# 2008 ATE SURVEY OVERVIEW

This survey serves three primary purposes: (1) to provide information about the ATE program activities and impacts, (2) to provide information that will guide possible studies on specific topics and issues, and (3) to help guide projects in their activities.

Findings from this survey will be used by NSF program staff to prepare their annual reports and make program decisions. ATE projects and centers can use the survey results to learn about the activities reported by other ATE grantees and to serve their own information needs. Additional information about the ATE program evaluation is available at <a href="http://ate.wmich.edu">http://ate.wmich.edu</a>.

We will neither report individual survey responses nor attribute any data to a specific respondent. Survey findings and aggregated data across projects and centers will be made available through our Web site and in formal reports to NSF.

The deadline for survey completion is March 17, 2008. We recommend that you review the survey in its entirety before responding so that you will have all the necessary information at hand to answer the questions.

Questions regarding this survey should be directed to

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Thank you for participating in this survey process.

#### **GENERAL INSTRUCTIONS**

- 1. Sections 1-3 are required for all respondents. These sections address grantee characteristics, organizational practices, and collaborative activities.
- 2. Sections 4-6 are about materials development, professional development, and program improvement, respectively. Only complete those sections if in 2007 your project or center allocated EITHER 30 percent or more of its direct costs OR at least \$100,000 to the activity in question.
- 3. Focus your responses on the 2007 calendar year: January 1 December 31, 2007.

### **SECTION 1: BACKGROUND INFORMATION**

Please provide the following information. If you are responding to the online version of the survey, much of the information will be shown in the response areas. Please check to make sure it is accurate. If not, replace the incorrect information with the correct information.

| 1.  | NSF ATE award #:   |
|-----|--|
| 2.  | Award category: Project (including articulation agreements)  Center  |
| 3.  | Your name:   |
| 4.  | Your institution:  |
| 5.  | Your role on the ATE grant:  |
| 6.  | Your office address:   |
| 7.  | Phone: ( )   |
| 8.  | Your e-mail address: @   |
| 9.  | Project/Center Web site, if there is one. http://                    |
| 10. | Total funds awarded in the current grant for this project/center. \$ |
| 11. | Beginning date for current award: / / (MM/DD/YYYY)                   |
| 12. | Ending date for current award: / / (MM/DD/YYYY)                      |

| otal award | r center/project's current get? (Estimate provided is amount/award length in ed to the nearest \$10,000.) \$,,,   |
|------------|---|
|            | our response to item 13, estimate the percentage of your annual budget allocated ving activities. Please reply for the <u>present grant year</u> only. Percentages should ercent. |
|            | Materials development for national dissemination  |
|            | Professional development  |
|            | Program improvement   |
|            | Targeted research   |
|            | Evaluation (internal and external)  |
|            | Advisory committees   |
|            | Institutional indirect costs  |
|            | Other (specify):  |
| 100%       | Total project/center costs for 2007   |
| Yes<br>No  | eceived any other ATE grant awards that are associated with your current award?  ered YES, report their award numbers below. If NO, go to the next question.                      |
|            | of the following received the NSF grant funds (i.e., is the budgetary agent) for your er?  1-year college/university  |
|            | oject/cent  |

| 17. | •         | centage of the grant budget was targeted to serve individuals or groups at each type on? Estimate to the nearest 10 percent. |
|-----|-----------|--|
|     | %         | 4-year college/university  |
|     | %         | 2-year college   |
|     | %         | Association/society  |
|     | %         | Secondary school   |
|     | %         | Business/industry  |
|     | %         | Other  |
|     | 100%      | Total  |
| 18. | Choose or | ne of the following options to describe the major emphasis of your project/center.   |
|     | A         | Advanced materials (polymers, nanotechnology, microsystems, composites)  |
|     | Е         | Bio-related technologies (biotechnology, biomanufacturing, etc.)   |
|     |           | Chemical technology (process technicians, lab tech, pharmaceuticals)   |
|     | E         | Electronics and photonics (also instrumentation)   |
|     | E         | Energy technology (alternative energy, fuel cells, power plants, hybrid vehicles)  |
|     | E         | Engineering technology (also core technology courses)  |
|     |           | Environmental technology (agriculture, sustainable resources, sustainable levelopment)                                       |
|     |           | Graphics and multimedia (video and gaming)   |
|     | lı        | nformation technology (telecommunications, GIS, information systems)   |
|     | N         | Manufacturing (automated manufacturing, rapid prototyping, welding)  |
|     | F         | Marine technologies Professional development (problem-based case learning, in-service and preservice education)              |
|     | §         | Science core (mathematics, physics, biology)   |
|     | §         | Student issues (recruitment, retention, articulation)  |
|     | т         | argeted research   |
|     | Т         | ransportation (automotive, aerospace, logistics)   |
|     |           | Other (e.g., forensics, construction)  |
|     |           |  |

- 19. Listed below are possible dissemination activities that your project/center may have carried out in 2007.
  - (i) Check (✓) those activities that you have done.
  - (ii) Write in the number of such activities.
  - (iii) Estimate the audience size for these activities (cells left blank will be treated as zeros).

