# DRAFT
# 2006 ATE SURVEY
## OVERVIEW

Thank you for taking time to complete the annual ATE program evaluation survey. The audience for this survey is all active ATE awards that have been in operation for at least 12 months. Based on feedback from program stakeholders, we have revised the overall survey. Highlights of these revisions include the following:

- To reduce the time needed to complete the survey, we have changed the requirements for completing sections 4-7 of the survey regarding materials development, professional development, program improvement, and articulation agreements.

  For **PROJECTS**, we ask that you complete these sections **only** if you allocated 30% or more of your **direct** costs to an activity **in the past 12 months**.

  For **CENTERS**, we ask that you complete these sections only if you allocated $100,000 or more of your **direct** costs to an activity **in the past 12 months**.

- To further reduce the time needed to complete the survey, we have eliminated a number of open-ended questions that in the past required written responses from you. These items have either been completely removed or replaced with menu style options that now require checking a box.
- To gather more detailed information about effective ATE program practices, we have added a series of rating scales with check boxes for your responses.
- Finally, we have added a short section to assist in better understanding the roles of project leadership and staffing in ATE projects, centers, and partnerships.

The purpose of this survey is to provide evidence of the work, productivity, and quality of the ATE program through input from its projects, centers, and articulation partnerships. Findings from this survey are expected to be useful to NSF program staff in preparing their annual GPRA reports and making programmatic decisions. ATE projects, centers, and articulation partnerships can use the results of this survey to learn about the activities and findings reported by other ATE grantees and to serve their own information needs. Additional information about the ATE program evaluation can be accessed at our Website at ate.wmich.edu. In addition, the online version of the survey can be accessed through this site.

The survey will be available online February 20, 2006. The deadline for online and paper survey responses will be March 17, 2006. A complete survey schedule, including reporting dates will be communicated through our website and via email to ATE principal investigators. We will not report individual survey responses or attribute any data to a specific respondent. All data will be reported in aggregate through our website, via interactive data displays, and through formal reports to NSF.

We recommend that you review this document before completing your response so that you will have all the information you need to complete the survey. Any questions regarding this survey should be directed to:

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## GENERAL INSTRUCTIONS

1. Sections 1-3 are required for all respondents. These section address grantee characteristics, organizational practices, and collaborative activities.

2. For Sections 4-7 regarding materials development, professional development, program improvement, and articulation agreements:

   For **PROJECTS**, we ask that you complete these sections **only** if you allocated 30% or more of your **direct** costs to an activity **in the past 12 months**.

   For **CENTERS**, we ask that you complete these sections only if you allocated $100,000 or more of your **direct** costs to an activity **in the past 12 months**.

3. Focus your responses on the past 12 months only.

## SECTION 1: GRANTEE CHARACTERISTICS

This section asks for basic information about your current ATE award. For the online version of the survey, much of this information will be shown in the response fields.

1.    NSF ATE Award #: _____

2.    Award Category:    _____ Project (including articulation agreements)
                         _____ National Center
                         _____ Regional Center
                         _____ Resource Center

3.    Current total award amount:    $ _____ , _____ _____ _____ , _____ _____ _____

4.    Begin date for current award:    _____ / _____ / _____ (MM/DD/YYYY)

5.    End date for current award:    _____ / _____ / _____ (MM/DD/YYYY)

6.    Indicate the award numbers for any other ATE grants you have received that are associated with your current award (e.g., a planning grant or a previous award):

      _____    _____    _____

7.    Funded Institution Category:    _____ 4-Year College/University
                                      _____ 2-Year College
                                      _____ Association/Society
                                      _____ Secondary School
                                      _____ Other

Section 1: Grantee Characteristics

8.   Major emphasis (Select one only.):
       _____ Agriculture
       _____ Aquaculture
       _____ Biotechnology
       _____ Chemical Technology
       _____ Electronics, Instrumentation, Laser and Fiber Optics
       _____ Engineering Technology (general)
       _____ Environmental Technology
       _____ Geographic Information Systems
       _____ Graphics and Multimedia Technology
       _____ Information Technology, Telecommunications
       _____ Machine Tool Technology, Metrology
       _____ Manufacturing and Industrial Technology
       _____ Marine Technology
       _____ Mathematics
       _____ Multidisciplinary or Interdisciplinary (general)
       _____ Physics
       _____ Semiconductor Manufacturing
       _____ Transportation
       _____ Other. Specify: _____

9.   Institution name: _____

10.  Your name: _____

11.  Your role: _____

12.  Your address: _____

_____

_____

13.  Phone:   ( ____  _____  ____ )  ____  _____  _____ - ____  _____  ____  _____

14.  E-mail address: _____ @ _____

15.  Project Web site:   http:// _____

Section 1: Grantee Characteristics

16. What is the indirect cost rate used by your institution <u>for this ATE grant</u>? _____ %

17. <u>For the past 12 months</u>, estimate the proportion of your <u>direct</u> costs allocated to the following program activities.

    Note: Percentages on these direct costs should total 100%.

    | | |
    |---|---|
    | _____ | Materials development for national dissemination |
    | _____ | Professional development |
    | _____ | Program improvement |
    | _____ | Articulation agreements |
    | _____ | General operations |
    | _____ | Other. Specify: _____ |
    | 100% | Total Direct Costs for the Past 12 Months |

18. From the following list, please rank order the top <u>three</u> areas of emphasis for your project/center <u>in the past 12 months</u>. Your primary focus should be ranked #1, the second #2, and the third #3.

