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ABSTRACT
                Prepared by the Human Resources Research Organization
to assist administrators, faculty, and staff at other minority
institutions to plan and implement successful computing projects,
this book is one of a series of case studies on educational uses of
computers. The profile of Bennett College is presented in terms of
its mission, location, programs offered, numbers of faculty and
students, accreditation, tuition and financial aid, and operating
budget. A time line of the 16 years of academic computing at the
college precedes discussions of the organization and management of
the computer facilities and support; descriptions of computer
assisted instruction programs for math, reading, science, and the
Graduate Record Exams and National Teacher Exams for seniors; a brief
review of location, programs offered, numbers of faculty and
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college precedes discussions of the organization and management of
the computer facilities and support; descriptions of computer
assisted instruction programs for math, reading, science, and the
Graduate Record Exams and National Teacher Exams for seniors; a brief
review of computer literacy opportunities for students and faculty;
and lists of student benefits and accomplishments and outreach
programs. In the final section, Nellouise Watkins, the director of
the computer center, offers advice on computer assisted instruction.
A list of contacts and faculty developers is attached. (RBF)

Academic Computing at

Bennett College

A Case Study

Beverly Hunter and Greg Kearsley

HumRRO

HUMAN RESOURCES RESEARCH ORGANIZATION

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Dr. Nellouise Watkins, Director of the Computer Center at Bennett College, gathered the information that is described in this book.

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Academic Computing at Bennett College

A Case Study

Purpose

This book is one of a series of Case Studies of Academic Computing at minority institutions. These Case Studies are intended to assist educators at such institutions perform the following activities:

- Identify academic computing needs.
- Establish realistic goals for instructional computing.
- Organize and staff a computer center.
- Select appropriate computer hardware and software.
- Make computer resources more accessible to students and staff.
- Extend computer applications in particular courses and disciplines.
- Establish or improve a computer science curriculum.
- Raise the general level of computer literacy on campus.
- Share facilities, expertise, or curricular materials within the college community or with other institutions.
- Make personal contacts with experts at other institutions.
- Prepare a (five year) plan for academic computing.

Computers and related technology provide important opportunities for minority institutions to help their historically disadvantaged students —— to become equal members of modern society. By using computer-based instruction, students can get individualized help in catching up on basic skills. By learning and applying computer-related skills, students strengthen their career potential.

Despite the clear advantages to minority institutions of employing computer technology, these institutions have in fact been slower to adopt the technologies than most majority institutions.

A number of studies[1,2] have examined the status and needs of academic computing at minority institutions. These studies suggest that while minority institutions are catching up to non-minority institutions in terms of computing facilities and activities, there are some significant inequities. For example, minority institutions are significantly lacking in computer science programs and the staff to provide them: in 1976/77, only 35 of 228 minority institutions had computer science programs.

Much of the progress made in academic computing at minority institutions during the past decade has been due to federal funding. Two programs in particular have been critical: AIDP (Advanced Institutional Development Program) of the Office of Education, HEW; and MISIP (Minority Institutions Science Improvement Program) of the National Science Foundation.. The two programs have supported equipment acquisition, facilities, and curriculum development, as well as research projects.

A particularly valuable contribution to progress in minority computing was the ECMI (Educational Computing in Minority Institutions) funded by the National Science Foundation's Science Education Directorate. ECMI sponsored conferences and summer workshops which enabled 921 college faculty and staff (including 56 presidents) to learn about and discuss the potentials of academic computing at minority institutions.
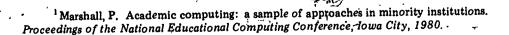
[1] Lewis, J., et al. Computing in minority institutions: 1976/77. *The fourth inventory of computers in higher education.* Praeger, Colo., 1980.
[2] Marshall, P. *Instructional computing in minority institutions: a needs/strategy assessment.* (Final Report). NSF Grant 7821515, 1979.

