5 or more
- Don't know

Did your institution require special approval for the curriculum program (s) to be adopted?

- Yes
- No

Please briefly describe the nature of approval required, e.g., the approval process and criteria.

What credentials were awarded upon successful completion of the program(s) developed or modified with ATE support? SELECT ALL THAT APPLY.

- Certificate
- Associate degree
- Bachelors degree
- None of the above

If any of the programs that were developed or modified with ATE funding are no longer offered, please indicate why. SELECT ALL THAT APPLY.

- Does not apply—all programs are still offered
- Lack of student interest
- Lack of financial resources
- Lack of necessary instructional resources (e.g., computers, lab space)
- Lack of qualified instructors
- Lack of support from business and industry
- Content no longer relevant
- Other

Other. Please describe.

Please select your BEST estimate for each question.

	Decreased a lot (>20%)	Decreased a little (~10%)	Stayed the same	Increased a little (~ 10%)	Increased a lot (> 20%)	Don't know
In the year IMMEDIATELY AFTER your ATE funding ended, how did the number of students enrolled in the curriculum programs developed with ATE support change?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
As of the 2004-2005 academic year, how has the number of students enrolled in the curriculum programs developed with ATE support changed since your final year of funding?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To the best of your knowledge, how many of the PROGRAMS you developed or modified with ATE funding have been at least partially adopted at other institutions? SELECT ONE.

- None has been adopted elsewhere
- 1
- 2
- 3
- 4
- 5 or more
- All have been adopted elsewhere
- Don't know

To the best of your knowledge, how many INSTITUTIONS have adopted at least one of the programs you developed or modified with ATE funding? SELECT ONE.

- 0
- 1-10
- 10-20
- 20-50
- 50+
- Don't know

**Program Improvement: Sustainability Enablers and Barriers**

Please indicate the extent to which the presence or absence of these conditions acted as CONTRIBUTING or INHIBITING factors in the sustainment of your ATE program improvement efforts. SELECT ONE FOR EACH QUESTION.

	Major Contributor	Minor Contributor	Not a Factor	Minor Inhibitor	Major Inhibitor
Student enrollment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Institutional course approval	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Institutional program approval	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Faculty support & advocacy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Faculty turnover (e.g., retirements, new hires)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Support from college administrators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
External funding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Demand by local/regional business and industry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cost to maintain/update	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
National economic trends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Emergence of newer technologies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Institutional funding cuts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Partnership with external stakeholders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ability to generate revenue to support the programs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide any additional information about the most important contributors or inhibitors to help us understand why your program improvement efforts were or were not sustained after the conclusion of ATE funding.

## Professional Development

ATE Program Guidelines indicate that the “program supports projects that provide current secondary school teachers and college faculty with opportunities for continued professional growth in areas that directly impact advanced technological education.”

Which of the following best describes your professional development efforts? SELECT ONE.

- Our PD efforts were designed to support our broader program improvement objectives
- Our PD efforts were intended as stand alone activities and not necessarily linked or integrated with other ATE activities

Which of the following were target audiences for your professional development efforts? SELECT ALL THAT APPLY.

- ATE project faculty and staff
- Faculty in my department
- Faculty at my institution
- Faculty at other institution
- Faculty across the region or nation
- None of the above

Which of the following purposes did your professional development efforts serve? SELECT ALL THAT APPLY.

- Prepared faculty to teach NEW courses or programs
- Updated faculty knowledge and skills about SPECIFIC technologies
- Updated GENERAL TECHNOLOGY knowledge and skills
- Updated GENERAL INSTRUCTIONAL knowledge and skills
- None of the above

Which of the following best describes how you used ATE funds to support your professional development efforts? SELECT ONE.

- a. We developed and/or delivered new or existing professional development programs
- b. We paid for faculty to attend existing professional development programs

Which of the following characterizes the primary type(s) of professional development opportunities you developed and/or delivered with ATE funding? SELECT ALL THAT APPLY.

- Workshops
- Workshops with planned follow-up activities
- Professional conferences
- Internships or in-service programs
- e-learning
- Self-study programs
- Other

Other. Please describe.

Which of the following best describe why the programs are no longer offered. SELECT ALL THAT APPLY.

- Not applicable—Programs and/or opportunities are still offered
- Program not designed/intended to be offered beyond ATE
- Everyone who needed the development received it
- Topic no longer relevant
- Funds no longer available
- Other sources of development on same topic are competing
- Lack of demand
- Other

Other. Please describe.

Please provide your BEST estimate for each question.

	Decreased a lot (> 20%)	Decreased a little (~10%)	Stayed the same	Increased a little (~ 10%)	Increased a lot (> 20%)	Don't know
In the year IMMEDIATELY AFTER your ATE funding ended, how did the number of faculty enrolled in the professional development programs developed with ATE support change?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
As of the 2004-2005 academic year, how has the number of faculty enrolled in the curriculum programs developed with ATE support changed since your final year of funding?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To the best of your knowledge, how many of the PROFESSIONAL DEVELOPMENT PROGRAMS you developed or modified have been adopted at other institutions? SELECT ONE.

