

NSF # 4444444

Project Title: Liping's Testproject

PI: Ms. Liping Zhang

Basic Information

This section provides basic information about your center/project ATE grant. Please complete, verify, and correct it if needed.

Numerical values must be entered as integers (e.g., "3420", "6" or "0").

Do not use: decimal points, commas or percent signs in numerical values (e.g., "3,000", "6.00", "\$320" or "95%").

Person currently assigned to this section is: **Ms. Liping Zhang (lzhang@cs.wmich.edu)**

**Basic Information about your Center/Project**

1.
 - a. Funded Institution: _____
 - b. Institution Category:
 - 4 year college/university
 - 2 year college
 - Association/Society
 - Secondary School
 - Other
 - c. Funding Category
 - Project
 - Center
 - d. Type of grant
 - Standard Grant (all grant funds provided at the time of the grant)
 - Continuing Grant (grant lasts more than one year, but funding is provided year by year)
 - Renewal of Standard Grant
 - Renewal of Continuing Grant
 - e. Date of first NSF-ATE funding: _____ (MM/DD/YYYY)
 - f. Begin date of current NSF-ATE funding: _____ (MM/DD/YYYY)
 - g. End date of current NSF-ATE funding: _____ (MM/DD/YYYY)
 - h. Current award amount: \$ _____

i. Project Director / Principal Investigator

Courtesy: First Name: Middle: Last Name: E-Mail:

- Dr.
 Mr.
 Mrs.
 Ms.

j. Project Co-Director / Co-Principal Investigator

Courtesy: First Name: Middle: Last Name: E-Mail:

- Dr.
 Mr.
 Mrs.
 Ms.

k. Technology Field

- A. Agriculture
 B. Aquaculture
 C. Biotechnology
 D. Chemical Technology
 E. Distance Learning
 F. Electronics, Instrumentation, Laser and Fiber Optics
 G. Engineering Technology(general)
 H. Environmental Technology
 I. Geographic Information Systems
 J. Graphics and Multimedia Technology
 K. Information Technology, Telecommunications
 L. Mathematics
 M. Manufacturing and Industrial Technology
 N. Machine Tool Technology, Metrology
 O. Marine Technology
 P. General, Multidisciplinary or Interdisciplinary
 Q. Other
 R. Physics
 S. Semiconductor Manufacturing
 T. Transportation

l. Abstract: _____

The System is currently in testing mode. E-mails which are created for the certification of user will be sent to the Project Director instead of the e-mail address you specify.

NSF # 4444444

Project Title: Liping's Testproject

PI: Ms. Liping Zhang

Collaboration

Complete this section if your center/project has collaborative relationships with institutions or groups, other than your project partners, that provide money or other support.

All questions refer to the past 12 months.

click here if this section doesn't apply

Numerical values must be entered as integers (e.g., "3420", "6" or "0"). Do not use: decimal points, commas or percent signs in numerical values (e.g., "3,000", "6.00", "\$320" or "95%").

[What does "not apply" mean?](#)

Person currently assigned to this section is: **Ms. Liping Zhang (lzhang@cs.wmich.edu)**

If you want to reassign this section, please enter the name of the person below or select from the list.

Courtesy:	First Name:	Middle I.:	Last Name:	E-Mail:
enter name: none ▼	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

click here to reassign this section

or select from list: ▼

[What does "reassign" mean?](#)



Collaboration with other institutions or groups

1. Non-NSF funding and in-kind support. Please provide the approximate amount of monetary and in-kind support that your center/project has received in the past 12 months from non-NSF sources. Estimate dollar amounts to the nearest \$1,000 or 10%. Please enter only numbers (no "\$", commas, or periods).

Types of supporting institutions	Monetary support received to date	Estimated monetary value of in-kind support
a. Center/Project lead institution(s) (The institutions that are the primary participants in the work of the center/project and the primary recipients of center/project funds)	_____	_____
b. Foundations	_____	_____
c. Business and industry	_____	_____
d. Local and state public agencies	_____	_____
e. Non-NSF federal sources	_____	_____
f. Organizations and professional societies	_____	_____
g. Secondary level education institutions	_____	_____
h. Associate level education institutions	_____	_____
i. Baccalaureate level education institutions	_____	_____
j. Income from products and services	_____	_____
k. Other (please describe)	_____	_____

2. With how many institutions has your center/project established collaborative arrangements that involve non-monetary support (contributions of time, faculty sharing, equipment, etc.) and approximately how many persons from these institutions collaborate? Please specify for each type of institution listed below. For collaborators that offer their time, include only those that have spent a minimum of two days per year working with your center/project.

Types of collaborating institutions	# of Institutions	# of Persons
a. Business and industry	_____	_____
b. Public agencies at the local, state, and federal levels	_____	_____
c. Organizations and professional societies	_____	_____
d. Secondary level education institutions	_____	_____
e. Associate level education institutions	_____	_____
f. Baccalaureate level education institutions	_____	_____
g. Other (please describe)	_____	_____

3. The table below is divided into 4 major groups of collaboration purposes, displayed in the left-hand column. In each cell of the table, input the number of organizations/institutions of the identified type (column header) that have collaborated in the identified purpose (row header).

Collaboration Purpose	Institution Type			
	Business or Industry	Public agencies (local, state and federal)	Educational Institutions	Other Organizations
I General center or project support				
a. Advice (e.g., advisory panel)	_____	_____	_____	_____
b. Contributed or shared equipment/technology	_____	_____	_____	_____
c. Contributed time and effort (beyond advice)	_____	_____	_____	_____
d. Other (please describe)	_____	_____	_____	_____
II Materials development				
a. Development or implementation of standards/guidelines	_____	_____	_____	_____
b. Determining or confirming materials content	_____	_____	_____	_____
c. Pilot testing of materials (preliminary testing of materials or portions of materials; usually done with a small number of sites)	_____	_____	_____	_____
d. Field-testing of materials (testing of materials in settings where they will be used; usually larger and more in-depth than pilot testing)	_____	_____	_____	_____
e. Other (please describe)	_____	_____	_____	_____
III Academic program(s)				
a. Student recruitment program	_____	_____	_____	_____
b. Student understanding of industry opportunities and requirements	_____	_____	_____	_____
c. College/school-based instruction matters (e.g., course instruction,	_____	_____	_____	_____

	field testing of materials, etc.)				
d.	Work-based instruction and experience matters (e.g., internships, practica, etc.)	_____	_____	_____	_____
e.	Student entry to the workforce	_____	_____	_____	_____
f.	Other (please describe)	_____	_____	_____	_____

IV Professional development

a.	Faculty/staff knowledge of industry needs, opportunities, and requirements	_____	_____	_____	_____
b.	Faculty/staff knowledge and skill in the discipline	_____	_____	_____	_____
c.	Business/industry representatives' knowledge of educational options and opportunities	_____	_____	_____	_____
d.	Other (please describe)	_____	_____	_____	_____

4. Item 3 addressed four main categories of collaborative purposes. Here you are asked to provide an overall rating of quality/productivity of the collaboration that occurred relative to these purposes. Provide ratings for collaboration by organization type. (Refer back to the above item for specific information about each of the purpose categories.)

