Development of Computing at Luther College

By Dale Nimrod

Computing at Luther began early (1965), was innovative in Iowa higher education, and powered one of the first projects in Iowa to bring computing to bear on K-12 instruction.

During the era of card-based computing, faculty at Luther saw the importance of interactive computing for academic use and chose an interactive terminal (albeit slow) to connect to a remote, shared computer by telephone. A card-based computer was added for a short while, but interactive computing was the goal for both instructional and administrative applications.

Transformations are created by cooperative efforts, but Ed Thorland, a Luther grad with advanced study in theoretical physics at Michigan, Cambridge, Iowa State, and Berkeley, provided extraordinary leadership and insight in the development of information technology beginning in 1970.

Thorland made a daring recommendation based on his review of the advanced design of a new computing system being readied at Hewlett Packard. An HP 3000—the second machine to leave their laboratories—arrived at Luther in early April, 1973. This machine became HP’s most successful product for more than two decades.

Financing the equipment required creative funding: Luther supplied area school districts with academic and administrative computing services; Thorland cancelled maintenance contracts and used the savings to buy test instruments that he himself used to keep the computers running. The computer connection to the area schools also opened the door to many additional cooperative initiatives.

Thorland’s leadership and the interest of students and other faculty resulted in a growing curriculum of computer science courses. Visits to a number of universities confirmed the strength of Luther’s program and encouraged the proposal for a computer science major. The faculty agreed in 1975.

Another Luther grad, Steve Demuth headed the development of robust administrative computing that was advanced in many ways over vendor-supported software available at the time. He spearheaded the design of programming tools for distributing centralized computing power to desktop computers. This new “client/server” model of software was the first of its kind in Iowa, and could be maintained by a very small staff.

A number of major grants beginning in 1983 led to the development of student computer labs and academic applications in nearly every department. All faculty offices have been equipped with computers for more than a decade. And all have been connected to each other and to the world. The college mounted a major effort to manage, support, and regularly upgrade all of this equipment and connectivity, as well as to schedule systematic replacement of the ever-changing technology. A very generous gift, given specifically for this purpose, has been especially important in this effort.