This case study project is an attempt to identify some minority institutions which demonstrate elements of successful academic computing. These case studies are intended to help the administrators, faculty, and staff of other minority institutions to plan and implement successful computing projects, building on the experiences of these case study institutions.

The minority institutions selected for these case studies include Jackson State University, Bennett College, Community College of Baltimore, and Florida A&M University. While these institutions vary widely in size, environment, history and academic programs, they do share certain common missions and problems. The case studies address some of the problems and ways the institutions have attempted to overcome them.

The case study project and other studies of minority institutions,[3] have identified the following key factors leading to successful use of computers to improve learning and teaching in minority institutions.

(1) Dedication on the part of key faculty and administrators.

(2) Support of top administration.

(3) Campus-wide planning—beyond walls of a single department.

(4) Ability to put together funds from various sources.

(5) Careful budgeting practices.

(6) Ability to learn from own or others' experiences.

(7) Desire to get as much mileage as possible from available resources.

(8) Innovative approaches and continued efforts towards solving the problem of acquiring adequate staff and faculty.

[1] Marshall, P. Academic computing: a sample of approaches in minority institutions. Proceedings of the National Educational Computing Conference, Iowa City, 1980.

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Bennett College was founded in 1873 as a coeducational school in the basement of Greensboro's St. Mathews Methodist Episcopal Church. It achieved college status in 1889 and was reorganized in 1926 as a four-year liberal arts college for the education of women. It is a private institution governed by a Board of Trustees. Bennett is affiliated with the United Methodist Church and the United Negro College Fund.

MISSION

The mission of Bennett College is to provide women with a flexible program of instruction, supplemented by rich experiences in group partici- pation and community involvement, and designed to meet occupational and individual needs of women in an ever-changing society.

Throughout its history, Bennett College has actively participated in community affairs. The faculty and staff serve on many civic committees and commissions. Its students undertake volunteer and field study assign- ments with local public agencies. Its cultural offerings are a vital contri- bution to the "black experience" and the general tone of the city.

Bennett College also strives to have an impact on the international community by encouraging enrollment by foreign women.

LOCATION

The college is located about one mile southeast of downtown Greensboro, North Carolina. Greensboro has a population of over 160,000 and is the home of five other colleges and universities.

PROGRAMS

Bennett offers Bachelor of Arts and Bachelor of Science in Education degrees from four major divisions of instruction: Education, Humanities, Sciences and Social Sciences. There are 12 departments offering a total of

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19 majors. A Bachelor of Fine Arts degree is also offered through the combined facilities of the Greensboro Regional Consortium. In addition, there is an interdisciplinary studies program which leads to a Bachelor of Arts and Science degree. Bennett features innovative programs such as women's studies, home and family life, student designed courses, and independent "on-the-job" learning experiences through a cooperative education program. In recent years there has been a significant reduction in teacher preparation enrollment and an increase in Business Administration and related fields.

FACULTY

The approximately 60 faculty members represent many nationalities and professional experiences. Some members are involved in research in their respective areas. Over 55% have doctoral degrees. The ratio of students to faculty is about 10 to 1.

STUDENTS

In academic year 1980-81, Bennett had an average enrollment of 650 students. The average age of the students is 19.5 years and the enrollment is 99% black. The student population is heterogenous in terms of scholastic abilities and socioeconomic backgrounds. Approximately half of the students come from North Carolina. The largest number of out-of-state students come from Pennsylvania followed by New York and the District of Columbia. Of foreign students, the largest number come from Nigeria and South Africa.

ACCREDITATION

Bennett College is accredited by the Southern Association of Colleges and Schools, the North Carolina State Department of Education, and is a member of many organizations such as the American Association of

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Colleges, the National Association of Schools and Colleges of the Methodist Church, the Cooperative Education Association, and others.

