

Table 4 (continued): Selected Faculty Survey Results

Overall Support of College versus Area or School		
Department or School	Meets Them Completely or Well	Does Not Meet Them Very Well or Not At All
Arts & Sciences: Area I	42.0%	58.0%
Arts & Sciences: Area II	55.6%	44.5%
Arts & Sciences: Area III	66.1%	33.8%
School of Business	53.8%	46.2%
School of Education	42.9%	57.2%
School of Law	75.0%	25.0%
School of Marine Science	55.2%	44.8%
All	54.6%	45.4%

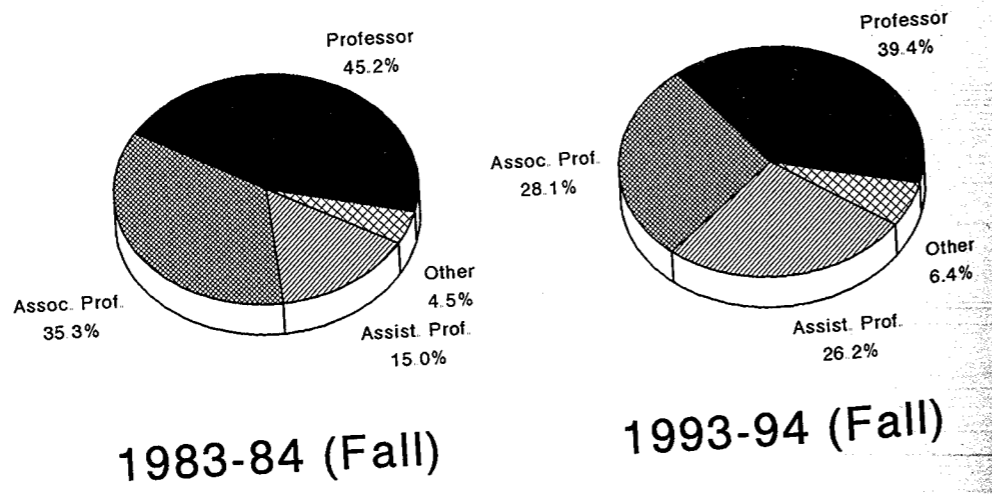
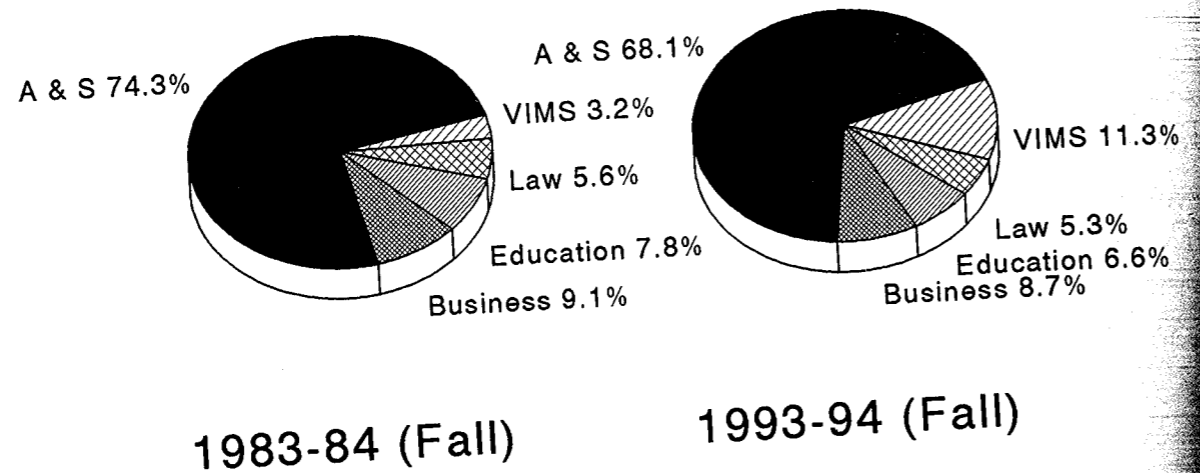
Own Salary versus Area or School

Department or School	Good or Excellent	Fair or Poor
Arts & Sciences: Area I	13.0%	87.0%
Arts & Sciences: Area II	26.4%	73.6%
Arts & Sciences: Area III	29.0%	71.0%
School of Business	33.3%	66.7%
School of Education	20.0%	80.0%
School of Law	66.6%	33.4%
School of Marine Science	41.3%	58.7%
All	27.2%	72.8%

Table 5: Analysis of the Part-time Faculty, Fall 1983 and Fall 1993

Academic Unit	Faculty FTE 1983	Faculty FTE 1993	Faculty Headcount 1983	Faculty Headcount 1993
American Studies	NA	0.20	NA	1
Anthropology	0	0.53	0	2
Applied Science	NA	2.12	NA	8
Biology	0	0.77	0	3
Chemistry	0.10	1.04	1	2
Classical Studies	0	0.93	0	2
Computer Science	NA	1.47	NA	3
Economics	0	0	0	0
English	1.75	2.28	6	7
Fine Arts	3.00	1.60	7	5
Geology	0	0	0	0
Government	0	0.60	0	2
History	0.75	0	2	0
International Studies	NA	0.40	NA	1
Mathematics	0	3.95	0	24
Philosophy	NA	1.60	NA	5
Physics & Computer Science	3.00	NA	10	NA
Religion	3.40	3.17	4	5
Sociology	7.96	2.34	28	28
Statistics	0	0.60	0	2
Visual Arts	0	0.40	0	1
Writing	1.25	0.52	2	3
<b>Total</b>	<b>NA</b>	<b>0.79</b>	<b>NA</b>	<b>3</b>
	1.50	0.20	2	1
	0	0.40	0	1
	0	0.53	0	1
	<b>22.71</b>	<b>26.44</b>	<b>62</b>	<b>110</b>
	5.79	1.53	13	7
	1.25	2.16	6	12
	2.75	4.72	9	22
	0	0.27	0	2
	1.50	NA	6	NA
	<b>34.00</b>	<b>35.12</b>	<b>96</b>	<b>153</b>

Figure 1: Faculty Proportions by School and by Rank, 1983-84 and 1993-94



Chapter Seven

# Consortia and Contractual Relationships

Alan F. Edwards, Jr., Chair (Graduate Student, Education)  
 Lawrence Wiseman, Steering Committee Liaison (Professor of Biology)  
 Steering Committee Members

## Introduction

The College's previous Self-Studies, in reflecting then-current SACS Criteria, did not directly address topics of consortia and contractual relationships. When discussed, these topics have been completely included within sections on the educational program and/or special activities. This report attempts to pull together the institution's current and involvement in these areas, presenting information in a uniform manner consistent with current SACS guidelines.

## Consortia Relationships

William and Mary is joined with other institutions in a number of educational relationships which are characterized as consortia. One of these is a degree-granting consortium, the Virginia Consortium for Professional Psychology. This section reviews the degree-granting consortium in depth and summarizes all other consortia.

### Virginia Consortium for Professional Psychology

William and Mary was a founding member of the Virginia Consortium for Professional Psychology. The program was established in 1978. The program is jointly by the four member institutions: William and Mary, Old Dominion University, Norfolk State University (NSU), and Eastern Virginia Medical School (EVMS). All four VCPP are accredited by the American Association of Colleges and Schools.

The program is accredited by the American Psychological Association (APA), most recently in 1993. The program has always earned the highest accreditation from APA site-visitations. VCPP is one of only 23 APA-accredited programs in the U.S.

The program is overseen by a Council of Directors composed of one faculty representative from each institution. The Council usually meets several times per month to discuss matters of academic policy, standards, and quality. In addition, a full-time program coordinator is employed in the VCPP central office at the ODU/NSU Higher Education Center in Virginia Beach. Budgets are established and basic policy matters are reviewed annually during a meeting of the member institutions' provosts.

Applications for admission to the four-year, year-round degree program are processed for the VCPP by the ODU Office of Graduate Admissions. Admission is highly competitive; each year, about 150 candidates vie for just 10-12 openings. The program's approximately 40 students are served by more than 20 full-time faculty members from the sponsoring departments, as well as by about 60 psychologists (practicum supervisors) from the more than 20 participating clinical agencies in the Hampton Roads area of eastern Virginia.

In their first two years, students receive classroom instruction at all four institutions (courses are scheduled to minimize travel and maximize faculty expertise) and complete a sequence of six practica (each being an eight-hour-per-week supervised clinical experience with a two-hour-per-week laboratory). In their third year, students choose practica and coursework for advanced training --in family therapy, individual therapy, behavioral medicine, or neuropsychology-- and write an empirical dissertation. A full-time clinical internship is required in the fourth year.

Through December 1994, the VCPP had conferred 102 Psy.D. degrees. An alumni organization for these graduates was established during William and Mary's commencement weekend in 1993. As it becomes a doctoral-granting institution in 1995,

Norfolk State University will become an equal (25%) partner in the Consortium (it has previously been only a 10% partner). An effort is currently underway to change the method by which VCPP graduates are recognized by the state -- currently, all Psy.D. recipients are recorded as graduates of Old Dominion University by the State Council of Higher Education for Virginia (SCHEV). A more equitable distribution is sought.

### Virginia Consortium of Engineering and Science Universities

Graduate education in engineering and related applied science disciplines has been provided to the Peninsula area since 1993 by the Virginia Consortium of Engineering and Science Universities (VCES). Representing an alliance between the engineering schools of Virginia Tech, the University of Virginia, and Old Dominion University and the Applied Science program at William and Mary, the program operates in conjunction with the NASA-Langley Research Center to provide master's and doctoral programs through classroom instruction and televideo courses. VCES courses are transmitted to multiple sites in Virginia and other states as well.

The VCES is administered by a committee whose membership is selected by the deans of the represented schools of each member institution. The consortium is intended to serve the needs of employed professionals in the region, particularly those at NASA-Langley, and to utilize the world-class facilities at NASA-Langley for graduate education. Each institution maintains full control over all academic matters related to its students. For further information on the Virginia Consortium of Engineering and Science Universities, also see *Chapter Five, Continuing Education, Outreach, and Service*.

### VILaP(rogram) in High Performance Computing and Communications

Along with Old Dominion University, George Mason University, and Virginia Tech, the College signed a revenue-neutral memorandum of agreement to form an interdisciplinary consortium with the Institute for Computer Applications in Science and Engineering (ICASE) and NASA Langley Research Center (LaRC) in 1994. Known as VILaP-HPCC (Virginia/ICASE/LaRC Program in High Performance Computing and Communications), the consortium will allow selected graduate students in computer science and applied science from the four universities to take courses, perform research, and receive mentoring from ICASE and Langley scientists. At the same time, these en-

gineers and physical scientists will benefit from the computer expertise of the graduate fellows. This discipline-bridging will enhance aerospace research in computational science, computational engineering, and computational modelling.

### Tidewater Physics Consortium

The presidents of William and Mary, Old Dominion University, and Hampton University joined with the director of the Continuous Electron Beam Accelerator Facility (CEBAF) in 1992 to establish the Tidewater Physics Consortium (TPC). This unique university-federal laboratory partnership ensures that physics graduate students from each institution have access to CEBAF and to the extensive regional physics community. The TPC is directed by the Graduate Study Coordinating Committee, a 10-member body of faculty from the three universities and scientists from CEBAF. The Consortium fosters cooperation between the universities, and between the universities and CEBAF, allowing coordinated programs of advanced courses to be developed.

### National Physical Science Consortium

In 1992 William and Mary joined the National Physical Science Consortium (NPSC), an alliance of doctoral universities, federal laboratories, and corporations. The NPSC is not a program-sharing academic consortium, but rather a group organized to identify and encourage qualified students from underrepresented groups to pursue doctoral education in the physical sciences, mathematics, and computer science. The Consortium also provides fellowship funds to outstanding students.

### Virginia Tidewater Consortium for Higher Education

The Virginia legislature established the Tidewater Consortium for Higher Education along with five other regional consortia. To establish linkages, enhance cooperation, and maximize educational opportunities across the region, the current VTC membership includes Eastern Shore Community College, Virginia Medical School, Hampton University, Paul D. Camp Community College, Reginald F. Lewis College, Tidewater Community College, University of Virginia, Virginia Tech, and Virginia Wesleyan College (Armed Forces Staff College and Wesleyan are associate members).

This alliance of public and private

and four-year, graduate and undergraduate institutions is maintained by a Board of Directors composed of the presidents of the member campuses. The Board meets quarterly to review, plan, and administer the numerous activities of the VTC. The Consortium facilitates cross-registration, interlibrary loans and courier service, and professional development activities, as well as overseeing off-campus information centers at three military bases, the Educational Opportunity Center, the Higher Education Cable Channel, and the Summer Institute on College Teaching. Seminars on teaching and faculty development are offered throughout the Tidewater area; the VTC offices are in Norfolk.

### School-University Research Network

A grant from the Virginia Department of Education facilitated the establishment of the School-University Research Network (SURN) in 1994. This research consortium is a partnership between William and Mary and eleven school systems in the Tidewater area. Providing collaborative, field-based research on the improvement of educational delivery systems, the Network is housed in the College's School of Education. The Advisory Board, consisting of the eleven school-system superintendents and two William and Mary Education faculty members, meets at least twice per year to set the direction of SURN's future projects and activities. A three-member administrative committee oversees day-to-day operations and faculty-lead research teams are established to carry out various research projects.

### Virginia Graduate Marine Science Consortium

Based on recommendations from the State Council of Higher Education for Virginia (SCHEV), the Virginia Graduate Marine Science Consortium was established in 1981 to facilitate a comprehensive statewide approach to marine research. The state institutions offering marine science -- William and Mary, Old Dominion University, University of Virginia, Virginia Tech -- are the consortium members. The consortium's primary goal is to coordinate marine science efforts within the state and enhance the ability to attract students. The consortium's primary goal is to improve state institutions' chances of receiving National Sea Grant College Program funds from the National Oceanic and Atmospheric

Administration. Such status was attained in 1984, the first year in which the VGMSC was eligible. In addition to providing funding for marine research, education, and advisory services, this highest College Program status permits the Consortium greater state-level administrative control in managing Sea Grant funds.

### Chesapeake Research Consortium

The Chesapeake Research Consortium (CRC) was created in 1972 to provide coordination of scientific staff and facilities in a broad-based investigation of management issues and problems facing the Chesapeake Bay and its watershed. The CRC was chartered by the State of Maryland and formed by the Smithsonian Institution, the University of Maryland, the Johns Hopkins University, and William and Mary's School of Marine Science (including the Virginia Institute of Marine Science, or VIMS). Old Dominion University and The Academy of Natural Sciences of Philadelphia joined in 1993.

Representatives from the member institutions as well as outside individuals form the Board of Trustees, which sets CRC policy and procedures. A board-appointed director oversees day-to-day operations from the Consortium's offices in Solomons, MD. The organization functions through investigative teams of scholars and scientists from various disciplines and member institutions who come together to design and undertake multidisciplinary studies related to the Bay. Conferences, workshops, and administrative assistance can also be provided, usually at no cost to those seeking services.