| Dissemination Activities |  | (i)<br>We did<br>this | (ii)<br>Number<br>of times | (iii) Estimated Audience Size for the Target Audience(s) (✓) |                        |                                     |   |
|--------------------------|--|-----------------------|----------------------------|--|------------------------|-------------------------------------|---|
|                          |  | (√)                   |                            | Business/<br>Industry  | Secondary<br>Education | Associate<br>Degree<br>Institutions | Baccalaureate<br>Degree<br>Institutions |
| a.                       | Presentations at conferences   |                       |                            |  |                        |                                     |   |
| b.                       | Booths at conferences or career days   |                       |                            |  |                        |                                     |   |
| C.                       | Presentations at education institutions  |                       |                            |  |                        |                                     |   |
| d.                       | Special project/center events at this project/center site                                      |                       |                            |  |                        |                                     |   |
| e.                       | Special project/center events at a collaborator site   |                       |                            |  |                        |                                     |   |
| f.                       | Distributed promotional materials (e.g., brochures, posters) related to your project or center |                       |                            |  |                        |                                     |   |
| g.                       | Developed Web site for your project/center (number of hits)                                    |                       |                            |  |                        |                                     |   |
| h.                       | Other (describe):  |                       |                            |  |                        |                                     |   |

20. Please rate the priority your project/center gave to each of the following outcomes in 2007.

<u>High priority</u>: A large proportion (e.g., 50% or more) of our project/center's work emphasis was placed here.

<u>Medium priority</u>: Some of the project/center's work emphasis was placed here, but other aspects of the project received equal or greater emphases.

Low priority: Little (e.g. 10%) or no project/center work emphasis was placed here.

|    | Possible Grant Outcomes   | Low<br>Priority | Medium<br>Priority | High<br>Priority |
|----|---|-----------------|--------------------|------------------|
| a. | Student recruitment and retention: Increasing the number or diversity of students in your program   |                 |                    |                  |
| b. | Materials development: Improving the quality of or access to instructional materials  |                 |                    |                  |
| C. | Faculty development: Upgrading faculty/instructor skills in defined technician areas  |                 |                    |                  |
| d. | Program improvement: Increasing the number of programs, courses, or other program options available to students                                 |                 |                    |                  |
| e. | General skill development: Increasing student knowledge<br>and skill in STEM (science, technology, engineering, and<br>mathematics) disciplines |                 |                    |                  |

| 21. | Sustaining our project/center or its products, outcomes, and collaborative relations beyond |
|-----|---|
|     | the completion of ATE grant funding (select only one)                                       |

| a. | has not been considered  |
|----|--|
| b. | is expected to happen as a natural project/center outcome                                      |
| c. | has been a discussed on occasion (e.g., discussed with an advisory panel)                      |
| d. | is regularly considered in our project planning and work (e.g., evident in project reports)    |
| e  | is an objective for which we regularly evaluate progress (e.g., evident in evaluation reports) |

### **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. *Matriculation may occur in a sequential or concurrent (seamless) fashion.* Sequential matriculation occurs when a student completes the program at the lower level and then begins taking courses at the higher level institution. Concurrent matriculation occurs when the student is simultaneously (dual) enrolled at both the lower and higher education level institutions. This section addresses both articulation agreements for students preparing for careers as technicians as well as teacher preparation agreements.

| വ   | Dravide the requested number at each education level for each of the following articulations |
|-----|--|
|     | No (If NO, go to the end of this section.)   |
|     | Yes (If YES, go to Question 23.)   |
| 22. | is developing articulation agreements part of your project/center activities?                |

23. Provide the requested number at each education level for each of the following articulation characteristics.

|    | Articulation Characteristic   | High School to<br>2-Year College | 2-Year College to<br>4-Year College |
|----|---|----------------------------------|-------------------------------------|
| a. | Total number of articulation agreements in place (sequential and concurrent)  |                                  |                                     |
| b. | Number of articulation agreements that provide for concurrent matriculation—dual enrollment of students at both education levels                |                                  |                                     |
| C. | Number of institutions involved in all the agreements   |                                  |                                     |
| d. | Number of students that articulated in the past 12 months (enrolled at the higher education level under the terms of an articulation agreement) |                                  |                                     |

Answer Question 24 only if your project/center has one or more articulation agreements in place.

| 24. | For each articulation agreement characteristic listed, indicate (check) which of the following |
|-----|--|
|     | characteristics describe at least one of your articulation agreements Check all that apply for |
|     | each education level.  |

|    | Agreement Characteristics  | High School to 2-<br>Year College | 2-Year College to 4-<br>Year College |
|----|--|-----------------------------------|--------------------------------------|
| a. | Students can enroll for dual credit (i.e., credit at both institutions)  |                                   |                                      |
| b. | Course credits can be applied to the matriculating institution whether or not the student graduates from the "feeder" institution                          |                                   |                                      |
| C. | Dual credit courses receive full college credit (e.g., as part of the major) at the matriculation institution  |                                   |                                      |
| d. | The number of dual credit courses that can be applied to a degree or program at the matriculating institution is restricted                                |                                   |                                      |
| e. | Some or all of the general education credits for specific courses transfer   |                                   |                                      |
| f. | Some or all of the technical education credits for specific courses transfer as elective credits   |                                   |                                      |
| g. | Program completion allows students to matriculate at selected institutions   |                                   |                                      |
| h. | Agreement provides for students to matriculate at selected institutions, but not necessarily into specific degree programs                                 |                                   |                                      |
| i. | Agreement provides for students to matriculate into specific degree programs at selected institutions  |                                   |                                      |
| j. | Some or all of the technical education credits for specific courses transfer as a part of the matriculation program's requirements (i.e., student's major) |                                   |                                      |
| k. | Other (describe):  |                                   |                                      |

| 25. | What types of evidence would you consider most useful for making the case for or demonstrating the success of articulation agreements? Please describe. |  |  |  |  |
|-----|---|--|--|--|--|
|     |   |  |  |  |  |
|     |   |  |  |  |  |
|     |   |  |  |  |  |