TUITION AND FINANCIAL AID

In 1980-81, the annual tuition was $3300 for students in residence and $2150 for off-campus students. The median range of family income for Bennett College students is $8,000 - $10,000; approximately 92% of students receive some form of financial aid. This aid comes from scholarships, private loans, BEOG, SEOG, NDSL, and state aid to the handicapped.

BUDGET

The total annual operating budget of Bennett College is $3,767,522. Approximately 37% of funds come from tuition with the remainder coming from the United Negro College Fund and federal grants.

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Sixteen Years of Computing

Academic computing started at Bennett College in 1965. During the earlier years, the Mathematics Department was the sole academic user. In 1975, with the support of an Advanced Institution Development Program grant from the Department of Health, Education and Welfare (HEW), a four-year computer-assisted instruction effort in basic skills (mathematics, English and reading) was launched. In 1979, a three-year cooperative project was initiated under support of the Minority Institutions for Science Improvement program (NSF). This project is jointly administered by Bennett and North Carolina A&T State University and involves CAI training and development at approximately 30 minority institutions in the three-state region of North and South Carolina and Virginia.

COMPUTER ASSISTED INSTRUCTION CENTER

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The success of academic computing at Bennett College is largely due to the efforts of Dr. Nellouise Watkins who has been the director of the computer center since its inception. In addition, Dr. Watkins has received solid backing from the college administration, including the President and Dean of Instruction.

1965: Model 33 Teletype in Mathematics Department connected to Triangle University Computer Consortium (TUCC). Computer time was free. The college paid for rental of teletype.

1966: IBM 1050 Courses initiated in FORTRAN, PL/1, and APL, Teleprocessing was continued to TUCC but the IBM 1040 provided for local syntax checking and editing.

1969: IBM 1130 purchased through a federal grant in conjunction with the University of North Carolina, Chapel Hill. Project involved using the computer in teaching of statistics; all courses offered in the Mathematics Department were modified to include a computer applications component.

1970: A separate computer center was established to serve all academic departments. There was no formal director.

1974: The computer center was formalized with Dr. Watkins as Director. Work on CAI was begun.

1975: HP 2000 and 15 CRT's obtained through Title III Act, AIDP grant. Math drills, basic English, reading and GED programs used by 180 students.

1976: Math Department develops own mathematics course to replace original HP library program.

1978: Reading supplement program developed. Curriculum materials were developed for biology, chemistry, and geography. A test item bank was developed for the Medical Aptitude Test, the GRE, National Teachers Examination and Millers Analogy Test.

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1979: Use of the reading program by all students was discontinued. As a part of the MISIP grant a new joint course, communicative skills was offered for cooperative efforts between Bennett and North Carolina A&T State University to improve literacy of faculty at minority institutions through conferences and seminars.

1980: Purchase of IBM System 34 — Initiation of courses in RPG II, the popular language for file manipulation.

1981: Preliminary Computer Science major initiated using Apple II and TRS-80 microcomputers.

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Organization and Management

The facilities and support for all computing at Bennett College are managed by the computer center director. The director of the computer center reports to the President of the College. A computer advisory committee with representation of major administrative users was established in 1979. Recommendations are to expand the committee to include larger faculty-student representation.

Because of its small size, Bennett College lends itself to a joint administrative and instructional "systems approach" for fulfillment of its computing needs. The goals of administrative computing at Bennett are:

- Create and capture data on a daily basis.
- Provide data expeditiously upon request.
- Establish a centralized data collection so that maximum advantages can be derived from interfacing data bases.
- Develop a methodology to identify and use data for long-range planning.
- Provide simulations for support of the decision-making process.
- Train staff in offices responsible for source data.

A systems approach is also used in the approach to instructional computing at Bennett. Traditional teaching methods are combined with technology toward the accomplishment of a common goal—improvement of the quality and quantity of the students graduated. The goals for instructional computing at Bennett are:

- Manage and evaluate student performance using diagnostic and prescriptive courseware.
- Create an interest in the art of computer technology as a major professional pursuit.