## II. Contractual Relations

Generally, the College does not contract with other institutions or organizations for educational services or programs carrying academic credit. This section of the Self-Study documents William and Mary's few contractual arrangements within the educational program.

### Applied Music Faculty Contracts

The Department of Music operates a program in Applied Music. Students receive private, individual instruction for one hour or two hours of semester credit, depending on whether the student is enrolled for half-hour lessons or more advanced one-hour lessons. Instructors in the program are part-time faculty with contracts to provide lessons on voice, on specific instruments, or on families of instruments. The contracts specify that these instructors are compensated directly from the fees charged to the students taking the lessons.

These contracts are consistent with the College's goals of providing breadth and depth in its educational program and are consistent with the Department of Music's goal of preparing students for futures in music and performance. As a part of the Department, the Applied Music program and its instructors comply with both institutional and SACS criteria and policies.

Hiring and evaluation matters are handled by the Applied Music Advisory Committee. Hiring decisions are based on program needs and applicants' qualifications (received in response to advertised announcements). Evaluations are conducted using criteria from the College's *Faculty Handbook* at the end of instructors' first and third years. The only difference between their assessment and the assessment of tenured/tenure-track members is that their involvement in "professional service" is not requisite for retention (because such is not compulsory in their contracts.)

#### Kinesiology Contracts for Instruction, Equipment, Facilities

Due to specific equipment and facility requirements, the Department of Kinesiology contracts for a very small percentage of its activity classes. Completion of two activity courses is required of all undergraduates and up to four activity credits may be applied to the 120 credit-hour minimum for graduation. By offering instruction in such contract-enabled areas as scuba, bowling, horseback riding, and skiing, the Department and the College are fulfilling the goal of providing a wide variety of challenging educational opportunities. These courses are conducted and evaluated according to the same policies and procedures as other activity classes; and thus, they comply with all relevant institutional and SACS rules and criteria.

Requests for Proposals (RFPs) are issued through the College's Material Management Office when external assistance is needed. For the bowling course, only a facility is contracted; instruction is provided by a Kinesiology faculty member. In the scuba and riding courses, individuals are contracted who are qualified to teach in these areas and who can also provide the requisite equipment. While equipment and costs are considered, the primary criteria on which prospective instructors are judged are their qualifications and abilities as teachers (they must hold at least a Bachelor's degree and preference is given to those with previous, successful teaching experience).

For skiing courses, a facility and instructors are

contracted, but a Kinesiology faculty member supervises this instruction and is the instructor of record for the Department. The selection criteria for instructors and facilities include: (1) the number of instruction hours the facility can actually provide to students; (2) the facility's ability to ensure student-to-instructor ratios of no greater than 10-to-1; (3) the technique(s) used in instruction and the quality thereof; (4) the quality of the equipment provided by the facility; and, (5) the reliability of the location in providing adequate snowcover and reasonable weather.

#### Conclusions

The College's ability to forge collaborative relationships with other institutions during this time of limited resources and increased competition is important to William and Mary's students, faculty, administration, and educational reputation. Given that most of the aforementioned consortia are of recent vintage, such partnerships may represent an ongoing trend.

1. It is recommended that the College continue to proceed in these areas, but careful scrutiny must be given to matters of shared responsibilities, support, administration, and assessment.

2. While many of the current consortia involve the physical sciences, consortial interactions, no doubt also possible in the humanities and social sciences. Degree-granting consortial arrangements may be avenues of recourse for the Master's programs terminated as a result of the College's just-completed Strategic Plan. Such possibilities are recommended for exploration by affected departments and by the Strategic Implementation Committee.

3. William and Mary has always prided itself on the fact that faculty actually do the teaching, an almost complete lack of contractual relations in degree-credit educational programs and supports this tradition. The examples of contractual relations from Applied Music and Kinesiology indicate the College's commitment to provide broad and deep educational opportunities in a fiscally-responsible, quality-oriented way.

The potential for contractual relations should not be overlooked as new developments reshape higher education. William and Mary should consider the appropriateness, the costs and logistics of such future relations in light of its mission and the realities of budgetary constraints.

## Chapter Eight

### Library

Gary W. Rice, Chair (Associate Professor of Chemistry)

James M. Patton, Steering Committee Liaison (Associate Dean and Associate Professor of Education)

Michael F. Cox (Law Student)

James T. Deffenbaugh (Assistant Dean, University Libraries)

Henry E. Mallue, Jr. (Professor of Business Administration)

Terry L. Meyers (Professor of English)

Samuel A. Ozeck (Undergraduate)

Rosa Quemam (Director, School of Education Learning Resources Center)

#### GENERAL INTRODUCTION AND STATEMENTS

The libraries of the College of William and Mary are composed of three main units: Earl Gregg Swem Library, the Marshall-Wythe Law Library, and the library of the School of Marine Science and the Virginia Institute of Marine Science (VIMS). Each library is administratively and fiscally autonomous. Since the main libraries are unique with respect to their missions and clientele served, this report will address each of the libraries separately. There are a number of smaller branch libraries associated with specific disciplines throughout the main campus; however, these complement the mission of the Swem Library and will be considered as such.

A substantial amount of information was obtained by the committee for the preparation of this report. Statements were requested from the directors of the Swem Library (Nancy Marshall), the Law Library (James Heller) and the VIMS Library (Charles Madden) to address the topics relative to their respective libraries which appear in this report. The committee conducted site visits at the three libraries followed by group interviews with professional staff and then the professional staff interviews. The Administrative Council at Swem Library, including John Haskell (Associate Dean for Academic Services), Berna Heyman (Assistant Dean for Automation and Bibliographic Control), James Heller (Assistant Dean for Reference and Academic Services), James Deffenbaugh (Assistant Dean for Collection Development and Preservation), and Kay Domine (Assistant Dean for Special Collections and University Archivist), was interviewed collectively. Interviews at all sites were conducted with each respective director. The

interviews focussed on "if and how" recommendations from the 1984 Self-Study were implemented, the current situations of the libraries, and what must be done in the future to insure the continued vitality of each unit.

The committee also submitted questions and reviewed the compiled results from the surveys distributed by the Self Study Steering Committee to faculty and students. The chairs or library representatives of each department or program within Arts and Sciences as well as the Schools of Business, Education, and Marine Science were also requested by letter to submit evaluations of library performances with respect to the collections in their fields, the methods through which material requests are ordered and obtained, other services such as interlibrary loan, and the roles the libraries should play in the developments of information technology.

We were very fortunate in having available to us several vital documents prepared by the Swem staff, which to a certain extent constitute an internally initiated self study by the library, and one document prepared by an ad hoc student committee from the Student Association. These included the following:

1. "A Library for the Fourth Century" (A report to President Timothy Sullivan, prepared by Nancy Marshall (Dean of University Libraries), August, 1992.

2. "Future Automation Vision of the Libraries of the College of William and Mary," chaired by Berna Heyman (Assistant Dean for Automation

and Bibliographic Control), September, 1992.

3. "Report of the Facilities Planning Task Force to the University Librarian," chaired by James Rettig (Assistant Dean for Reference and Information Services), March, 1992.

4. "An Interpretation of Library Needs: A Student Report," chaired by Alan Mitchell, February, 1993.

The administrative structures of the libraries are described in the College catalogs (organization charts are on file with the Self-Study documents collection). There is also a university wide Library Policy Advisory Committee (LPAC) appointed by the President upon recommendations from the deans of the schools to the Faculty Assembly. The membership consists of seven representatives from the Faculty of Arts and Sciences (who also serve as members of that faculty's Library Committee), two representatives from the Law School, and one each from the Schools of Business, Education, and Marine Science, and two graduate and two undergraduate student representatives. The director of each library and the Administrative Council at Swem serve as non-voting ex-officio members and observers respectively, and the Associate Librarian of Swem acts as secretary of LPAC. Two years ago Swem also created a nine-member Library Student Advisory Committee to receive additional input from the students on library issues of concern to that constituency.

We were very impressed with the efforts taken by the library directors (Nancy Marshall of Swem, James Heller of Law, and Charles McFadden of the School of Marine Science) in educating the general administrations as to the priorities that should be funded in the libraries and their visions for the future of the libraries. Each library director has taken a leadership role in the development of automated technology, which continues to grow in capacity to access and manage information. Such developments were virtually non-existent only ten years ago. For Swem in particular, private sources of funding have increased through the Campaign for the Fourth Century, private fund raising, and a very active and growing Friends of the Library organization. Substantial increases in state and private allocations for the Law Library have allowed for the development of a collection and services quite amenable to the patrons served.

The space constraints at the School of Marine Science/VIMS and Swem were somewhat relieved by a new library located in Watermen's Hall at VIMS in 1984 and a new addition to Swem opened in

1988. The core collections at each library are quite good, especially for undergraduate materials at Swem. Overall, the Committee is of the opinion that each library has made outstanding efforts to provide the highest service possible to its patrons within the constraints of the available resources.

We may be giving the impression that our libraries, which are the cornerstones for the vitality of all the programs associated with the College, are successfully fulfilling their missions at the level of excellence typically associated with William and Mary academia. However, recurring themes during our studies, especially with respect to funding, space, and staff deficiencies, clearly indicate that the foundations of our library system are operating under conditions of extreme impairment. The libraries have traditionally not been allocated the funds necessary to keep pace with material costs, which far exceed the average inflation rates associated with other campus operations and services. The implementation of new undergraduate and graduate programs over the past ten years and advances in automated technology have demanded entirely new areas of library resources, which have not necessarily translated into increased funding and staffing for the library. The general fund taken from the library by the administration due to state budget cuts in the beginning of 1990 was especially difficult to recover from in terms of staffing and materials. The biggest threat to material acquisitions budget continues to be the cost of contractually maintaining the press, serials collection and expanding that collection to meet the needs of new programs, which in turn continues to reduce the funds available for other library materials.

The staffs are small and overextended at the libraries, creating substantial backlogs in services such as circulation, order processing, cataloging. Interlibrary loan requests have recently exploded with the accessibility of online databases. Demands and changes in library services will continue to expand as predicted in the state college populations occur.

The physical plant of Swem Library is outdated with respect to the ability to house additional materials, with a very poor infrastructure for the implementation of modern telecommunications which continue to grow at a remarkable rate and are more widely demanded as resources by library patrons. The collections are deteriorating due to poor climate control and funding limitations on the conservation and preservation program.

The quality of the programs at the College of William and Mary can only be as good as the library resources which are available to them. We can generally conclude that Swem Library is at a state of very limited development. There is no room to grow, there is not enough staff to provide the services expected by patrons, and collection development will continue to diminish under the burden of and demand for increases in the serial collection. The lesson to be learned from the following narrations is that academic libraries are always in a state of expansion, which requires the acceptance of and need to accommodate steady increases in library space, staff, and funding in a timely manner. The details of these claims are contained in the following sections as they pertain to each of the major libraries. Each library was evaluated with respect to funding and collection development, staff, services, facilities and space, and developments in automated technology. Specific references to numerical data are through the 1993-94 academic year.

#### A. THE EARL GREGG SWEM LIBRARY

The Earl Gregg Swem Library is the center of the William and Mary library system. There are approximately 982,000 volumes housed within the library, added to at an average rate of about 23,000 titles per year. Approximately 125,000 volumes are circulated each year, with about the same number used within the building. There is a microform collection of about 1,024,000 units and over 10,000 videotapes, recordings, films, filmstrips, and slides. A 31-station microcomputer lab and eight CD-ROM workstations are available for student use. Swem Library is a selective depository for United Nations, federal government, and Virginia government documents, which amounts to the addition of approximately 35,000 - 40,000 documents per year for a total collection of 400,000 documents. The library currently subscribes to over 5,570 serial titles. The special collections include over 32,300 rare books and over 10,000 manuscripts and maps with an emphasis on Virginia and colonial history.

Swem Library services an undergraduate body of approximately 5,200 students in Arts and Sciences, Education, and Business Administration; 200 full time graduate students in Arts and Sciences, MA, MS in American Studies, Anthropology, Marine Science, Biology, Chemistry, Communication, English, Government, History, Geography, Physics, Psychology, and Sociology; and 100 students in Public Policy; PhD in American Studies, History, Science, Computer Science, History, and Psychology; PsyD in Psychology), Business Ad-

ministration (MBA), and Education (MA, MEd, EdS, EdD). The library services are also available to students and faculty at the Law School and at the School of Marine Science/Virginia Institute of Marine Science. There are approximately 450 faculty associated with all the fields, as well as the university's administrators and staff which make use of Swem's collections and services. The library is a member of the Association of Southeastern Research Libraries and subscribes to OCLC services and products through the Southeastern Library Network (SOLINET) for cataloging and interlibrary loan services.

#### 1. Funding and Collection Development

The standards by which the collections at the Swem Library are judged are complicated by virtue of the wide variety of disciplines associated with the College. Furthermore, these standards fall into three areas of service to the academic community: support for undergraduate teaching and research, for graduate teaching and research at the master's and doctoral levels, and faculty research. The patterns of content and discontent were fairly obvious and expected based on the evaluations submitted by the departments and schools and the Self-Study survey.

There is general agreement that the collections are adequate for undergraduate purposes. Students have periodically expressed concerns about the inability to locate recent materials, and this was by far the greatest concern generated from the student report, which stated that "Students feel the materials are outdated, insufficient, and difficult to find." This appears more to be from a lack of understanding in the utilization of the on-line catalog system, or a commitment to learn how to use it, although by all rights LION is a very tedious and outdated system. The lack of opportunity for students to suggest additions to the collections has been corrected this past academic year by the allocation of a \$5000 fund exclusively for student book suggestions (of which only \$2,860 was used over the 1993-94 academic year). Greater dissatisfaction was expressed at the graduate and faculty levels, where more in-depth collections tend to be required for research purposes.

During the 1992-93 academic year the library used an electronic assessment system to compare the Swem book collections dating from 1979-89 with a number of designated library peer groups from other North American academic libraries. When compared to libraries of similar size, the number of books in our collections was found to be above average in Anthropology, Philosophy,

Psychology, Religion, History, Political Science, Education, English Literature, the Sciences, and Economics. We were about average in Classical Language and Literature, Foreign Language and Literature, Literary Criticism, American Literature, Drama/Theatre, Fine Arts, and Music. We were below average in Engineering, Medicine/Health Sciences, Agriculture, and Children's Literature (the former three of which are not offered in the William and Mary curriculum). When compared to a peer group of institutions suggested by undergraduate departments from Arts and Sciences, we were much above average in Anthropology, Philosophy, Psychology, U.S. History, Economics, the Sciences, Medicine/Health Sciences, Education, and Drama/Theatre. We were near average in Religion, Western European History, Literary Criticism, English Literature, Sociology, and Children's Literature. All other subjects were below average. When compared to a peer group of institutions suggested by the graduate departments of Arts and Sciences, we were much above average in Psychology, Education, and U.S. History (all of which support doctoral programs at the College); around average in Philosophy and the Sciences; and below average in all other subjects. Although these statistics imply that the monograph collection at Swem is relatively strong for the subject and discipline areas offered at William and Mary, departmental statements were quite mixed. Anthropology and Applied Science reported inadequacies in the collections relative to the specific interests of individual faculty members. Art History, Biology, Chemistry, Computer Science, Economics, Government, Mathematics, Music, Psychology, Physics, and Theatre and Speech considered the monograph collections to be adequate. No responses were obtained from Classical Studies, History, International Studies, Kinesiology, Modern Languages, Philosophy, Public Policy, Religion, and Sociology.