## **SECTION 2: ORGANIZATIONAL PRACTICES**

# **Workforce Needs Assessment**

| 1  | Did your project/center gather workforce needs asses   | sment da                      | ta in 2007 | 7?                    |          |
|----|--|-------------------------------|------------|-----------------------|----------|
|    | Yes (If YES, go to Question 2.)  |                               |            |                       |          |
|    | No (If NO, go to Question 3 regarding Adv  | risory Cor                    | nmittees.  | )                     |          |
| 2  | Check the types of workforce needs assessments you if the focus was local, regional, and/or national for each that you may check (🗸) more than one focus.                                  |                               |            |                       |          |
|    |  | Check                         | Focus      | of Those Yo           | u Marked |
|    | Types of Workforce Needs Assessment Information and Processes  | (√)<br>those<br>that<br>apply | Local      | ( <b>√</b> ) Regional | National |
| а. | Review of reports/studies written by others (state, agencies, specific industry groups, etc.)  |                               |            |                       |          |
| Э. | Obtained work performance data from business/ industry or other constituent group (items <b>c-k</b> below are intended to more fully describe actions you took to gather or use this data) |                               |            |                       |          |
| С  | omplete <u>c-k</u> only for columns checked in <u>b</u> above.   |                               |            |                       |          |
| Э. | Conducted your own survey (via telephone/mail/<br>Internet)  |                               |            |                       |          |
| d. | Hired an outside individual or organization to conduct a survey (via telephone/mail/Internet) specifically for your project/center   |                               |            |                       |          |
| Э. | Analyzed <u>existing</u> data regarding workforce needs (i.e., data gathered by business or industry for their own purposes but made available to you for your purposes)                   |                               |            |                       |          |
|    | Conducted focus group(s) with industry/business representatives  |                               |            |                       |          |
| g. | Conducted formal interviews with industry/business representatives   |                               |            |                       |          |
| Դ. | Obtained feedback from an advisory committee   |                               |            |                       |          |
|    | Gathered anecdotal information through conversations with business/industry representatives  |                               |            |                       |          |
|    | Obtained feedback from partners and alliances  |                               |            |                       |          |
| ∢. | Other (describe):  |                               |            |                       |          |

# **Advisory Committees**

| 3  | For the following questions about advisory committee activities, please check (✓) t | the |
|----|---|-----|
| J. | appropriate boxes if the answer is YES.   |     |

|    |   | Type of Committee              |                |                     |  |
|----|---|--------------------------------|----------------|---------------------|--|
|    |   | National Committee             | Regional       | Local               |  |
|    |   | (National Visiting Committee,  | Committee      | Committee           |  |
|    |   | National Advisory Board, etc.) |                |                     |  |
| a. | Did you use this type of committee in 2007?   |                                |                |                     |  |
| b. | Is ATE grant work the primary focus of the committee?                                       |                                |                |                     |  |
|    | swer parts <u>c-f</u> for only those colum<br>bove.   | ns where you answered ye       | s to both ques | stions <u>a</u> and |  |
| C. | How many times per year do they meet (face-to-face or via video or teleconference)?         |                                |                |                     |  |
| d. | Is this committee funded by your project/center ATE grant?                                  |                                |                |                     |  |
| e. | Did the committee provide a written report?   |                                |                |                     |  |
| f. | Did you respond in writing to this report? (Answer only if the answer to <b>e</b> was yes.) |                                |                |                     |  |

# Evaluation

| 4. | Sele | ct the type | e of evaluator(s) used by your project/center (select only one).   |
|----|------|-------------|--|
|    | a.   |             | We do not have an evaluator, either internal or external (If you check this response, skip to question 11.)                          |
|    | b.   |             | Type 1 external evaluator only (i.e., hired specifically to evaluate this grant—<br>External to project and institution)             |
|    | c.   |             | Type 2 external evaluator only (i.e., hired specifically to evaluate this grant—<br>External to project but internal to institution) |
|    | d.   |             | Internal evaluator only (i.e., is a member of your staff)  |
|    | e.   |             | We have both an external evaluator and an internal evaluator.  |
| 5. | Do y | ou have a   | current, detailed evaluation plan for your project/center?   |
|    |      | No          |  |
|    |      |             |  |