ADMINISTRATIVE AND FACULTY SUPPORT

One of the outstanding attributes of computing at Bennett College is the clear-cut and consistent support from top administrators. The President of the College has taken an active role in promoting computer use and placing priorities on securing funds for computing activities. The Dean of

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Instruction and Business Manager have also strongly supported computer activities. This support has undoubtedly been an important factor in the success of instructional computing at Bennett College.

The faculty overall have been less supportive. The Math and Science Departments have been most involved, along with the English Department. Some other departments have been involved over the years; but they have not been continuous users. Those involved in computing activities would like to see more faculty involved. Teacher workshops on computer literacy and the development of CAI curriculum materials have been held to promote faculty involvement.

STAFF

Originally, the computer center was part of the Mathematics Department where the Director was chairperson. As administrative usage developed, two staff persons were hired. With the award of the AIDP grant, it was possible to hire a full-time programmer, keypunch and computer operators. In addition, student assistants are needed in the computer center during the evenings and weekends to serve as "proctors" for the CAI activities.

COSTS AND BUDGETS

The educational and general budget of the college, supplemented by the federal and foundation funds, support computing activities. The largest allotment comes from AIDP funds.

.COURSEWARE DEVELOPMENT

For three summers beginning in 1976, faculty received stipends for a five week workshop to develop computer curriculum materials. Ten faculty participated and were given stipends ranging from $25 - 50/day as budgeted in the AIDP Grant. In succeeding summers faculty

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STUDENT IN COMPUTER LAB

were given contracts ranging from $500 - $1,000 for the authoring of
a module. A module provides 10-15 hours of student interaction time.
Materials are corrected and revised and/or updated currently covered by
a stipend of $200 per faculty in each discipline.

Access to Computer Resources

A student or faculty member's access to computing is influenced not only by the type and amount of computing equipment available, but also by policies on user access, priority given to instructional uses, availability of appropriate software for their applications, documentation to help the user, and technical assistance. The Computer Center has always been operated as an open shop, thus giving students experience in a total computer operation.

EQUIPMENT

IBM System/34—administrative and student use

HP 2000—dedicated to instruction

IBM 1130—administrative and student use

Three keypunch machines

One sorter

Eighteen terminals (dumb)—located in the Computer Center

Two microprocessors

SOFTWARE/COURSEWARE

The courseware consists of three complete courses (full year) of student interaction in English, Math and Reading. In addition, there is a library containing programs for:

- Data Handling, Testing, Debugging, Programming Aids

- Math and Numerical Analysis, Probability and Statistics, Scientific and Engineering Applications

- Management Sciences, Operation Research and Business Applications

- Education

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Test banks are available in MCAT, NCAT, MAT, SAT as well as the discipline areas.

ACCESS

As students register for courses in mathematics and English at the beginning of the school year, they are assigned a computer ID and an hour block of time per week per course. All upper class students have open access to the computer without need for account codes. There is no time accounting.

AVAILABILITY

The computer center is open Monday-Friday from 8 a.m. until 9:30 p.m. and at student request on the week-ends.

CONSULTING

Student assistants who can answer questions regarding computer use are available whenever the center is open.

USAGE

The computer is heavily used by students all week long. Every freshman student must use the system in conjunction with her basic mathematics and English courses. This amounts to about 180 students per semester and 600 student course hours per week. In addition, courses are offered in FORTRAN, BASIC, RPG, PL/1 and APL languages. Students may also use the system to prepare for the professional standardized tests.

In 1979-80 approximately 2000 batch jobs were run and 30,000 connect hours of interactive sessions were logged.

DOCUMENTATION

The CAI courses in English and mathematics have manuals purchased by students as part of the textbook requirement of the course. Manuals provided by the individual computer manufacturers for their machine are available in the center. Mimeographed sheets of log on and off procedures are readily available. Library programs for the HP are well documented and readily available.