- None have been adopted elsewhere
- 1-2
- 3-5
- 6-10
- 11-20
- 20+
- All have been adopted elsewhere
- Don't know

To the best of your knowledge, how many INSTITUTIONS have adopted at least one of the professional development programs you developed or modified? SELECT ONE.

- 0
- 1-10
- 10-20
- 20-50
- 50+
- Don't know

**Professional Development: Sustainability Enablers and Barriers**

Please indicate the extent to which the presence or absence of these conditions acted as CONTRIBUTING or INHIBITING factors in the sustainment of your ATE professional development efforts. SELECT ONE FOR EACH QUESTION.

	Major Contributor	Minor Contributor	Not a Factor	Minor Inhibitor	Major Inhibitor
Student enrollment in related programs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Faculty interest in subject matter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Faculty turnover (e.g., retirements, new faculty)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Support from college administrators for professional development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
External funding for professional development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Demand by local/regional business and industry for students in related programs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cost to maintain/update the professional development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
National economic trends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Emergence of newer technologies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Institutional funding cuts for professional development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Collaboration with key external stakeholders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ability to generate revenue to support the programs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide any additional information about the most important contributors or inhibitors to help us understand why your professional development efforts were or were not sustained after the conclusion of ATE funding.

### Materials Development

ATE program guidelines indicate that materials development “activities should result in textbooks, laboratory experiments and manuals, software, CD-ROMs, videos, or other courseware that will be published for national distribution to colleges, secondary schools, or industry.”

Which of the following best describes your materials development efforts? SELECT ONE.

- Our MD efforts were designed to support our broader program improvement and/or professional development efforts
- Our MD efforts were intended as stand alone activities and not necessarily linked or integrated with other ATE activities

Which of the following describe(s) the dissemination and/or use of the materials you developed with ATE funding? SELECT ALL THAT APPLY.

- Use materials locally within our college
- Distribute materials for use regionally
- Distribute materials for use nationally
- Commercial publication of materials
- None of the above

How many of the following types of materials were developed or modified with ATE support? PLEASE INDICATE NUMBERS.

Textbooks	<input style="width: 40px; height: 20px;" type="text"/>
Course modules/exercises/experiments	<input style="width: 40px; height: 20px;" type="text"/>
Instructional software	<input style="width: 40px; height: 20px;" type="text"/>
Videos	<input style="width: 40px; height: 20px;" type="text"/>
e-learning	<input style="width: 40px; height: 20px;" type="text"/>
Other. Please specify.	<input style="width: 380px; height: 20px;" type="text"/>

If any of the materials you developed are no longer in use, please indicate the primary reasons why the materials are no longer being used. SELECT ALL THAT APPLY.

- Does not apply—all materials are still in use
- Topic no longer relevant
- Materials are out of date
- Materials are too expensive to purchase
- There is no effective distribution channel (e.g., a publisher)
- Other

Other. Please describe.

Please provide your best estimate for EACH question.

	Decreased a lot (>20%)	Decreased a little (~10%)	Stayed the same	Increased a little (~ 10%)	Increased a lot (> 20%)	Don't know
In the year IMMEDIATELY AFTER your ATE funding ended, how did the number of copies you distributed, of materials you developed with ATE support, change?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
As of the 2004-2005 academic year, how has the number of copies you distributed, of materials you developed with ATE support, changed since your final year of funding?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To the best of your knowledge, how many of the MATERIALS you developed or modified have been adopted at other institutions? SELECT ONE.

- Not applicable—materials were intended only for local use
- None have been adopted elsewhere
- 1-5
- 6-10
- 11-20
- 21-50
- 50+
- All of the materials have been adopted elsewhere

To the best of your knowledge, how many INSTITUTIONS have adopted at least one of the materials you developed or modified? SELECT ONE.

- 0
- 1-10
- 11-20
- 21-50
- 50+
- Don't know

**Materials Development: Sustainability Enablers and Barriers**

Please indicate the extent to which the presence or absence of these conditions acted as CONTRIBUTING or INHIBITING factors in the ATE sustainment of your materials development efforts. SELECT ONE FOR EACH QUESTION.

	Major Contributor	Minor Contributor	Not a Factor	Minor Inhibitor	Major Inhibitor
Student enrollment in related programs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Faculty choosing to use materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
New external funding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Demand by education institutions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Direct or indirect business need for the materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Institutional support for revision	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cost to maintain/update	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Content relevance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Effective dissemination strategy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Partnership with a commercial publisher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ability to generate revenue from the materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide any additional information about the most important contributors or inhibitors to help us understand why your materials development efforts were or were not sustained after the conclusion of ATE funding.

