

Evaluating your North American Mobility in Higher Education Grant

Innovation with Impact in Postsecondary Education

Dr. Susan G. Lehmann
Education Research Analyst, FIPSE
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***Warning: This is a draft document and not an official statement of the U.S. Department of Education. It is provided for the assistance of our grantees.**

Setting up a Successful Evaluation

By December 1, you should:

- 1) Check out the FIPSE website for evaluation materials designed to help you move through the process.

What evaluation materials can you locate on the FIPSE Website?

- ▶ An annotated evaluation chart and worksheet for you to work out your evaluation goals and action plan.
- ▶ A new list of short articles (5-15 pages) with hyperlinks, which introduce a novice to different aspects of evaluation.

By December 1, you should:

2) Work through the FIPSE evaluation chart. When you have a draft you like, send it to: susan.lehmann@ed.gov



The Evaluation Chart Has 4 Parts

A: Refining the Project

B: Identifying the Data to Collect

C: Setting the Timeline

D: Identifying Interested Parties
to Share Results With

Hints

Be realistic. Do you really want to set such an ambitious evaluation agenda that you spend 50% of your time working on your evaluation?

Your project has many facets. You **do not** need to measure everything.

Hints

An evaluation report is **not** an accounting that you did what you proposed and spent all the money as planned.

Imagine two schools are attempting to improve engineering education using two different techniques. If both schools report only that they did what they proposed, spent all their money, and students were highly satisfied, a colleague at a third school has no information with which to judge which model is more effective at improving engineering education.

Hints

Set out to obtain data that *moves knowledge forward* by documenting what works, what does not work, and why.

If, at the end of the project, you conclude that your original model didn't get you the results you had hoped for, then tell us what you would change next time - the activities, the schedule, the type of students, etc.

Hints

Write for a general audience. Write your evaluation so that someone like yourself could identify the key aspects of the project to replicate or avoid.

If you feel very comfortable using evaluation jargon, feel free to use it. If you use no jargon, that is perfectly fine.

Refining the Project: Things to Consider

- ▶ 1-3 main themes, a.k.a “project goals” .
- ▶ 1-2 key questions per theme. These are your “project objectives” .
- ▶ What will be documented or measured so that you will be able to determine if you met your objectives?
- ▶ Speed and extent of change.

Data Collection

- ▶ Baseline measures.
- ▶ Data collection instruments.
- ▶ Who is the respondent, interview subject, etc. **Who is changing?**
- ▶ Comparison or control group, if possible.

Timeline

- ▶ When will your evaluation instruments be drafted?
- ▶ When will you collect your data?
- ▶ When will you analyze your data?
- ▶ Will your evaluation results provide feedback during the project that will enable you to modify project activities? Which activities might you modify?
- ▶ When will your written evaluation findings be ready for an outside audience?

Dissemination: Who should hear about your findings?

- ▶ On campus?
- ▶ In the local community?
- ▶ At similar institutions?
- ▶ Professional groups & associations?
- ▶ Professional colleagues?
- ▶ Local, state, and federal agencies & officials?
- ▶ Interested others?



Make sure your announcements, papers, website, etc. clearly identify FIPSE funding on the first page.



By clearly referencing FIPSE, you help publicize what FIPSE does and you increase the likelihood that funding for this program will continue.

You also ensure that we can easily find your project in a Google search and tell officials of your findings and achievements.

Now that you have identified who should know about your project, review the project objectives and data collection plan one more time.

- ▶ Did you address issues of high interest to the people you intend to share results with?
- ▶ Are you collecting data that will be convincing to a *skeptic*?
- ▶ Will the data you collect help you rule out alternative explanations for any changes you notice?



By December 1, you should:


3) Locate your outside evaluator.

If you have not yet located an outside evaluator, we offer the following advice:

► Our website,

<http://www.ed.gov/programs/fipsenortham/awards.html>

lists current FIPSE grantees. If you see that someone located at a nearby institution or with a similar project has a '04, '06, or '07 grant, you might contact them for a reference.

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- ▶ You can log into the FIPSE database at www.fipseaed.org and search among all FIPSE grants, past and present. FIPSE funds several international programs and all programs are required to have outside evaluators.

The contact information for the project directors, along with project abstracts, is posted for you to review.

- ▶ You could contact someone from another department at your institution, particularly the sociology, statistics, or education departments. Often faculty consult as evaluators.

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- ▶ The American Evaluation Association keeps a list of evaluation consultants searchable by state. The main website for the organization is: www.eval.org .

The webpage for finding an evaluation consultant is:

http://www.eval.org/find_an_evaluator/evaluator_search.asp

Access to this list is free of charge.

Sample entry from the AEA Website:

Firm:	Britt Enterprises
Location:	NE, IA, MI, IN, KT, USA
From the Firm:	Specializing in federal education and NSF grant evaluations. Over twenty years of combined experience. Offer flat rate fees and custom services that support clients from conceptual development to final report stages.
Website:	
AEA Member(s) On Staff:	Jody Britten, Principal, jodybritten@earthlink.net

CAUTION:

FIPSE has NO affiliation with AEA and has NOT reviewed individuals or firms listed on the AEA website. Use this resource at your own risk.

