

Council for Excellence in Teaching and Learning Curriculum and Instructional Grants Guidelines for Final Project Report

Recipients of Council for Excellence in Teaching and Learning (CETL) Curriculum and Instructional Grants (CIG) are required to report the results of their projects to CETL one year after the award was made. These reports are intended to be brief, practical, and non-technical summaries of funded project and reports the educational outcomes of the project. These reports are intended to be shared with the UIC community by CETL.

The report of the CIG project should be two to three pages in length and should include the following sections:

1. Project Information
2. Statement of the Problem
3. Summary of the Project
4. Anticipated Educational Outcomes of the Project
5. Results of Project Assessment Plan
6. Discussion of the Impact of the Project on Teaching and Learning at UIC
7. Images from the project may also be included

Each of these sections will be described in greater detail below.

Project Information

This section includes the names and department/program affiliations of all investigators associated with the project, the title of project, and the amount of funding received for the project.

For example:

Name: James Pierce, Council for Excellence in Teaching and Learning

Title of Project: Development of Web-Based Problem Sets to Enhance Elementary Physics Instruction

Funding Received: \$8500

Statement of the Problem

This section states the problem that the project was intended to solve.

For example:

Students who do not intend to major in the sciences often find the study of Physics intimidating. They do not readily see the applications of Physics to everyday life and therefore have trouble visualizing key concepts and applying these concepts to homework and exam problems.

Summary of the Project

This section describes what was done in the project. It should highlight the major activities of the project and outline the timeline under which the project was

implemented. This section should be a brief, one- to two-paragraph summary of the project. Bulleted summaries are also appropriate.

For example:

Working with one month's summer salary and with a 50% graduate student programmer, I developed a web page to supplement in class instruction in a Physics course for non-science majors (PHYS 100). The web page used Blackboard with the assistance of the Instructional Technology Lab to deliver course announcements, video clips demonstrating basic physical principles, animations that assist students in visualizing problems, and problem sets to supplement those included with the text. I pulled together existing resources in June and July of 2001 while my graduate student converted images and clips to a digital format using the facilities of the InfoTech Arcade. She also programmed problem-sets into HTML. Consulting with the Teaching and Learning Center, we organized the course web site to mirror the course syllabus. The course was initially offered during the Fall semester of 2001.

Anticipated Educational Outcomes

This section focuses on what was *expected* to happen as a result of the project. These outcomes should concentrate on what was desired rather than on what actually happened.

For example:

There were three primary outcomes expected from this project:

1. Students would become more engaged with the class due to the supplementary multimedia materials that were made available over the Internet
2. Students would be better able to understand key course concepts due to the ability to see visual representations of them through video and animation
3. Students ability to solve problems would increase as a result of improved ability to visualize problems

Results of Assessment Plan

This section provides an overview of the results of the assessment plan provided in the original application. It should point out key findings that demonstrate whether the project's anticipated learning outcomes were met. Bulleted results are also appropriate.

For example:

There were three main components of the assessment plan. First, we tracked "hits" on the various parts of the web site. Analysis of that information showed us that students overwhelmingly accessed the additional problem sets above all other sections of the web site. Second, we conducted a survey of the class on their use of the web site. 85% of students either agreed or strongly agreed that the web site enhanced their learning in the course. Third, we compared exam grades from this semester with grades in previous semesters in which I taught this course. I found that student grades rose slightly over previous terms.

Discussion of the Impact of the Project on Teaching and Learning at UIC and It's Broader Impact on Teaching

This section is an open-ended opportunity to talk about the project. Some questions that might be considered in preparing this section include:

- Did the project work as expected? Why? Why not?
- Were the outcomes met? If not, is there an explanation?
- Were there any surprises? How were they dealt with?
- What might be done differently?
- What advice would you offer to someone considering a similar project? Would you do it again?

For example:

This project did not work as I expected it would. I was surprised by the lack of greater improvement in student grades. I suspect that this result is related to the fact that the problems sets on the web site provided access to supplementary resources while the exams were conducted in the traditional pen and paper way. Students who relied too heavily on the computer did not develop the essential problem solving strategy in Physics of diagramming the problem. Instead of helping students visualize problems, I fear that the web site may have actually hurt their ability to accomplish this central cognitive task. The task of answering a pencil and paper exam question, it seems, was substantively different than answering an apparently similar question over the web. Additionally, there was not as much student work on the exam papers. While grading the papers, I realized that even students who arrived at the correct answers were skipping many steps. This lack of "showing their work" limited my ability to give partial credit on problems.

I did notice, however, that student questions in class were more advanced. I believe that the web site did contribute significantly to the students' understanding of the theories and concepts in the source. This also increased my satisfaction with the course. Results of the survey I conducted as well as those from the departmental instructor evaluation indicate that students were also more satisfied with the web-enhanced course.

I think that in the future, I will utilize the web page differently. I used it exclusively as a supplement. I hope that in upcoming semesters that I can avoid having students develop "bad" problem-solving habits by integrating the web page more into the course of instruction. I intend to model how I want the students to use the web resources.