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STEERING COMMITTEE AND TASK GROUPS

STEERING COMMITTEE

Minda Rae Amiran, Professor (retired, consultant), English Department
John Arthos Jr., Assistant Professor, Communication Department
Michael J. Conley, Associate Director, Learning Center
Jack Croxton, Chair/Professor, Psychology Department, Steering Committee Co-Chair
Judy Elwinger, Director, Career Development Office, Steering Committee Co-Chair
Gregory F. Harper, Professor, School of Education
Holly J. Lawson, Associate Professor, Chemistry Department
Ann Manly, Member, Fredonia College Council
Alberto E. Rey, Professor, Art Department
Thomas Rywick, Professor, Psychology Department, Interim Dean, Natural and Social Sciences and Professional Studies (1997-98)
Una Mae Reck, Vice President for Academic Affairs (*ex officio*)

ACADEMIC PROGRAMS TASK GROUP

William H. Foeller, Professor, Economics Department, Task Group Leader
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INTELLECTUAL GROWTH AND DEVELOPMENT TASK GROUP

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PERSONAL AND SOCIAL GROWTH AND DEVELOPMENT TASK GROUP

M. Susan Maloney, Director of Health Services, Task Group Leader
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CAMPUS CLIMATE/LEARNING ENVIRONMENT/COMMUNITY OF LEARNERS TASK GROUP

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LEARNING SUPPORT STRUCTURE TASK GROUP

Carol S. Schwerk, Director of Budget, Task Group Leader

Karen R. Porpiglia, College Controller

Christine Davis Mantai, Director of News Services

Patricia A. Feraldi, Director, Alumni Affairs

Franklin B. Krohn, Distinguished Service Professor, Business Administration Department

Harry W. Watters, Director, Office of Residence Life

Annette Sophia, senior, Business Administration major

Gregory F. Harper, Professor, School of Education, Steering Committee Liaison

OVERVIEW

INSTITUTIONAL PROFILE

Founding Date	1826 – The Fredonia Academy
Location	Fredonia, Chautauqua County, State of New York
President	Dr. Dennis L. Hefner
Enrollment Fall 1998	4809 Total Enrollment (4353 full-time, 456 part-time) 4591 Undergraduate (4301 full-time, 290 part-time) 4508 New York state residents (98.2%), 62 out of state residents (1.4%), 20 foreign (.4%), 1 unknown 218 Graduate (52 full-time, 166 part-time)
Gender	Undergraduate: 58.7% female, 41.3% male Graduate: 72.5% female, 27.5% male
Ethnicity	1.6% Black, Non-Hispanic 1.6% Hispanic .4% Asian, Pacific Islander .7% American Indian, Alaskan 95.4% White Non-Hispanic .4% Non-Resident Alien
Undergraduate Degree Programs	Arts and Humanities Acting, Art Studio, Art Studio/History, Communication, English, French, History, General Theatre Studies, Media Arts, School of Music (Applied Music, Music Composition, Music Education, Music History and Literature, Music Performance, Music Theory, Music Therapy, Musical Theatre, Sound Recording Technology), Philosophy, Spanish, Theatre Arts Production Design Natural and Social Sciences and Professional Studies Accounting, Biochemistry, Biology, Business Administration, Chemistry, Communication Disorders and Sciences, Computer and Information Sciences, Earth Science, Economics, School of Education (Elementary Education, Secondary Education Biology, Chemistry, Earth Science, English, French, Mathematics, Physics, Social Studies, Spanish), Geochemistry, Geology, Geophysics, Health Services Administration, Industrial Management, Mathematics, Mathematics-Physics, Medical Technology, Physics, Political Science, Psychology, Recombinant Gene Technology, Social Work, Sociology, Speech and Hearing Handicapped Interdisciplinary Studies (model majors) American Studies, Arts Administration, Criminal Justice, Environmental Sciences, International Studies, Legal Studies, Music Business
Graduate Degree Programs	Biology, Chemistry, Elementary Education, English, English 7-12, Interdisciplinary Studies, Mathematics, Mathematics 7-12, Music Education, Music Performance, Music Theory-Composition, Reading, Speech Pathology
Degrees Granted 1997-98	884 Bachelor's Degrees 126 Master's Degrees