Some comments made regarding the process through which materials are ordered seem to imply that many of the complaints of the faculty would be reduced if they were made more aware of the process through which they can request materials germane to their specific instructional and research interests. There are clearly disparities in the way materials are selected and ordered in each department, which has led to subject gaps in the general collections. This can only be circumvented by additional professional bibliographers trained in general areas of interest to the College community to aid in the collection development process through direct exposure and contact with the faculty.

The area for which the greatest dissatisfaction was expressed was the serials collection. The faculty survey indicated that anywhere from 54% of the natural sciences faculty to 68% of the humanities faculty in Arts and Science felt there was a need for improvement. Over 80% and 60% in Business and Education respectively expressed the same opinion. The disparity between the opinions of maintaining the current serial collection relative to all other materials has strained -- and will continue to strain -- library resources. Over the past ten years the amount of monies required for serials has ranged from approximately 60% to almost 80% of the total materials budget. The inflation for some journals, in particular foreign publications where prices are controlled by currency values, have increased at rates of 10%-20% per year, far above average increases in the library budget. Indeed, the average cost to academic libraries for periodical subscriptions in the sciences alone increased by 113% from just 1984-85 to 1990-91. Such increases at Swem have been countered by at least three reductions in serial collections over the past ten years (1984-85, 1988, and 1990-91), and this trend will continue unless funding can appropriately moderate the increases in subscription costs. Requests for new serials until this past year have been frozen with the exception of the needs of programs such as the doctoral programs in Science and Computer Science.

Over eighty percent of the serials budget originates from the natural sciences, heavily on journal publications for research endeavors (65% of all material allocations to the sciences). The Arts and Sciences Library Committee has initiated a serials factor on allocations which heavily depend on serial subscriptions. This factor is applied to the formulas used to determine departmental book allocations as well as decreasing the disparities in allocations to the natural sciences and the humanities. This essentially shifts more monies to other non-serial materials. This factor has been active for two years; thus, the faculty with substantial increases in serials over the past two years, are not receiving

The costs of individual journal titles in some cases are astronomical -- \$10,300/year for one journal title recently canceled, and several titles are more expensive. We contend that the library should evaluate the cost effectiveness of

serials relative to subscribing to services which could provide articles in a 24-hour to 48-hour time frame (necessary to faculty research interests) at only a fraction of the cost. A viable option in the future which should be pursued for journals in excess of \$500/year subscription rates will be electronic access to specific articles available via electronic networks. The development of the campus-wide network and the eventual ability to request rapid interlibrary loans directly from another library or commercial supplier should also alleviate the needs or desires for additional serials. The "virtual library" concept being formulated and funded by the state must proceed as swiftly and aggressively as possible within the state universities to make this a viable and attractive alternative to faculty and students alike.

This problem will only continue to magnify as the faculty are recruited with more diverse and varied research interests. While the Committee recognizes that all faculty members should have immediate access to the most vital publications in their fields, we also contend that faculty must recognize that the William and Mary libraries cannot be expected to support all the needs of the faculty and postdoctoral training at what are essentially certified research libraries with budgets far surpassing our own.

The budget for Swem has varied considerably over the past ten years, due in part to the reduction in state funding. Total expenditures for the library have ranged from \$2,376,500 in 1984-85 to \$2,200,000 in 1994, with material expenditures ranging from \$965,450 to \$2,201,890 in 1994. The materials budget remained relatively stable from 1986 to 1991 at about \$1,000,000. A steady increase in private funds from \$223,154 has occurred over the past ten years, and which will have to continue to offset the reductions from state funds.

Concerns in a few of the departments regarding the faculty surveys concerning requested materials because of the various departments in past years. The materials budget was increased by the College administration in the previous years. The library has been able to continue to rely on retroactive purchases of materials. If one considers the materials that have been purchased

several years ago are now costing 20-30% more, a clear example of the "penny wise but pound foolish" philosophy.

This philosophy is best reflected in allocations recommended by the State Council of Higher Education for Virginia (SCHEV) guidelines and the funds ultimately allocated by the state. The last biennium for which close to 100% full funding of the guidelines was received by the library was 1984-86, although nearly full support is expected for the upcoming 1994-96 biennium. The low during the past ten years was 63% of the guidelines for 1991-92. The College administration has when possible offset low state appropriations with additional College funds (especially in the 1992-94 biennium); however this has not translated into replacing losses for years in which the College could not offset low state appropriations. It is essential that allocations at a minimum be maintained at 100% of the guidelines in order for the library simply to maintain its present level of collection building and access to information.

Another area of concern which has increased considerably over the past ten years is the approval and implementation of new academic programs without thoroughly investigating the implications on the materials budget of the library. There have been too many cases in recent years where library resources were said to be adequate to start and maintain new programs, only to find that the demand for materials by these programs increases as the programs grow, which in effect is reducing allocations to established departments and schools. The College committees associated with the approval of these new programs must either closely scrutinize and question the resource requirements, or the College must generate additional material allocations to the library to offset these oversights.

The library is one key area of the College which should be among the last to sustain budget cuts imposed by the state. In essence, the state can no longer be considered a reliable and stable source of funds for the library, and it is up to the College administration to be accountable for maintaining library funding in lieu of drastic state cuts which we can expect but not necessarily anticipate from time to time. The College administration must ensure the library that steady increases in appropriations will be maintained regardless of the source. A question which was asked in the Self-Study survey was, "If you endorse an increase in the library budget to support needed changes, where would you suggest that these funds originate?"

Aside from greater appropriations from the state, other suggestions which the Committee received as viable options included 1) shift some of the student support fees from athletics to the library, 2) continue an aggressive alumni private fund campaign targeted specifically for the libraries, 3) shift some of the overhead generated from grants and contracts to library resources, and 4) reduce the burgeoning level of administrative positions on campus and redirect the monies to educational needs. These responses come from a very small fraction of the total college community, yet imply that the priorities set by the administration do not necessarily reflect the needs of the faculty and students. We should have a library which exemplifies the traditions of excellence in education at William and Mary, and this can only be achieved by raising the standards of the collections.

## 2. Staffing

The organization of the divisions within the library changed somewhat upon the arrival of Nancy Marshall as the Dean of the Libraries in 1986. The conversion of the heads of each division to associate and assistant deans within the library hierarchy was a positive step in the recognition of the library staff as members of the academic community. All professional positions are filled by persons with the requisite professional degrees. Overall the committee found the staff at all levels to be very experienced and competent in their respective areas and professionally active at the state and national level.

The primary problems that continue to be identified at all levels are the insufficiency of staff to maintain existing services and the obtaining and providing of training for new and upcoming technologies. This feeling was particularly noted within the classified staff, a number of whom were beyond the responsibilities placed upon them were beyond what they have been trained for and to a certain extent were bordering responsibilities normally associated with the professional staff. Although the staff expressed no animosity towards these expanded duties, it is clear that two of the primary needs for the library are an expansion of the staff and a program of continuous training and development.

Other highly regarded concerns of the classified staff are the limitations for advancement and compensation, which are restricted and defined by obsolete state classifications. Assessment of job performance tends to be compared to more conventional clerical duties which are no longer the case as job responsibilities vary with the changes in

library technology. Although the classified staff consider themselves to be far more stressed and overworked than at this time ten years ago, they are nonetheless a cohesive, stable, and supportive staff who perform their jobs to the best of their ability, time, and resources available.

At the time of the 1974 Self-Study, Swem Library had an FTE staff of 19 full-time professional librarians and 41 support staff servicing 5,600 students in a facility containing 494,000 volumes. By the time of the 1984 Self-Study, Swem had a staff of 16 full-time professionals and 44 support staff serving a student population of 6,100 in a facility containing 742,000 volumes. In 1993-94 Swem has a staff of 23 professional librarians (three of whom are part-time and one of whom was formerly in a classified position) and 42 classified and hourly support staff servicing 6,700 students in a facility approaching 1,000,000 volumes. Data tabulated by The Association of Southeastern Research Libraries in 1993 for 31 academic libraries consistently show William and Mary near the bottom with respect to all levels of staffing, including student assistants.

The lack of staff is clearly evident from the negative comments made in the departmental responses and the Self-Study surveys, which are clearly associated with the lack of staff necessary to keep pace with even basic functions such as circulation and timely acquisition of new materials. Some areas of the library collections which should be included in the on-line catalog continue to be backlogged, and the processing of items such as gifts to the library in the form of collections literally take months before the boxes are opened. In essence the staff have been stretched beyond reasonable limits, and the expansion of changes in library services with the augmentation of automated technology and the ability of patrons to access information more quickly will only magnify these problems to unmanageable levels.

Recommendations by past Self-Study committees for expansion of the library staff have been ignored over the past ten years. More distressing is the fact that three positions were lost from the budget crisis in these years, of which two have yet to be approved for replacement for the specific areas from which they were lost (circulation and cataloging). One position each has been generated in Interlibrary Loan and in Systems Operations for eventual entry into the library's automated systems; however, these positions still do not meet the needs of the library. The library has continually

additional and replacement staffing over the years, which for the most part has been denied. There are especially critical needs in acquisitions, cataloging, interlibrary loans, and an increase in the number of student assistants allocated. Part of the problem lies in the formulas derived by the state in determining appropriate library staff levels, which are based primarily on the size of the institution with respect to the number of students and faculty rather than the amount and variety of services which are rendered. Another factor related to student assistants is the fact that the minimum wage has increased over 65% in the past ten years, yet the appropriations for student assistants have remained virtually constant.

Consider the following statistics based on percent changes for just the past ten years alone. The student and faculty populations have increased by 15% and 25% respectively. Total volumes in the library have increased 25%. Circulation of materials in and out of the library has increased almost 20%. Interlibrary loan requests have increased over 130%. New titles and government documents added per year to the library have increased over 40%. The microform collection has increased almost 100%. Automated technology has increased from essentially nothing to an everyday facet of library service and operations. Yet the total FTE library staff responsible for all of these increases has risen only 5.8% over the past ten

supported.

*The ability to grow beyond an average library to one more representative of William and Mary tradition hinges greatly on the essential enhancement of the staff.* The committee feels that the library staff should be among the last to sustain state imposed budget cuts and essentially be considered as important an asset as the faculty with respect to the excellence in education that we supposedly offer our students. The ability to recruit professional librarians in the future will only diminish as the trend to eliminate graduate library programs at other institutions continues. Library operations and services continue to grow faster than virtually any other area of the College.

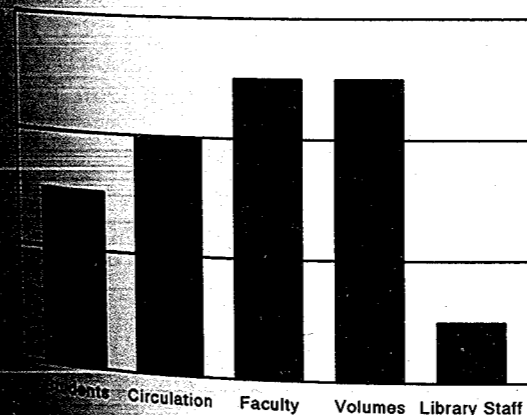
## 3. Services

Swem Library is divided into five administrative divisions; Administrative Services, which includes the science and music librarians and office services; Automation and Bibliographical Control, under which are Cataloging and Systems Operations; Reference and Information Services, under which are Circulation, Documents, Reference Services, and Interlibrary Loan; Collection Development and Preservation, under which are Acquisitions and Serials; and Special Collections and University Archives.

We can simply reiterate what was stated in the 1984 Self-Study, namely that concerns over inadequate funding and staffing magnify the complaints frequently expressed in the surveys and interviews over library services. The most frequent complaints involved delays in interlibrary loans, difficulty in finding materials which were supposedly available (due to the lack of staff for recirculating), excessive time in the acquisition and availability of new materials, and limited access to photocopy services (which are no longer under library control). The efficiency of the staff will continue to diminish under the confines of the existing building, with the need for continued expansion of the collections encroaching on usable work space by the staff.

The Committee nevertheless did not perceive that any problems exist with providing as high a quality of service within the limits of the available staff and resources, and surveys indicated that the helpfulness of the staff is quite good overall. What is apparent is that the library will never be able to provide the quality of service within its capabilities to patrons without enhancements in the staffing levels and space. We will attempt to address strengths and weaknesses which are the most significant as related to the service areas previously

Ten-Year Increases



Swem Library Staff Needs

student assistants are included in the total FTE staff responsible for all of these increases has risen only 5.8% over the past ten

mentioned.

**Acquisitions:** There appears to be general satisfaction in the College community with respect to the methods through which the various departments and programs are informed of and order new library materials. There are still complaints about the length of time that is required to have physical access to new materials, but again this is largely due to the lack of library staff for processing. The time deadlines for ordering new materials due to the requirements of expending state appropriations continues to be an annoyance to the extent that only six to eight months of active ordering is possible, although the actual acquisition process by the library continues throughout the year. This factor certainly adds to the delays in processing, especially towards the end of the fiscal year when an excessive number of orders can be expected.

**Cataloging:** Delays in the availability of new materials to users also lies within the cataloging division, again the result of reductions in the staff. Interviews with the professional staff indicated that the greatest need at the professional level within the library is for cataloging. Aside from the department head, the number of professional staff in cataloging has dropped from three to one, resulting in a substantial amount of the cataloging being performed by classified staff. This factor has been especially difficult to cope with for efficient cataloging of foreign language materials and other special materials such as music and rare books.

The amount of new materials acquired by the library has been increasing at a far greater rate than the current staffing levels within cataloging can manage. Some materials, in particular the special collections, are set aside with no time available for complete cataloging. The availability of commercial cataloging services for special groups of materials has been used to a limited extent and may have to be increased in order for cataloging to keep up with acquisitions; however the quality of the records provided from these services depends upon the libraries from which the information is supplied.

There is also insufficient space to accommodate materials for processing and cataloging, to the extent that they are stored in up to six different locations as space permits. Access to the on-line catalog by the staff is literally restricted to where electrical outlets and cables can be located for terminals, which are now required for all staff associated with cataloging. In essence the cataloging staff is working in a work area supplied with furnishings that were made to accommodate the

needs of the library thirty years ago.

**Circulation:** The circulation department has been enhanced somewhat over the past ten years with the installation of the computerized circulation system and the on-line catalog. Some of the acute space needs were reduced upon completion of the new addition. Centralized book returns located on each level of the stacks have improved staff efficiency for return of materials to the shelves.