    \_\_\_\_\_ Increase the skills and knowledge of our students

    \_\_\_\_\_ Increase awareness among students about opportunities in STEM related careers

    \_\_\_\_\_ Increase the quality and availability of educational materials in a targeted area for our institution

    \_\_\_\_\_ Improve the quality of instruction in STEM education at our institution

    \_\_\_\_\_ Bring the curriculum up to date in terms of equipment and procedures

    \_\_\_\_\_ Improve the expertise of faculty and staff in our institution

    \_\_\_\_\_ Disseminate high quality educational materials and information to other institutions

    \_\_\_\_\_ Improve the compatibility of our curriculum with local and regional needs

    \_\_\_\_\_ Increase the expertise of faculty and staff regionally or nationally

    \_\_\_\_\_ Other. Specify: _____

Section 1:  Grantee Characteristics

19.    What do you consider to be the primary "market" for participants in or products of your ATE project/center? (Select one only.)

       _____ Local

       _____ State

       _____ Regional

       _____ National

20.    Which of the following best describes the industry served by your ATE project/center? (Select one only.)

       _____ An individual industry

       _____ One or more closely related industries

       _____ Different, unrelated industries

21.    How would you rate the relative importance of the industry or industries on which your project/center focuses to the region on which you are focused?

       _____ Very important

       _____ Important

       _____ Somewhat important

       _____ Marginally important

       _____ Not important

22.    How would you describe the current "growth mode" of the industry or industries on which your project/center is focused? (Select one only.)

       _____ High growth

       _____ Moderate growth

       _____ Stable

       _____ Moderate decline

       _____ Significant decline

## SECTION 2: ORGANIZATIONAL PRACTICES

### Challenges

1. From the following list, please rank order up to three challenges your project/center has faced in the past 12 months and indicate the extent to which the challenge has been satisfactorily resolved. Your greatest challenge should be ranked #1, your next challenge #2, and the third as #3.

|  | Rank (1, 2, or 3) | Not Yet Resolved | Partially Resolved | Fully Resolved |
|---|---|---|---|---|
| Difficulty recruiting students | | | | |
| Faculty/instructor turnover | | | | |
| Lack of qualified instructors | | | | |
| Lack of institutional administrative support/interest | | | | |
| Project/center staff/personnel turnover | | | | |
| Lack of financial resources | | | | |
| Lack of necessary instructional resources (e.g., computers, lab space) | | | | |
| Lack of support/interest from business and industry | | | | |
| Changes in the industry served by your project/center | | | | |
| Difficulty acquiring student job placement data | | | | |
| Other. Describe: _____ | | | | |

2. For what you ranked as the primary (#1) challenge you selected in question 1, please identify strategies you have used to address the challenge. ***_Please be as detailed as possible in your response. Your strategies will be shared with future ATE projects/centers/partnerships in the form of lessons learned_.***

Strategies used to address: _____

_____

_____

_____

_____

_____

_____

Please check this box if you are also willing to discuss your strategies directly with NSF program officers ☐

## Project Leadership/Staffing

This section of questions is designed to help us learn more about ATE project leadership and staffing in ATE projects/centers.

3.    What percentage of FTE does your ATE project/center <u>Principal Investigator</u>
       (PI) serve in this role? _____ % (fill in percent of time based on FTE)

       Is the FTE based on: (Select one only.)    _____    Full year (12 months)

                                                  _____    Academic year (9 months)


4.    For how many years has the PI for your project/center been employed by your
       institution?    _____


5.    Is the PI for your project/center primarily: (Select one only.)

                       _____    An Administrator  (Skip to question 7)

                       _____    A Faculty Member


6.    If a faculty member, is the PI for your project/center tenured?

                       _____    Yes

                       _____    No

                       _____    Not applicable


7.    For how long has the current PI served as PI for your project/center?

                       _____    Months


8.    How many changes in project leadership (the PI) have there been since the beginning of your project/center?

                       _____    None (0)

                       _____    1

                       _____    2

                       _____    3

                       _____    More than 3


9.    To what extent do you believe that the success of your project/center relies on a single individual or "champion" (e.g., the PI)?

                       _____    Strongly agree

                       _____    Agree

                       _____    Uncertain

                       _____    Disagree

                       _____    Strongly Disagree

Section 2:  Organizational Practices

10.     Has <u>at least one person</u> on your project/center team (e.g., the Principal Investigator) served as a PI on other externally funded grants prior to this current ATE support?

         _____  Yes

         _____  No (Skip to question 12)

11.     If you responded "Yes" to question 10, what was the funding source? (Select all that apply.)

         _____  NSF

         _____  Other federal organization/agency

         _____  Other state organization/agency

         _____  A business or industry supported project

         _____  A private foundation

         _____  Other. Describe: _____

## Workforce Needs Assessment

12.     How recently did your project/center conduct a <u>formal</u> workforce needs assessment to guide your work? (Select one only.)

         _____  Since receiving this ATE grant

         _____  Prior to receiving this ATE grant (Skip to question 14)

         _____  Never (Skip to question 15)

13.     If you have conducted a workforce needs assessment since receiving this grant: Which of the following methods did you use? (Select all that apply.)

