

DIGITAL EQUIPMENT CORPORATION

APPLICATION NOTE

# decsystem10

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## Academic, Administrative Requirements Met at Cerritos College



digital

A proven system. A modular system with excellent growth potential. A versatile system. Key reasons why Cerritos College replaced an existing computer with DECsystem-10.

The Cerritos Community College District is the 18th largest of California's 68 community college districts. The two-year school has set annual enrollment records since its founding in 1955 and currently serves more than 17,000 students from eight cities in Southeast Los Angeles County.

Because of budget limitations, Cerritos needed a computer system that could start small, yet handle both academic and administrative work. They needed a computer system that could grow as they grew. They needed a reliable system, one proven in similar applications.

Before deciding on DECsystem-10, Cerritos spent more than a year studying the various computer systems that might satisfy their requirements.

Key factors in their choice were the reputation, modularity, and versatility of DECsystem-10. Over 2000 colleges and universities now use computers manufactured by DIGITAL, many of them DECsystem-10's. And DECsystem-10's modular construction means growth. As requirements increase, additional system components can be added and processors can be upgraded without reprogramming, permitting both Cerritos and the system to grow together. For now, modularity means buying only the components needed to do the job. And, because DECsystem-10 is versatile even in relatively small configurations, simultaneous multiprogram batch processing, interactive timesharing, and real-time functions are possible.

Cerritos meets both academic and administrative computing requirements with the DECsystem-1040. The computer center contains a separate student data center with its own display terminal, Teletypes, line printer, and card reader. Students have access to this equipment for study or classwork. The central computing equipment, along with a card reader and line printer reserved for administrative work, is housed apart in a limited-access room next to the student data center.

Data processing classes conducted by the school's

Business Education Division—about 1200 students each semester—are handled on a full college day basis using the card reader and line printer located in the student data center. Remote terminals in the science, engineering and mathematics departments support interactive data processing requirements. In addition, computer-assisted instruction is a future consideration for the system.

DECsystem-10 handles administrative data processing requirements as well as academic applications. Cerritos uses approximately 300 data processing programs for student records and statistical reporting. Currently, these programs are in a data-base management system developed by Cerritos. Called ACCESS, the system is written in COBOL using simple English-like statements for selecting, sorting, and reporting terminal users' requests about a particular base. The ACCESS system will be converted to run on DECsystem-10 and will continue to be used for the school's business records systems.

One of the computer center's first projects following administrative program conversion will be to implement the Planned Programming Budgeting System (PPBS). The PPBS is a statewide concept which will be used throughout California's unified and community college districts. With their own DECsystem-10, Cerritos plans to be a leader in employing PPBS.

Long-range plans call for serving near-by secondary and community college districts with remote timesharing service. Revenues from such a service would help finance system upgrades, improving performance at little direct cost to the users. Right now, Cerritos is offering the use of DECsystem-10 terminals and data processing facilities to adjoining school districts. Full ANSI Level 4 COBOL, FORTRAN, ALGOL, and BASIC are available for administrative work; COBOL, FORTRAN, ALGOL, BASIC, AID (a calculator language developed by the Rand Corporation), APT-5 Dimensional Point-to-Point/Continuous Path Contouring, BAL, RPG, ECAP, and GASP II (a discrete simulating language) are provided for instructional use.

With DECsystem-10 on campus, new uses can be developed, new approaches refined, and utilization increased in step with staff growth and financial ability.