| 6.  | Did you receive Yes No                               | a written report f  | rom your ev         | aluator in 2007 | 7?            |                       |     |  |  |  |
|-----|--|---|---------------------|-----------------|---------------|-----------------------|-----|--|--|--|
| 7.  | Did you receive Yes No                               | an oral report fro  | m your eva          | luator in 2007? |               |                       |     |  |  |  |
|     | If you answered provided in these                    |   |                     |                 | ect/center us | ed the informat       | ion |  |  |  |
| -   |  |   |                     |                 |               |                       |     |  |  |  |
| -   |  |   |                     |                 |               |                       |     |  |  |  |
| -   |  |   |                     |                 |               |                       |     |  |  |  |
| Ans | wer Questions  | 9 and 10 only if  | you indica          | ted use of an   | external eva  | aluator.              |     |  |  |  |
| 9.  | In 2007, how fre related informati (select only one) | on with your staf   |                     |                 |               |                       |     |  |  |  |
|     | a. Rare  | ely (e.g., one to th  | ree times)          |                 |               |                       |     |  |  |  |
|     |  | Infrequently (e.g., not every month but at least quarterly)           |                     |                 |               |                       |     |  |  |  |
|     |  | Occasionally (e.g., more often than quarterly and as much as monthly) |                     |                 |               |                       |     |  |  |  |
|     | d Ofter  | Often (e.g., more often than monthly and as much as biweekly)         |                     |                 |               |                       |     |  |  |  |
|     | e Cont   | inually (e.g., very   | nearly we           | ekly, weekly, o | more often)   |                       |     |  |  |  |
| 10  | How useful is th                                     | e interaction vou   | have with           | vour project/ce | nter's extern | al evaluator?         |     |  |  |  |
| 10. | Not<br>Applicable                                    | Not<br>Useful   | Minimally<br>Useful |                 | Useful        | Essential to Our Work |     |  |  |  |
|     |  |   |                     |                 |               |                       |     |  |  |  |

# **Professional Development Opportunities for Project/Center Staff**

The questions in this section pertain only to professional development opportunities that your project or center staff **attended**. Please **DO NOT** include professional development activities provided by your project/center; these are addressed in Section 5 of this survey.

| 11. |      | your project/center use grant funds to provide support for professional development livement by project/center faculty in 2007?                              |
|-----|------|--|
|     |      | Yes (If YES go to Question 12)   |
|     |      | No (If NO, skip to the end of this section)  |
| 12. |      | ch of the following types of professional development activities describe the ways in ch project/center faculty members were engaged? (Check all that apply) |
|     | Me   | etings and conferences pertinent to ATE  |
|     | a.   | Participation in the annual ATE PI meeting   |
|     | b.   | Attended without presenting at a regional or national conference   |
|     | C.   | Attended and presented at a regional or national conference  |
|     | d.   | Other (describe):  |
|     | Dire | ected learning experiences pertinent to ATE  |
|     | a.   | Participation in a short-term workshop or training program (one week or less)  |
|     | b.   | Enrollment in a course or multiweek training program  Participation in a long-term (e.g., semester) internship, externship, work release                     |
|     | c.   | program, or study (e.g., on location at a business or industry)  |
|     | d.   | Enrollment in a degree program   |
|     | e.   | Other (describe):  |

### **SECTION 3: COLLABORATION**

Collaboration is defined as a relationship with another institution, business, or group that provides money and/or other support to your project or center. Collaborators are not funded by the grant; collaborators may include local businesses, other education institutions, public agencies, industry groups, other ATE projects and centers, or groups within your host institution but outside your project/center.

1. For each type of collaborator listed below, report the <u>number</u> of different groups or organizations you collaborate with and the <u>number</u> 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, facilities) <u>in 2007</u>.

|    |   | # of                                    | # Providing | Support |
|----|---|---|-------------|---------|
|    | Type of Collaborator                            | Collaborator Groups or<br>Organizations | Monetary    | In-Kind |
| a. | Business/industry                               |   |             |         |
| b. | Within your host institution (e.g., department) |   |             |         |
| C. | Other education institutions                    |   |             |         |
| d. | Public agencies                                 |   |             |         |
| e. | Other ATE awards                                |   |             |         |
| f. | Other types                                     |   |             |         |

| 2. | •                | netary and in-kind support received by your project/center n your ATE award (round to the nearest thousand dollars). |
|----|------------------|--|
|    | Monetary support | \$<br>·,,,,  |
|    | In-kind support  | \$<br>·,   |

3. For each type of collaborator listed below, check (✓) **up to two** options that best describe the primary benefits to your project/center in 2007. Each <u>column</u> should have two checked benefits at most.

| Collaboration Benefit to Your<br>Project/Center |   | Type of Collaborator  |                                    |                                    |                    |                       |  |  |  |
|---|---|-----------------------|------------------------------------|------------------------------------|--------------------|-----------------------|--|--|--|
|   |   | Business/<br>Industry | Within Your<br>Host<br>Institution | Other<br>Education<br>Institutions | Public<br>Agencies | Other ATE<br>Awardees |  |  |  |
| a.  | General support                                 |                       |                                    |                                    |                    |                       |  |  |  |
| b.  | Financial support                               |                       |                                    |                                    |                    |                       |  |  |  |
| C.  | Developing program content                      |                       |                                    |                                    |                    |                       |  |  |  |
| d.  | Facilitating service delivery                   |                       |                                    |                                    |                    |                       |  |  |  |
| e.  | Providing access to decision makers             |                       |                                    |                                    |                    |                       |  |  |  |
| f.  | Providing information regarding workforce needs |                       |                                    |                                    |                    |                       |  |  |  |
| g.  | Developing articulation agreements              |                       |                                    |                                    |                    |                       |  |  |  |

| 4. | If your project/center received <u>other types of benefits</u> from these collaborative efforts in 2007, please briefly describe the nature of benefits received and which of the collaborator groups provided these benefits. |  |  |  |  |  |
|----|--|--|--|--|--|--|
|    |  |  |  |  |  |  |
|    |  |  |  |  |  |  |
|    |  |  |  |  |  |  |
|    |  |  |  |  |  |  |

5. Collaborative efforts are expected to produce benefits to the collaborator groups as well as to your project/center. For each type of collaborator, please check (✓) **up to two** benefits that you believe the collaborator group received. Each <u>column</u> should have two checked benefits at most.