There were still numerous complaints in the surveys concerning the ability to find materials which were supposedly available. Books and other materials were observed to take excessive periods of time to be reshelfed. Considering that over 250,000 books and serial volumes are moved by users within the course of a year, it is certainly not a trivial task to insure that materials are returned to their proper location. Once again an acute shortage of staff is the primary culprit, in particular the need for more student assistants.

The Reserve Materials area continues to become smaller at the expense of needed space for microform materials and other audio/visual materials. On the other hand, the deposit of materials by faculty and requests for materials have increased tremendously over the past few years. Staff are literally crammed into the quarters with the reserve materials, and the ability of users to review the materials in the immediate area is now limited to two small tables. Steps should be taken to relieve faculty from having to locate and deliver reserve materials from the stacks.

The space reserved for storage of the microform collections was exceeded almost thirty years ago and the additional media collections stored in the area only compound the problem. Retrieval of microforms often requires staff assistance and ever most of the storage areas are in outlying areas away from public service desks. The microform reading areas contain microform readers which are badly in need of replacement on a regular basis due to heavy usage.

**Government Documents:** The bureaucratic process of literally producing an exponential increase in documentation continues to place a strain on the ability of the department to process and store materials. The stacks are now at 90% capacity, and will soon require implementation of a program for removal of superseded titles. At this point only superseded titles have been removed.

A major concern within Government Documents is the ability to keep up with the ever changing formats through which government information is distributed, without sacrificing the quality of service in more traditional areas. There has been no move by the government to standardize the electronic formats for the disbursement of documentation; thus the staff is obligated to learn a wide variety of software programs for these new materials, which far surpasses the time required for printed or microfiche titles. Yet the department has a small staff (2.5 FTE), and much of their time is delegated to the procedures required for the processing of the 20,000-30,000 government documents received each year.

The department badly needs upgrading in the computer equipment necessary for access to the new information formats. For example, most government CDs are in full text and require memory for storing and running which far surpasses current systems within the department. The trend towards electronic mapping software to replace printed maps will only increase this need for larger storage and faster computers with appropriately trained staff for management of the systems.

**Interlibrary Loan:** This department continues to be one of the most heavily criticized areas of the library by both faculty and students alike with respect to the length of time required to obtain information from other libraries. There are several contributing factors to these delays which patrons must accept as givens, at least for the time being. First, this department receives requests from other libraries as well (over 14,000/year), which must be processed to make the system work at all. Second, patrons must rely on the libraries from which the materials are requested to respond in as prompt a manner as possible. If there are delays from other libraries, it is probably for the same reasons that cause delays here, namely an insufficient number of staff.

The problem will increase rapidly as the "virtual library" concept being funded by the state and the statewide network become realities within the next few years. Once fully operational, any of the six doctoral-granting institutions in the state will have access to the on-line catalog of each respective library. Faculty by all institutions will have the ability to make direct requests to the supplying library, which will reduce the workload in the loans department. On the other hand, we anticipate that the number of other institutions will increase

dramatically. The state has recognized this potential problem by allocating one additional position in interlibrary loans; however the Committee feels that the need is highly underestimated, especially considering the poor staffing and space limitations already imposed; thus additional staff beyond the anticipated levels will certainly be in order in the upcoming years. If space associated with non-library activities can be recovered, highest considerations should be given to expanding the space afforded to the interlibrary loan department.

**Reference:** The reference collection has improved considerably over the past ten years without comparable increases in space, which has imposed limitations on the amount of reference material that is physically accessible within the confines of the reference area of the library. The addition of new volumes is only possible by removing older and less used titles from the collection. The proliferation of electronic resources has also increased problems in space for computer workstations and the reference services required by patrons. The time required with individual patrons has increased substantially due to the number of options available from reference services. Librarians have had to learn over a dozen different search protocols to use the available resources, and are constantly faced with the most cost- and time-effective means for accessing information requested by library patrons. These demands will only continue to increase as the availability of these systems becomes more widely known and accepted.

Many academic libraries have developed new models of reference service, in which an information desk for quickly-answerable questions is maintained as well as a consultation service for more complex research assistance. These models tend to require additional space, staffing, and physical access to sufficient electrical wiring. Unfortunately, as with many other areas of Swem, none of these are currently available.

**Serials:** The primary problems with the serials department in the minds of many of the faculty and other patrons have already been addressed with respect to the expressed need for additional serials, which would eventually saturate the entire materials budget. Some complaints were noted with respect to the time that is required for new volumes to be bound, which can take anywhere from weeks to months. Once again this is the result of too little staff and inefficient space for the processing of too many materials. Space problems in the branch science libraries are compounded by the need for most of the space to be for the journal



collections.

The deselection processes utilized over the past ten years to constrain the growth of the serial holdings and costs have reached a limit at which other alternatives must be considered. Consistent increases in the materials budget is one obvious solution and necessity for continued collection development. The space consideration over the next several years is a more difficult one. One possibility for providing minor relief would be to completely remove all materials that went through the deselection process from the shelves as well as the library catalog. A second option may be to remove volumes from the library by age deselection, especially in the sciences where one is more prone to examine the most recent literature in one's respective field. These processes could only be performed under consultation with the faculty.

**Special Collections and Archives:** Special Collections maintains and develops three major research collections: manuscripts, rare books, and the university archives. The manuscript collection focuses on early and recent Virginia history. The rare books collection covers many areas of western thought and disciplines with volumes dating back to the 15th century. The University Archives collects material documenting the history and activities of the College from its founding to the present. The Archives also administers the College's records management program, which deals with the retention and disposition of records throughout the College. All of the rare books and manuscript collections are accessible through the on-line catalog, but most of the Archives materials are not yet available on-line, which would require time far beyond that available to the current staff with their on-going and required duties.

The special collections, rare books and manuscripts, and archive areas of the library are in desperate need of attention, much of which could be corrected with the new addition planned but not yet funded for the library. The Special Collections area is completely full, requiring areas that should be available to patrons to be used as bulk storage and processing areas. The need for storage space is so acute that not only are the tables in the public areas full, but the floor space beneath the tables as well. Collection decisions are becoming so space-driven that large manuscript collections may be turned down in the future and some potentially valuable College records may be destroyed because of the lack of storage space. The value and uniqueness of the collections, and the confidentiality required for selected records, make

the security of the area, as well as the need for proper environmental control (which is virtually impossible with storage on the bottom floor of Swem) a primary concern.

Another major concern is the great difficulty in getting campus offices to comply with procedures for identification and submission of appropriate materials for archiving (although some records which should be saved are being turned away due to the lack of sufficient space). This problem will only increase due to the legal requirements for retention, storage, and disposal of public records as no records can legally be destroyed without the approval of both the University Archivist and State Archives. All persons within the College must be familiar with the legal requirements or the services and functions of the Archives relative to College documents. This can only occur through proper and additional communication, which the University Archives does not have sufficient staff to perform adequately.

#### 4. Facilities and Space

The library should serve as the heart and soul of any academic institution, serving not only as a depository for the vast amounts of printed materials available to its patrons, but also as an environment for enhancing the learning experience. The library under present conditions is by no means a case facility that characterizes the spirit of William and Mary. The committee was absolutely appalled at the physical conditions to which our source of information and research have been allowed to degrade. We do not find the library administration at fault in this decline. The Swem library was occupied in 1965 with 100,000 sq.ft. of usable space. At that point in time, consideration was given to space requirements for information or preservation/conservation needs. No significant renovations of Swem have occurred. In 1988 a four story, 28,000 sq.ft. addition was added to the front of the original building primarily to provide badly needed space for collections and users. A student lounge, faculty office and work space for library staff were also housed in this area; however, the lounge was never materialized. Overall, the space currently allocated to Swem Library and its associated functions is only 75% of the total it needs and according to the formulas used by the Council of Higher Education for Virginia (SHEC).

The long term effects from the lack of space are numerous. Space for the housing of materials and other collections is severely limited. Space originally designed for storage

replaced by materials to the extent that studying is no longer a viable alternative, and the continued growth of the collections will ultimately become impossible without a substantial increase in space. The original building could seat close to 1,600 people when opened in 1965; whereas, by the close of 1991, only 750 seats remained for almost twice the enrollments. The library now has one seat for every 10 students as opposed to 2.6 students in 1965, and this does not even consider use by faculty or outside patrons. Group-study space is virtually non-existent.

During the Committee's interviews with the staff there were numerous complaints of poor environmental control for the entire facility. Lighting throughout the building is inadequate, especially in the new addition due to cost cutting measures in the construction. Temperature and humidity variations within the building are more a function of the outdoor climate than what the HVAC systems can produce. This situation only exacerbates the problems associated with document and materials preservation, as well as the discomfort passed on to the library patrons and staff. The general condition and appearance of the library has declined substantially over the past five years due to substantial reductions in the cleaning staff in the early 1990's from budget cuts. This factor has taken its toll on the ability to properly care for the collections simply from the accumulation of dust. There were numerous comments in interviews regarding the points mentioned above. The library has been achieved with numerous sacrifices. The lounge area was converted to a work area for the library department. Lounge areas for faculty and staff were converted to the Duplicating Office and periodicals areas respectively. Very little consideration was given to the space requirements for automation and preservation/conservation needs of today.

The Interlibrary Loan, and Government Documents departments, as well as the Special Collections division, are particularly crowded in the library and processing space. Serials is housed on three floors of the building, resulting in highly inefficient operations. Much of the space should be a display area for the Special Collections is used for storage of materials. The volume of material processed through the loan has increased by a factor of ten in the last twenty years, yet the space available is smaller. The office space, which is totally inadequate, has been converted to makeshift, partitioned cubicles.

Space for the collections is rapidly approaching saturation. At the close of the 1993 academic year, the general stacks were at about 84% capacity, government documents were at about 89%, and Special Collections was simply full. Standard library practices recommend that libraries should have new space made available by the time shelving is at 86% capacity or resort to zero growth, which is clearly not practical considering the obligations of Swem to continually provide and update materials for the curricular and research needs of the university community.

There are a number of other deficiencies and needs which are recognized as serious problems. The building is poorly wired, and incapable of being properly wired in some areas, for the rapidly expanding automated technology which is becoming a growing part of everyday library services. The Systems Office and computer room, being located in the basement, are prone to minor flooding during heavy rains. Departments and other areas of the library which must interact on a regular basis are remotely separated to an impractical level of inefficiency, due mainly to the need to appropriate space wherever it is available for other users. Clearly changes are necessary for the continued growth and vitality of the library.

The College has recognized the need for the renovation and expansion of Swem by giving the library highest priority for capital projects requested in the current 1994-96 biennium. The projected cost of approximately \$26 million includes complete renovation of the current structure and an additional 98,650 gsf in new construction. The new areas would house the Special Collections, university archives, and a state-of-the-art multi-media area. In addition, all serials and their services would be brought into closer proximity, compact shelving would be provided for growth of the collections, better individual and group study areas would be created, and library and information technology could be provided wherever needed. Renovations would result in a more centralized system of acquisitions and placement of collections as well as the ability to accommodate the rapidly growing and changing areas in automated technology. This project has been 100% justified by SCHEV and recommended for the 1994-96 capital outlay package.

Unfortunately, the state legislature declined funding for this project in the upcoming biennium to the extent that funding for planning and design was not even allocated. Such would have at least made the transition to construction more rapid if

funding is approved for the 1996-98 biennium. We are of the opinion that the reasoning of the legislature may be due in part to the bonds issued by the state in 1992 to fund large capital projects at academic institutions throughout the state, which makes them hesitant at this point in time to approve new and costly appropriations from general funds. Appropriations for the upcoming biennium were awarded primarily to campuses which are willing to expand to accommodate the substantial increase in Virginia students projected at the turn of the century, and for new innovative programs in technological fields. The frustration experienced by all of us is that the capital projects approved in the bond referendum were largely needed well before the money became available. In the case of the library, continued stalling on what should be an absolute priority could potentially lead to situations where short gap measures, such as relocating materials to other locations, will only increase the ineffectiveness of the library as the central source of information and learning for our academic community.

The Committee urges the College administration to aggressively continue the pursuit of the state funding necessary for the complete renovation/addition project overwhelmingly justified by SCHEV and the number one priority of the campus. The last two major capital projects on the main campus were the Recreation Center and the University Center, the latter of which was funded through bonds being paid for through student fees. Other substantial renovations have occurred in many of the administrative and academic facilities. On the other hand, what should be the center and pride of our academic environment and excellence in education continues to be on hold.

### 5. Automated Technology

Automation has created enormous changes in the way libraries provide information and resources to their patrons. Over the past twenty years the library has changed from virtual non-utilization of automation to a leadership role in technology for our academic community. The library began the automation of its operations and services in 1974 with the introduction of OCLC (Online Computer Library Center), which is affiliated with over 11,000 libraries worldwide. In 1985, the Virginia Tech Library System (VTLS) was installed, from which Swem and other William and Mary libraries resources can be accessed through LION, our local online catalog. Public access terminals are located throughout the main library, one in each of the departmental libraries, and several in the Marshall-Wythe Law Library. All Swem

monograph and serial titles may now be accessed through LION. However, pre-1990 government documents, some bibliographic records for microfiche, microfilm sets, archival materials, a substantial amount of the holdings at the School of Marine Science, and other materials at the Business and Education libraries are not accessible through LION, due primarily to the lack of staff required for entry tasks. All materials associated with the libraries' collections should be included in LION access by their patrons.

Swem began introducing CD-ROM databases as an integral part of its reference services in 1989. The library currently has six workstations dedicated to supporting 8 commercial CD-ROM databases and 17 government sponsored products. Four of these stations are currently networked. Online databases through the DIALOG search service are also accessible and have grown substantially over the years with respect to the number of databases and information available. Interests were also expressed in the department responses for acquiring other databases, such as MEDLINE for Biology, MathSci for Mathematics, and Music Index and Muse for Music. These requests will certainly continue to grow at a phenomenal rate as more bibliographic databases are generated (with each unit offered at substantial costs).

*The most critical need of the library is the development of automation is to be allocated means for maintaining a leading role in the selection and utilization of current technology for information processing. This is clearly a difficult task considering the developments taking place in computer hardware and software which are changing more rapidly than anyone could have imagined a few years ago. The current online system is seven years old and is very slow and awkward relative to current technology used in many academic libraries. Public access is only through "dumb" terminals which are becoming obsolete and inoperable. The number of options available now and in the future, the need for microcomputers and printers, and download information from a variety of sources beyond the Swem collections. The development of a high speed campus-wide communications network is essential for the development of access to databases through the library.*

The library is clearly making significant efforts and is being supported by the state and state in updating the present

state-of-the-art information management and access system. The current VTLS/LION operating system will be replaced by the Fall of 1995 with a UNIX-based system of far greater capabilities and multiple user access. A virtual library concept supported by the State Council of Higher Education for Virginia and funded by the Virginia General Assembly for \$5.2 million will provide the library with an additional \$210,000 plus one classified position in resources over the next biennium in partial support for a consortium of Virginia academic libraries in the development of rapid access to both on-site and off-site resources. In addition, \$2 million will be spent by the six doctoral libraries on electronic databases which will be accessible to all academic library patrons. A key factor in this development will be the eventual ability to locate materials from any on-line catalog associated with the system and provide for immediate user-initiated interlibrary loan requests. We can only assume and hope that when such a system becomes a reality it will alleviate some of the pressure exerted by the faculty for expansion of the serial collections. However, the success of such a program will only be realized when all libraries are trained and equipped with the appropriate hardware, software, and peripherals to support such an attractive alternative viable.