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Computer Assisted Instruction

Instructional computing began with drills and tutorials in the basic skill areas of mathematics, reading, and English for entering students. The original programs were supplied by Computer Curriculum Corporation; however, these were eventually replaced by faculty-developed programs. These locally developed programs are specifically designed to meet the particular learning needs of Bennett's students, based on analysis of their performance on test items. Although use of the computer is much broader in scope now (8 out of 11 departments use it), the major application area remains basic skills.

MATHEMATICS

The courses offered in the mathematics program result in zero to four credit hours per semester. Placement levels are determined by SAT qualitative scores, mathematics courses taken in high school and performance on an initial diagnostic test. Twelve common errors made by freshmen in mathematics form the basis of the computer curriculum. These errors are:

- arithmetic of counting numbers
- decimal arithmetic
- fractional arithmetic
- linear equations
- percent
- word problems using percent

- measurements
- algebraic expressions
- signed numbers
- quadratic equations
- graphing ordered pairs
- factoring

At the inception of the program, students with scores of 350 or less in the quantitative section of the SAT and less than six error types met with an instructor one class meeting per week and two meetings in the computer lab. Students whose SAT scores range between 350 and 495 meet with the instructor in the classroom setting two times per week and one time in the lab. Students whose SAT scores are greater than 500, meet three times a week in the classroom with one meeting per week in the lab. Currently all freshman students work in the CAI laboratory once per week on specific course required curriculum materials.

Records are maintained by the computer for the entire semester on topics completed, scores for each session, and percentage of the course completed. The final grade represents a weighted average of the instructor's grade for classroom performance and the grade determined by the computer work. The allocation of course content delegated to classroom and computer instruction was decided by the total mathematics faculty.

The beginning course in calculus uses application programs and the epsilondelta limit process, numerical integration, and convergence of series. The Statistics course has access to the largest number of programs from mean and median through a n-dimensional cross-tabulation.

ENGLISH

The English program provides three credit hours per semester. Placement levels are determined by SAT verbal scores and performance on an initial diagnostic test. Twleve common errors of grammatical usage form the base of the computer curriculum materials. The basic errors in English were:

- run-on sentences
- sentence fragments
- incorrect principal parts of the verb
- confusion of adjectives and adverbs
- lack of agreement of pronoun and its antecedent
- lack of agreement of subject and verb

- incorrect case of pronouns
- vague or indefinite pronominal reference
- dangling elements
- misplaced modifiers
- errors in comparative forms of adjectives and adverbs
- double negatives

Initially students with SAT scores above 350 in the verbal section and/or less than six error types met with an instructor two class meetings per week and one meeting at the terminal. Currently all freshman students taking communication skills 101-102 meet with the instructor twice in the normal classroom and once in the computer laboratory.

All other students meet with the instructor once in the normal classroom and twice in the computer laboratory. As with the mathematics program, a composite of class and computer performance scores is used to determine the student's grade.

READING

The reading course begins with a test on basic reading skills to ascertain an approximation of the reading level. The five reading components tested are word attack, vocabulary, literal comprehension, interpretative comprehension and work study skills. When a student completes the diagnostic placement in 90 to 100 minutes, he/she is considered reading at the senior high school-level and enters the regular reading program. Otherwise, the student is moved diagnostically through the skills until he/she is raised to the required level to enter the regular program. This course was discontinued in the reorganization of the communication skills courses.

SCIENCE

Chemistry and physics programs illustrate both CAI and specific application problems.

TEST BANKS

To help seniors prepare for the Graduate Record Exam (GRE) and the National Teachers Exam (NTE), test item banks from these tests were created so that students could familiarize themselves with the type of questions asked. Some departments use these test banks to help students improve their test-taking skills. The new objective of the CAI program is to place large test banks, several thousand questions, in each of the general education and junior college courses. These banks will be for optional use by students for individualized testing and scoring by faculty.