|    |   | Type of Collaborator  |                                    |                                    |                    |                       |  |  |
|----|---|-----------------------|------------------------------------|------------------------------------|--------------------|-----------------------|--|--|
| 1  | Benefit to<br>the Collaborating Group   | Business/<br>Industry | Within Your<br>Host<br>Institution | Other<br>Education<br>Institutions | Public<br>Agencies | Other ATE<br>Awardees |  |  |
| a. | Direct monetary benefit<br>(e.g., reduced costs for<br>training employees)                    |                       |                                    |                                    |                    |                       |  |  |
| b. | Access to facilities, equipment, etc.   |                       |                                    |                                    |                    |                       |  |  |
| C. | Intellectual support (new ideas, better techniques, expert advice, etc.)                      |                       |                                    |                                    |                    |                       |  |  |
| d. | Increased time on<br>task—more people<br>and/or more time<br>applied to defined<br>priorities |                       |                                    |                                    |                    |                       |  |  |
| e. | Improved quality of a targeted group (workforce technicians, students, etc.)                  |                       |                                    |                                    |                    |                       |  |  |
| f. | Marketing or sales improvement  |                       |                                    |                                    |                    |                       |  |  |
| g. | Improved outcomes<br>(better quality products,<br>community relations,<br>etc.)               |                       |                                    |                                    |                    |                       |  |  |
| h. | Access to your program or its students  |                       |                                    |                                    |                    |                       |  |  |
| i. | Opportunities to teach in your college  |                       |                                    |                                    |                    |                       |  |  |

| 6. | If <u>other benefits</u> resulted from these collaborations in 2007, in the space provided please describe the nature of benefits received and indicate which of the collaborating groups received the benefits. |  |  |  |  |
|----|--|--|--|--|--|
|    |  |  |  |  |  |
|    |  |  |  |  |  |
|    |  |  |  |  |  |
|    |  |  |  |  |  |

| 7. | What factors do you consider important for extending your collaborative relationships beyond the completion of your ATE grant funding? |
|----|--|
|    |  |
|    |  |
|    |  |

#### **SECTION 4: MATERIALS DEVELOPMENT**

Complete this section if your project/center develops materials for national dissemination and the funds your project/center allocated to materials development activities in 2007 amounted to <u>EITHER</u> 30 percent or more of its direct costs OR at least \$100,000.

This section of the survey focuses strictly on materials developed for national dissemination to serve instructional purposes (e.g., it does not include project/center promotional materials). Materials addressed here are the media (textbooks, laboratory experiments and manuals, software, CD-ROMs, videos, or other courseware) used to convey the content and instruction of activities, modules, and courses. For survey purposes we have defined activity, module, and course as follows:

**Course:** A stand-alone collection of instructional content and activities to achieve some desired educational outcomes. Courses usually last a semester or a year.

**Module:** A self-contained collection of content and activities designed to achieve a set of specific objectives. Modules are generally shorter than courses and focus on fewer outcomes.

**Activity:** An activity is an instructional exercise—for example, a laboratory experiment—designed to achieve a discrete learning outcome or a test to measure achievement or progress toward that outcome.,

For the items in this section, we are interested in the number of **discrete** activities, modules, and courses that your project/center developed in 2007. Do <u>not</u> count an activity in the activity category if it was included as part of a module or course. Similarly, do not count a module separately if it is included within a course you reported.

1. For each type of material listed below, report the number of materials that were in draft stage or field-tested in 2007.

| Dayslanment Stees |                   | Type of Material |        |          |  |
|-------------------|-------------------|------------------|--------|----------|--|
|                   | Development Stage | Course           | Module | Activity |  |
| a.                | # in draft stage  |                  |        |          |  |
| b.                | # field-tested    |                  |        |          |  |

2. For each type of material listed below, report the number of materials that were completed <u>in</u> 2007.

|    |  | Type of Material |        |          |
|----|--|------------------|--------|----------|
|    |  | Course           | Module | Activity |
| a. | Number that were completed (If your answer is 0 for each of these three cells, skip to item 4) |                  |        |          |

3. For the materials you reported as complete in **Question 2**, report that are being used locally, elsewhere, and that have been published commercially. (A single course, module, or activity may be reported in multiple rows.)

| Motoriala Distribution                                   | Type of Material |        |          |  |
|--|------------------|--------|----------|--|
| Materials Distribution                                   | Course           | Module | Activity |  |
| a. Number in use locally (at your institution)           |                  |        |          |  |
| b. Number in use elsewhere (i.e., at other institutions) |                  |        |          |  |
| c. Number that were published commercially               |                  |        |          |  |

| 4. | For the materials you reported as complete in <b>Question 2</b> , report the number of |  |
|----|--|--|
|    | institutions, other than your own, that are using at least one of them.                |  |

5. For the materials you reported in **Questions 1a-b and Question 2**, report the number of materials that are directed at each target audience for each type of material.

| Torrest Audion on                                  | Type of Material |        |          |  |
|--|------------------|--------|----------|--|
| Target Audience                                    | Course           | Module | Activity |  |
| a. Secondary school                                |                  |        |          |  |
| b. 2-year college                                  |                  |        |          |  |
| c. 4-year college                                  |                  |        |          |  |
| d. Business/industry training or education program |                  |        |          |  |
| e. Other (specify):                                |                  |        |          |  |

6. For the materials you reported in **Questions 1a-b and Question 2**, report the number of materials that use the instructional media indicated.

