A HIGH SCHOOL COMPUTER PROGRAMMING PROJECT

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A group of high school students at Ernest Manning High School in Calgary are learning computer programming as a pilot project supported by the University of Calgary Data Center.

Last September, a group of approximately 15 Grade XII students began the program. A number of these students left school before the new semester began in February. We then offered the program to Grade XI students and are now working with such a group. The course is offered as an extracurricular activity.

This project has several purposes:

1. to acquaint students with some of the things computers can and cannot do;
2. to prepare high school students who will be entering university with an "already" introduction to computers;
3. to encourage students to consider computer technology as a career after graduation from high school or university;
4. to study the feasibility of teaching computer programming in high school and to determine some of the real problems.

After a six-month operation of this course, a few observations have been made: Students have discovered, often to their surprise, that a computer is a "dumb" machine that must be controlled by man. This has invariably decreased their awe about the machine and computer science. I noticed that the students have become much more exact about their mathematical expression and have learned to think logically through a problem. One student of this course since September has found that some systems, of which he thinks all by himself and independently, actually work.

I would suggest to any other math teacher who is interested in a similar program to offer it to his students through a course. This is a very rewarding activity despite occasional temporary headaches.