Faculty	370 Total 239 Full-time 216 Tenured or tenure track 169 Male, 70 Female 214 Caucasian, 3 African American, 8 Hispanic, 2 Native American, 12 Asian or Pacific Islander 131 Part-time
Administration	25 Management/Confidential (24 full-time, 1 part-time) 143 Professional Staff (100 full-time, 43 part-time) 253 Clerical/Maintenance (213 full-time, 40 part-time) 19 University Police (18 full-time, 1 part-time) 4 Nurses (2 full-time, 2 part-time)
Operating Budget 1998-99	\$28,520,600 College Operating Budget \$13,245,200 State Appropriations \$15,275,400 Tuition and Fees \$ 7,071,400 Residence Hall (DIFR) Operating Budget \$ 7,762,200 Faculty Student Association Budget (auxiliary services) \$ 5,184,000 Income Fund Reimbursable Budget \$ 1,200,000 State University Tuition Reimbursable Account (SUTRA) \$ 211,650 Fredonia College Foundation Operating Budget \$ 6,600 Fredonia Restricted Current Fund Budget \$49,956,450 Total Consolidated College Operating Budget
Tuition and Fees (Annual Undergraduate)	Full-Time Study \$3400 In-State Tuition \$8300 Out-of-State Tuition \$ 25 College Fee \$ 700 Student Services and Programs Fee Part-Time Study (per credit hour) \$137.00 In-State Tuition \$346.00 Out-of-State Tuition \$.85 College Fee \$ 29.25 Student Services and Programs Fee
Physical Plant	266 Acres 37 Buildings, including 13 residence halls
Reed Library	396,454 Bound Volumes 1,031,766 Microforms 1,987 Journal Subscriptions 45 Map Sheets
Accreditation	Middle States Association of Colleges and Schools Board of Regents of the University of the State of New York National Association of the Schools of Music National Association of Schools of Theatre American Speech and Hearing Association American Chemical Society approved list
Collective Bargaining Units	UUP (United University Professions) CSEA (Civil Service Employees Association) MC (Management Confidential) PEF (Public Employees Federation)

SELF-STUDY PROCESS

In some respects Fredonia has been a leader in assessment. We won a FIPSE grant to assess our general education program, and we participated in a FIPSE-funded project to assess academic programs in five academic departments. We also have participated in the triannual SUNY-wide administration of the ACT Student Opinion Survey. However, we have not had an integrated, campus-wide assessment plan. In an attempt to move in this direction, SUNY Fredonia has chosen to conduct a “selected topics” self-study with a focus on institutional assessment and student outcomes.

In November 1997 the co-chairs of the Steering Committee were named and an assessment consultant identified; in early January 1998 the members of the Steering Committee were appointed, and in late January 1998, the Steering Committee began its work to develop the self-study design.

The Steering Committee established the following objectives for the self-study:

1. To assess the current state of student learning and development in relationship to Fredonia’s *Vision Statement*, with its emphasis on an inclusive learning community both in and out of the classroom.
2. To use this assessment to discover actions we might take to improve student learning of higher order skills and to increase student understanding of subject areas in the major.
3. To use this assessment to discover actions we might take to further student development of self-awareness and responsibility, cooperative and leadership abilities, multicultural sensitivities, and a range of interests and values that contribute to a sense of purpose in life.
4. To further the establishment of a ‘culture of evidence’ at Fredonia and to use the results to provide a basis for continuing improvement and future strategic planning activities.
5. To recommend ‘a sensible, useful, and comprehensive approach’ to assessment for Fredonia in the future.

The co-chairs and consultant met with the Steering Committee throughout the Spring 1998 semester to develop the self-study design, including the task group structure and charges. They also attended meetings of thirteen different faculty, staff and student constituent groups on campus. Their purpose was to explain the accreditation process, the type of self-study being proposed, and to ask for input on pertinent questions for the charges, as well as for assistance in identifying useful existing data.

After reviewing the Commission on Higher Education’s *Characteristics of Excellence in Higher Education* and *Designs for Excellence*, the Steering Committee generated many questions that could be studied about teaching and learning in and out of the classroom. After careful consideration and much discussion, these questions seemed to fall into four areas. A fifth area was added to include two significant functions of the campus not directly involved in teaching and learning. These five areas resulted in the formation of the following task groups:

- Academic Programs
- Personal and Social Growth and Development
- Intellectual Growth and Development
- Campus Climate/Learning Environment/Community of Learners
- Learning Support Structure

A charge was developed for each of the task groups (see Appendix A). After the design was approved, task group leaders were identified, and the members of the task groups were recruited. An attempt was made to

have each task group include representatives from the teaching faculty, student affairs professionals, academic support professionals, and students. A member of the Steering Committee served as a liaison to each task group.