The library is to be commended for its leadership in working with patrons to provide them to electronic sources of information through the Internet and other electronic databases worldwide. The Committee believes that as management of information on campus evolves, the library must play its important leadership role and responsibility for designing ways to provide information and for instructing users. Since meeting these increasing responsibilities puts an even greater burden on an already inadequate staff base, the library should be provided with the necessary staff to accomplish this important

The number of unit libraries on the campus which supplement the services of the main library are intended for enhanced service to particular users from a number of disciplines. These libraries fall into

reflect, a branch of the main collection which rarely duplicates materials housed in a building close to the

majority of users who are in disciplines that emphasize study and research in the laboratory which extends from library research. These disciplines at the present time include Biology, Chemistry, Geology, and Physics. There is also a Music Library. Acquisitions, funding, and operations for these libraries are administered by Swem, and all holdings are included in the database for the entire library system. The holdings within each branch vary greatly, from complete subject and serial collections in the physics and chemistry libraries to just the most recent serials in biology.

A new library addition for Physics, housed in Small Hall, was completed in 1987 and is already nearing 80% capacity. The Chemistry library, housed in Rogers Hall, is close to 100% capacity. Well over one-half of the seating available ten years ago is now used for shelf space for the serial collections. The Swem administration has made notable efforts to enhance the operations of these libraries with the addition of two librarians (one at 0.67% FTE and the other at 0.75% FTE). In addition, a part-time classified staff member and student assistants are dedicated to the complete operation of these five libraries, which has lessened the burden considerably on faculty who tended to be responsible for a variety of library duties over the years. Nevertheless, both of the librarian positions should be converted to full time to accomplish the high work load, which includes every facet of library operations.

The second category is based on small collections which tend to duplicate the Swem collections but are housed separately for better service to particular users. These include Anthropology, Classical Studies, Economics, Fine Arts, Government, History, Psychology, Sociology, and the Institute of Early American History and Culture. The purpose of each library varies widely ranging from maintaining reference collections for faculty use to allowing access to students for browsing and classroom needs. Acquisitions are funded through departmental budgets or private monies and are thus separate from the Swem budget. The operation of these libraries is not under the jurisdiction of Swem, although technical advice and support is readily available. These facilities are not staffed by librarians and are normally overseen by faculty and/or departmental secretaries.

The third type of library is the Professional School libraries, such as the Learning Resource Center (LRC) in the School of Education, whose holdings are primarily classroom materials (i.e., new textbooks, teaching materials, etc.) which

under normal circumstances would not be collected at Swem. The LRC is one of a number of locations designated by the state to receive samples of primary and secondary school textbooks for examination by local schools for possible adoption. There is also the Professional Resource Center in the School of Business Administration, whose holdings reflect the needs of the business undergraduate and graduate students, both in print and electronic formats. A greater percentage of the PRC budget will necessarily be consumed by the electronic formats as they become increasingly accessible and important in business operations.

### Recommendations:

We recognize that a fact of life in academics is that all the items considered as necessary improvements for the library can rarely be achieved in a single time frame which satisfies the needs of both the library and its patrons. We further recognize that there are numerous and smaller recommendations that could be addressed; however, more global considerations should prevail and be focused upon, for they will ultimately solve many of the problems associated with the libraries. Thus, we wish **the following broad based and prioritized recommendations**, from highest to lowest, to be considered as vital to the future of Swem Library as we approach the turn of the century:

1. Our strongest recommendation goes toward the continued pursuit of funding for the library addition and renovation, which will alleviate many of the problems associated with the current structural arrangements and meet the needs of the College and community through the first 25 years of the next century. The Committee recognizes that there are many capital needs throughout the College; however the library stands as the focal point to the continued success and vitality of all academic and research activities, thus warranting sacrifices at other ends to meet these needs. The Campaign for the Fourth Century was quite successful in developing a substantial source of private funds for the College; thus we recommend that the College begin an immediate campaign for the donation of private funds targeted exclusively for the library construction. The College must pursue the means through which the interfacing of public and private funds can insure that all of the requests associated with the new addition and necessary renovations to the existing library structure can be honored.

Short term measures **must** be taken in the interim, which could be anywhere from five years

or more before the addition/renovation is realized. Instructional Technology and the Institute of Early American History and Culture should be relocated to other facilities as soon as possible, which would provide an additional 7,800 sq. ft. of space for the most critical library needs. We also feel that a modest amount of stack space both in Swem and the unit libraries could be retrieved by removal of science journals dated prior to years acceptable to the respective department(s) which request the subscriptions (e.g., 1930 and below). The committee feels that the need to have these journals on hand would be minimal and require little if any maintenance or time for retrieval, provided that a suitable depository can be found.

2. The staffing requests of the library must be honored to insure that vital services as well as needs for the completion of the Swem online databases bring the library to a level of excellence expected by its patrons. The College administration must set a high priority on changing the guidelines of the archaic formulas used by the College for staff levels, as well as on restructuring the classification system to allow for upgrading and advancements in positions. Part-time library positions should be upgraded to full-time status. All hourly positions should be considered for conversion to classified status. Funds must be available to hire sufficient numbers of graduate student assistants and to reward student assistants for performance and longevity with incremental increases in salaries above the minimum wage. We expect that turnover rates and the cost required for training by the permanent staff will decrease considerably.

We support the suggestion given in the report that the creation of endowed library positions using private funds could free state funds for additional library positions. This is not an approach by any means, as many prestigious institutions have endowed positions in their library system, which again supports the notion that our librarians should be considered in respect to the faculty.

3. The library must be sufficiently funded to carry out its mission to the satisfaction of its patrons who must be served. We recommend that the library is in a continual state of expansion and requires a continual increase of allocations to meet the resource requirements. The College administration should recognize and support the library as an exceptionally high priority with respect to the addition of new programs which will result in automatic increases in funding.

allocations commensurate to the anticipated size and growth of the program, regardless of whether the program states that library resources are sufficient, as this has never been the case in past history. Material allocations at a very minimum should be matched to the true inflation rate of printed/electronic materials. Indeed, full funding as dictated by state guidelines for all library resources must be maintained and continue to increase to meet the needs for turnover in equipment and necessary increases in staffing at all levels. The library must be designated as one of the highest priorities with respect to those responsible for pursuing endowments, private donations, and gifts to the College.

4. Serials costs must not be allowed to overwhelm needed allocations for other library materials; but, on the other hand, the serials collection must be maintained and developed to a level appropriate for student and faculty needs. We strongly recommend that the College administration develop a reserve fund as determined by the library which can be used in fiscal years in which serial costs are beyond anticipated allocations. We also recommend that once the necessary information technology for document delivery is in place, the College as a whole must make every serious effort to evaluate the existing collection with respect to need and costs and to explore other and more cost-effective means of providing access to the collection. A key factor here will be the willingness of the faculty, administration, staff, students, and users to become literate in these new and emerging technologies. In the interim, we recommend every effort be made by the administration to maintain funding for the existing collection, without the sacrifice of other material needs.

Advancements in automated technology and the dissemination of information continue to move at a pace far beyond the levels of support currently available to the library to compete at the leading edge. It is unacceptable in the opinion of the committee to replace the obsolete VTLs/LION systems in library management and services. We recommend that the library be given the authority to provide the level of service merited by the community being served. In order for these efforts to be effective, academic administration should recognize and support the library as an exceptionally high priority with respect to the addition of new programs which will result in automatic increases in funding.

## B. THE MARSHALL-WYTHE LAW LIBRARY

The Marshall-Wythe Law Library serves approximately 550 law and graduate students and 35 Law School faculty and administrators, as well as College faculty and students, the Virginia bench and professional bar (especially in the southeastern region of the state), and the general public. Staff at the National Center for State Courts, which is adjacent to the Law School, use the Law Library extensively as well.

The Law Library has approximately 185,000 volumes plus an additional 125,000 volume equivalents in microform. There are about 47,000 book titles and 4,200 active serial titles. The library is particularly strong in its collection of constitutional law, environmental law, and tax materials. Special collections include a partial reconstruction of the law library of Thomas Jefferson and a fairly strong collection of Roman law materials.

The Law School ranks in the top forty schools nationwide for its programs and performance. The library is dedicated to providing students and faculty the best possible access and research skills necessary in their field. Recognition by the administration over recent years for the need to develop the library to the level of excellence enjoyed by the Law School has led to improvements in collections and services such that the library has made substantial progress relative to peer institutions. The library must be allowed to continue in the expansion of space, staff, and funding to maintain the standards necessary for student use and faculty research.

### 1. Funding and Collection Development

Over the past ten years the Law Library budget increased from \$743,900 for 1983-84 to \$1,623,600 for 1993-94 from state funds, an increase of 118%. There were several years (1988-91) in which there were essentially no increases due to stringent budget cuts by the state; however recent increases have been substantial and have allowed the library to maintain an adequate acquisition timetable for new library materials. The 1984 Self-Study noted that the library had to reduce the number of treatises purchased due to dramatic increases in costs. In contrast to the other College libraries, the Law Library is primarily composed of materials which require regular updating to the extent that 80-90% of the acquisitions budget can be consumed updating materials already in the collection.

The current library director recognized this as a problem which could eventually saturate the entire library budget. To circumvent this dilemma, every library subscription was reviewed beginning in the Fall of 1988 to determine whether it met law school curricular or research needs, or the needs of other library patrons. Nearly 700 serial subscriptions were canceled from November, 1988 to July, 1991 based on faculty input and consent, reducing the serial subscriptions from a high of 5,366 in 1988 to the current level of 4,504. All subscriptions are still reviewed on an annual basis to determine if continuing value and interest exists.

The materials/binding budget for the Law Library has increased by 136%, from a total of \$387,720 in 1983-1984 to \$ 882,400 for 1993-1994. Most of the academic support budget and non-state funds are also used to acquire library materials. Nevertheless, the law library continues to rank at a median level for the size of its collection when compared with the other 175 academic law libraries nationwide (for 1992, the library was ranked 89th for total collection size and 85th in book titles held). Similar statistics are maintained for the 37 law school libraries of the southeastern United States, and again the Law Library is at a median level with respect to total collections and book holdings. The rate of acquisition that is currently taking place with the increases in the materials acquisition budget should, over a period of a few years, bring the Law Library to a ranking more appropriate and in line with the rankings of the Law School as a whole.

The increased funding should allow the library to enhance collections relevant to ongoing and incoming faculty research needs. Interlibrary lending and document delivery services are still expected to be highly relied upon for complete research referencing. A critical factor for continued growth will be that funding for materials continues to grow at levels comparable to the exceptional inflation rate for legal materials. According to the annual Price Index for Legal Publications [85 *Law Library Journal* 867 (1993)], the cost of legal materials has increased from 52% for commercial law reports to 124% for legal periodicals over the past ten years. The cost of purchasing legal monographs increased by 99% over the same time period. Fortunately, through the serial review process and appropriately increased levels of funding, the library is in the position to build and maintain a stronger collection that meets the needs of the faculty, students, and other patrons. We cannot overemphasize how important these two factors are to maintaining the continued growth

and vitality of the Law Library.

## 2. Staffing

A major concern is the size of the library staff which at present time consists of six full-time professionals and nine classified staff. The professional staff is composed of the director, associate director/head of public services, head of technical services, head of computer and audiovisual services, a reference librarian, and a reference/cataloging librarian. The library is currently recruiting an additional reference librarian, while will increase the professional staff to seven. Compensation shortfalls that were recognized in the last Self-Study report have been remedied to the extent that all salaries are at median levels or above compared to salaries of all non-director law school libraries.

The full-time classified staff has remained constant in size since the late 1970's and is working to an absolute capacity, although interviews conducted with the classified staff would indicate that the work load and duties extend beyond the limits. The same staff which ordered, processed, and catalogued over 5,000 new volumes only two years ago did the same for close to 10,000 volumes during the 1992-93 year. Interlibrary lending and document delivery transactions have tripled over the past five years. In 1990, the Law Library also assumed responsibility for coordinating all Law School audiovisual activities and the student computer lab without any increase in staff.

From 1992 statistics collected by the American Bar Association for academic law schools, the Law Library ranked in the bottom quarter for the number of FTE professional librarians, number of hours worked by student aides (3.2 FTE), and the number of hours the library is staffed by professional librarians. These should improve somewhat with the increase in the professional staff and the hours that began in the 1993 academic year. The greatest need for additional student aides and audiovisual and computer lab functions.

## 3. Services

The services rendered by the library have increased substantially over the past ten years in respect to not only the volume of traditional services rendered to faculty, students, and other patrons but to the scope of services as well. The library was able to offer professional assistance on evenings and weekends beginning in the 1993 Fall semester. The increase from 50 to 63.5 hours per week of the professional library staff assistance

of legal research in the Legal Skills curriculum as well as in specialized training in other law courses and in an advanced research course. The demands for audiovisual assistance consume a substantial amount of staff time. We must again stress that the diversion of the library staff to these new areas of services dilutes the availability to traditional library functions, which can only be remedied by an increase in staff size.

## 4. Facilities and Space

The 1984 Self-Study report implied that space should not be a problem for the law library over the next decade; however our tour of the facility and interviews with the staff revealed that this is certainly not the case. The facility itself is in excellent condition from a cosmetic view; however there were complaints of poor heating and cooling, ventilation, and lighting. The increasing need for computer terminals and audio/visual equipment has put an excessive strain on the electrical system of the library to the extent that interruptions in service are common place.

Substantial amounts of space are now occupied by a cluster of 25 PC workstations and 34 terminals dedicated to Westlaw and Lexis equipment. The number of law reviews generated at the Law School has increased from two to five, which has taken a small amount of library space for offices as well as storage and shelving for the reviews. Additional office space for the staff has been carved from the existing stack space and still does not meet the needs of the current staff level. All of these factors will ultimately consumed seating for students, and shelving space for the collections is also being consumed. The library staff has projected that the library will be at 86% capacity by the end of the year 1995 and 100% by the year 2000. While the staff perceives this to be a problem which will continue to grow, we contend that the Law Library will have to be innovative in the way that it addresses the needs of expansion and renovation of the library. Nevertheless, it is in the best interest of the Law School to initiate a study and plan for addressing either the expansion or renovation of the library in new and exciting ways in the next decade.

## 5. Technology

The utilization of computerized circulation, and library management is a given in the current Law Library. The library currently has 25% of the 176 ABA law schools law and Lexis use per student (from

1992 data). The library is also in the process of obtaining 25 upgraded stations for student use in the near future. The main problems appear to arise from working in a building that predates extensive utilization of computer equipment; thus space and outlets are at a premium. Time should also be allowed for all staff to be properly trained as new systems and software are introduced, rather than having a few staff, with limited exposure in training sessions, teach the remaining staff members.