         _____  Conduct your own survey (via telephone/mail/Internet)

         _____  Have someone conduct a survey (via telephone/mail/Internet) specifically for your project/center

         _____  Analyze existing data regarding workforce needs

         _____  Conduct focus group(s) with industry/business representatives

         _____  Formal interviews with industry/business representatives

         _____  Feedback from an advisory panel

         _____  Anecdotal information gathered through conversations

         _____  Other.  Describe: _____

Section 2:  Organizational Practices

14. For the past 12 months, please rate the extent to which the following workforce needs assessment information was useful to your project/center:

| | Not Used | Essential | Useful | Somewhat Useful | Minimally Useful | Not Useful |
|---|---|---|---|---|---|---|
| To secure project funding from sources other than the ATE program | | | | | | |
| General project planning/ development purposes | | | | | | |
| General marketing purposes | | | | | | |
| Internally to gain administrative support for the project/center | | | | | | |
| Internally to gain support from faculty | | | | | | |
| To recruit students | | | | | | |
| To recruit faculty/staff | | | | | | |
| To make a case for developing articulation agreements | | | | | | |
| To focus materials development | | | | | | |
| To focus course/program content | | | | | | |
| To focus professional development activities | | | | | | |
| To set goals and objectives | | | | | | |
| Other. Describe: _____ | | | | | | |

## Advisory Committees

15. How much did your project/center spend for advisory committee activities during the past 12 months?  (round to the nearest thousand dollars)

$ _____ _____ _____ , _0_ _0_ _0_

16. For the past 12 months, indicate the type(s) of advisory committee(s) used by your project/center to assist you in your work and rate the usefulness of each for your project/center.  If you do not have any type of advisory committee at all, skip to question 20.

| | Not Used | Essential to Our Work | Useful | Somewhat Useful | Minimally Useful | Not Useful |
|---|---|---|---|---|---|---|
| National committee (National Visiting Committee, National Advisory Board, etc.) | | | | | | |
| Regional committee | | | | | | |
| Local committee | | | | | | |
| Other. Describe: _____ | | | | | | |

Section 2:  Organizational Practices

Please answer questions 17-19 for your advisory committee with the most broad geographic reach.  For example, if you have a National Committee and a Regional Committee, respond to questions 17-19 based on the National Committee.

17.    Have you received a <u>written</u> report from your advisory committee <u>in the past 12 months</u>?

       _____  Yes

       _____  No (Skip to question 19)

18.    If you responded "Yes" to question 17, have you responded <u>in writing</u> to this report?

       _____  Yes

       _____  No

19.    <u>For the past 12 months</u>, please report the extent to which you agree with the following statements about your advisory committee(s) and/or its advice relative to your project/center.

| Our advisory committee . . . | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree |
|---|---|---|---|---|---|
| Lends credibility to our project/center | | | | | |
| Provides timely feedback from a "real world" industry/business perspective for our project/center | | | | | |
| Provides timely feedback to our program/center/partnership content | | | | | |
| Provides encouragement for our project/center | | | | | |
| Provides our project/center with access to industry business | | | | | |
| Is an advocate for our project/center | | | | | |
| Provides useful advice for our project/center | | | | | |
| Provides direct support for our project/center | | | | | |
| Understands challenges associated with operating in an academic environment | | | | | |
| Provides feasible recommendations for our project/center | | | | | |

## Evaluation

20. Indicate the type of evaluator used by your project/center. (Select one only.)

    _____ We do not have an evaluator (Skip to question 28)

    _____ External (i.e., hired specifically to evaluate this grant)

    _____ Internal (i.e., is a member of your staff)

    _____ We have both an external evaluator and an internal evaluator

21. How much did your project/center <u>spend</u> for evaluation activities <u>during the past 12 months</u>?  (round to the nearest thousand dollars)

    $ _____  _____  _____ ,  <u>0</u>  <u>0</u>  <u>0</u>

22. Who wrote the evaluation plan that was included in the NSF proposal for your project/center? (Select the <u>primary</u> responsible individual.)

    _____ Internal evaluator

    _____ External evaluator

    _____ Project PI

    _____ Other. Describe: _____

23. How closely would you say this evaluation plan is being followed?

    _____ Followed precisely

    _____ Followed

    _____ Somewhat followed

    _____ Marginally followed

    _____ Not followed

24. Have you received a <u>written</u> report from your evaluator <u>in the past 12 months</u>?

    _____ Yes

    _____ No

Section 2: Organizational Practices

25. <u>During the past 12 months</u>, how useful has your project/center evaluation been for each of the following purposes:

| | Essential | Useful | Somewhat Useful | Minimally Useful | Not Useful |
|---|---|---|---|---|---|
| *Project planning* (e.g., input at regular staff meetings based on feedback regarding project needs, processes, and outcomes) | | | | | |
| *Project improvement* (formative feedback to guide project implementation) | | | | | |
| *Project output* (determination of who has been served and in what ways) | | | | | |
| *Accountability* (confirmation that project work and products are being accomplished) | | | | | |
| *Project effectiveness* (evidence of quality of work and quality of products, improvements in student knowledge and skills, etc.) | | | | | |
| Other. Describe: _____ | | | | | |

Please answer questions 26 and 27 <u>only</u> if your project/center has an <u>external evaluator</u>.