I. Business or Industry

		Quality/Productivity of Collaboration				
Collaborative Purpose	Not Applicable	Poor	Satisfactory	Good	Excellent	
a. General center or project support	0	0	0	0	0	
b. Materials development	0	0	0	0	0	
c. Academic program	0	0	0	0	0	
d. Professional development	0	0	0	0	0	

II. Public agencies (local, state and federal)

		Quality/Productivity of Collaboration				
Collaborative Purpose	Not Applicable	Poor	Satisfactory	Good	Excellent	
a. General center or project support	0	0	0	0	0	
b. Materials development	0	0	0	0	0	
c. Academic program	0	0	0	0	0	
d. Professional development	0	0	0	0	0	

III. Educational Institutions

		Quality/Productivity of Collaboration				
Collaborative Purpose	Not Applicable	Poor	Satisfactory	Good	Excellent	
a. General center or project support	0	0	0	0	0	
b. Materials development	0	0	0	0	0	
c. Academic program	0	0	0	0	0	
d. Professional development	0	0	0	0	0	

IV. Other Organizations

		Quality/Productivity of Collaboration				
Collaborative Purpose	Not Applicable	Poor	Satisfactory	Good	Excellent	
a. General center or project support	0	0	0	0	0	

- | | | | | | |
|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| b. Materials development | <input type="radio"/> |
| c. Academic program | <input type="radio"/> |
| d. Professional development | <input type="radio"/> |

5. This question addresses what you consider to be the most important products and/or results of your collaborative efforts.

I. Which organization type has been the most effective collaborator in helping your center/project reach its goals?

- a. business and industry
- b. public agencies
- c. organizations and professional societies
- d. secondary education institutions
- e. associate degree level education institutions
- f. baccalaureate degree colleges or universities
- g. Other (please describe)

II. Briefly describe what you consider to be the most important products and/or results of your collaboration with groups within that organization type.

6. What makes some collaborative relationships more effective than others?

7. What issues or barriers have kept potential collaborators from agreeing to participate?

The System is currently in testing mode. E-mails which are created for the certification of user will be sent to the Project Director instead of the e-mail address you specify.

NSF-ATE Survey

The Evaluation Center

NSF # 4444444

Project Title: Liping's Testproject

PI: Ms. Liping Zhang

Materials Development

Complete this section if the development of materials is a focus of your center/project.

"Materials" include one or more courses, modules, process models, and/or other instructional or assessment units.

"Development" includes the preparation, adaptation for implementation and/or testing of materials.

If your center/project provides instruction to students as a part of a curricular program, you should also complete a Program Improvement section.

[click here if this section doesn't apply](#)

Numerical values must be entered as integers (e.g., "3420", "6" or "0").

Do not use: decimal points, commas or percent signs in numerical values (e.g., "3,000", "6.00", "\$320" or "95%").

[What does "not apply" mean?](#)

Person currently assigned to this section is: **Ms. Liping Zhang (lzhang@cs.wmich.edu)**

If you want to reassign this section, please enter the name of the person below or select from the list.

Courtesy: First Name: Middle I.: Last Name: E-Mail:

enter name: none

or select from list:

[click here to reassign this section](#)

[What does "reassign" mean?](#)



Materials Development: courses, modules and other types of material

1. Please indicate the number of items developed or under development for each development type listed below. Materials development is often a mix of simple and substantial efforts. For example, making changes throughout a course or module would likely require substantial effort, while revision of a test would probably not require substantial effort for the center/project. List only substantial items.

Material development	Number in draft stage	Number being field tested	Number completed	Number in use locally*	Number in use elsewhere*	Number published commercially
a. Course Development	_____	_____	_____	_____	_____	_____
b. Course adaptation for implementation	_____	_____	_____	_____	_____	_____
c. Module Development (a component that can be used in more than one course)	_____	_____	_____	_____	_____	_____
d. Other (please describe)	_____	_____	_____	_____	_____	_____

* Materials in use locally means at sites within your center/project.

* Materials in use elsewhere means at sites not a part of your center/project.

2. Please provide the following information for up to five (5) of the most important materials that your center/project developed (or are under development).

i.	a. Title	_____
	b. Type of Development	
	<input type="radio"/>	i. Course Development
	<input type="radio"/>	ii. Course Adaptation for Implementation
	<input type="radio"/>	iii. Module Development
	<input type="radio"/>	iv. Combination of above
	<input type="radio"/>	Other (Please describe)
	c. Technology Field	_____
	<input type="radio"/>	A. Agriculture
	<input type="radio"/>	B. Aquaculture
	<input type="radio"/>	C. Biotechnology
	<input type="radio"/>	D. Chemical Technology
	<input type="radio"/>	E. Distance Learning
	<input type="radio"/>	F. Electronics, Instrumentation, Laser and Fiber Optics
	<input type="radio"/>	G. Engineering Technology (general)
	<input type="radio"/>	H. Environmental Technology
	<input type="radio"/>	I. Geographic Information Systems
	<input type="radio"/>	J. Graphics and Multimedia Technology
	<input type="radio"/>	K. Information Technology, Telecommunications
	<input type="radio"/>	L. Mathematics
	<input type="radio"/>	M. Manufacturing and Industrial Technology
	<input type="radio"/>	N. Machine Tool Technology, Metrology
	<input type="radio"/>	O. Marine Technology
	<input type="radio"/>	P. General, Multidisciplinary
	<input type="radio"/>	Q. Other
	<input type="radio"/>	R. Physics
	<input type="radio"/>	S. Semiconductor Manufacturing
	<input type="radio"/>	T. Transportation
	d. Grade Level(s)	
	<input type="radio"/>	i. K-12
	<input type="radio"/>	ii. College-first year
	<input type="radio"/>	iii. College-second year
	<input type="radio"/>	iv. College-upper level
	e. Brief description(2-3 sentences)	_____

ii. a.	Title	_____
b.	Type of Development	
	<input type="radio"/>	i.Course Development
	<input type="radio"/>	ii.Course Adaptation for Implementation
	<input type="radio"/>	iii.Module Development
	<input type="radio"/>	iv.Combination of above
	<input type="radio"/>	Other (Please describe)
c.	Technology Field	_____
	<input type="radio"/>	A.Agriculture
	<input type="radio"/>	B.Aquaculture
	<input type="radio"/>	C.Biotechnology
	<input type="radio"/>	D.Chemical Technology
	<input type="radio"/>	E.Distance Learning
	<input type="radio"/>	F.Electronics, Instrumentation, Laser and Fiber Optics
	<input type="radio"/>	G.Engineering Technology(general)
	<input type="radio"/>	H.Environmental Technology
	<input type="radio"/>	I.Geographic Information Systems
	<input type="radio"/>	J.Graphics and Multimedia Technology
	<input type="radio"/>	K.Information Technology, Telecommunications
	<input type="radio"/>	L.Mathematics
	<input type="radio"/>	M.Manufacturing and Industrial Technology
	<input type="radio"/>	N.Machine Tool Technology, Metrology
	<input type="radio"/>	O.Marine Technology
	<input type="radio"/>	P.General, Multidisciplinary
	<input type="radio"/>	Q.Other
	<input type="radio"/>	R.Physics
	<input type="radio"/>	S.Semiconductor Manufacturing
	<input type="radio"/>	T.Transportation
d.	Grade Level(s)	
	<input type="radio"/>	i.K-12
	<input type="radio"/>	ii.College-first year
	<input type="radio"/>	iii.College-second year
	<input type="radio"/>	iv.College-upper level
e.	Brief description(2-3 sentences)	_____