|    | Instructional Media   |  | Type of Material |          |  |  |
|----|---|--|------------------|----------|--|--|
|    |   |  | Module           | Activity |  |  |
| a. | Print only (e.g., textbooks, manuals)   |  |                  |          |  |  |
| b. | Audio/video only (e.g., cassettes, videotapes, one medium only)                     |  |                  |          |  |  |
| C. | CD-ROMs (e.g., may include video, DVDs, audio, text, or a combination)              |  |                  |          |  |  |
| d. | Online/Web-based only (e.g., Web CT, online self-paced learning)                    |  |                  |          |  |  |
| e. | Mixed media (e.g., textbooks with supporting CD-ROM—any combination of above types) |  |                  |          |  |  |
| f. | Ipods, MP3s, etc.   |  |                  |          |  |  |
| g. | Other (describe):   |  |                  |          |  |  |

| 7. | In 2007, did you evaluate the quality of materials developed by your project/center? |
|----|--|
|    | Yes (If YES, please go to Question 8)  |
|    | No (If NO, please skip to the end of this section)                                   |

8. How useful were the following types of data or practices for that evaluation?

| Type of Data or Practice |  | Data Gathered or Practice We Used | <ul> <li>I Degree of Usefulness of Data or</li> </ul> |                    |        | ata or         |
|--------------------------|--|-----------------------------------|---|--------------------|--------|----------------|
|                          |  | Check (✓) those that apply        | Not<br>Useful   | Somewhat<br>Useful | Useful | Very<br>Useful |
| a.                       | Business and industry input to verify the alignment of materials to industry needs |                                   |   |                    |        |                |
| b.                       | Student and industry standards or guidelines                                       |                                   |   |                    |        |                |
| C.                       | Review by external experts   |                                   |   |                    |        |                |
| d.                       | Field test of materials internally (i.e., within your project/center)              |                                   |   |                    |        |                |
| e.                       | Field test of materials externally (i.e., outside your project/center)             |                                   |   |                    |        |                |
| f.                       | Assessment of student performance in the classroom (learning effects)              |                                   |   |                    |        |                |
| g.                       | Assessment of student performance in the workforce (work performance effects)      |                                   |   |                    |        |                |
| h.                       | Other (describe):  |                                   |   |                    |        |                |

### **SECTION 5: PROFESSIONAL DEVELOPMENT**

Complete this section if the funds your project/center allocated to professional development activities in 2007 amounted to <u>EITHER</u> 30 percent or more of its direct costs OR at least \$100,000.

1. Listed below are various types of professional development activities. In *column i*, report the total number of such opportunities your project/center **provided** in 2007.

In columns ii, iii, iv, and v provide additional descriptive information about those activities.

- In <u>column ii</u>, report the number of these activities that were conducted <u>at your institution</u>.
- In <u>column iii</u>, report the number of these activities that were conducted mainly <u>at a business or industry site</u>.
- In <u>column iv</u>, report the number of activities that employed distance education techniques (e.g., conducted online or with online support).
- In <u>column v</u>, report the number of activities that employed follow-up after an initial event (e.g., workshop) to support implementation.
- If you haven't done the activity, put a zero (0) in the space provided.

|     |   |  |   | ****  |   |   |
|-----|---|--|---|---|---|---|
| Pro | ofessional Development<br>Activity  | (i)<br>Total<br>Number of<br>Activities<br>Offered | (ii)<br>Number<br>Offered On<br>Site <u>at</u><br><u>Your</u><br><u>Institution</u> | (iii) Number Offered On Site <u>at a</u> Business or Industry | (iv) Number Offered Using Distance Education Techniques | (v) Number Offered With Follow-Up to Support Implementation |
| a.  | Short presentations to raise awareness  |  |   |   |   |   |
| b.  | Instructional activities of less than a day (e.g., lecture, training session)                 |  |   |   |   |   |
| C.  | Instructional activities that last one day to one week (e.g., workshop, online module)        |  |   |   |   |   |
| d.  | Instructional activities that last from one to several weeks (e.g., course, summer institute) |  |   |   |   |   |
| e.  | A long-term periodic instructional activity (e.g., internship, peer coaching)                 |  |   |   |   |   |

2. For the listed types of professional development activities **provided** by your project/center, write in the number of each type of participant who attended these activities. *Enter zero (0) in the space provided if activities had no participants in a particular category.* 

| Professional Development Activity |   | Total Number of Participants       |  |                           |                               |  |
|-----------------------------------|---|------------------------------------|--|---------------------------|-------------------------------|--|
|                                   |   | Business/Industry or Organizations |  | Associate<br>Degree Level | Baccalaureate<br>Degree Level |  |
| a.                                | Short presentations to raise awareness  |                                    |  |                           |                               |  |
| b.                                | Instructional activities of less than a day (e.g., lecture, training session)                 |                                    |  |                           |                               |  |
| C.                                | Instructional activities that last one day to one week (e.g., workshop, online module)        |                                    |  |                           |                               |  |
| d.                                | Instructional activities that last from one to several weeks (e.g., course, summer institute) |                                    |  |                           |                               |  |
| e.                                | A long-term periodic instructional activity (e.g., internship, peer coaching)                 |                                    |  |                           |                               |  |

This question is about the impact of professional development activities. Please report the
percentage of participants that actually implemented new materials or ideas after attending a
professional development program. Your estimate for each response should be based on
follow-up data your project/center collected. If you did not collect data for a type of activity,
enter NA.