26. <u>During the past 12 months</u>, how frequently has your <u>external evaluator</u> interacted with and exchanged project/center-related information with your staff (e.g., e-mail, teleconferences, face-to-face meetings)? (Select one only.)

         Once a month or more

         Once every three months

         Once every six months

         Once a year

         Less than once a year

Section 2: Organizational Practices

27. <u>For the past 12 months</u>, please indicate the extent to which you agree with the following statements about your <u>external evaluator</u> relative to your project/center.

| Our external evaluator . . . | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree |
|---|---|---|---|---|---|
| Understands how our project/center operates | | | | | |
| Lends credibility to the project/center | | | | | |
| Provides timely feedback of information for project/center improvement | | | | | |
| Provides encouragement/support/feedback to project/center staff/faculty | | | | | |
| Collects information that accurately reflects how the project/center is doing | | | | | |
| Uses a variety of methods (e.g., surveys, interviews, review of program content) to obtain data about the quality of the outcome produced by our project/center | | | | | |
| Provides too little time or assistance for providing requested data | | | | | |
| Helps us understand/interpret evaluation findings | | | | | |
| Helps us present evaluation findings to internal/external stakeholders | | | | | |
| Demands too much time from our project/center personnel | | | | | |
| Is flexible with respect to changes in project/center | | | | | |
| Provides evidence, <u>based on data</u>, about the quality of the outcomes produced by our project/center | | | | | |
| Provides us with advice and guidance that has been counterproductive | | | | | |
| Takes on an adversarial role with project/center personnel | | | | | |
| Takes "hands-off" stance toward our project/center activities | | | | | |
| Is an advocate for our project/center | | | | | |
| Other. Describe: _____ | | | | | |

## NSF Program Monitoring

28. <u>For the past 12 months</u>, please indicate the extent to which you agree with the following statements about NSF staff and their activities relative to your project/center.

| | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree |
|---|---|---|---|---|---|
| My NSF project officer has an accurate understanding of my center/project | | | | | |
| NSF is responsive in meeting our needs | | | | | |
| I am satisfied with the amount of interaction between our project/center and NSF | | | | | |
| NSF staff encourage our efforts | | | | | |
| NSF staff take a "hands off" stance toward our center/project | | | | | |
| NSF staff provide constructive feedback and guidance | | | | | |
| NSF evaluative actions, including site visits, have helped improve the quality of our work | | | | | |
| NSF facilitates collaboration between our project/center and other ATE awards | | | | | |
| Participation in the annual ATE PI Conference is an important part of our project/center success | | | | | |
| Other. Describe: _____ | | | | | |

# Section 3: 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.

1.  For each type of collaborator listed below, indicate the number of different organizations you collaborate with, and the number from which your project/center received substantial monetary support (e.g., cash contributions, other grants) or in-kind support (e.g., personnel time, equipment, space) in the past 12 months.

| Type of Collaborator | # of Collaborators | # providing support Monetary | # providing support In-Kind |
|---|---|---|---|
| Business/Industry groups | | | |
| Your host institution | | | |
| Other educational institutions | | | |
| Public agencies | | | |
| Other ATE awards | | | |
| Other types | | | |

2.  Indicate the total dollar value of monetary and in-kind support received by your project/center in the past 12 months from all sources other than your ATE award (round to the nearest thousand dollars).

Monetary Support      $ _____ , _____ _____ _____ , 0   0   0

In-Kind Support      $ _____ , _____ _____ _____ , 0   0   0

3.  For each type of collaboration listed below, check the box to indicate the primary purpose for collaboration with your project/center.

| Type of Collaborator | General Support | Materials Development | Professional Development | Program Improvement | Articulation Agreement | Other |
|---|---|---|---|---|---|---|
| Business/Industry groups | | | | | | |
| Your host institution | | | | | | |
| Other educational institutions | | | | | | |
| Public agencies | | | | | | |
| Other ATE awards | | | | | | |
| Other types | | | | | | |

Section 3: Collaboration

The remaining questions in this section are designed to help us learn more about factors that contribute to effective collaborative relationships. ***This information will be used to inform future ATE projects and centers about developing effective collaborations.***

4.     From the following list, please rank order what you consider to be the three most important factors for effective collaboration with organizations outside of your ATE project/center. The most important factor should be ranked #1, the next most important #2, and the third as #3.

_____ Personal relationships among staff across organizations

_____ Institutional program approval

_____ Formal organizational agreements (e.g., sharing staff, contracts)

_____ Cross organizational processes (e.g., regular meetings)

_____ Track record of previous work together

_____ Shared goals/objectives/priorities

_____ Complementary skills and resources

_____ Consistency in faculty and staff (retention)

_____ Consistency in amount of institutional support received

_____ Clarity of problem or opportunity to be addressed

_____ Clarity of benefits from collaboration for every collaborating partner

_____ Other. Describe: _____

5.     Of the following types of organizations with which your project/center has collaborated in the past 12 months, please indicate the extent to which each is useful in helping your project/center reach its objectives. (For each type of organization, either mark "Not Used" OR if used, rate the level of usefulness.)

| | Not Used | Essential | Useful | Somewhat Useful | Minimally Useful | Not Useful |
|---|---|---|---|---|---|---|
| Businesses/Industry groups | | | | | | |
| Your host institution | | | | | | |
| Other educational institutions | | | | | | |
| Public agencies | | | | | | |
| Other ATE awards | | | | | | |
| Other. Specify: _____ | | | | | | |

Section 3: Collaboration

6. <u>For the past 12 months</u>, which type of collaboration was the <u>most important</u> in helping your project/center reach its objectives? (Select one only.)

