Sample Minigrant Proposal - Junior High School Technology

The information in this fictional minigrant proposal is based on several actual proposals, and is designed to serve as a general example.

Project Title: Introduction to Control Technology

Subject area: Technology education

Project Summary: Recent changes in the curriculum from a traditional Industrial Arts (shop) program to an exploratory Technology Education program require new and sometimes costly instructional materials. The area of computer control is especially important, because this is one of the fastest growing job markets of the future. Our school budget does not provide enough funding to purchase computer control instructional materials. We need these materials so that our students can learn the Technology Education concepts effectively.

This project is designed to introduce control technology through the use of computer controlled LEGO® models. A group problem solving method of instruction will use design briefs to apply a design loop system in developing practical solutions to project simulations in the technology areas of communication, construction, transportation, manufacturing, and bio-related technology.

Who Will Benefit: Approximately 60 eighth grade students each year. I currently teach technology to 4 classes of 12-16 students. Each class will have the opportunity to work with the requested materials.

Project Objectives:

1. Provide hands-on experience and instruction in control technology for all 8th grade students.
2. Expand the use of the design-based instructional format in Technology Education classes.
3. Raise the career awareness of students to fields related to computer control.

Project Activities/Methods: I am planning to attend a summer session of "Using LEGO Materials in the Technology Education Classroom," a 3-credit graduate workshop at a local university. I hope to purchase the computer control materials in late summer and begin using them in September. Two teams of three students each will work with the Control Lab materials from LEGO Dacta for four weeks of each grading period. All students will rotate through an introductory instructional unit on controlling motors and lamps with the Logo programming language. They will then begin working on investigation and invention projects, and will keep project portfolios and a daily journal. All completed design problems will be presented by teams to the class for evaluation and critique.

Evaluation: The technology education chair, the director of secondary education, and the principal will review results of pre-tests and post-tests as well as student portfolios. If significant learning has taken place, additional Control Lab materials will be purchased from the principal's discretionary fund to expand the program.

Budget Requested:

Two LEGO DACTA Control Lab Starter Packs for MS-DOS (item 943).	$1,250.00

Other Sources of Support: Shipping and handling cost for materials and 75% of the graduate workshop cost will be paid by school district funds.

Additional remarks: In addition to improving the instructional program for the 8th grade students, the project materials will also enable the local Technology Student Association (TSA) chapter to participate in the Control Technology event at regional, state, and national TSA competitions.