## Recommendations:

1. The Law Library is, like any academic library, the foundation to the continued development and success of the School and the specialized patrons who depend on its services. The magnitude and scope of these services have increased dramatically over the past ten years, which have fallen on a constant work force. We strongly recognize and support the need to establish at least one more full-time classified position immediately and an additional position within the next three years. An hourly half-time position should be created for the continued growth in audiovisual and computer assistance, which should not necessarily be delegated to the permanent library staff.

2. The library is facing a growing space problem in the upcoming decade. The Law School administration and library staff should begin taking the appropriate steps to generate a comprehensive plan for expansion of the current facility. The library was not designed with current technology in mind. We are of the opinion that a new addition to the school would better serve everyone with respect to these needs.

## C. THE VIMS LIBRARY

The library of the School of Marine Science/Virginia Institute of Marine Science (SMS/VIMS) is primarily a research library dedicated to the institute's mission by providing access to marine science literature and databases for educational, research, and advisory service purposes. The School of Marine Science is exclusively a graduate program at both the MA and PhD levels and enrolls over 100 graduate students each year in all phases and disciplines of marine science. Although no undergraduate concentration is available, some courses are open to advanced undergraduate students. Over \$7.0 million each year is currently obtained in external grants and contracts for research conducted by the faculty, professional staff, and graduate students at VIMS.

## 1. Funding and Collection Development

The library contains approximately 19,500 tit-

les in over 45,000 bound volumes between the monograph and serial collections. About 500 books are added each year and paid subscriptions to over 520 periodicals are maintained. Over 25,000 individual microfilm pieces are also available. The library budget is funded through allocations determined by the SMS/VIMS administration from state appropriations made directly to VIMS. Over the past ten years the library budget has increased from about \$170,000 to over \$262,000, of which \$109,000 is currently allocated to personnel and over \$136,000 for the serials collection. Although this represents an increase of approximately 55% over ten years for the entire library budget, virtually all of the increase as well as diversions from other vital areas have gone towards circumventing inflation to maintain the periodical collections. The VIMS Library grew rapidly in the mid-1980's to the point of being recognized as one of the best marine science libraries and bibliographical sources for coastal and estuary literature in the United States. In the late 1980's and beyond, dwindling state support for VIMS, coupled with highly inflated subscription prices and poor exchange rates in the procurement of international journals, had a substantial impact on this growth. Approximately 28% of the library's journal subscriptions were canceled between 1987 and 1990 due to lack of funds. In addition, money normally allocated to monographic development was diverted to maintain the remaining serial subscriptions. Coupled with this problem is the broadened scope of research interests from faculty hired in disciplines and programs not previously represented at SMS/VIMS. Unfortunately, their needs for literature to maintain productive research programs are not being met due to the funding problems. We do not perceive, nor has it been implied, that the SMS/VIMS administration is at fault with respect to providing as much library funding as possible. Indeed it would appear that the entire institute has weathered substantial losses in state appropriated funds, for which the library has also suffered. An endowment for the library has been initiated; however substantial levels of private money targeted for specific goals will be necessary to bring the library to the levels of excellence necessary to fulfill the mission of the institute.

## 2. Staffing

The SMS/VIMS library staff consists of three full-time professionals each with very distinct as well as overlapping duties. These include the director of the library (Charles McFadden), a librarian for bibliographical services, and a librarian for public services. All of these positions were upgraded to professional faculty status in

1992. In addition there is a part-time classified position (25 hours/week) which is annually budgeted for additional clerical help. The part-time position tends to be transient at best (five people over the past five years), which has resulted in no clerical help approximately 10% of the time during the hiring phase as well as time required from the permanent staff for training with each replacement.

The current staff has remained virtually unchanged in size since the last Self-Study; however the responsibilities of the professional staff have changed substantially over the past ten years to the extent that an excessive amount of clerical work must be accounted for by the professional staff. For example, with the growing use of on-line databases, interlibrary loan requests from other institutions to the VIMS Library have grown from essentially nothing to over 1000 items/year, which is now consuming up to 50% of the time for one of the professional librarians (requests quadrupled in a one month period alone when the VIMS serial database was added to the Southeastern Virginia Union Listings). Our committee concurs with the current staff that the level of professional support at the VIMS Library can only be effective if a substantial amount of the necessary clerical work can be transferred to more classified staff. This would allow the professional staff to focus their energies on more critical needs such as processing and cataloging of new material, development of the VIMS collections, completion of their part of the College-wide library on-line catalog database, and enhancing local databases related to the strengths of the VIMS collections.

## 3. Services

The library staff is dedicated to providing professional library guidance for VIMS personnel and other patrons. The library is currently open 40 hrs/week on weekdays for use by all patrons. All VIMS faculty, professional staff, and students have 24-hour access to the library through entry keys to Waterman Hall. Patrons have access to the library staff during the week for initial orientation and development of searching and database skills. Photocopying is now available through a vending card system and a state-of-the-art microfilm reader/copyer recently obtained.

A concern addressed in the 1982 Self-Study was the circulation procedure, which is an honor system whereby library patrons remove library materials from the library by

simple card. Our committee did not perceive this procedure to be a problem, in part due to increased awareness by the library patrons of their obligations to the VIMS library and the limited number of library users. With the completion of the automated catalog and efficient interfacing to Swem, the library should be able to upgrade to the level and benefits of rapid and automated check-outs.

## 4. Facilities and Space

The current library was opened in 1984 upon the completion of Waterman Hall, which also houses classrooms, laboratories, and administrative and service offices. The space afforded to the library houses two levels of stacks for the monograph and journal collections, a reference room for abstract collections, offices and work rooms for the professional staff, and a small special collections room. Approximately \$250,000 in funding has been approved for renovation to comply with ADA guidelines and an expansion of the library to begin in the summer of 1994. The overall design and structural modifications incorporated into the renovations could actually increase usable shelf space by 30% over the existing structure only if compact shelving is ultimately added to the standard shelving currently funded. This should accommodate future growth of the library collections for a number of years.

## 5. Automated Technology

The SMS/VIMS Library has made substantial progress in providing electronic access to the local level. The VIMS Library was the first library at the College to make multiple CD-ROM databases available over a local network. The *Chesapeake Bay Bibliography*, containing over 8000 citations on articles pertaining to the bay, was started in 1970 by the library at VIMS. The time allocated to this project all increased by the late 1980's due to the clerical responsibilities of the staff. The long range plan of the library is to incorporate these citations into a far more expansive coastal and estuary bibliography projected database surpassing 200,000 citations within the next ten to fifteen years.

Conversion of the entire VIMS collection to the wide on-line catalog database appears to be proceeding at an agonizingly slow pace, again the clerical responsibilities delegated to the professional staff, which must be given a higher priority to maintain library operations. At this time only post-1980 library materials are recorded; this only constitutes about 40% (~6500) of the total collection. There are certainly

a number of departments on the William and Mary campus which could benefit from a complete on-line database from the VIMS collections. A continuing frustration encountered by VIMS patrons and staff is the ludicrously poor electronic connections, if any at times, between the Swem Library on the main campus and the VIMS Library for rapid access to the collections at Swem. Conversely, there are substantial holdings at VIMS which are not recognized by Swem patrons due to the incomplete on-line catalog database.

## Recommendations:

1. The committee feels that the highest priority should be given to increasing the current staffing levels of the VIMS Library. We are of the opinion that the current level of professional support is sufficient within the context of the library's mission; however, classified, non-professional staffing should immediately be increased at the very least to one full-time employee to minimize turnover. Two additional classified staff members should be phased into full-time status over the next five to ten years to assist in maintaining the growing collection, bibliography and service needs.

2. The SMS/VIMS Library by the mid-1980's was in position to become one of the premier and model libraries for marine science in the United States, if not the world. We recommend that all efforts be made by the VIMS administration in their quest for state appropriations to substantially enhance the monies necessary to bring the library back to such a prestigious level. This can only be achieved with the additional staffing already mentioned, increasing relevant journal subscriptions desperately requested and needed by current and upcoming faculty and programs, and developing complete and comprehensive marine science databases for public access. The ability to undertake such a task will require that materials appropriations be doubled over the next five years at a minimum. Every effort should be made by the VIMS administration, as well as the main campus, to develop an endowment with substantial donations (\$500,000+) for the VIMS Library. Until such a realization is achieved, the VIMS administration should consider diverting a small percentage of overhead monies to the operation of the library (i.e., only 1% of the \$3,000,000 or more in indirect costs collected annually from grants and contracts would supplement the library budget by \$30,000). This seems quite fair since the library is the keystone to the success and vitality of any research institution and the faculty, staff, and students who rely on its resources.

3. We recommend that the SMS/VIMS Library be upgraded and maintained at the same technological levels as the main campus. The VIMS library should enjoy the same benefits reaped by the main campus from the current and scheduled upgrading of campus-wide data transfer and access technology. Unfortunately these upgrades are not being extended to SMS/VIMS, thus both libraries are losing with respect to the databases that could be mutually shared.

## Chapter Nine

# Instructional Support and Computer Resources

**Robert E. Noonan, Chair (Professor of Computer Science)**

*Alan F. Edwards, Jr., Steering Committee Liaison (Graduate Student, Education)*

*Brian K. Dewey (Undergraduate)*

*I. Trotter Hardy, Jr. (Professor of Law)*

*Myron B. Hayslett (Audio Visual Education Specialist, Technology Services)*

*Carlisle E. Moody (Professor of Economics)*

*Gary A. Smith (Associate Professor of Modern Languages and Literatures)*

*Mary K. Swartz (Associate University Registrar)*

*Philip J. Syribey (Undergraduate)*

### Introduction

The last Self-Study noted:

Computing technology has grown at a tremendous rate over the last decade, and the use of computers has spread to almost every walk of life. It will not be long before almost every educated person will be required to have working knowledge of computers and their applications.

In the last 10 years, the College has attempted to keep abreast of the changes in computer technology and to incorporate these advances into its research, and administration. Indeed, in the last completed revision of the general College requirements, the Faculty of Arts and Sciences proposed the following computer proficiency requirement on all entering freshman beginning

Students must satisfy a Concentration Requirement established by each department, program, or school and approved by the Educational Policy Committee. The purpose of this requirement is to ensure that all students have mastered the advanced computer skills appropriate to their respective disciplines. Students will be required to demonstrate proficiency in:

- computer programming, or
- computer-aided composition of original, expository material (including mathematical or scientific models, music, or other works of art and experimental studies), or
- the use of a computer to retrieve, process, and analyze numeric or non-numeric informa-

Given the continuing rapid evolution of computer technology, it is impossible to predict where the College should be 10 years from now. It is hoped that this report will provide some insight into where we have been, where we are now, and where we need to be going.

Data for this report has come from a variety of sources. The Self-Study Steering Committee surveyed all faculty (231 responded), a random sample of 500 undergraduate students (125 responded), and a random sample of 500 graduate students (102 responded). Additionally, we had access to a survey of the undergraduate students run by the Computer Center concerning cable TV (1400 responses) and another on instructional technology run by the office of the Dean of the Faculty of Arts and Sciences (169 responses). Other sources include the Advisory Committee on Information Technology, the Vice Provost for Information Technology, the Department of Computer Science, and numerous other individuals.

### 1. History

At the time of the last Self-Study, the College was operating under the Gross Committee Plan for academic computing. Administrative computing was largely done on an NAS 6650 (IBM 370-compatible) mainframe. Academic computing was being offloaded from the mainframe onto a network of three Prime superminis; as part of this, academic computing was converting from batch mode to timesharing terminals. This configuration is summarized in Table 1; in this table and throughout

**TABLE 1: Computing at William and Mary**

	1984	1994
IBM 370-compatible mainframes	1	1
Prime superminis	3	0
Student terminals	146	0
Faculty terminals	90	0
Administrative terminals	15	0
Student PC's	24	192
Faculty PC's	42	"all"
Administrative PC's	17	"all"

this report the term PC is used to denote a personal computer (either Apple Macintosh or Intel-based).

A quick study of Table 1 shows that the College has moved from a centralized computing model to a decentralized one. Instead of using terminals to access a few remote computers, faculty and administrative workers largely have computers on their desks. This is largely in keeping with Recommendation 3 of the 1984 Self-Study (p. 243).

Another major change in computing concerns the advisory committee structure. In 1984 the College had an advisory committee on Computer Policy and Planning and two subcommittees, one for academic users and one for administrative users; neither of the subcommittees was ever very active. With the creation of the Faculty Assembly in 1988/89, the committees were unified into an Advisory Committee on Information Technology as a subcommittee of the Assembly. This committee was formed and began to operate in January 1993 and has met roughly bi-weekly since then.

The third major event since the last Self-Study was the acquisition and installation in 1989 of a digital PBX phone system and its associated infrastructure. This solved the problem of providing serial line access to central computing just as the need for this type of access was beginning to die out. Currently, serial line connectivity is used primarily to access administrative systems on the College's mainframe, the on-line public access catalog in the library (named LION), and electronic mail.

1. The Advisory Committee's meetings are open to the College community and are regularly attended by non-members.

**2. Advisory Committee on Information Technology**

At the time of this writing, the Advisory Committee on Information Technology has been in existence for only 1.5 years. The committee is composed of 7 faculty members (one from each area in Arts and Sciences and one from each School), the Vice Provost for Information Technology, a designee from the Computer Center, one from the Library, one undergraduate and one graduate student.

This committee advises the Vice Provost for Information Technology and other relevant administrative officials on 1) policies regarding information technology and services, including telecommunications and academic computing services; 2) the development, monitoring, and updating of long-range plans for instructional computing and telecommunication services; and 3) the allocation of resources among all users of computers and telecommunication services. It also acts as a liaison between the Computer Center and its academic users.

In the Spring semester of 1993, the committee first reviewed and then endorsed the Report of the Ad Hoc Academic Computing Committee of 1992. It then reviewed many of the implementation details of the findings of that committee.

In the Fall semester 1993, the committee produced a vision of computing and a strategy to achieve that vision. These documents were delivered to the Strategic Planning Committee at the Faculty Assembly in December 1993. The major recommendations were:

- The College needs to install a computer network connecting administrative, and dormitory buildings. Without question, this is the highest priority.
- Computers, workstations and servers should be periodically upgraded so that all applications can be run.
- Convenient, high speed access to administrative data for students and administrators is needed.

**TABLE 2: Faculty Use of Computers**

Type of use	Percent
Word Processing	97
Electronic Mail	82
Database	48
Spreadsheet	40
Programming	28
Other	31

faculty use electronic mail (or e-mail). 63% of the faculty reported being satisfied with the computer the College provided.

Also beginning in the 1988/89 academic year the College began replacing the terminals in its public-access labs with personal computers. However, student access to computing has not improved as dramatically as faculty access (see Table 1). In 1984 there were a total of 170 terminals and PC's; in 1994 there are 181 public access PC's [Reference: "Connected", August 1993]. Clearly, there has been a qualitative improvement, but the quantitative improvement is not as dramatic.