       _____ Businesses / Industry groups

       _____ Your host institution

       _____ Other educational institutions

       _____ Public agencies

       _____ Other ATE awards

       _____ Other organizations. Specify: _____

7. For the collaboration you selected as <u>most important</u> in helping in your project/center reach its objectives (in question 6), <u>for the past 12 months</u> please indicate the extent to which each of the following types assistance was useful. (For each type of assistance, either mark "Not Used" OR if used, rate the level of usefulness.)

| | Not Used | Essential to Our Work | Useful | Somewhat Useful | Minimally Useful | Not Useful |
|---|---|---|---|---|---|---|
| Providing evidence/information regarding workforce need | | | | | | |
| Developing program content (e.g., materials development & content for professional development) | | | | | | |
| Facilitating service delivery | | | | | | |
| Building community support | | | | | | |
| Facilitating/providing access to decision makers | | | | | | |
| Developing articulation agreements | | | | | | |
| Other. Describe: _____ | | | | | | |

8. For the collaboration you selected as <u>most important</u> (in question 6), did this collaborative relationship:

       _____ Exist prior to receiving ATE funding

       _____ Develop as a result of the ATE project/center (Skip to question 10)

9. If the relationship was *already in existence*, since receiving ATE funding has the level of activity associated with the collaboration:

       _____ Greatly increased

       _____ Slightly increased

       _____ Remained stable

       _____ Slightly decreased

       _____ Greatly decreased

Section 3: Collaboration

10.     For your_most important_ collaborative relationship (in question 6), which of the partners benefits most? (Select one only.)

_____ Community College (ATE project/center)

_____ Business/ Industry

_____ Community College and Business / Industry benefit equally

## Section 4: 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."

PROJECTS: Complete this section only if you allocated 30% or more of your direct costs in the past 12 months to MATERIALS DEVELOPMENT for the purpose of national dissemination.  Refer to Question #17 in Section 1 of this survey for this figure.

CENTERS: Complete this section only if you allocated $100,000 or more of your direct costs in the past 12 months to MATERIALS DEVELOPMENT for the purpose of national dissemination.

Instruction: for items 1-4 below, the total number of materials described in each question should be the same.

1.      Indicate the number of materials(s) that are in draft stage, are being field tested, or that were  completed in the last 12 months, for each type of material listed below.

| Development Stage | Type of Material | | |
|---|---|---|---|
| | Course | Module | Other |
| # in Draft Stage | | | |
| # being Field Tested | | | |
| # that are Complete | | | |

2.      Indicate the number of materials that are being used locally, elsewhere, and that have been published commercially, for each type of material listed below.

| Development Stage | Type of Material | | |
|---|---|---|---|
| | Course | Module | Other |
| # in use Locally (i.e., at the institution(s) where they were developed) | | | |
| # in use Elsewhere (i.e., at other institutions) | | | |
| # that are published commercially | | | |

3.      Indicate the number of institutions, other than your institution, that are using at least one of the materials developed by your project/center.                    _____

Section 4:  Materials Development

4.    Indicate the number of materials that are under development/have been developed that are directed at each target audience, for each type of material listed below.

| Target Audience | Type of Material | | |
| --- | --- | --- | --- |
| | Course | Module | Other |
| Secondary school | | | |
| Associate/2-year college | | | |
| Baccalaureate/4-year college | | | |
| Other. Specify: _____ | | | |

5.    Indicate the number of materials that are under development/have been developed using the instructional media indicated, for each type of material listed below.

| Instructional Media | Type of Material | | |
| --- | --- | --- | --- |
| | Course | Module | Other |
| Print (e.g., text books, manuals) | | | |
| Audio/Video (e.g., cassettes, video tapes, one media only) | | | |
| CD-ROMs (e.g., may include video, audio, text, or a combination) | | | |
| Online/Web-based training (e.g., Web CT, online self-paced learning, etc.) | | | |
| Mixed-media (e.g., text-books with supporting CD-ROM) | | | |
| Other _____ | | | |
| Other _____ | | | |
| Other _____ | | | |

Section 4:  Materials Development

6.    For the past 12 months, please rate the overall quality of materials developed by your project/center.

| Excellent | Very Good | Average | Fair | Poor |
|---|---|---|---|---|
|  |  |  |  |  |

7.    Considering the rating provided in question 6, which of the following types of evidence have you used to assess the quality of materials developed by your project/center during the past 12 months?

|  | Always Used | Used Most of the Time | Used About Half the Time | Seldom Used | Never Used |
|---|---|---|---|---|---|
| Gather input from business & industry regarding workforce needs |  |  |  |  |  |
| Use applicable student and industry standards or guidelines |  |  |  |  |  |
| Verify and validate alignment of materials with industry needs |  |  |  |  |  |
| Field test materials internally (i.e., within your project/center) |  |  |  |  |  |
| Field test materials externally (i.e., outside of your project/ center) |  |  |  |  |  |
| Assess student success in comparison with industry standards |  |  |  |  |  |
| Assess improvement of student performance in the workforce |  |  |  |  |  |
| Other. Describe: _____ |  |  |  |  |  |