iii. a.	Title	_____
b.	Type of Development	
	<input type="radio"/>	i. Course Development
	<input type="radio"/>	ii. Course Adaptation for Implementation
	<input type="radio"/>	iii. Module Development
	<input type="radio"/>	iv. Combination of above
	<input type="radio"/>	Other (Please describe)
c.	Technology Field	_____
	<input type="radio"/>	A. Agriculture
	<input type="radio"/>	B. Aquaculture
	<input type="radio"/>	C. Biotechnology
	<input type="radio"/>	D. Chemical Technology
	<input type="radio"/>	E. Distance Learning
	<input type="radio"/>	F. Electronics, Instrumentation, Laser and Fiber Optics
	<input type="radio"/>	G. Engineering Technology (general)
	<input type="radio"/>	H. Environmental Technology
	<input type="radio"/>	I. Geographic Information Systems
	<input type="radio"/>	J. Graphics and Multimedia Technology
	<input type="radio"/>	K. Information Technology, Telecommunications
	<input type="radio"/>	L. Mathematics
	<input type="radio"/>	M. Manufacturing and Industrial Technology
	<input type="radio"/>	N. Machine Tool Technology, Metrology
	<input type="radio"/>	O. Marine Technology
	<input type="radio"/>	P. General, Multidisciplinary
	<input type="radio"/>	Q. Other
	<input type="radio"/>	R. Physics
	<input type="radio"/>	S. Semiconductor Manufacturing
	<input type="radio"/>	T. Transportation
d.	Grade Level(s)	
	<input type="radio"/>	i. K-12
	<input type="radio"/>	ii. College-first year
	<input type="radio"/>	iii. College-second year
	<input type="radio"/>	iv. College-upper level
e.	Brief description(2-3 sentences)	_____

iv. a.	Title	_____
b.	Type of Development	
	<input type="radio"/>	i.Course Development
	<input type="radio"/>	ii.Course Adaptation for Implementation
	<input type="radio"/>	iii.Module Development
	<input type="radio"/>	iv.Combination of above
	<input type="radio"/>	Other (Please describe)
c.	Technology Field	_____
	<input type="radio"/>	A.Agriculture
	<input type="radio"/>	B.Aquaculture
	<input type="radio"/>	C.Biotechnology
	<input type="radio"/>	D.Chemical Technology
	<input type="radio"/>	E.Distance Learning
	<input type="radio"/>	F.Electronics, Instrumentation, Laser and Fiber Optics
	<input type="radio"/>	G.Engineering Technology(general)
	<input type="radio"/>	H.Environmental Technology
	<input type="radio"/>	I.Geographic Information Systems
	<input type="radio"/>	J.Graphics and Multimedia Technology
	<input type="radio"/>	K.Information Technology, Telecommunications
	<input type="radio"/>	L.Mathematics
	<input type="radio"/>	M.Manufacturing and Industrial Technology
	<input type="radio"/>	N.Machine Tool Technology, Metrology
	<input type="radio"/>	O.Marine Technology
	<input type="radio"/>	P.General, Multidisciplinary
	<input type="radio"/>	Q.Other
	<input type="radio"/>	R.Physics
	<input type="radio"/>	S.Semiconductor Manufacturing
	<input type="radio"/>	T.Transportation
d.	Grade Level(s)	
	<input type="radio"/>	i.K-12
	<input type="radio"/>	ii.College-first year
	<input type="radio"/>	iii.College-second year
	<input type="radio"/>	iv.College-upper level
e.	Brief description(2-3 sentences)	_____

v. a.	Title	_____
b.	Type of Development	
	<input type="radio"/>	i.Course Development
	<input type="radio"/>	ii.Course Adaptation for Implementation
	<input type="radio"/>	iii.Module Development
	<input type="radio"/>	iv.Combination of above
	<input type="radio"/>	Other (Please describe)
c.	Technology Field	_____
	<input type="radio"/>	A.Agriculture
	<input type="radio"/>	B.Aquaculture
	<input type="radio"/>	C.Biotechnology
	<input type="radio"/>	D.Chemical Technology
	<input type="radio"/>	E.Distance Learning
	<input type="radio"/>	F.Electronics, Instrumentation, Laser and Fiber Optics
	<input type="radio"/>	G.Engineering Technology(general)
	<input type="radio"/>	H.Environmental Technology
	<input type="radio"/>	I.Geographic Information Systems
	<input type="radio"/>	J.Graphics and Multimedia Technology
	<input type="radio"/>	K.Information Technology, Telecommunications
	<input type="radio"/>	L.Mathematics
	<input type="radio"/>	M.Manufacturing and Industrial Technology
	<input type="radio"/>	N.Machine Tool Technology, Metrology
	<input type="radio"/>	O.Marine Technology
	<input type="radio"/>	P.General, Multidisciplinary
	<input type="radio"/>	Q.Other
	<input type="radio"/>	R.Physics
	<input type="radio"/>	S.Semiconductor Manufacturing
	<input type="radio"/>	T.Transportation
d.	Grade Level(s)	
	<input type="radio"/>	i.K-12
	<input type="radio"/>	ii.College-first year
	<input type="radio"/>	iii.College-second year
	<input type="radio"/>	iv.College-upper level
e.	Brief description(2-3 sentences)	_____

3. In the table below, identify the frequency of use for each practice that your center/project employs when developing curricular materials.

Practices	Frequency of Use				
	Not applicable	Used each time	Used most times	Used less than half the time	Almost never used or never used
a. Obtain verification by industry regarding alignment of materials with workforce and skill needs	0	0	0	0	0
b. Use applicable student and industry-based standards or guidelines to guide materials development.	0	0	0	0	0
c. Assess student success (knowledge and skills) in comparison with industry/business standards (American Electronics Association Standards, American Chemical Society Standards, etc.)	0	0	0	0	0
d. Assess student success (knowledge and skills) in comparison with educational standards (SMET foundation standards, AMATYC, National Council of Teachers of Mathematics Standards (NCTM), National Research Council Science Education Standards, etc.)	0	0	0	0	0
e. Assess student success (knowledge and skills) in comparison with nontechnical skill standards (e.g., SCANS)	0	0	0	0	0
f. Assess student success (knowledge and skills) in comparison with other nonproject or nonparticipating students	0	0	0	0	0
g. Pilot test(1) materials	0	0	0	0	0
h. Field-test(2) materials internally (i.e., within the center/project)	0	0	0	0	0
i. Field-test(2) materials externally (i.e., not center/project based locations)	0	0	0	0	0
j. Assess improvement of student performance in the workforce	0	0	0	0	0

* (1) Pilot testing refers to brief, preliminary testing of materials or portions of materials; usually done with a small number of sites.

* (2) Field testing refers to testing of materials in settings where they will be used when finalized; usually large and more in-depth than pilot testing.

4. Select one materials item that you listed in question 2 above as developed by your center/project. For that item please briefly describe:

a. The title of the chosen material

b. What makes this item an improvement over other available products.

c. What you consider to be the most compelling evidence for its quality.

The System is currently in testing mode. E-mails which are created for the certification of user will be sent to the Project Director instead of the e-mail address you specify.

NSF-ATE Survey

The Evaluation Center

NSF # 4444444

Project Title: Liping's Testproject

PI: Ms. Liping Zhang

Monitoring

Confidentiality of responses to this section will be provided to the extent allowed by law.

Numerical values must be entered as integers (e.g., "3420", "6" or "0").
Do not use: decimal points, commas or percent signs in numerical values (e.g., "3,000", "6.00", "\$320" or "95%").

Person currently assigned to this section is: **Ms. Liping Zhang (lzhang@cs.wmich.edu)**

If you want to reassign this section, please enter the name of the person below or select from the list.