|    |   | Level of Outcome           |
|----|---|----------------------------|
|    | Professional Development Activity   | % of participants who      |
|    | 1 Tolessional Development Activity  | implemented one or more of |
|    |   | the new materials or ideas |
| a. | Short presentations to provide awareness  | %                          |
| b. | Instructional activities of half-day or less (e.g., a lecture, training session)                      | %                          |
| C. | Instructional activities that last one day to one week (e.g., workshop, online module)                | %                          |
| d. | Instructional activities that last from one to several weeks (e.g., a course, summer institute, etc.) | %                          |
| e. | A long-term periodic instructional activity (e.g., internship, peer coaching)                         | %                          |

4. For professional development activities <u>provided by your project/center</u>, please rank order the following purposes in terms of importance for your project/center's efforts. 1 = greatest importance; 5 = least importance. <u>To exclude a purpose from the ranking, check "not a focus."</u>

|    | Purpose of Professional Development   | Importance (Rank 1-5 where 1=highest and 5=lowest) | Not a focus |
|----|---|--|-------------|
| a. | Prepare participants to teach new courses or programs   |  |             |
| b. | Update participants' knowledge and skills for specific equipment or technology used in business or industry (e.g., milling machine)   |  |             |
| C. | Update participants' general technology knowledge and skills (continuous learning processes, future trends, etc.)   |  |             |
| d. | Update participants' specific instructional knowledge and skills (learning new techniques to teach a course)  |  |             |
| e. | Update participants' general instructional knowledge and skills (e.g., increase attention and sensitivity to diversity in the classroom and workplace, prepare faculty to manage team problem-solving situations) |  |             |

| 5. | Did you evaluate the quality of your project/center's professional development program in 2007? |
|----|---|
|    | Yes (If YES, go to Question 6)  |
|    | No (If NO, skip to the end of this section)   |
| 6. | How many professional development activities were evaluated?                                    |

If you evaluated more than one professional development activity, use your most comprehensive evaluation effort to answer Questions 7–9.

| (a) | Did you collect end-of-program participant reaction data (e.g., satisfaction, intent to use)?                            |
|-----|--|
|     | Yes  |
|     | No   |
|     | (b) If YES, indicate which of the following types of data you collected (check all that apply).                          |
|     | Participants' opinions about the training.   |
|     | Perceived value of new ideas, materials, or techniques for use in the participants' home institutions                    |
|     | Participant learning/achievement in the professional development program you provided                                    |
| (c) | If you assessed participant learning/achievement, what method(s) did you use? (check all that apply)                     |
|     | Participants' self-assessment of how much they learned   |
|     | Instructor-prepared hands-on or written assessments  |
|     | Externally prepared exams (e.g., Microsoft certification exam)   |
| (a) | Did the evaluation include follow-up with participants to determine implementation or adoption of ideas?                 |
|     | Yes  |
|     | No (If NO, go to Question 9.)  |
| (b) | If YES, did you probe to learn about whether the participants implemented the ideas, materials, or techniques correctly? |
|     | Yes  |
| (c) | No If YES, did you probe to learn about any changes in their students' interest or achievement?                          |
|     | Yes  |
|     | No   |
|     | your evaluation obtain feedback from experts about the content and instruction of the fessional development activities?  |
|     | Yes  |
|     | No   |

#### **SECTION 6: PROGRAM IMPROVEMENT**

Complete this section if the funds your project/center allocated to program improvement activities <u>in 2007</u> amounted to <u>EITHER</u> 30 percent or more of its direct costs OR at least \$100,000.

ATE program guidelines state 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."

For purposes of this survey, a program is defined as a sequence of classes, laboratories and/or work-based experiences that lead students to a degree, certification, or an occupational competency point.

1. For the year 2007, report the number of programs, institutions, courses, and students enrolled for each education level and on-the-job training that your project/center targeted with program improvement efforts. If a requested number is not applicable to your project/center situation, enter the letters NA for "not applicable."

Complete each cell with either a number or NA (not applicable). Blank cells will be treated as zeros.

| 26108.                                 |  |                 |           |               |                         |  |
|--|--|-----------------|-----------|---------------|-------------------------|--|
|  |  | Education Level |           |               | On-the-Job<br>Training/ |  |
|  |  | Secondary       | Associate | Baccalaureate | Contract<br>Training    |  |
| 1                                      | umber of ATE grant-<br>programs developed<br>offered   |                 |           |               |                         |  |
| courses<br>grant-fu<br>course          | umber of separate<br>s offered across all ATE<br>unded programs. If a<br>appears in more than one<br>n, count it only once |                 |           |               |                         |  |
| student<br>course<br>funded<br>took mo | umber of individual is who took at least 1 in 1 of your ATE grant- programs. If students ore than 1 course, count nly once |                 |           |               |                         |  |
| busines                                | umber of institutions/<br>sses where the ATE grant-<br>programs were offered   |                 |           |               |                         |  |

2. Based on the total number of students reported in item <u>1c</u> above, estimate the number of students in each of the following demographic categories across all of your ATE grantfunded programs at the levels indicated.

|    |  | E         | On-the-Job<br>Training/ |               |                      |
|----|--|-----------|-------------------------|---------------|----------------------|
|    |  | Secondary | Associate               | Baccalaureate | Contract<br>Training |
| a. | Male   |           |                         |               |                      |
| b. | Female   |           |                         |               |                      |
| C. | Hispanic/Latino  |           |                         |               |                      |
| d. | American Indian or Alaska<br>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                      |           |                         |               |                      |
| k. | Incumbent workers (i.e., individuals who were employed as technicians while enrolled in courses) |           |                         |               |                      |