8.    For each type of material listed below, indicate the total number of copies for all materials that have been distributed beyond your ATE project/center in the past 12 months.

|  | Type of Material | | |
|---|---|---|---|
|  | Course | Module | Other |
| Number of Copies Distributed |  |  |  |

9.    Describe the methods used by your project/center to nationally disseminate the materials developed:

_____

_____

_____

_____

# Section 5: 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."

PROJECTS: Complete this section only if you allocated 30% or more of your direct costs in the past 12 months to providing PROFESSIONAL DEVELOPMENT. Refer to Question #17 in Section 1 of this survey for this figure.

CENTERS: Complete this section only if you allocated $100,000 or more of your direct costs in the past 12 months to providing PROFESSIONAL DEVELOPMENT.

1. Indicate, by type, the number of professional development opportunities conducted by your project in the last 12 months, the total number of participants that attended those opportunities, and the number of participants from each education level. Do not include opportunities attended by your staff unless you also developed/delivered them.

| Type of Opportunity | # of Opportunities | # of Participants by Education Level | | |
| --- | --- | --- | --- | --- |
| | | Secondary | Associate | Baccalaureate |
| Events (e.g., conferences, workshops, institutes, college courses) that have a clear beginning and end point | _____ | _____ | _____ | _____ |
| Events that include pre-defined follow-up activities to support implementation | _____ | _____ | _____ | _____ |
| Long-term contact programs (e.g., 1-2 year mentoring, regular support from designated faculty, in-service program) | _____ | _____ | _____ | _____ |
| Internship (e.g., work exchange program where the participant works outside of their normal work setting) | _____ | _____ | _____ | _____ |
| Self-study program (e.g., self directed study, web-based training) | _____ | _____ | _____ | _____ |
| Other. Describe: _____ | _____ | _____ | _____ | _____ |

Section 5: Professional Development

2.    Based on the total number of participants in Question 1 above, indicate, by type of professional development opportunity your project or center conducts, the <u>estimated percent</u> that, based on evidence you collected, reported each level of outcome.

| Type of Opportunity | Level of Outcome | | |
| --- | --- | --- | --- |
| | % indicating **satisfaction** and/or **intent to use** the information presented | % indicating that they **tried and/or fully or partially implemented** the new materials or ideas | % indicating that **student achievement increased** due to implementation |
| Events (e.g., conferences, workshops, institutes, college courses) that have a clear begin and end point | % | % | % |
| Events that include pre-defined follow-up activities to support implementation | % | % | % |
| Long-term contact programs (e.g., 1-2 year mentoring, regular support from designated faculty, in-service program) | % | % | % |
| Internship (e.g., work exchange program where the participant works outside of their normal work setting) | % | % | % |
| Self-study program (e.g., self-directed study, web-based training) | % | % | % |
| Other. Describe: _____ | % | % | % |

3.    Which of the following best describes your professional development activities?
(Select one only.)

_____ Our professional development efforts are designed to support our broader ATE objectives (i.e., program improvement, materials development, development of articulation agreements)

_____ Our professional development efforts are intended as <u>stand alone activities</u> and are not necessarily linked or integrated with other ATE activities

4.	Please indicate to which target audience(s) your professional development is directed and rate the importance of each. (Select all that apply and rate.)

|  | N/A | Very Important | Important | Somewhat Important | Marginally Important | Not Important |
|---|---|---|---|---|---|---|
| ATE project faculty and staff |  |  |  |  |  |  |
| Faculty in my department |  |  |  |  |  |  |
| Faculty at my institution |  |  |  |  |  |  |
| Faculty at other institutions |  |  |  |  |  |  |
| Faculty across the region or nation |  |  |  |  |  |  |
| Other. Describe: _____ |  |  |  |  |  |  |

5.	How important are the following purposes for your project/center professional development efforts? (Select all that apply and rate.)

|  | N/A | Very Important | Important | Somewhat Important | Marginally Important | Not Important |
|---|---|---|---|---|---|---|
| Prepare faculty to teach NEW courses or programs |  |  |  |  |  |  |
| Update faculty knowledge and skills about SPECIFIC technologies |  |  |  |  |  |  |
| Update GENERAL TECHNOLOGY knowledge and skills |  |  |  |  |  |  |
| Update SPECIFIC INSTRUCTIONAL knowledge and skills |  |  |  |  |  |  |
| Update GENERAL INSTRUCTIONAL knowledge and skills |  |  |  |  |  |  |
| Other. Describe: _____ |  |  |  |  |  |  |

Section 5:  Professional Development

6.  For the past 12 months, please rate the overall quality of professional development activities conducted by your project/center.

| Excellent | Very Good | Average | Fair | Poor |
|-----------|-----------|---------|------|------|
|           |           |         |      |      |

7.  Considering the rating provided in question 6, which of the following types of evidence have you used to assess the quality of your project/center's professional development activities during the past 12 months?