Courtesy: First Name: Middle I.: Last Name: E-Mail:
 enter name: none

or select from list: select from currently registered persons

[click here to reassign this section](#)

[What does "reassign" mean?](#)

[← Back](#)

NSF Monitoring of Centers and Projects

1. Indicate the frequency of the following monitoring actions between your center/project and your NSF program officer during the past 12 months.

Monitoring Action	Frequency (Number of Times)			
	0	1	2 - 4	>4
a. Site visits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Telephone calls	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Email contacts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Visits to NSF	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Principal Investigator meetings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Reading and reaction to materials submitted by your center/project	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Interacting with program officer at non-ATE conferences or meetings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. To what extent do you agree with the following statements?

Statement	Strongly disagree	Disagree	Agree	Strongly Agree
a. NSF has been responsive in meeting my center's/project's identified needs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. NSF site visits and/or evaluative actions have helped to improve the quality of my center/project.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. NSF facilitates collaboration between my center/project and other ATE projects or centers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. How accurate an understanding do you believe your NSF program officer(s) has of your center/project?

- Not accurate
 Somewhat accurate

Very accurate

4. How many reports on your center/project have you submitted using NSF's FastLane system?

- 0
- 1
- 2
- 3 or more

5. To what extent do you agree with the following statement? "FastLane allows me to report to my program officer what I consider to be appropriate information regarding my center/project."

- Not applicable
- Strongly disagree
- Disagree
- Agree
- Strongly Agree

6. If you have used FastLane, please comment on how it could be improved to allow you to provide more appropriate, accurate, and complete representation of your center/project to your program officer.

The System is currently in testing mode. E-mails which are created for the certification of user will be sent to the Project Director instead of the e-mail address you specify.

NSF # 4444444

Project Title: Liping's Testproject

PI: Ms. Liping Zhang

PI Overview

This section should indicate the Principal Investigator's (PI's) view of the Center/Project and reflect information provided in the other sections of this survey.

Numerical values must be entered as integers (e.g., "3420", "6" or "0").

Do not use: decimal points, commas or percent signs in numerical values (e.g., "3,000", "6.00", "\$320" or "95%").

Person currently assigned to this section is: **Ms. Liping Zhang (lzhang@cs.wmich.edu)**



The Principal Investigator's overview of the Center/Project

1. Non-NSF support. Please rate the current status of your center/project as compared to its status last year at this time for each of the following factors.

Factor	Not Applicable	Substantial Decline(>20%)	Some Decline(5-20%)	Stable	Some Increase(5-20%)	Substantial Increase(>20%)
a. Size of the staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Financial support from other organizations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Income from center/project-developed products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Use of center/project-developed products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Direct participation by other institutions and organizations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Students enrolled	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Students graduating or completing the program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Students placed in related technical jobs, whether they completed program or not	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. Number of professional development opportunities (e.g., conferences, workshops, inservice, on-line courses)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. Amount of participation in professional development opportunities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. Workforce needs

a. Please describe the workforce needs that your project is addressing

b. Please describe what you consider to be your center/project's most important effects on the workforce (the nature and extent of your center/project's effects in meeting identified workforce needs).

3. Needs assessment

a. Did you collect information to determine workforce needs (i.e. a workforce needs assessment) before submitting your proposal to NSF

- yes
 no

b. Did you conduct a workforce needs assessment after receiving your funding?

- yes
 no

c. If you answered "yes" to either of the above questions about a workforce needs assessment, please describe how you conducted the needs assessment (survey, review of existing reports, interviews, etc.)

4. Briefly describe the nature (purposes served and types of activities) and extent (how many, how often and how much effort) of your center/project's collaboration with other centers or projects.

5. Center/Project Evaluation

a. Does your center/project have (an) evaluator(s)?

- yes
 no

b. If you selected 'yes' in item a, is/are the evaluator(s) (choose one)

- external (not on staff with center/project)
 internal (is a member of center/project staff)
 both (you have both types of evaluators)

c. If you selected 'yes' in item a, when in the life of the center/project was the evaluator engaged? (choose one)

- evaluator was involved in developing the initial proposal
 evaluator was hired when the funds were awarded
 evaluator was hired after the project was in full operation
 evaluator was hired as the project was ending

6. Briefly describe what steps your center/project has taken to involve underrepresented groups (minorities, women, people with disabilities).

7. Product dissemination: Indicate what method(s) your center/project uses to disseminate your center/project's products regionally or nationally and provide evidence of the effectiveness of those method(s).

a. in-house production and distribution

b. commercial publication

c. presentations at regional/national conferences or meetings

d. website

e. other (please describe)

8. For each educational level, briefly describe what you consider to be the most important ways in which classrooms and other educational experiences for students have changed as a result of the work of your center/project.

a. secondary school

b. community college (2 year)

c. 4-year college/university

9. For each educational level, briefly describe what you consider to be your center/project's most important effect on students: What can students do now as a result of your center/project's work that they could not do before.

a. secondary school

b. community college (2-year)

c. 4-year college/university

10. Please describe any significant unintended outcomes (positive and/or negative) of your center/project work.

11. Please describe up to three barriers or challenges to success that occurred in your project.

12. Please describe the most important features of your center/project that are not captured in the survey.

13. Please describe anything not yet captured in the survey that you think is important to the success of the ATE program in meeting its goal of increasing the diversity, size, and effectiveness of the advanced technology workforce.

The System is currently in testing mode. E-mails which are created for the certification of user will be sent to the Project Director instead of the e-mail address you specify.

NSF # 4444444

Project Title: Liping's Testproject

PI: Ms. Liping Zhang

Program Improvement: Associate Degree Level (2-year college programs)

Complete this section if your center/project provides an instructional program to students (e.g. degree, certification or other collection of courses) at the Associate Degree Level (2-year college programs) and ATE grant monies have been used to improve that instructional program.

"Program", as used here, refers to multiple, related courses and/or field experiences for students at the designated education level. These instructional experiences lead to a defined outcome such as a degree, certification, or occupational completion point.

"Module", as used here, refers to a component that can be used in one or more courses.

"Course", as used here, refers to an educational unit (usually at the secondary, college or university level) consisting of a series of instruction periods (e.g., lectures, recitations, and laboratory sessions) dealing with a particular subject.

If you have modified or developed an individual course or courses in this program as part of this ATE grant, you should also complete the Materials Development section.

Numerical values must be entered as integers (e.g., "3420", "6" or "0"). Do not use: decimal points, commas or percent signs in numerical values (e.g., "3,000", "6.00", "\$320" or "95%").

[click here if this section doesn't apply](#)

[What does "not apply" mean?](#)

Person currently assigned to this section is: **Ms. Liping Zhang (lzhang@cs.wmich.edu)**

If you want to reassign this section, please enter the name of the person below or select from the list.

	Courtesy:	First Name:	Middle I.:	Last Name:	E-Mail:
enter name:	none ▼	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

or select from list: ▼

[click here to reassign this section](#)

[What does "reassign" mean?](#)

[← Back](#)

Program Improvement and Student Characteristics: Associate Degree Level (2-year college programs)

1. This question addresses the size and scope of your educational program(s) for this level.

- a. State the total number of programs developed/offered. _____
- b. State the total number of institutions/campus locations where the programs are offered. _____
- c. State the total number of courses offered across all programs and locations _____
- d. State (estimate) the total number of students (head count) who have taken at least one course in one of your programs during the past academic year plus summer (12 months). _____

2. In completing the remainder of this section, please refer to one specific program as offered at one location and that best represents your center/project.