For its undergraduate assessment in 1992/93 the Department of Computer Science was required to assess the College's computing equipment. A questionnaire was sent to 15 liberal arts schools; 10 schools responded but the information from Dartmouth was too vague to be usable. The results of this questionnaire are shown in Table 3.

**TABLE 3: Computer Facilities at Peer Institutions, 1992-93**

School	Number of Undergraduates	"Introduction to Comp. Sci." Students/Year	Number of PC's	Students per PC
Bowdoin	1410	60	101	14
Calvin	3600	75	120	30
Colgate	2650	75	215	12
Dickinson	2000	62	104	19
Hamilton	1700	40	210	8
Oberlin	2700	40	130	21
Smith	2500	50	610	4
SUNY Geneseo	5000	100	210	24
Washington & Lee	1600	12	110	15
William & Mary	5000	180	173	29

- Commitment from top-level administrators is essential if the College is to make the most productive use of information technology.
- The College needs to develop and pursue policies to encourage students to acquire their own computers.
- The required support personnel to make all this happen are needed.
- Adequate classroom technology is needed to support the instructional process.

In the Spring semester 1994, the committee considered various implementation strategies for the goals and set priorities. This report was delivered to Strategic Planning and the Faculty Assembly in March 1994. All of these documents are accessible on-line in the College's "gopher" system (known as William and Mary Information, or WAMI) under Administrative Information.

**Computing Resources**  
**Academic Computing**

Beginning in the 1988/89 academic year the College began a program to put a personal computer on the desk of every full-time faculty member. (As indicated in Table 1) this goal has largely met; hence, we made no attempt to inventory the faculty computers. Most of them are Intel-based IBM-compatible personal computers running the MS-DOS operating system. There are islands of Apple Macintosh computers in the School of Education, Swem College, and the School of Business. As far as the faculty are concerned, this goal has met recommendations 12.1-12.3 of the 1984 Self-Study (p. 243).

One weak point is the lack of a network, as recommended in the Self-Study (p. 243).

On the surface, the computer resources are adequate. The computer resources are adequate almost everywhere. An Apple Macintosh is almost everywhere. Most of the computers are Intel-based IBM-compatible computers. Table 2, the Faculty Use of Computers, shows that the College is doing well in word processing, database, and spreadsheet applications. The College is doing well in word processing, database, and spreadsheet applications.

**TABLE 4: Undergraduate and Graduate Student Use of Computers**

Undergraduates			Graduate Students		
Type of use	In room	Public	Type of use	In room	Public
Word Processing	73%	57%	Word Processing	93%	77%
Electronic Mail	14%	55%	Electronic Mail	20%	41%
Database	6%	12%	Database	22%	20%
Spreadsheet	20%	19%	Spreadsheet	37%	21%
Programming	9%	14%	Programming	8%	14%
Other	31%	21%	Other	28%	26%

A key measure of student access to computing is the ratio of students to PC's; the lower this number the better. Of the surveyed schools whose data were reliable, the average student-to-PC ratio was 14. William and Mary and Calvin are substantially worse than this with ratios of 29 and 30, respectively. In fact, a number of schools had roughly the same number of PC's with undergraduate populations half our size. Similarly, the ratio of students taking the equivalent of CS 141 (introductory programming) averaged 0.4 students per PC, with the College being high at 1.4 students per PC. The figures are worse than they appear because they ignore William and Mary's sizeable graduate population, who, presumably, also use public-access computers.

One mitigating circumstance is that 46% of the undergraduate students have access to a computer in their room (according to the cable TV survey), which is largely used for word processing. The Advisory Committee on Information Technology has recommended the development of further strategies to encourage more students to acquire their own computers to relieve pressure on public-access PC labs. The survey shows that 90% of the students use a computer at least once per week.

Student use of computers is summarized in Table 4 (71% of the students reported being satisfied with the College's public-access computers).

### 3.2 Administrative Computing

Administrative computing relies both on the College's IBM mainframe and on PC's in various administrative offices. The mainframe is used to run the College's major administrative computer applications including:

- The student information system, including transcripts, registration, grades, degree audit, etc.

- The financial records system, including budgeting, accounts payable, accounts receivable, etc.

- The human resources system, including payroll, personnel, etc.

The PC's are used primarily for word processing, spreadsheets (local budgeting), and in some cases local databases.

The mainframe was upgraded in the spring of 1994 from an IBM 4381 Model T-24 with 64 megabytes of memory to an IBM 9121 Model 311 with 256 megabytes of memory. This upgrade allows for an expansion of the number of simultaneous connections.

Most of the faculty and students deal only with the Student Information System, primarily registration and grades. Both faculty and students indicated widespread dissatisfaction with the current system as indicated in Table 5. The committee believes that this reflects dissatisfaction with the entire system used, not just the computer portion of it.

**TABLE 5: Student Information System**

Want on-line	Undergrad		
	Students	Grads	Faculty
Preregistration	94%	79%	71%
Grade lookup	91%	76%	78%
Grade reporting			85%
Address change	81%	89%	
Add/Drop	94%	78%	
Transcript ordering	93%	93%	

### 3.3 Microcomputer Maintenance

Microcomputer Maintenance is responsible for the hardware maintenance of College-owned computers, printers, and associated computer equipment. Non-College equipment can be repaired on a time-and-materials basis.

A good portion of the faculty (44%) and most of the students (73%) have had no dealings with Microcomputer Maintenance. A majority of those who have used the service rated it very good or better (56% of the faculty and 66% of the students).

### 3.4 Computer Support Services

Technology Services includes both Computer Support Services (formerly, User Services) and Audio-Visual Services. We are concerned here primarily with the former. It is a popular misconception on campus that Computer Support Services is part of the Computer Center (which was once true), whereas Technology Services reports directly to the Vice Provost for Information Technology. The mission of Computer Support Services includes providing documentation and training on various computer applications, providing consulting services, and distributing software to faculty, staff, and students.

Faculty and students who use User Services are generally satisfied (69% faculty, 76% undergrads, 62% grads rating it "good" to "excellent"); 10% of faculty and 38% of students had no experience with it. Both faculty (54%) and students (80% undergrads, 76% grads) indicated that they usually relied on a "local expert."

There were two comments that appeared quite clearly in the Instructional Technology Survey. One was that Macintosh computer users basically felt unsupported. The second was that many users wanted training beyond the usual introductory classes that are offered.

### 4. Instructional Support

Instructional support has been provided primarily through Audio-Visual Services, which is now part of Technology Services. This office is responsible for delivering overhead projectors, slide projectors and audio/video equipment to classrooms, for overseeing permanent installation of such equipment in many locations, and for providing academic computing support, high-speed duplicating, photo and graphics, and television production and editing services. Several computer and audio/video laboratories on campus are dedicated to the needs of specific disciplines. Because of increasing demand, these services and

facilities require expansion, updating and improvement. For example, utilization of video, audio and display equipment at the College has gone up steadily over the past several years (Table 6), and can be expected to grow even more in the future.

**TABLE 6: A/V Equipment Requests**

Academic Year	Equipment Requests
91/92	2630
92/93	3455
93/94	3575

Most of the College's classrooms are ill-equipped to accommodate use of technology. Many offer no technological capabilities at all, or contain only an overhead or slide projector and a projection screen. When instructors wish to use video materials in their instruction, Technology Services personnel generally must deliver a VCR or laserdisc player and television monitor on a cart. For computer-based presentations, an LCD panel, high-intensity overhead projector, and the computer itself must be brought in and set up within the short break between classes.

Technology Services personnel must constantly move equipment from building to building in a delivery van, except in the case of two classroom buildings in which extremely high usage of video equipment has necessitated the establishment of satellite offices from which equipment is delivered. Lack of adequate storage space in most other classroom buildings, an inadequate supply of equipment, and insufficient staffing prevent the establishment of further such satellite offices.

A few classrooms, primarily in the recently renovated Washington Hall, have built-in video monitors, or RGB monitors capable of displaying video and computer output, and a growing number of auditorium-style rooms in buildings across campus are being equipped with three-gun RGB projectors (Table 7, on following page). Even in these locations, however, source equipment must still be brought in and connected to the monitor or projector when required.

As a long-term goal, the College should work toward equipping every classroom on campus with a built-in video or RGB monitor. Additionally, the planned campus-wide fiber-optics network should include video distribution, so that instructors can utilize video and computer source equipment at a central location, rather than having to request



delivery of equipment to the classroom each time it is needed. Such a centralized system would utilize equipment much more efficiently, and dramatically reduce the danger of damage or theft, because video players or computers would be switched electronically from one room assignment to another rather than being moved physically to the classroom. Instructors would be able to interact with the equipment from the classroom by means

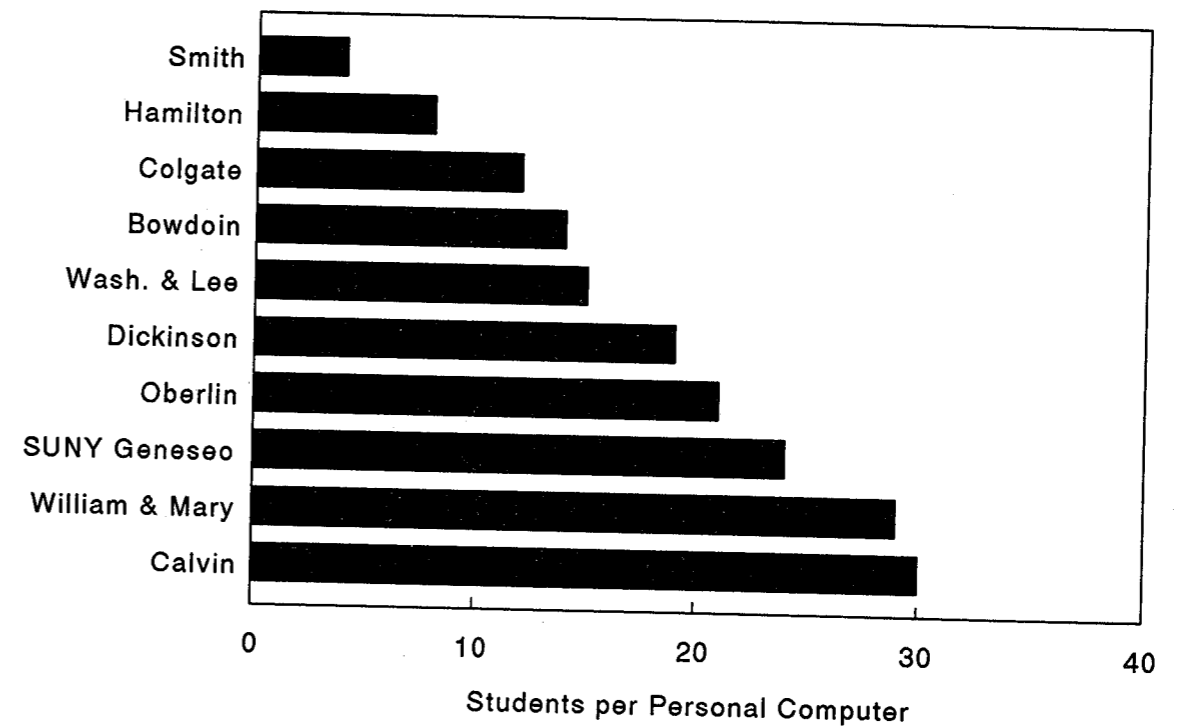
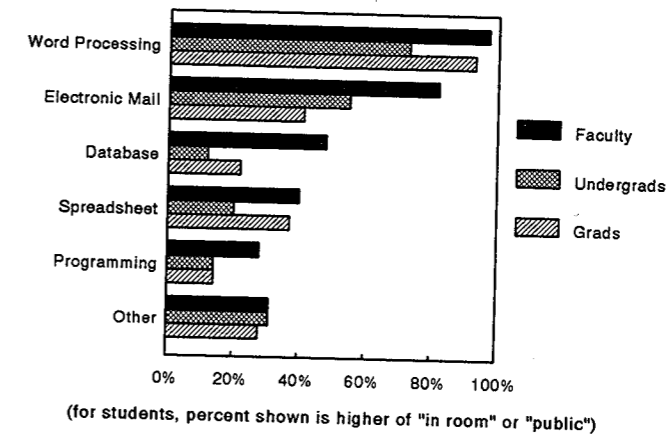
of an infrared remote control, keyboard or other input device. As the College works toward installation of a fiber-optic based data network, it should therefore also plan to incorporate the delivery of video and computer displays to classrooms via such a network.

In equipping classrooms with technological capabilities, the College should ensure uniformity

**TABLE 7: Permanent Audio Visual Classroom Installations**

Building	Room number	Video display	Computer display
Blow Hall	331	Large screen projector	
	332	Large screen projector	
	333	Large screen projector	
	334	Large screen projector	
Ewell Hall	107	Large screen projector	
Millington Hall	117	25" monitor	-
	119	Two 25" RGB monitors	
	150	Large screen projector	
	211	25" monitor	-
Morton Hall	20	25" monitor	-
	220	25" monitor	-
	341	25" monitor	-
Rogers Hall	100	Large screen projector	
Small Hall	113	Large screen projector	
Tucker Hall	215	25" monitor	-
	216	25" monitor	-
Tyler Hall	201	Large screen projector	
Washington Hall	201	Large screen projector	
	301	Two 25" monitors	-
	302	Two 25" monitors	-
	304	25" monitor	-
	305	25" RGB monitor	
	306	25" monitor	-
	307	25" monitor	-
	308	25" monitor	-
	310	25" monitor	-
	312	25" monitor	-
	317	25" RGB monitor	

**Computer Use at W&M**



In equipping classrooms with technological capabilities, the College should ensure uniformity of configuration, compatibility of equipment and consistency of installation.

**Recommendations**

1. The top priority of both the ad hoc Academic Computer Committee and of the Advisory Committee on Information Technology for the last 2 years has been the establishment of a high-speed campus backbone computer network (including video distribution). During the Fall semester of 1994, fiber optic cable was installed to most, although not

all, academic buildings. However, the campus backbone is not expected to be operational until sometime in the Summer of 1995.

Those computers already on local area networks (LANs) within a building should be easily able to connect to the campus backbone, once the building hubs are in place. All remaining computers will need Ethernet cards purchased and installed --and changes made in the building (telephone) wiring closets-- in order to connect to the campus backbone. **Continued funding of the construction of the network must remain a**

**priority.**

2. The College needs to totally revamp its preregistration and registration procedures. Both faculty and students are highly dissatisfied with the current system. An ad hoc committee has been appointed by the Provost to do so.

3. The College should work toward equipping every classroom on campus with a built-in video or RGB monitor and campus network access.