3. Estimate the number of applicants to all of your ATE-funded programs in 2007 that may be characterized according to each of the following categories.

| Applicant Categories |  | E         | On-the-<br>Job |               |                                   |
|----------------------|--|-----------|----------------|---------------|-----------------------------------|
|                      |  | Secondary | Associate      | Baccalaureate | Training/<br>Contract<br>Training |
| a.                   | Number of applicants to our programs   |           |                |               |                                   |
| b.                   | Number of students who were accepted to our programs   |           |                |               |                                   |
| C.                   | Number of students whose applications were denied due to the students' lack of qualifications    |           |                |               |                                   |
| d.                   | Number of students whose applications were denied because space was not available in the program |           |                |               |                                   |
| e.                   | Number of students who newly enrolled in our programs  |           |                |               |                                   |

4. Please estimate the number of students across all of your ATE-funded programs who met the respective student status definitions at each education level.

|    | Ec   |           | Education L | On-the-<br>Job |                                   |
|----|--|-----------|-------------|----------------|-----------------------------------|
|    | Student Status   | Secondary | Associate   | Baccalaureate  | Training/<br>Contract<br>Training |
| a. | Completed the specified program  |           |             |                |                                   |
|    | <ol> <li>Started or continued employment<br/>as a technician</li> </ol>                                      |           |             |                |                                   |
|    | 2. Continued STEM education  |           |             |                |                                   |
|    | <ol> <li>Both continued STEM education<br/>AND started or continued<br/>technician employment</li> </ol>     |           |             |                |                                   |
|    | <ol> <li>Did not continue STEM education<br/>nor start or continue employment<br/>as a technician</li> </ol> |           |             |                |                                   |
| b. | Left the program prior to completion (e.g., dropped out, changed majors, etc.)                               |           |             |                |                                   |
|    | <ol> <li>Started or continued employment<br/>as a technician</li> </ol>                                      |           |             |                |                                   |
|    | 2. Continued STEM education  |           |             |                |                                   |
|    | <ol> <li>Both continued STEM education<br/>AND started or continued<br/>technician employment</li> </ol>     |           |             |                |                                   |
|    | <ol> <li>Did not continue STEM education<br/>or start or continue employment as<br/>a technician</li> </ol>  |           |             |                |                                   |
| C. | Students remaining in the program (i.e., did not complete or leave the program)                              |           |             |                |                                   |

5. For 2007, estimate the **percentage** of students across all of your ATE-funded programs in each of the following categories.

|   |                | Education Le   | evel            | On-the-Job<br>Training/   |
|---|----------------|----------------|-----------------|---------------------------|
|   | Secondary<br>% | Associate<br>% | Baccalaureate % | Contract<br>Training<br>% |
| a. Full- or part-time students <u>not</u> employed as technicians at the same time they are taking coursework |                |                |                 |                           |
| b. Incumbent workers (i.e., individuals who were employed as technicians while enrolled)                      |                |                |                 |                           |
| c. Employed as technician prior to enrollment   |                |                |                 |                           |

| 6. | Were your project/center's program improvement activities evaluated in 2007? |
|----|--|
|    | Yes (If YES, go to Question 7.)  |
|    | No (If NO, skip to the end of this section.)                                 |

7. Below is a list of sources of potential evaluation information. Please rate the usefulness of the evaluation information that your project gathered.

|    |  | Data We<br>Gathered        | Degree of Usefulness |                    |        |                |
|----|--|----------------------------|----------------------|--------------------|--------|----------------|
|    | Potential Evaluation Information   | Check (✓) those that apply | Not<br>Useful        | Somewhat<br>Useful | Useful | Very<br>Useful |
| a. | Course-level student satisfaction data   |                            |                      |                    |        |                |
| b. | End-of-program student satisfaction data   |                            |                      |                    |        |                |
| C. | Student course grades  |                            |                      |                    |        |                |
| d. | Data regarding student dropout rates   |                            |                      |                    |        |                |
| e. | Data on student or industry referrals to the program   |                            |                      |                    |        |                |
| f. | Postprogram follow-up data from students (e.g., employment status, preparedness for industry)  |                            |                      |                    |        |                |
| g. | Postprogram follow-up data from supervisors of students (e.g., students' skills, knowledge, preparedness for industry)   |                            |                      |                    |        |                |
| h. | Testing of students' knowledge and skills against established business/industry work standards   |                            |                      |                    |        |                |
| i. | Comparison of students' knowledge and skills against other critical competitors (e.g., personnel from other colleges or military programs or other course options)               |                            |                      |                    |        |                |
| j. | Faculty feedback on course and program implementation  |                            |                      |                    |        |                |
| k. | Course records/logs (syllabi, content taught, sample assignments, etc.)  |                            |                      |                    |        |                |
| I. | Feedback from instructional experts regarding content and instruction of courses and program (e.g., comparisons of program content and instruction against critical competitors) |                            |                      |                    |        |                |
| m. | Feedback from companies that employ your students and graduates  |                            |                      |                    |        |                |
| n. | Expert panel review of program and/or products   |                            |                      |                    |        |                |
| 0. | Other (describe):  |                            |                      |                    |        |                |