|  | Always Used | Used Most of the Time | Used About Half the Time | Seldom Used | Never Used |
|---|---|---|---|---|---|
| End of program reaction data (e.g., satisfaction, intent to use) |  |  |  |  |  |
| Follow-up data to determine implementation/adoption of ideas (e.g., tried the ideas, fully incorporated the materials) |  |  |  |  |  |
| Follow-up data to determine impact of implementation on student achievement (e.g., are students performing better following adoption) |  |  |  |  |  |
| Feedback from instructional experts regarding content & instruction of professional development activities (e.g., comparisons of professional development content & instruction against critical competitors) |  |  |  |  |  |
| Expert panel review of professional development activities and/or products |  |  |  |  |  |
| Other. Describe: _____ |  |  |  |  |  |

# Section 6: 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."

PROJECTS: Complete this section only if you allocated 30% or more of your direct costs in the past 12 months to PROGRAM IMPROVEMENT Refer to Question #17 in Section 1 of this survey for this figure.

CENTERS: Complete this section only if you allocated $100,000 or more of your direct costs in the past 12 months to PROGRAM IMPROVEMENT.

1.     Indicate the number of programs, institutions, courses, and students enrolled for each education level that your project/center targets with program improvement efforts. If your project/center provides on-the-job training / contract training for businesses indicate the number of programs, courses, companies, and students enrolled in these efforts.

|  |  | Education Level | | | On-the-job training/ contract training |
| --- | --- | --- | --- | --- | --- |
|  |  | Secondary | Associate | Baccalaureate |  |
| a. | Total number of ATE grant-funded programs developed and/or offered |  |  |  |  |
| b. | Total number of institutions/ businesses where the ATE grant-funded programs are offered |  |  |  |  |
| c. | Total number of unique courses offered across all ATE grant-funded programs. If a course appears in more than 1 program, count it only once |  |  |  |  |
| d. | Total number of unique students who have taken at least one course in the past 12 months in one of your ATE grant-funded programs. If a student took more than one course, count them only once |  |  |  |  |

Section 6: Program Improvement

2.  Based on the total number of students reported in Question 1d above, estimate the number of students in each of the following demographic categories across all of your ATE grant-funded programs at the levels indicated.

| | Education Level | | | On-the-job training/ contract training |
|---|---|---|---|---|
| | Secondary | Associate | Baccalaureate | |
| a.  Male | | | | |
| b.  Female | | | | |
| c.  Hispanic/Latino | | | | |
| d.  American Indian or Alaska Native | | | | |
| e.  Asian | | | | |
| f.  Black or African American | | | | |
| g.  Native Hawaiian or other Pacific Islander | | | | |
| h.  Multiracial | | | | |
| i.  White Non Hispanic/Latino | | | | |
| j.  Students requesting accommodation under the Americans with Disabilities Act | | | | |

3.  For the past 12 months only, estimate the number of (1) applicants, (2) students who were accepted, and (3) students who were newly enrolled in your ATE grant-funded programs.

| | Education Level | | |
|---|---|---|---|
| | Secondary | Associate | Baccalaureate |
| Number of applicants to our programs in the past 12 months | | | |
| Number of students that were accepted to our programs in the past 12 months | | | |
| Number of students that newly enrolled in our programs in the past 12 months | | | |

4. Estimate the number of students across all of your ATE-funded programs, in each of the following categories.
   Note: In your response a = c + d + e

| | Education Level | | | On-the-job training/ contract training |
| --- | --- | --- | --- | --- |
| | Secondary | Associate | Baccalaureate | |
| a. Enrolled students | | | | |
| b. Employed as technician prior to enrollment | | | | N/A |
| c. Completed the specified program/course | | | | |
|    1. Started / continued employment as a technician | | | | |
|    2. Started / continued STEM education | | | | |
| d. Left the program prior to completion (e.g., dropped out, changed majors, etc.) | | | | |
|    1. Started / continued employment as a technician | | | | |
|    2. Started / continued STEM education | | | | |
| e. Students remaining in the program (i.e., did not complete nor leave the program entirely/drop-out) | | | | N/A |

Section 6:  Program Improvement

5.  For the past 12 months, please rate the overall quality of program improvement activities conducted by your project/center.

| Excellent | Very Good | Average | Fair | Poor |
|-----------|-----------|---------|------|------|
|           |           |         |      |      |

6.  Considering the rating provided in question 5, which of the following types of evidence have you used to assess the quality of your project/center's program improvement activities during the past 12 months?

|  | Always Used | Used Most of the Time | Used About Half the Time | Seldom Used | Never Used |
|---|---|---|---|---|---|
| Course level student satisfaction data |  |  |  |  |  |
| End of program student satisfaction data |  |  |  |  |  |
| Student course grades |  |  |  |  |  |
| Data regarding student dropout rate |  |  |  |  |  |
| Data on student or industry referrals to the program |  |  |  |  |  |
| Post program follow up data from students (e.g., employment status, preparedness for industry) |  |  |  |  |  |
| Post program follow up data from supervisors of students (e.g., re. skills, knowledge preparedness for industry) |  |  |  |  |  |
| Testing of students against established business/industry work standards |  |  |  |  |  |
| Comparison of students' knowledge and skills against other critical competitors (e.g., other colleges or military programs, or other course options) |  |  |  |  |  |
| Feedback from instructional experts regarding content and instruction of courses and program (e.g., comparisons of program content and instruction against critical competitors) |  |  |  |  |  |
| Expert panel review of program and/or products |  |  |  |  |  |
| Other. Describe: _____ |  |  |  |  |  |