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If students and faculty are to benefit from computers in their learning, teaching, research and subsequent careers, they must acquire the basic skills and knowledge required to be informed users of the computer. The basic skills and knowledges related to using computers are often referred to as "computer literacy." Because computer use is an integral part of the mathematics and English programs at Bennett, almost all students have exposure to the computer.

Approximately 60 students enroll in programming courses each year. The computer programming courses teach programming skills in FORTRAN, PL/1, BASIC, RPG, and APL; the impact of computers on society; and allow students to apply computers to subject areas of their interest. BASIC is taught as a mini course meeting for ten consecutive days during a semester. This arrangement has provided a convenient opportunity for faculty and staff to learn an interactive language.

Approximately 15 faculty members from different departments have become involved in computing activities and/or developed curriculum materials. The latter has enabled Bennett to reduce software costs by avoiding cost of leasing instructional software. In addition to the mini course in BASIC to encourage literacy among faculty and staff members, workshops have been given periodically. These workshops cover the basics of computing, the programs available and how to author materials.

From 1976 to 1979 summer workshops were held for faculty. Since that time, one and two day workshops are given on demand.

1. - Student Benefits and Accomplishments

Positive effects of computer use at Bennett College include the following:

• Self-pacing allows better prepared students to complete courses in less time. For example: 56 out of 130 students were able to "test out" of the reading program by demonstrating competency in less than the two semesters required.

• The institution has been able to admit more high-risk students needing remedial classes without increased faculty because of the additional drill provided by the computer. An important psychological aspect of this has been the avoidance of embarrassment of students who need remediation.

• Students make rapid improvement in basic skills by using Computer Assisted Instruction that is integrated with regular teacher-led courses. A study was conducted of reductions in students' errors in mathematics and English using a teacher/technology combination versus traditional instruction (with a control group at another college). There was a greater reduction in errors over a nine month period by students in the teacher/technology combination than the traditional instruction.[1]

• Using a standardized reading test, a study was made of raw score improvement over a nine-month period. There was a significant difference between the scores of students using a teacher/technology combination as compared with the traditional approach to reading instruction.[1]

• Graduates from the mathematics program have been able to get jobs in the computing field because of their computer experiences.

• Students from various major fields of interest are able to secure summer employment as data entry operators after a school year of using the terminals.

For the past eight years, ninety percent of the mathematics majors have entered graduate school or pursued careers in the computing area. A 1973 graduate is a programmer at Western Electric. Three graduates, 1974, 1975, and 1979 are with IBM. Two graduates of 1978 are employed as systems analysts for Southern Bell in Atlanta and Macon, Georgia. One 1978 graduate completes the M.S. degree in Computer Science at MIT this term. One graduate is employed in the data processing field by an insurance company in Connecticut.

[1] Watkins, N. "A Systems Approach to the Use of the Computer in Freshman College Basic Skills Courses." Bennett College, N.C. 1979.

Bennett College has played a leadership role in computing locally as well as nationally.

REGIONAL/COMMUNITY OUTREACH

● Bennett has shared its computer facilities with students and faculty from Greensboro and Guilford Colleges. Students from these colleges attended Bennett courses. A Bennett faculty member taught evening courses at Guilford College using the Bennett facilities.

● Bennett has conducted in-service courses for secondary school science teachers with support of NSF.

● Bennett participated in a research project in statistics with the University of North Carolina in Chapel Hill.

● For two years, the college conducted adult/continuing education classes for veterans using the computer-based English and mathematics courses.

● Students from Bennett assisted in voting services by writing programs and tabulating the results as part of a class project.

● The college has provided computer-based courses in reading for upward bound secondary school students.

● A four-week workshop in introductory FORTRAN and operation of computers was conducted for 12 faculty members of colleges in the city.

● Bennett college and North Carolina A&T State University coordinated a three-year project to enhance the use of computers for science instruction at 30 minority institutions in the Carolinas and Virginia.

NATIONAL OUTREACH

● The Director of the Computer Center has served on the steering committee for three conferences on Educational Computing in Minority Institutions.