- a. Program name: Choose one specific program to consider when answering the remaining questions in this section. _____
- b. Institution name: Choose one institution location to consider when answering the remaining questions in this section. _____

3. Indicate the extent to which the courses in your specified program meet the following conditions

Condition	None	Some	Most	All	Don't Know
a. Course credits can be transferred to other similar institutions.	<input type="radio"/>				
b. Course credits can be transferred to higher degree level institutions.	<input type="radio"/>				

4. Which of the following options does your specified center/project program offer (check all that apply)?

- a. Multiple courses in a targeted discipline
- b. A degree-based major in a targeted discipline
- c. Certification in specific skill areas

5. How many persons instruct courses in your specified program?

6. Of those persons who instruct courses in your specified program, how many also currently work in business or industry?

7. For courses in the single program and location you specified in Question 2, estimate the Number of Courses with each Course Status (New(1), Changed(2) or Unchanged(3)).

- * If the information is Unavailable enter "U"
- * If the information is Not Applicable enter "NA"

Course Status	Number of Courses
a. New Courses(1)	_____
b. Changed Courses(2)	_____
c. Unchanged Courses(3)	_____

* (1) New Courses means courses added as part of this grant.
 * (2) Changed Courses means pre-existing courses that were substantially changed through this grant's efforts.
 * (3) Unchanged Courses means pre-existing courses, used in the specified program, that were not changed through this grant's efforts.

8. For courses in the single program and location you specified in Question 2, provide the number of courses that are New, Changed, or Unchanged for each Course Category below.

- Note that a single course may be counted in several categories (e.g., the same course may be described as both a SMET course and an Introductory Technology Course)
- * If the information is Unavailable enter "U"
 - * If the information is Not Applicable enter "NA"

Course Categories	New Courses(1)	Changed Courses(2)	Unchanged Courses(3)
a. SMET: focus on SMET knowledge and skills.	_____	_____	_____
b. Field-Based: extended field experiences in industry (> 1 month).	_____	_____	_____
c. Field-Related: focus on workforce skills, but with most work done in non-field-based settings.	_____	_____	_____
d. Certification: individual courses provide certification of industry-based technician skills.	_____	_____	_____
e. Distance: web-based or distance learning courses.	_____	_____	_____
f. Introductory Technology: introduction to cutting edge tools and equipment needed for technician work without in-depth, hands-on experience.	_____	_____	_____
g. Technology Intensive: in-depth, hands-on experience with cutting edge tools and equipment for technician work.	_____	_____	_____

* (1) New Courses means courses added as part of this grant.
 * (2) Changed Courses means pre-existing (2) courses that were substantially changed through this grant's efforts.
 * (3) Unchanged Courses means pre-existing courses, used in the specified program, that were not changed through this grant's efforts.

9. For courses in the single program and location you specified in Question 2, estimate enrollment information by Course Category.
 Report an individual student only once in each Course Category, even if the student attended several courses.
 Use the past academic year plus summer (12 months) as the basis for completing student information items.
 * If the information is Unavailable enter "U"
 * If the information is Not Applicable enter "NA"

Course Categories	Number enrolled in any or all courses	Success Rate(1)
a. SMET: focus on SMET knowledge and skills.	_____	_____
b. Field-Based: extended field experiences in industry (> 1 month).	_____	_____
c. Field-Related: focus on workforce skills, but with most work done in non-field-based settings.	_____	_____
d. Certification: individual courses provide certification of industry-based technician skills.	_____	_____
e. Distance: web-based or distance learning courses.	_____	_____
f. Introductory Technology: introduction to cutting edge tools and equipment needed for technician work without in-depth, hands-on experience.	_____	_____
g. Technology Intensive: in-depth, hands-on experience with cutting edge tools and equipment for technician work.	_____	_____

* (1) Percent of students who successfully completed these courses once they have enrolled.

10. For courses in the single program and location you specified in Question 2, estimate the number of your students in each of the following categories. (Use the past academic year plus summer (12 months) as the basis for answering.)
 * If the information is Unavailable enter "U"
 * If the information is Not Applicable enter "NA"

Student Characteristics	Number of Students
a. Number of students in your specified program	_____
b. Number of students who completed the specified program	_____
c. Number of students who left the specified program without completing it	_____
d. Number of students who were already employed as technicians in specified program-related fields upon entry into the specified program	_____
Of those students who completed the specified program	
a. Number who go into or continue employment as a technician	_____
b. Number who continue SMET-related higher education	_____
Of those students who left the specified program without completing it	
a. Number who go into or continue employment as a technician	_____
b. Number who continue SMET-related higher education	_____

11. For courses in the single program and location you specified in Question 2, estimate the percent of your students in each of the following categories. Use the past academic year plus summer (12 months) as the basis for answering.

*** If the information is Unavailable enter "U"**

*** If the information is Not Applicable enter "NA"**

Student Characteristics	Percent of Students
a. Students who were required to take remedial SMET courses before entering your specified program	_____
b. Students who meet basic SMET workforce entry requirements for technician jobs related to your specified program at the time of entry into your specified program	_____
c. If your specified program offers a degree, what percent of the students in the specified program's courses seek the degree?	_____
d. If your specified program offers certification, what percent of the students in the specified program's courses seek certification?	_____

12. For courses in the single program and location you specified in Question 2, please provide your best estimate of gender, ethnicity, race, and disability information from application and enrollment information for your ATE grant-based academic specified program for the past academic year plus summer (12 months).

*** If the information is Unavailable enter "U"**

*** If the information is Not Applicable enter "NA"**

a. Gender		
Student Category	Applicants (%)	Enrollment (%)
% Female	_____	_____
b. Ethnicity/Race (These will not necessarily sum to 100%.)		
Student Category	Applicants (%)	Enrollment (%)
% Hispanic or Latino	_____	_____
% American Indian or Alaska Native	_____	_____
% Asian	_____	_____
% Black or African American	_____	_____
% Native Hawaiian or Other Pacific Islander	_____	_____
% White	_____	_____
c. Percent of students who requested accommodation due to their disability under the Americans with Disabilities Act.		
Student Category	Applicants (%)	Enrollment (%)
% Hearing Impairment	_____	_____
% Visual Impairment	_____	_____
% Mobility/Orthopedic Impairment	_____	_____
% Learning Disability	_____	_____
% Other	_____	_____
d. Total number of applicants and enrollees (totals not percentages)		
	Applicants (not %)	Enrollment (not %)
Total number	_____	_____

13. For courses in the single program and location you specified in Question 2, please provide a brief description for each type of specific student recruitment, retention, and placement activities in your specified program. For each activity, pay special attention to actions your center/project or supporting institution took to serve minority or disability groups and women. In each case, briefly describe what worked well and what did not.

* If the information is Unavailable enter "U"

* If the information is Not Applicable enter "NA"

a. The specific steps taken to recruit students to your specified program.

b. The specific steps taken to retain students (i.e., help students to meet personal, financial, and academic barriers in order to complete their specified programs in an academically sound way).

c. The specific steps taken to place students in positions during and upon completion of the specified program (either industry or higher education related).

The System is currently in testing mode. E-mails which are created for the certification of user will be sent to the Project Director instead of the e-mail address you specify.

NSF # 4444444

Project Title: Liping's Testproject

PI: Ms. Liping Zhang

Program Improvement: Baccalaureate Level (4-year college/university programs)

Complete this section if your center/project provides an instructional program to students (e.g. degree, certification or other collection of courses) at the Baccalaureate Level (4-year college/university programs) and ATE grant monies have been used to improve that instructional program.

