DIGITAL EQUIPMENT CORPORATION

APPLICATION NOTE

decsystemo

April 1973

College, Community Requirements Met in Burlington County.



Burlington County College in Pemberton, N.J. is one of the fastest growing educational institutions on the Eastern seaboard. College officials soon realized the necessity for a computer facility that could handle the rapid increase in administrative and academic tasks. The computer center was also planned to be a joint organization providing services on a shared-cost basis for the college *and* the county. After an extensive search, Burlington College selected Digital Equipment Corporation's versatile DECsystem-1040 to do the job.

There were three major requirements of the computer system in order to serve both the college and community's objectives:

- A general timesharing system for both students and faculty.
- 2. The ability to develop and operate batch-type administrative systems with a particular emphasis on the ability to multi-program.
- Quick and easy development of a number of on-line data collection and administrative systems, featuring terminals located at work sites capable of retrieving and updating data from centralized files.

The DECsystem-1040 met these requirements and offered even more appealing features.

*Expandability—able to start small, it could still handle all requested administrative and educational tasks. And the system can grow, adding components in a modular way.

*Administrative capability—75% of all the work handled by the system is in COBOL.

Burlington's present DECsystem-1040 has 80,000 words of core memory, over 100 million characters of disk storage, a data communication controller scanner, card

reader, line printer and 2 magnetic tape drives.

DECsystem on Campus

The campus duties of DECsystem-1040 include admissions, registration, student scheduling and running the library's automated circulation.

Student registration was once a typically massive headache for all concerned. Now every Burlington student is scheduled by the computer and receives a computer-printed schedule for reference. The process is fast and simple. CRT terminals perform the verification process, checking the basic data about each individual registrant. The student then fills out a card and the computer informs him if the classes have space. When a schedule is confirmed the computer prints a copy for the student. Instructors also receive a roster of all students assigned to their classes.

In purely academic areas the DECsystem-1040 operates a computer-supported instruction program, a computer-managed instruction plan, a simulations and games program, a student response system and a student testing center.

DECsystem-1040 made Burlington County College's library the first computerized system of its kind to serve a two year institution in the country. The library enjoys automated circulation for more than 30,000 volumes presently on file and officials say that the DECsystem-1040 will catalogue up to one million volumes. The library system is based on a network of four CRT terminals multiplexed through external hardware and wired to the communication controller of the computer. In the course of any given day the DECsystem-1040 will check books in and out, request lost book cards, request new file entry cards, locate books via accession lists, list all of the



Overall view of the heart of the DECsystem-10 computer facility at Burlington County College in Pemberton, N.J. Computer provides on-line services for the college, for adjacent school districts and for various branches of Burlington County government.

books currently being held by any particular student, give the identity of any student holding a specific book, give a daily transaction total and show how "full" the library is.

Community Service

The various school districts in the area are recipients of computer support as a result of the working relationship of college and community. The DECsystem-1040 is helping to provide better instruction while significantly lowering the administrative costs of running the schools. By placing terminals in the school districts and connecting them by telephone lines to the college's computer center, many students are now using terminals in their math and science courses.

The computer center also helps school districts in registration and scheduling. The computer supplies the school superintendent with a master schedule and also furnishes each student with a class schedule. A grade reporting package operates from a master file at the college. New grades are fed through a computer terminal in the local school district and transmitted to the college for recording and storage. At the computer center all grades are compiled, tabulated and individual reports printed. The reports can either be delivered to the school for issuance to students or sent directly to the student's home from the computer center.

County Government

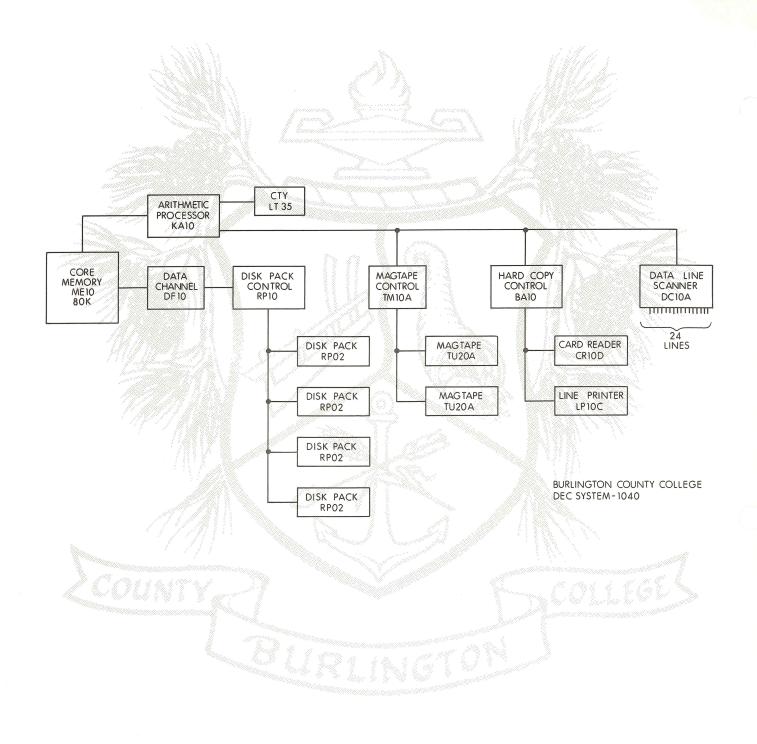
With characteristic ease and thoroughness the DECsystem-1040 serves the needs of the Burlington County government. On a shared-cost arrangement the county receives:

- 1. A record of personnel files on each of its more than 1,650 employees, including cross registry by date of employment and department, insurance data, and an interface to the county payroll system.
- Paychecks and explanatory stubs for the entire county payroll, net earnings of employees on a quarterly and year-end basis, quarterly tax reports, W-2 forms for all employees plus a year-to-date social security report, bond report and a longevity breakdown.
- A daily accounting for the county's probation department including daily payments journal, individual accounts histories, master file printout, beneficiary lists, delinquency letter for domestic relations and criminal fines, weekly charge listings, various fines reports and account totals.
- 4. A complete data bank on all business and industry in the county, compiled for the planning commission.
- Results of all county elections by candidate, district and town.
- Payroll processing for the entire county welfare department.
- 7. Jury lists for all of Burlington County with statistics by town, instant mail juror questionnaires, juror subpoenas, court attendance records and other data.

DECsystem-1040 is meeting the objectives set by Burlington County College. Its future promises to be one of continually growing responsibility and the DECsystem-1040's ability to add components in a modular way will greatly ease this process. College officials expect to soon add enough components to the present system to allow for a rapid increase in the number of programs that can be processed by the system at any one time.



A Burlington County College student brings a book to the college library's checkout counter. The library clerk enters her ID card along with the book number and waits to be informed by the DECsystem-10 if the student has books outstanding or is eligible to withdraw the volume.



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