



THE INFINITY PROJECT

PDI Description

The Infinity Project for Computer Applications

Introduction: This *The Infinity Project for Computer Applications* course is an adaptation of The Infinity Project. The curriculum has been adapted primarily for 9th and 10th grade students. However, this course is also open to 11th and 12th graders. The topics covered align with the Computer Applications Texas Essential Knowledge and Skills. Schools outside of the state of Texas can incorporate this curriculum into courses that meet similar knowledge and skills requirements.

Qualifications of educators: The teacher must be certified in Technology Education to teach the Computer Applications course. The teacher should also have a moderate to strong competency in computer hardware and software. The necessary teacher computer skills include the ability to send and receive email messages, search the Internet, and install software from a CD ROM.

Course Objectives:

Participants will:

- Use *LabVIEW for the Infinity Project* software
 - To create applications
 - Understand front panels, block diagrams, and icons and connector panes
 - To use built-in functions
- Cover the topics and lab experiments associated with each module in the curriculum
- Review software applications currently used in most computer applications courses and the Infinity Project experiments that have been designed to utilize these applications
- Review the math concepts that are reinforced in this curriculum.
- Review curriculum support materials including instructor's manual, daily lesson plan guide, Classroom Support on-line

Course Materials:

Textbook: *Engineering Our Digital Future* by Prentice-Hall.

Student Lab Manual: The student manual contains laboratory descriptions and includes step-by-step instructions.

Instructors Manual: The instructor's manual contains solutions to the exercises in the textbook, sample test questions, Frequently Asked Questions which can be used to generate student discussions, and references to web sites.

Presentation Slides: PowerPoint slides are available for instructors to use in their lectures.

Daily Lesson Plan Guide: Contains the calendar of lessons based on a 45-50 class period for the academic year.

Topics Covered:

1. Introduction to *LabVIEW for The Infinity Project* software
2. Introduction To Engineering
3. Basics of Engineering Involving Video
4. Math You Can See
5. Basics of Engineering Involving Sound
6. Digitizing The World
7. Coding Information
8. Realistic Engineering Principles

Duration: 5-days

Cost: \$750

Schedule: 8:30-5:00