"Program", as used here, refers to multiple, related courses and/or field experiences for students at the designated education level. These instructional experiences lead to a defined outcome such as a degree, certification, or occupational completion point.

"Module", as used here, refers to a component that can be used in one or more courses.

"Course", as used here, refers to an educational unit (usually at the secondary, college or university level) consisting of a series of instruction periods (e.g., lectures, recitations, and laboratory sessions) dealing with a particular subject.

If you have modified or developed an individual course or courses in this program as part of this ATE grant, you should also complete the Materials Development section.

Numerical values must be entered as integers (e.g., "3420", "6" or "0"). Do not use: decimal points, commas or percent signs in numerical values (e.g., "3,000", "6.00", "\$320" or "95%").

click here if this section doesn't apply

[What does "not apply" mean?](#)

Person currently assigned to this section is: **Ms. Liping Zhang (lzhang@cs.wmich.edu)**

If you want to reassign this section, please enter the name of the person below or select from the list.

	Courtesy:	First Name:	Middle I.:	Last Name:	E-Mail:
enter name:	none ▼	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

or select from list: ▼

click here to reassign this section

[What does "reassign" mean?](#)

< Back

Program Improvement and Student Characteristics: Baccalaureate Level (4-year college/university programs)

1. This question addresses the size and scope of your educational program(s) for this level.

- a. State the total number of programs developed/offered. _____
- b. State the total number of institutions/campus locations where the programs are offered. _____
- c. State the total number of courses offered across all programs and locations _____
- d. State (estimate) the total number of students (head count) who have taken at least one course in one of your programs during the past academic year plus summer (12 months). _____

2. In completing the remainder of this section, please refer to one specific program as offered at one location and that best represents your center/project.

- a. Program name: Choose one specific program to consider when answering the remaining questions in this section. _____
- b. Institution name: Choose one institution location to consider when answering the remaining questions in this section. _____

3. Indicate the extent to which the courses in your specified program meet the following conditions

Condition	None	Some	Most	All	Don't Know
a. Course credits can be transferred to other similar institutions.	<input type="radio"/>				
b. Course credits can be transferred to higher degree level institutions.	<input type="radio"/>				

4. Which of the following options does your specified center/project program offer (check all that apply)?

- a. Multiple courses in a targeted discipline
- b. A degree-based major in a targeted discipline
- c. Certification in specific skill areas

5. How many persons instruct courses in your specified program?

6. Of those persons who instruct courses in your specified program, how many also currently work in business or industry?

7. For courses in the single program and location you specified in Question 2, estimate the Number of Courses with each Course Status (New(1), Changed(2) or Unchanged(3)).

- * If the information is Unavailable enter "U"
- * If the information is Not Applicable enter "NA"

Course Status	Number of Courses
a. New Courses(1)	_____
b. Changed Courses(2)	_____
c. Unchanged Courses(3)	_____

- * (1) New Courses means courses added as part of this grant.
- * (2) Changed Courses means pre-existing courses that were substantially changed through this grant's efforts.
- * (3) Unchanged Courses means pre-existing courses, used in the specified program, that were not changed through this grant's efforts.

8. For courses in the single program and location you specified in Question 2, provide the number of courses that are New, Changed, or Unchanged for each Course Category below.

- Note that a single course may be counted in several categories (e.g., the same course may be described as both a SMET course and an Introductory Technology Course)
- * If the information is Unavailable enter "U"
 - * If the information is Not Applicable enter "NA"

Course Categories	New Courses(1)	Changed Courses(2)	Unchanged Courses(3)
a. SMET: focus on SMET knowledge and skills.	_____	_____	_____
b. Field-Based: extended field experiences in industry (> 1 month).	_____	_____	_____
c. Field-Related: focus on workforce skills, but with most work done in non-field-based settings.	_____	_____	_____
d. Certification: individual courses provide certification of industry-based technician skills.	_____	_____	_____
e. Distance: web-based or distance learning courses.	_____	_____	_____
f. Introductory Technology: introduction to cutting edge tools and equipment needed for technician work without in-depth, hands-on experience.	_____	_____	_____
g. Technology Intensive: in-depth, hands-on experience with cutting edge tools and equipment for technician work.	_____	_____	_____

- * (1) New Courses means courses added as part of this grant.
- * (2) Changed Courses means pre-existing (2) courses that were substantially changed through this grant's efforts.
- * (3) Unchanged Courses means pre-existing courses, used in the specified program, that were not changed through this grant's efforts.

9. For courses in the single program and location you specified in Question 2, estimate enrollment information by Course Category.
 Report an individual student only once in each Course Category, even if the student attended several courses.
 Use the past academic year plus summer (12 months) as the basis for completing student information items.
 * If the information is Unavailable enter "U"
 * If the information is Not Applicable enter "NA"

Course Categories	Number enrolled in any or all courses	Success Rate(1)
a. SMET: focus on SMET knowledge and skills.	_____	_____
b. Field-Based: extended field experiences in industry (> 1 month).	_____	_____
c. Field-Related: focus on workforce skills, but with most work done in non-field-based settings.	_____	_____
d. Certification: individual courses provide certification of industry-based technician skills.	_____	_____
e. Distance: web-based or distance learning courses.	_____	_____
f. Introductory Technology: introduction to cutting edge tools and equipment needed for technician work without in-depth, hands-on experience.	_____	_____
g. Technology Intensive: in-depth, hands-on experience with cutting edge tools and equipment for technician work.	_____	_____

* (1) Percent of students who successfully completed these courses once they have enrolled.

10. For courses in the single program and location you specified in Question 2, estimate the number of your students in each of the following categories. (Use the past academic year plus summer (12 months) as the basis for answering.)
 * If the information is Unavailable enter "U"
 * If the information is Not Applicable enter "NA"

Student Characteristics	Number of Students
a. Number of students in your specified program	_____
b. Number of students who completed the specified program	_____
c. Number of students who left the specified program without completing it	_____
d. Number of students who were already employed as technicians in specified program-related fields upon entry into the specified program	_____
Of those students who completed the specified program	
a. Number who go into or continue employment as a technician	_____
b. Number who continue SMET-related higher education	_____
Of those students who left the specified program without completing it	
a. Number who go into or continue employment as a technician	_____
b. Number who continue SMET-related higher education	_____

11. For courses in the single program and location you specified in Question 2, estimate the percent of your students in each of the following categories. Use the past academic year plus summer (12 months) as the basis for answering.
 * If the information is Unavailable enter "U"
 * If the information is Not Applicable enter "NA"

Student Characteristics	Percent of Students
a. Students who were required to take remedial SMET courses before entering your specified program	_____
b. Students who meet basic SMET workforce entry requirements for technician jobs related to your specified program at the time of entry into your specified program	_____
c. If your specified program offers a degree, what percent of the students in the specified program's courses seek the degree?	_____
d. If your specified program offers certification, what percent of the students in the specified program's courses seek certification?	_____

12. For courses in the single program and location you specified in Question 2, please provide your best estimate of gender, ethnicity, race, and disability information from application and enrollment information for your ATE grant-based academic specified program for the past academic year plus summer (12 months).
 * If the information is Unavailable enter "U"
 * If the information is Not Applicable enter "NA"

a. Gender		
Student Category	Applicants (%)	Enrollment (%)
% Female	_____	_____
b. Ethnicity/Race (These will not necessarily sum to 100%.)		
Student Category	Applicants (%)	Enrollment (%)
% Hispanic or Latino	_____	_____
% American Indian or Alaska Native	_____	_____
% Asian	_____	_____
% Black or African American	_____	_____
% Native Hawaiian or Other Pacific Islander	_____	_____
% White	_____	_____
c. Percent of students who requested accommodation due to their disability under the Americans with Disabilities Act.		
Student Category	Applicants (%)	Enrollment (%)
% Hearing Impairment	_____	_____
% Visual Impairment	_____	_____
% Mobility/Orthopedic Impairment	_____	_____
% Learning Disability	_____	_____
% Other	_____	_____
d. Total number of applicants and enrollees (totals not percentages)		
	Applicants (not %)	Enrollment (not %)
Total number	_____	_____

13. For courses in the single program and location you specified in Question 2, please provide a brief description for each type of specific student recruitment, retention, and placement activities in your specified program. For each activity, pay special attention to actions your center/project or supporting institution took to serve minority or disability groups and women. In each case, briefly describe what worked well and what did not.