By December 1, you should:

4) Identify your baseline measures & begin collecting data for your evaluator.

Here are some baseline measures that are typically useful.

- ▶ **Grades in key courses**
- ▶ **GPA, SAT, or GRE scores (Consider a control group.)**
- ▶ **Standardized language proficiency exam scores**
- ▶ **Initial participant attitudes**
- ▶ **Typical pre-program behavior**
- ▶ **Students' program and professional goals**

Decide whether to have students keep weekly activity logs of things that have been shown to have an impact on study abroad outcomes, such as:

- Number of major courses taken at the host institution
- Number of hours spent doing key internship activities
- List of professional contacts made
- Average number of hours/day spent speaking the host language
- Number of informal excursions with host nationals

If you have student activity logs, it will make it easier to divide students into groups for analysis.

For example, you might want to see if students who interacted informally more often with host nationals had a greater gain in Spanish language proficiency than those who hung out with American classmates in their free time.

Make sure that you have a written record of the following information for all students involved in the project:

- ▶ Name
- ▶ Major
- ▶ Department
- ▶ University
- ▶ Graduation Year

Recording this information makes alumni surveys a possibility.

Evaluation Example 1:

Note: The blue text on the following slides are sample answers that you might write.

Refining the Project: Example 1:

- ▶ 1-3 main themes, a.k.a “project goals” .

Goal 1: Train engineering students to be more globally competent.

Refining the Project: Example 1:

- ▶ 1-2 key questions per theme. These are your “project objectives”.

Project Objective 1a: To graduate engineering students with Spanish-speaking ability adequate for conversing informally with native Spanish speakers.

Refining the Project: Example 1:

- ▶ What will be documented or measured so that you will be able to determine if you met your objectives?

Increase in Spanish-language proficiency among American students who are non-native speakers of Spanish.

Refining the Project: Example 1:

► Pace of change.

By comparing language ability prior to travel and post study abroad, the participating undergraduate American engineering students will show evidence of increased Spanish language proficiency over the course of 1 semester.

Refining the Project: Example 1:

► Extent of change.

Change will be measured by:

Option A: an average increase of X percent on a standardized exam such as the Brigham Young's Foreign Language Achievement Test (FLATS), or

Option B: an average increase of X points on our college's Spanish placement exam, or

Option C: increases in self-reported willingness to conduct a series of tasks (speaking with colleagues, writing memos, reading documents, hosting a professional meeting, etc.) in Spanish.

Data Collection Example 1:

► Baseline measures.

Option A: FLATS Spanish test needs to be administered by the faculty advisor just prior to study abroad. Total cost per student = \$80. for the pre and post-tests.

Option B: Your college's Spanish placement exam needs to be administered just prior to study abroad.

Option C: A pre-departure survey needs to be administered to students to measure their initial willingness to conduct a series of tasks in Spanish.

Data Collection Example 1:

▶ Data collection instruments.

Option A: Standardized commercially available test.

Option B: Your college's placement test.

Option C: Your own attitude survey.

Data Collection Example 1:

- ▶ Who is the respondent, interview subject, etc. Who is changing?

American undergraduate students who participate in the study abroad portion of your project.

Data Collection Example 1:

- ▶ Comparison or control group, if possible.

Option A: See if the makers of your standardized test have data showing the amount of gain one could expect for different types of programs.

Option B or C: If you have some engineering students who are not participating in the study abroad portion of the project, but are otherwise taking the same course of study, can you administer a test/survey to them? Or can you administer the test/survey to those you taught last year who did not go abroad?

Timeline Example 1:

- ▶ When will your evaluation instruments be drafted?

Options A & B: They are already completed. Option C:
Pick a date prior to the departure of your first group of students.

- ▶ When will you collect your data?

Prior to the departure of your students and again immediately upon their return home.

- ▶ When will you analyze your data?

During the month or two after the first students return home in year 2.

Timeline

- ▶ Will your evaluation results provide feedback during the project that will enable you to modify project activities? Which activities might you modify?

Findings will be reviewed over the summer between year 2 and 3.

If there is insufficient evidence of the expected language gain, then P.D.'s will discuss options for year 3 such as: changing student housing arrangements to include host families instead of foreign student dorms, requiring that more courses be taught in the host language, organizing a debate in the host language between the American students and their host counterparts, selecting internships where students must function in Spanish, etc.

Timeline Example 1:

- ▶ When will your written evaluation findings be ready for an outside audience?

Some date between the return home of the 1st students and 6 months after the end of the FIPSE grant. You may plan to make different types of findings available at different times.

Dissemination: Example 1

▶ On campus?

The Dean is looking for evidence that study abroad adds value to the engineering curriculum.

Prospective majors need to hear about the finding so that they will see that engineering is an international field.

Dissemination: Example 1

▶ In the local community?

Engineering alumni need to know about this program because perhaps they would like to be involved in hosting the reciprocal visits of students to your campus.