● The Director of the Computer Center has made many presentations at mathematics and computer education conferences.

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● The Director of the Computer Center has testified before the Committee on Science and Technology of the U.S. House of Representatives regarding computing in minority institutions.

● The college was given a grant by the National Science Foundation for the Computer Center Director to give interim leadership to the Resource Centers for Science and Engineering Program. As visits were made to the regional institutional components of the centers, it was possible to discuss and make recommendations on computer hardware, software, and computer science curricula.

● Programs, test banks, and CAI courseware are being developed under the auspices of the Mid-Atlantic Conferences on Educational Computing for sharing and dissemination to each of the 30 minority participating colleges.

● Contacts have been made to initiate making the computer assisted instruction materials developed by the Bennett College faculty available to other colleges.

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From Nellouise Watkins, Director of the Computer Center

There is little contradiction that:

1. the great diversity of mental abilities, cultural background and life-styles of students today presents immense challenge to the institutions of higher learning.

2. the open admission policy has made individualization of instruction a necessity rather than an option.

3. for learning to be effective, maximum individual competence must be achieved along with a sense of pride and confidence that the learning will enable the student to make a substantive and significant contribution to society.

4. the time needed to interact with individual students is not possible given the teacher/student ratio.

The pressing need is for educators to look at the immense promise computer technology holds for meeting the problems of today's student clientele. Educators must capitalize on the effectiveness of interactive tutoring and drilling, record management, simulation and testing that can be provided in a teacher/technology partnership. They must understand the assistance the computer can offer instruction in order to dissipate the idea that the computer is a threat. Educators must become computer literate and develop the expertise required to integrate computer usage into their courses.

To be effective in the basic skills, CAI should be a well organized program. The elements for success should be carefully monitored. These three elements are: 1) presence of the student for regular interaction over an extended period of time, i.e., one or two semesters. 2) the presence of the teacher during the CAI laboratory which must serve as an adjunct to the regular course and 3) consistent course evaluation input for work done on the computer.

The latter element is often misinterpreted as an infringement on academic freedom since the final course grade assigned includes a grade for student performance with the computer.

The time invested in planning for a CAI program is invaluable. All persons expected to participate in the implementation—instructional and administrative, faculty and computer center personnel—should be involved

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at the beginning. Initial discussions should, where feasible, involve con-
sultants who can give statistical results of successful programs. Where
mathematics and non-science disciplines will be included, selection of
consultants in the humanities, social sciences and education would be
preferable.

Early in the program, faculty should be encouraged to tailor CAI
curriculum materials to support their lecture classroom needs. Teachers
in the same disciplines can develop modules determined by the group
as applicable for the computer. Any concept requiring repetition and/or
memorization of rules and facts would certainly fit this requirement. Use
of faculty-developed materials make the laboratory an extension of the
classroom learning experience and at the same time it is a highly moti-
vational boost for the teacher to see his/her materials on the CRT screen.

Contacts/Faculty Developers

Dr. Georgie B. Latimer, Department of Communication Skills, Bennett College, Greensboro, North Carolina.

Dr. Virginia Tucker, Department of Communication Skills, Bennett College, Greensboro, North Carolina.

Mrs. Amy Reynolds, Department of Communication Skills, Bennett College, Greensboro, North Carolina.

Mrs. Evelyn Jones, Department of Biology, Bennett College, Greensboro, North Carolina.

Dr. Mattie M. Moss, Department of Mathematics, North Carolina Central University, Durham, North Carolina.

Dr. James Alonso, Department of Mathematics, University of District of Columbia, Washington, D.C.

Mr. Ray Treadway, Department of Mathematics, Bennett College, Greensboro, North Carolina.

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Dr. Chelsea Tipton, Dean of Instruction, Bennett College.

Dr. Isaac H. Miller, Jr., President, Bennett College.

Dr. Perry V. Mack, Department of Biology, Bennett College.