* If the information is Unavailable enter "U"

* If the information is Not Applicable enter "NA"

a. The specific steps taken to recruit students to your specified program.

b. The specific steps taken to retain students (i.e., help students to meet personal, financial, and academic barriers in order to complete their specified programs in an academically sound way).

c. The specific steps taken to place students in positions during and upon completion of the specified program (either industry or higher education related).

The System is currently in testing mode. E-mails which are created for the certification of user will be sent to the Project Director instead of the e-mail address you specify.

NSF # 4444444

Project Title: Liping's Testproject

PI: Ms. Liping Zhang

Program Improvement: Secondary School Level

Complete this section, if your center/project provides an instructional program to students (e.g. degree, certification or other collection of courses) at the Secondary School Level and ATE grant monies have been used to improve that instructional program.

"Program", as used here, refers to multiple, related courses and/or field experiences for students at the designated education level. These instructional experiences lead to a defined outcome such as a degree, certification, or occupational completion point.

"Module", as used here, refers to a component that can be used in one or more courses.

"Course", as used here, refers to an educational unit (usually at the secondary, college or university level) consisting of a series of instruction periods (e.g., lectures, recitations, and laboratory sessions) dealing with a particular subject.

If you have modified or developed an individual course or courses in this program as part of this ATE grant, you should also complete the Materials Development section.

Numerical values must be entered as integers (e.g., "3420", "6" or "0"). Do not use: decimal points, commas or percent signs in numerical values (e.g., "3,000", "6.00", "\$320" or "95%").

[click here if this section doesn't apply](#)

[What does "not apply" mean?](#)

Person currently assigned to this section is: **Ms. Liping Zhang (lzhang@cs.wmich.edu)**

If you want to reassign this section, please enter the name of the person below or select from the list.

	Courtesy:	First Name:	Middle I.:	Last Name:	E-Mail:
enter name:	none ▼	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

or select from list: ▼

[click here to reassign this section](#)

[What does "reassign" mean?](#)

[← Back](#)

Program Improvement and Student Characteristics: Secondary School Level

1. This question addresses the size and scope of your educational program(s) for this level.

- a. State the total number of programs developed/offered. _____
- b. State the total number of institutions/campus locations where the programs are offered. _____
- c. State the total number of courses offered across all programs and locations _____
- d. State (estimate) the total number of students (head count) who have taken at least one course in one of your programs during the past academic year plus summer (12 months). _____

2. In completing the remainder of this section, please refer to one specific program as offered at one location and that best represents your center/project.

- a. Program name: Choose one specific program to consider when answering the remaining questions in this section. _____
- b. Institution name: Choose one institution location to consider when answering the remaining questions in this section. _____

3. Indicate the extent to which the courses in your specified program meet the following conditions

Condition	None	Some	Most	All	Don't Know
a. Course credits can be transferred to other similar institutions.	<input type="radio"/>				
b. Course credits can be transferred to higher degree level institutions.	<input type="radio"/>				

4. Which of the following options does your specified center/project program offer (check all that apply)?

- a. Multiple courses in a targeted discipline
- b. A degree-based major in a targeted discipline
- c. Certification in specific skill areas

5. How many persons instruct courses in your specified program?

6. Of those persons who instruct courses in your specified program, how many also currently work in business or industry?

7. For courses in the single program and location you specified in Question 2, estimate the Number of Courses with each Course Status (New(1), Changed(2) or Unchanged(3)).

* If the information is Unavailable enter "U"

* If the information is Not Applicable enter "NA"

Course Status	Number of Courses
a. New Courses(1)	_____
b. Changed Courses(2)	_____
c. Unchanged Courses(3)	_____

* (1) New Courses means courses added as part of this grant.

* (2) Changed Courses means pre-existing courses that were substantially changed through this grant's efforts.

* (3) Unchanged Courses means pre-existing courses, used in the specified program, that were not changed through this grant's efforts.

8. For courses in the single program and location you specified in Question 2, provide the number of courses that are New, Changed, or Unchanged for each Course Category below.

Note that a single course may be counted in several categories (e.g., the same course may be described as both a SMET course and an Introductory Technology Course)

* If the information is Unavailable enter "U"

* If the information is Not Applicable enter "NA"

Course Categories	New Courses(1)	Changed Courses(2)	Unchanged Courses(3)
a. SMET: focus on SMET knowledge and skills.	_____	_____	_____
b. Field-Based: extended field experiences in industry (> 1 month).	_____	_____	_____
c. Field-Related: focus on workforce skills, but with most work done in non-field-based settings.	_____	_____	_____
d. Certification: individual courses provide certification of industry-based technician skills.	_____	_____	_____
e. Distance: web-based or distance learning courses.	_____	_____	_____
f. Introductory Technology: introduction to cutting edge tools and equipment needed for technician work without in-depth, hands-on experience.	_____	_____	_____
g. Technology Intensive: in-depth, hands-on experience with cutting edge tools and equipment for technician work.	_____	_____	_____

* (1) New Courses means courses added as part of this grant.

* (2) Changed Courses means pre-existing (2) courses that were substantially changed through this grant's efforts.

* (3) Unchanged Courses means pre-existing courses, used in the specified program, that were not changed through this grant's efforts.

9. For courses in the single program and location you specified in Question 2, estimate enrollment information by Course Category.
 Report an individual student only once in each Course Category, even if the student attended several courses.
 Use the past academic year plus summer (12 months) as the basis for completing student information items.
 * If the information is Unavailable enter "U"
 * If the information is Not Applicable enter "NA"

Course Categories	Number enrolled in any or all courses	Success Rate(1)
a. SMET: focus on SMET knowledge and skills.	_____	_____
b. Field-Based: extended field experiences in industry (> 1 month).	_____	_____
c. Field-Related: focus on workforce skills, but with most work done in non-field-based settings.	_____	_____
d. Certification: individual courses provide certification of industry-based technician skills.	_____	_____
e. Distance: web-based or distance learning courses.	_____	_____
f. Introductory Technology: introduction to cutting edge tools and equipment needed for technician work without in-depth, hands-on experience.	_____	_____
g. Technology Intensive: in-depth, hands-on experience with cutting edge tools and equipment for technician work.	_____	_____

* (1) Percent of students who successfully completed these courses once they have enrolled.