Alumni may also be more interested in hiring your graduates if they knew about this project.

Dissemination: Example 1

- ▶ At similar institutions?

Your colleagues at Engineering Tech across the state need to hear about this project because they might want to consider a similar program.

If you could get them interested, perhaps you could expand the project or brainstorm ways to become self-sustaining.

Dissemination: Example 1

- ▶ Professional groups & associations?

The national engineering association needs to hear about your results so that other schools can cite your data to convince their deans that international study *enhances* engineering training.

Dissemination: Example 1

▶ Professional colleagues?

Using their employee performance data on past hires, Boeing has implemented a program to rank schools in terms of their ability to produce the best engineers for Boeing. Your institution didn't fare so well in their initial rankings. You should let them know that you have added this new feature to your program to make your graduates more competitive.

Dissemination: Example 1

- ▶ Local, state, and federal agencies & officials?

While abroad, your students learn a lot about certain engineering issues that are directly relevant to some engineering challenges that your state is trying to address. Perhaps a letter to the right state committee would open professional doors for your students and colleagues.

Dissemination: Example 1

▶ Interested others?

You are going to create a website with a section for student alumni to post resumes and announcements of professional achievements. You are going to publicize this website and your program to local businesses that hire engineers.

Evaluation Example 2: (Condensed Example)

Refining the Project: Example 2:

- ▶ 1-3 main themes, a.k.a “project goals” .

Goal 1: Train engineering students to be more globally competent. (This is the same goal as the one used in the first example.)

Refining the Project: Example 2:

- ▶ 1-2 key questions per theme. These are your “project objectives”.

Project Objective 1b. To give your students the basic knowledge to be more effective overseas employees from day 1.

Refining the Project: Example 2:

- ▶ What will be documented or measured so that you will be able to determine if you met your objectives?

Increase your students' basic knowledge about engineering regulation and professional life, and increase their professional contacts in Mexico.

Refining the Project: Example 2:

► Extent of change.

Option A: Having completed your program abroad, your students will be able to identify:

The 5 primary Mexican government agencies that deal with engineering policy, 10 major engineering firms in Mexico, 2 Mexican professional associations for engineers, and 2 major Spanish-language engineering publications.

They will have the professional contact information for 2 Mexican engineers with whom they have interned/worked and/or 1 letter of recommendation from a Mexican engineer with whom they interned or studied.

Data Collection Example 2:

- ▶ Baseline measures: Prior to overseas study, you will administer a short survey which will ask your students to identify the items listed in the previous slide.
- ▶ Control Group: Engineering students who are not participating in the study abroad portion of the project, but are otherwise taking the same course of study, will take the same survey. Or students you taught last year, who did not go abroad, will take the same survey.

OR

Refining the Project: Example 2:

► Extent of change.

Option B: Students who study abroad will demonstrate, on a faculty-designed test, that they have a better grasp of the rules and regulations impacting the international practice of their profession than those who did not go abroad.

Data Collection Example 2:

- ▶ Baseline measures: Prior to overseas study, you will administer a short survey measuring their baseline knowledge of the rules and regulations governing the international practice of their profession.
- ▶ Control Group: Engineering students who are not participating in the study abroad portion of the project, but are otherwise taking the same course of study, will take the same survey. Or students you taught last year, who did not go abroad, will take the same survey.

OR

Refining the Project: Example 2:

► Extent of change.

Option C: Students who study abroad will show a greater use of primary source material in their senior project than those who did not study abroad. Their senior projects will contain information that could only be gathered abroad - interviews, local knowledge of a particular issue, etc.

Data Collection Example 2:

- ▶ Baseline measures: Students going abroad need to be instructed on what primary source material they should be collecting for their senior projects.
- ▶ Control Group: Engineering students who did not go abroad will have their use of primary source material in their senior projects recorded and quantified in the same manner as those students who did go abroad -- for purposes of this evaluation report only.

OR

Refining the Project: Example 2:

► Extent of change.

Option D: Students who study abroad will receive an average of 1.5 more job offers and/or will receive higher salary offers than students from the same group who did not go abroad.

Data Collection Example 2:

- ▶ Baseline measures: Names and contact info for all students going abroad and those in your control group. You'll need to keep this information current for about 2 years.
- ▶ Control Group: Engineering students who are not participating in the study abroad portion of the project, but are otherwise taking the same course of study, will provide the same data on job and salary offers. The timeline for this example is longer. You will need to keep contact with students for several semesters after they return from study abroad to collect these data.

Timeline

- ▶ Will your evaluation results provide feedback during the project that will enable you to modify project activities? Which activities might you modify?

Options A & B: Findings will be reviewed over the summer between years 2 and 3. Options C & D: Findings will be reviewed over the summer between years 3 and 4.

If there is insufficient evidence of the expected knowledge gain, then P.D.'s will discuss options for the next group such as: organizing a seminar/lecture series on the professional life of the engineer in Mexico, organizing field trips to government agencies, foreign firms, and professional associations, or asking professionals to mentor your students.