**Chapter Ten****Student Development Services**

*Linda Collins Reilly, Chair (Associate Professor of Classical Studies)*

*Robert E. Wone, Steering Committee Liaison (Undergraduate)*

*David P. Aday, Jr. (Professor of Sociology)*

*Deborah Boykin (Director, Residence Life)*

*Anna E. Dinwiddie (Undergraduate)*

*Thomas M. Finn (Chancellor Professor of Religion)*

*Nini J. Forino (Graduate Student, Education; Executive Secretary, Provost's Office)*

*Connie Galloway (Associate Dean, School of Law)*

*Scott A. Hall (Undergraduate)*

*Charles O. Matthews, II (Associate Professor of Education)*

*James M. Olver (Associate Professor of Business Administration)*

**INTRODUCTION**

In the course of its work during the academic year 1993-94 the Self-Study Committee on Student Development Services conducted extensive interviews. We worked with many others to gather information, and the Committee also held an open meeting for students so they could share their reactions and concerns with our group. As a Committee we interviewed W. Samuel Sadler, Vice President for Student Affairs, on two occasions. The full committee conducted interviews with Carol Disque, Dean of Students; Kenneth E. Smith, Associate Vice President for Student Activities and Organizations; Edward P. Irish, Director of Student Financial Aid; J. William Savely, University Registrar; Ann M. Moore, Assistant Director for Programs Abroad and International Studies; and David Niebuhr, President of the Graduate Student Association. A sub-committee met with Director of the Student Health Center Linda V. Herrmann. Individual Committee members also interviewed Mr. Irish, Mr. Savely and Dr. Moore as well as met with Director of Residence Life, Deborah Boykin (who also served as a member of the Committee), Associate Vice President for Minority Affairs Carroll Hardy, Director of Undergraduate Academic Advising Randolph A. Coleman, and Director of Auxiliary Services Charles Dombek. We provided questions for both the undergraduate and graduate student questionnaire and we have utilized the responses to those questionnaires throughout our report, although only in an anecdotal format. (The following section numbering is that for "Student Development Services" in the Southern Association's *Criteria for Accreditation: Commission on Colleges.*)

**5.5.1 SCOPE AND ACCOUNTABILITY**

Student Development Services are integral to the mission of William and Mary, and these services support and enhance the academic experience of both undergraduate and graduate students. Most of the services specified in Section 5.5 are administered within the structure of the Vice President for Student Affairs, who reports to the President. Some of those responsible for student services report through the structure of the Provost's Office. The academic preparation and experience of those individuals responsible for these services, as well as the organizational charts for the university, are documented in the Self-Study document collection.

**5.5.2 RESOURCES**

At present the resources for student development are adequate to support the goals of the institution in most areas but not all. The Committee's recommendations address these areas in detail.

**5.5.3.1 ADVISING, COUNSELING AND CAREER DEVELOPMENT****Orientation, Career Development and Counseling**

1. William and Mary has an effective orientation program for full-time and part-time students.

2. William and Mary provides effective personal counseling services for students as well as an effective career development program. The Counseling Center has a staff of thirteen, including

6 full-time therapists and 4 part-time therapists who are appropriately trained for counseling college students. Career Services has a staff of eight which delivers a career development program that includes career information and planning, placement services, career counseling and testing. There are clearly specified policies regarding the use of Career Services by students, alumni and employers. Graduate and professional students receive career counseling and placement services within their individual schools.

### Academic Advising

The Office of Academic Advising serves to provide academic advising to freshman and sophomore students through a program of Faculty Advisors. As stated in the 1993-94 *Undergraduate Program Catalog*, "Sound academic advice can make the crucial difference between a coherent and exciting education that satisfies personal and professional goals and one that is fragmented and frustrating. It helps the student address not simply course selection and scheduling but also what a liberally educated person should be and know." In addition to this advising component, the office also monitors individual student progress towards a degree and alerts them to any deficiencies.

Currently, there are 130 Faculty Advisors, who work voluntarily with a very modest stipend. Each faculty member is assigned to advise 10-12 freshmen and 10-12 sophomore students, for a total of 20-24 advisees per year. Students are required to meet with their advisors three times during the freshman year, but the only required meeting during the sophomore year is when the advisor signs the Major Declaration form for the student.

Incoming students complete a form stating their proposed major or career interest. The Office of Academic Advising attempts to match advisees to faculty members who teach in their areas of interest. Sophomore students declare their majors through the Office of Academic Advising and are then assigned advisors from their major academic departments. The Office of Academic Advising has no specific role in the advising done at the junior and senior level, but maintains student records and monitors progress toward the undergraduate degree.

The Office of Academic Advising surveys freshmen, sophomore, and senior students each year. Results from these surveys have been positive and suggest the overall effectiveness of the advising program. However, these questionnaires are reviewed and advisors who score low in effective-

ness can be identified. The Director of Academic Advising then contacts these advisors and offers suggestions for improving the quality of their advising.

Another of the time-consuming responsibilities of the Office of Academic Advising is the evaluation of transfer credits, not only for transfer students but for a growing number of William and Mary students who enroll in summer school classes at other institutions. The Office is currently working to streamline this process by implementing a computerized transfer credit articulation module. This system, called Speedy, automatically evaluates credits, reflects them in the degree audit system, and provides students information on the status of their transfer credits.

The Office of Academic Advising relies heavily on its working relationship with the Office of the Dean of Students in meeting the needs of students experiencing academic difficulty. Given the nature and complexity of issues which can cause academic problems for students, the Office of the Dean of Students is best prepared to advise and serve these students as they attempt to resolve their problems.

### Recommendations:

1. On-line computer capability should be developed for undergraduate academic advisors to allow access to pertinent data about their advisees. Currently all information is transmitted through paper transactions. Additionally, students should have access to specific personal or biographical data and, for example, should be able to change their home address. Obviously, various security measures are necessary.
2. The Office of Academic Advising should provide support for departmental concentration advisors. This support should include identification of outstanding students, information about fellowships, scholarships, graduate and professional schools, and general career development related to their fields of study.

### The Office of the Dean of Students

The Office of the Dean of Students provides services to both undergraduate and graduate students. Some additional functions are provided to the individual Schools.

There are two functions of this office that should be strengthened:

### (1) Services to Off-Campus Students

The Office of the Dean of Students advises the off-campus student council and provides a number of services for students who live off campus. In 1994-95, 26% of the undergraduate students and 89% of the graduate students lived off-campus. Some of these students report that they feel detached from the institution and that they do not always receive the information that they need. They also report problems with adequate parking in safe areas.

### (2) Disability Services

In 1994-95 there are 200 disabled students enrolled at the College. The Office of the Dean of Students has recently hired a full-time staff member to assist in facilitating the educational experience of these self-identified disabled students. However, the College community still needs more education in this area.

### International Student Services: Reves Center

The Reves Center for International Studies has responsibility for the International Studies concentration and for International Student Services. Until recently, concentration advising has been coordinated in the Office of the Associate Director. Numbers (currently 160 concentrators) have caused a revision in structure. Effective September 1994, concentration advising will be directed by a faculty member with primary responsibility for this advising.

The Office of Study Abroad Programs of the Reves Center is responsible for both international student advising and study abroad programs, with the major emphasis on study abroad programs due to the large number of students seeking assistance in that area. Consequently, the needs of international students (192 in number in 1994-95) are largely unmet. There is no regular communication network linking international student services providers, and community resources remain untapped. Services provided to international students on a regular basis are limited to an initial orientation at the beginning of the school year, assistance with visas throughout the year, and individual consultations as time permits. Although international student numbers have remained fairly constant, given the trend toward globalization, they are likely to increase.

Interviews with international students, student personnel, and related staff clearly indicate that although international students are im-

pressed with the College itself, they are dissatisfied with the amount of support they receive. There is no centralized support structure, and assistance is generally inconsistent. The general sentiment among international students is that they have to work very hard at William and Mary, be very independent, and be willing to seek out opportunities on their own with no support. Many feel isolated as well.

Although advising international students is not entirely different from advising other students, the perspectives and experiences of international students demand special consideration. The five most common concerns reported by international students are language difficulties, financial problems, adjustment to a new educational system, social and cultural adjustment, and relevance of academic programs. Due to cultural differences, some international students are reluctant to seek help and feel uncomfortable divulging personal problems. One result is that advising international students is considerably more time-consuming than advising most American students.

As the College begins to earn a reputation as a school strongly committed to international education, there is an immediate need to clarify its position on international students. Once an institution commits itself to accepting international students, it has the obligation to provide services appropriate to their special needs. In addition, the increasing diversity of the Virginia population must be considered seriously. The heavy influx of Asians, Hispanics and other immigrants, is changing the face of the state, and will force a change in the way the College will deliver services to its students.

### Recommendations:

3. A clearly written policy on the admission of international students should be developed. Until such a policy is implemented, a moratorium should be declared on all activity related to the recruitment of international students.
4. Adequate support must be provided to those international students already admitted, including advising and counseling, centralized visa assistance, coordination and liaison with the community, and English as a Second Language instruction. In addition, cross-cultural training programs must be developed for faculty, administrators, staff, and students.

### Office of Multicultural Student Affairs

**Organization:** The office is an integral part of the Student Affairs Division and an outgrowth of the College's commitment to diversity. It is directed by an Associate Vice President for Student Affairs and has a staff of three full-time people (including the director) plus student help (presently one graduate student and four undergraduates). The principal clientele are undergraduate and graduate students of color (i.e., those not classified as white), and the parents of these students.

**Objectives:** The responsibilities of this office are listed by priority, with the first two occupying some 95% of staff time and resources:

- 1) to provide a comprehensive and effective retention program for students of color;
- 2) to provide a monitoring system for assessing the academic progress of students admitted conditionally;
- 3) to provide a six-week pre-college summer program to help with a successful transition from high school to college;
- 4) to provide administrative and resource help for programming that supports ethnic student organizations;
- 5) to provide counseling and tutorial support;
- 6) to advise ethnic organizations;
- 7) to plan, implement, and assess leadership development programs for students as well as assisting in the development of opportunities for students to participate in campus and community activities;
- 8) to provide community outreach through four pre-college summer enrichment programs for college entry preparation;
- 9) to coordinate volunteer service efforts such as tutoring middle school students;
- 10) to conduct research on the above objectives as well as preparing annual reports to the State Council of Higher Education for Virginia about the Virginia Student Recruitment and Retention Program (VSRRP, formerly VSTP).

#### Recommendations:

5. A plan should be developed to include support for Asian and Hispanic students.
6. A plan should be developed to recruit and

assist the transition of Native American students, especially from within Virginia.

7. A plan should be developed to expand the resources of the Office of Multicultural Affairs in order to facilitate the increasing responsibilities of the office, as well as to reflect the level of the College's commitment to a culturally diverse student body.

### 5.5.3.2 STUDENT GOVERNMENT, ACTIVITIES AND PUBLICATIONS

The extracurricular activities of students play an important part in their development at William and Mary. It is through the support of student activities, recreational opportunities, social organizations, student media, student governance and community service that William and Mary seeks to complement the classroom experience.

Most matters related to student activities are handled via the Office of Student Activities, headed by the Associate Vice President for Student Affairs (Activities and Organizations) and assisted by five FTE staff members. Also reporting to the Office of Student Activities are the Recreational Sports Department and the University Centers Department.

Currently there are more than 290 active chartered student activities and organizations at William and Mary that are competing with each other for the resources and attention of the Office of Student Activities. This high level of demand for service represents a tremendous strain on the abilities of the institution to respond. With a limited fund of student fee money available for allocation to the clubs, frequently club funding is accomplished through other less official means. Another area of stress is in the advisory support provided to the student activities. There are problems of liability which need attention, including student publications, student government, and Greek organizations. There are also issues of multiculturalism. The resources of the Associate Vice President and his limited staff are stretched to their limits by the demand for service. It seems likely that the demand will increase because new clubs are emerging at a very high rate. If the College is to assume responsibility to support and provide guidance to student interest groups, more resources are necessary.

College policies and procedures regarding student activities are detailed in the *Student Handbook* and received by all students. In addition, the selection process and rights of appeal are explained.

Social planning and programming is accomplished via a number of mechanisms of student life, including those administratively supported and those student initiated. The major organizations on campus almost universally provide large social functions for the campus, as well as the social outlets available via the Greek system at William and Mary. The Greek system occupies a major spot in student life, with 30% of the women undergraduates in sororities and 25% of men students in fraternities.

The Office of Student Activities also coordinates a number of related student activities functions, such as the scheduling of facilities, administration of the Concert Series, and the enforcement of college judicial policies on student groups and the alcoholic beverage policy of the College.

The addition of the University Center represents a dramatic improvement in the nature of student activities facilities available on the campus. The old Campus Center will be used to centralize many student development service and student organization offices.

#### Student Publications

The student publications of William and Mary are supervised by the Office of Student Activities through the Publication Council. This Council, which recently completed a thorough evaluation and examination of its procedures, recognizes College publications and supports them from an allocation of student fees. There are student newspapers, journals, magazines, and a campus radio station included among the recognized media outlets. The College's *Statement of Rights and Responsibilities* ensures the rights of editorial control of these publications and protection of their authors from arbitrary punishment.

#### Judicial and Honor System

The process of student governance at William and Mary is a cherished and important aspect of student and institutional life. A careful review of student governance was recently completed by a committee of students appointed by the President, the results of which call for a complete overhaul of the undergraduate student government structure. The Student Development Committee of the 1994 *Statement of Rights and Responsibilities* endorses the Commission on Student Governance recommendation of further study of the Honor Council and reiterates the 1984 recommendation of further study of the graduate student systems. (See recommendation in section

There also is a call by the Student Governance Commission for the abolishment of the Board of Student Affairs with its functions transferred to an Executive Council and the existing University Policy and Advisory Committee. The following section on student behavior is also related to this area.

#### Recommendation:

8. The College should adopt a policy clarifying the role of students in institutional governance.

### 5.5.3.3 STUDENT BEHAVIOR

In 1973, the college community --faculty, students, and administration-- recommended to the Board of Visitors, and the Board adopted, our *Statement of Rights and Responsibilities*. Amendments were made to the document in 1977 and again in 1991. Each year the *Statement of Rights and Responsibilities*, as amended, is printed in the William and Mary *Student Handbook* and disseminated to all students, both undergraduate and graduate, and is made available to faculty and staff.

The Student Handbook further describes the policies and regulations that govern student behavior within the community and the judicial procedures and structures that are in place to respond to charges of misconduct.

In 1988, the disciplinary procedures of the College were revised to permit undergraduate students charged with disciplinary offenses to choose a method of adjudication. Under the new system, students elect one of two alternatives: (1) a hearing by an administrative officer of the College (typically a member of the Student Affairs staff) or (2) a hearing by a Judicial Council board, composed of student, faculty and administration representatives. The right of appeal is assured regardless of the method of adjudication selected. Students in more than 90% of the cases have chosen to have disciplinary matters handled by administrative officers.

The new system provides for an Appeals Committee --again composed of student, faculty and administration-- which reviews appeals in both disciplinary and honor cases. At this intermediate review stage, the accused must establish grounds for appeal as stated in the *Student Handbook*: procedural irregularity, discrimination, lack of clear and convincing evidence, new material evidence, or excessive or inappropriate penalty. If the appeal is determined to have merit, the matter is referred to the Provost for full review.