10. For courses in the single program and location you specified in Question 2, estimate the number of your students in each of the following categories. (Use the past academic year plus summer (12 months) as the basis for answering.)
 * If the information is Unavailable enter "U"
 * If the information is Not Applicable enter "NA"

Student Characteristics	Number of Students
a. Number of students in your specified program	_____
b. Number of students who completed the specified program	_____
c. Number of students who left the specified program without completing it	_____
d. Number of students who were already employed as technicians in specified program-related fields upon entry into the specified program	_____
Of those students who completed the specified program	
a. Number who go into or continue employment as a technician	_____
b. Number who continue SMET-related higher education	_____
Of those students who left the specified program without completing it	
a. Number who go into or continue employment as a technician	_____
b. Number who continue SMET-related higher education	_____

11. For courses in the single program and location you specified in Question 2, estimate the percent of your students in each of the following categories. Use the past academic year plus summer (12 months) as the basis for answering.

*** If the information is Unavailable enter "U"**

*** If the information is Not Applicable enter "NA"**

Student Characteristics	Percent of Students
a. Students who were required to take remedial SMET courses before entering your specified program	_____
b. Students who meet basic SMET workforce entry requirements for technician jobs related to your specified program at the time of entry into your specified program	_____
c. If your specified program offers a degree, what percent of the students in the specified program's courses seek the degree?	_____
d. If your specified program offers certification, what percent of the students in the specified program's courses seek certification?	_____

12. For courses in the single program and location you specified in Question 2, please provide your best estimate of gender, ethnicity, race, and disability information from application and enrollment information for your ATE grant-based academic specified program for the past academic year plus summer (12 months).

*** If the information is Unavailable enter "U"**

*** If the information is Not Applicable enter "NA"**

a. Gender		
Student Category	Applicants (%)	Enrollment (%)
% Female	_____	_____
b. Ethnicity/Race (These will not necessarily sum to 100%.)		
Student Category	Applicants (%)	Enrollment (%)
% Hispanic or Latino	_____	_____
% American Indian or Alaska Native	_____	_____
% Asian	_____	_____
% Black or African American	_____	_____
% Native Hawaiian or Other Pacific Islander	_____	_____
% White	_____	_____
c. Percent of students who requested accommodation due to their disability under the Americans with Disabilities Act.		
Student Category	Applicants (%)	Enrollment (%)
% Hearing Impairment	_____	_____
% Visual Impairment	_____	_____
% Mobility/Orthopedic Impairment	_____	_____
% Learning Disability	_____	_____
% Other	_____	_____
d. Total number of applicants and enrollees (totals not percentages)		
	Applicants (not %)	Enrollment (not %)
Total number	_____	_____

13. For courses in the single program and location you specified in Question 2, please provide a brief description for each type of specific student recruitment, retention, and placement activities in your specified program. For each activity, pay special attention to actions your center/project or supporting institution took to serve minority or disability groups and women. In each case, briefly describe what worked well and what did not.

* If the information is Unavailable enter "U"

* If the information is Not Applicable enter "NA"

a. The specific steps taken to recruit students to your specified program.

b. The specific steps taken to retain students (i.e., help students to meet personal, financial, and academic barriers in order to complete their specified programs in an academically sound way).

c. The specific steps taken to place students in positions during and upon completion of the specified program (either industry or higher education related).

The System is currently in testing mode. E-mails which are created for the certification of user will be sent to the Project Director instead of the e-mail address you specify.

NSF # 4444444

Project Title: Liping's Testproject

PI: Ms. Liping Zhang

Professional Development

Complete this section if your center/project provides instruction and/or support to teaching faculty and staff, so that they update their knowledge and skills in order to effectively teach new or improved curricula.

click here if this section doesn't apply

Numerical values must be entered as integers (e.g., "3420", "6" or "0").

Do not use: decimal points, commas or percent signs in numerical values (e.g., "3,000", "6.00", "\$320" or "95%").

[What does "not apply" mean?](#)

Person currently assigned to this section is: **Ms. Liping Zhang (lzhang@cs.wmich.edu)**

If you want to *reassign* this section, please enter the name of the person below or select from the list.

Courtesy: First Name: Middle I: Last Name: E-Mail:

enter name:

or select from list:

click here to reassign this section

[What does "reassign" mean?](#)

< Back

Professional Development: Instruction and/or support to teaching faculty and staff

1. Please provide the number of opportunities provided for each option (e.g., 3 conferences) and then provide the total number of participants across all opportunities for the past 12 months.

* If the information is Unavailable enter "U"

* If the information is Not Applicable enter "NA"

Professional Development Opportunities	Number of Opportunities	Total Number of Participants
a. Conference (multiple track-participants choose from a selection of workshops or presentations to attend)	_____	_____
b. Short-term workshop (single track-1 to 3 day directed learning experience)	_____	_____
c. Inservice course or seminar (longer than a 3-day directed learning experience)	_____	_____
d. Internship, leave of absence to work with industry, and work exchange program	_____	_____
e. On-line courses	_____	_____
f. Other (please describe)	_____	_____

2. Please provide the percent of participants in the past 12 months who have taken the following actions as a result of participating in each type of professional development activity.

* If the information is Unavailable enter "U"

* If the information is Not Applicable enter "NA"

Professional Development Opportunities	Indicated satisfaction with the activity	Indicated intention to use the technology, materials, and/or major ideas presented	Tried out the technology, materials, ideas at least once in the classroom	Fully incorporated the technology, materials, and/or major ideas into their course or program
a. Conference	_____	_____	_____	_____
b. Short term workshop	_____	_____	_____	_____
c. Inservice course or seminar	_____	_____	_____	_____
d. Internship, leave of absence to work with industry, or work exchange program	_____	_____	_____	_____
e. On-line courses	_____	_____	_____	_____
f. Other (please describe) _____	_____	_____	_____	_____

3. Approximately what number of participants from the following institutions were engaged in professional development with your center/project in the last 12 months?

* If the information is Unavailable enter "U"

* If the information is Not Applicable enter "NA"

Institution type	Number of participants
a. Secondary schools	_____
b. 2-year colleges	_____
c. 4-year colleges/universities	_____
d. Other (please describe) _____	_____

4. Overall, to what extent are your professional development opportunities operating at capacity?

Professional Development Opportunities
a. <input type="radio"/> At or near full capacity
b. <input type="radio"/> At about 3/4 capacity
c. <input type="radio"/> At about half capacity
d. <input type="radio"/> At less than half capacity

5. Those who attempt to implement changes based on professional development typically require support of their implementation effort.

- I. Does your center/project require participants to obtain administrative, monetary, or other support for implementation as a condition of acceptance to the professional development program?

Required Support

- yes
 no

- II. What percentage of participants from the following institution types actually receive the promised support to implement changes?

* If the information is Unavailable enter "U"

* If the information is Not Applicable enter "NA"

Participant Type	Percentage
a. Secondary schools	_____
b. 2-year colleges	_____
c. 4-year colleges/universities	_____
d. Other (please describe)	_____

- III. Check each type of implementation support that your center/project typically provides to participants as part of the professional development program. If no support is typically provided check "none".

- a. money
b. equipment
c. materials
d. technical assistance
e. none
f. Other (please describe)

6. For each educational level for which your center/project has provided professional development activities, please comment on your program's effectiveness. That is, briefly describe what faculty can do now as a result of participation in professional development activities that they could not do before. If possible, please provide an example or two.

* If the information is Unavailable enter "U"

* If the information is Not Applicable enter "NA"

- a. secondary school faculty

- b. 2-year college faculty

- c. 4-year college/university faculty

The System is currently in testing mode. E-mails which are created for the certification of user will be sent to the Project Director instead of the e-mail address you specify.