## Articulation Agreements

ATE program guidelines state that articulation agreements “promote initiatives at two-year colleges, in partnership with four-year colleges and universities, to expand two important educational pathways. One type of articulation partnership aims to impact two-year college programs for prospective K-12 teachers (with a focus on activities and disciplines that have a strong technological foundation), and the other type of partnership targets two-year college programs for students who continue their education in four-year STEM degree programs, especially programs that have a strong technological basis.”

How many articulation agreements were developed or modified with ATE funding? SELECT ONE.

- 1
- 2-3
- 4-5
- 5-10
- 10+

What were the purposes of those agreements? SELECT ALL THAT APPLY.

- Help students move from secondary to two-year college
- Help students move from two-year to four-year colleges in teacher preparation programs
- Help students move from two-year to four-year colleges in technological education/engineering programs
- Other

Other. Please describe.

If any of the agreements that were developed or modified with ATE funding are no longer in place, please indicate why. SELECT ALL THAT APPLY.

- Does not apply—all agreements are still in place
- Student interest
- Financial resources
- Necessary instructional resources (e.g., computers, lab space)
- Qualified instructors
- Support from partner institutions
- Content no longer relevant
- Other

Other. Please describe.

Please indicate your best estimate for EACH question.

	Decreased a lot (>20%)	Decreased a little (~10%)	Stayed the same	Increased a little (~ 10%)	Increased a lot (> 20%)	Don't know
In the year IMMEDIATELY AFTER your ATE funding ended, how did the number of students who articulated under the agreements you developed with ATE support change?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
As of the 2004-2005 academic year, how has the number of students who articulated under the agreements you developed with ATE support changed since your final year of funding?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Articulation Agreement: Sustainability Enablers and Barriers**

Please indicate the extent to which the following were CONTRIBUTING or DETRACTING factors in the ATE sustainment of your efforts to establish articulation agreements. SELECT ONE FOR EACH QUESTION.

	Major Contributor	Minor Contributor	Not a Factor	Minor Inhibitor	Major Inhibitor
Student enrollment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Faculty support & advocacy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Faculty turnover (e.g., retirements, new hires)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Support from college administrators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
External funding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Demand by local/regional business and industry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cost to maintain/update	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
National economic trends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Emergence of newer technologies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Institutional funding cuts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Partnership with external stakeholders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ability to generate revenue from the materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide any additional information about the most important contributors or inhibitors to help us understand why your efforts to develop articulation agreements were or were not sustained after the conclusion of ATE funding.

## Research

Program guidelines state that “the ATE program is committed to applied research that assesses the effectiveness and impact of funded efforts in enhancing technician education. The purpose of the applied research projects is to ensure that the ATE program itself and the projects are grounded in research. The feedback helps all ATE projects benefit from this knowledge, strengthens the portfolio and identifies new programmatic directions.”

Briefly describe the nature of the research you conducted with ATE support.

What was the total budget for your research, including other grants and in-kind support (e.g., personnel, equipment, space)? PLEASE INDICATE FULL \$ AMOUNTS, NUMBERS ONLY (e.g., 100000).

What proportion of this funding was provided by ATE? SELECT ONE.

0-20%

21-40%

41-60%

61-80%

81-100%

Has this research continued since ATE funding ended? SELECT ONE.

- Yes
- No
- Not sure

How is the ongoing research being supported? SELECT ALL THAT APPLY.

- Other NSF program
- Other federal or state grant
- Private Foundation
- Corporation or other business interest
- Home institution
- Other education institution
- Other

Other. Please describe.

How many of the following types of research products were developed SINCE the period you received ATE support? PLEASE INDICATE NUMBERS (e.g., 15).

Books/monographs

Refereed journal articles

Trade journal articles/popular press

Conference presentations/speaking engagements

Other, please describe type and number.

How many of the following types of research products were developed DURING the period you received ATE support? PLEASE INDICATE NUMBERS (e.g., 15).

Books/monographs

Refereed journal articles

Trade journal articles/popular press

Conference presentations/speaking engagements

Other, please describe.

Please describe any cases where the results of the research had a noteworthy impact on secondary or undergraduate education?

**Research: Sustainability Enablers and Barriers**

Please indicate the extent to which the following were contributing or inhibiting factors in the sustainment of your research efforts. SELECT ONE FOR EACH QUESTION.

	Major Contributor	Minor Contributor	Not a Factor	Minor Inhibitor	Major Inhibitor
Interaction with research collaborators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Institutional/departmental priorities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Access to research subjects and/or data	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Support from college administrators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Funding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Opportunities to publish and/or present results	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide any other information about your research efforts that would help us understand why they were or were not sustained after the conclusion of ATE funding.

Thank you for participating in this NSF ATE sustainability study. With the online version you will receive an automated e-mail message that outlines your response to the survey. This e-mail does not retain section headings or questions you did not respond to.

Please use this paper version for your own reference.

If you have any questions, please do not hesitate to contact Daniela Schroeter at 269-387-5920 or via e-mail at [daniela.schroeter@wmich.edu](mailto:daniela.schroeter@wmich.edu).