7.     From the following list, please rank order the <u>three most important factors</u> influencing the success of your project/center program improvement activities.  The most important factor should be ranked #1, the next most important #2, and the third as #3. Then, for the three you select as most important, indicate the extent to which each is an inhibitor or a contributor.

| Rank Order the Three Most Important Factors (1, 2, or 3) | Major Inhibitor | Inhibitor | Uncertain | Contributor | Major Contributor |
|---|---|---|---|---|---|
| Student enrollment | | | | | |
| Student retention through program completion | | | | | |
| Institutional course approval | | | | | |
| Institutional program approval | | | | | |
| Faculty support & advocacy | | | | | |
| Quality of instructors | | | | | |
| Faculty turnover (e.g., retirements, new hires) | | | | | |
| Support from college administrators | | | | | |
| External funding | | | | | |
| Demand by business and industry | | | | | |
| Cost to maintain/update | | | | | |
| National economic trends | | | | | |
| Emergence of newer technologies | | | | | |
| Stability of institutional funding | | | | | |
| Partnership with external stakeholders | | | | | |
| Ability to generate revenue to support the program | | | | | |
| Other. Describe: _____ | | | | | |

# Section 7: ARTICULATION AGREEMENTS

Articulation agreements are defined as specific agreements that allow students who complete an education program or series of courses to matriculate to a higher level of education at specified institutions. This section addresses both articulation agreements for students preparing for careers as technicians as well as teacher preparation agreements.

PROJECTS: Complete this section only if you allocated 30% or more of your direct costs in the past 12 months to developing ARTICULATION AGREEMENTS.  Refer to Question #17 in Section 1 of this survey for this figure.

CENTERS: Complete this section only if you allocated $100,000 or more of your direct costs in the past 12 months to developing ARTICULATION AGREEMENTS.

1. For each category of articulation agreement, indicate the number of agreements in place, the number of institutions involved, and the total number of students that articulated in the past 12 months under the agreements indicated.

   Note: Articulated means a student completed the program AND matriculated at the higher-level institution.

|  | Category of Articulation Agreement | | |
|  | Technician Preparation | | Teacher Preparation |
|  | High school to 2-year college | 2-year college to 4-year college | 2-year college to 4-year college |
|---|---|---|---|
| Number of articulation agreements in place |  |  |  |
| Number of institutions involved in the agreements |  |  |  |
| Number of students that articulated in the past 12 months |  |  |  |

Instruction: For the remainder of this section, SELECT 1 agreement counted in question 1 and respond to the following questions based solely on information from that agreement.

2. Agreement name: _____

3. Level of institutions involved: (Select one only.)

   _____ High School to 2-Year College

   _____ 2-Year College to 4-Year College

   _____ High School to 2-Year College to 4-Year College (2+2+2)

4. Number of institutions involved: _____

Section 7: Articulation Agreements

5.       Characteristics of the agreement: (Select all that apply)

———— Some or all of the general education credits for specific courses transfer

———— Some or all of the technical education credits for specific courses transfer

———— Program completion allows students to matriculate at selected institutions

———— Program completion allows students to matriculate at selected institutions with standing in a specific degree program

6.       For the selected articulation agreement, what is the number of students that articulated (i.e., completed the program AND matriculated at the higher-level     —————— institution) in the past 12 months under this agreement?

7.       For the selected articulation agreement, based on the number provided in the previous question, estimate of the number of students in each of the following demographic categories who articulated in the last 12 months.

| | Number of Students |
|---|---|
| a.  Male | |
| b.  Female | |
| c.  Hispanic/Latino | |
| d.  American Indian or Alaska Native | |
| e.  Asian | |
| f.  Black or African American | |
| g.  Native Hawaiian or other Pacific Islander | |
| h.  Multiracial | |
| i.  White Non Hispanic/Latino | |
| j.  Student Requesting accommodation under the Americans with Disabilities Act | |

8.  From the following list, please rank order the <u>three most important factors</u> influencing the success of your project/center developing or establishing articulation agreements.  The most important factor should be ranked #1, the next most important #2, and the third as #3. Then, for the three you select as most important, indicate the extent to which each is an inhibitor or a contributor.

| Rank Order the Three Most Important Factors (1, 2, or 3) | Major Inhibitor | Inhibitor | Uncertain | Contributor | Major Contributor |
|---|---|---|---|---|---|
| Student interest/demand | | | | | |
| Faculty support & advocacy | | | | | |
| Faculty turnover (e.g., retirements, new hires) | | | | | |
| Course specifications (e.g., content, # of credit hours) | | | | | |
| Quality of instructors at institution from which students will be articulating | | | | | |
| Community college & university admission requirements | | | | | |
| Support from college administrators | | | | | |
| Institutional program approval | | | | | |
| Anticipated stability of institutional funding | | | | | |
| Expected ability to generate revenue | | | | | |
| Expected cost to maintain/update the articulation process | | | | | |
| Partnership with other educational institutions | | | | | |
| External funding | | | | | |
| Demand by business and industry | | | | | |
| National economic trends | | | | | |
| Other. Describe: _____ | | | | | |