

## Teaching and Learning Project Assessment Report

**Program or Unit:** Electrical/Instrumentation

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### **What we wanted to learn about our students:**

This project assesses:

PSLO #2 Troubleshoot, analyze, operate, repair, and install electrical systems equipment.

PSLO #3 Communicate the technical status of equipment in writing and verbally; be able to work and communicate with teams.

PSLO #4 Safely use electrical or instrumentation test equipment.

PSLO #5 Demonstrate the operational concepts of equipment and technology used in the electrical or instrumentation field.

### **What we did:**

How was the research question investigated? What students were studied? (If sampling was used, how was the sample chosen? Did the sample adequately represent all students in the program? Explain.)

The projects assigned in ETEC 59 requires students work in teams to put together a working process control system that encompasses most all of the principles and technology presented in previous courses. Each group is broken into sub groups that are assigned specific tasks to complete working control system. Once a working system was completed the instructor would insert a series of faults into the system and the teams were required to use proper troubleshooting techniques to locate and repair the system. Each subgroup was required to write a report on their portion of the project and present an oral report to the class. On the next project the sub groups were rotated to a different task so that each member had to perform each tasks at least once during the semester.

1. Were direct, indirect, or qualitative measures used in the assessment?

Direct methods were used to evaluate the students and a final grade was calculated based on scores received on each project. The criteria used for evaluations are as follows:

Group participation Instructor observation during the project of the following:

Project involvement. Was student actively working on the project most of the time?

Proper use of tools and equipment including safety considerations.

Demonstrated understanding of the technology.

Correct answers on written quizzes.

Following proper troubleshooting procedures.

Clear and accurate written and oral reports.

**What we learned about our students:**

What are the findings or results of this project? Summarize the data.

Twenty three students participated in this course and 17 of them were above proficiency and 6 were at proficiency. None were below proficiency.

These results indicate to me that the ETEC instructors are doing a pretty good job of preparing students for the work place.

**What we plan to do next to improve student learning:**

In the future we should incorporate more practice test for job entrance exams and bench test.

This is usually the last course the students take and refreshing their memory from earlier courses will improve their pass rate when applying for a job.