The self-study design was printed, distributed to the campus, and placed on the SUNY Fredonia web site (<http://www.fredonia.edu/ms>) in August 1998. The task groups have analyzed existing data from ongoing assessment activities, and have used questionnaires, nationally normed survey instruments, and individual as well as focus group interviews to gather additional data to respond to their charges.

Each task group's draft report was submitted to the Steering Committee for review and recommendations for revision. The Steering Committee Co-Chairs continued to meet with campus constituent groups and used campus media to inform the campus about the process.

After revisions to the preliminary draft were made, the complete draft self-study report was distributed to the campus in the fall of 1999. Campus-wide hearings will be conducted in late September to provide an opportunity for final input and feedback before submitting the final report to the visiting team.

Sincere appreciation is extended to the members of the task groups and to everyone in the campus community who responded to surveys, provided written documents, participated in interviews, and provided feedback throughout the design and self-study process.

Because of the "special topics" nature of the self-study, the first section of this document will include some basic information about SUNY Fredonia to provide an institutional context. It will also include some information about a few key functions of the campus that are not addressed in the work of the task groups.

ADMINISTRATION AND GOVERNANCE

SUNY System. The Chief Executive Officer of the SUNY system is the Chancellor, who is appointed by the Board of Trustees. The current Chancellor, John W. Ryan, has announced his intention to retire, and an effort to find a replacement has begun. System Administration is responsible for coordinating the activities of the various campuses and developing policy initiatives.

Liaison between the campuses and System Administration is maintained by informal means and periodically in formal meetings of the Presidents, the Vice Presidents, and other administrative groups.

There is also a University Faculty Senate, which is the official agency through which the University Faculty engages in the governance of the University. The Senate is concerned with effective educational policies and other professional matters within the University. The Senate does its work largely through six Standing Committees. They are: Undergraduate Academic Programs and Policies, Graduate Academic Programs and Research, University Operations, University Programs and Awards, Student Life, and Governance.

Individual campuses retain institutional autonomy in some matters while complying with the overall regulatory and coordinating authority exercised by the SUNY system. They are no longer subject to all of the fiscal review and approval processes which formerly made administration of a SUNY unit a frustrating undertaking; however, campuses continue to be subject to considerable oversight exercised by the Board of Trustees, the Chancellor, System Administration, the State Legislature, and the Executive Branch.

College Council. The *Educational Law of New York State* stipulates that ". . . the operation and affairs of each state - operated institution of the state university shall be supervised locally by a council consisting of ten members, nine of whom shall be appointed by the Governor and one of whom shall be elected by and from among the students of the institution." The responsibilities and powers of the College Council include such matters as:

- 1) Recommending candidates for appointment by the Trustees as Presidents of their institution;
- 2) Reviewing all major plans of the campus Presidents and making relevant recommendations before they are submitted to the Trustees for approval;
- 3) Making regulations regarding campus facilities;
- 4) Reviewing and recommending institutional budgets;

- 5) Fostering the development of advisory citizens' committees;
- 6) Naming buildings and grounds;
- 7) Making regulations regarding student conduct;
- 8) Exercising supervision of student housing and safety;
- 9) Reporting to the Trustees annually and at other times as needed;
- 10) Performing other actions directed by the Trustees; and
- 11) Making the regulations necessary for the performance of their other duties.

The College Council at Fredonia is comprised of residents of the area who bring to the institution the perspectives and insights of business, professional and community leaders on the mission and operation of the College. Although financial responsibility rests with the SUNY Board of Trustees, the Fredonia College Council provides invaluable services to the College through its interaction with area legislators on matters critical to Fredonia, the attention its members give to ensuring productive College - community relations, and by providing an informal external perspective on problems and issues that concern the campus. Undoubtedly the most critical function performed by the Council is the review and recommendation of candidates for President of the institution.

Administration. Dr. Dennis Hefner was appointed the twelfth President of SUNY Fredonia in January, 1997. There are currently four administrative divisions in the College: Academic Affairs, Student Affairs, Administration, and Development and College Relations. (See Appendix B1-B4 for organizational charts.)

The most recent significant structural change has occurred in Academic Affairs. Prior to Dr. Hefner's appointment, there was a single Dean of the Faculty under the Vice President for Academic Affairs. In the Spring of 1997, an Administrative Review Committee was charged by the Executive Committee of Faculty Council, in consultation with President Hefner, with the task of gathering information and making recommendations concerning a possible restructuring. Hearings were held and a number of proposals were generated. The current structure is the outcome of those deliberations.

Several successful administrative searches have been conducted since January 1997. In Academic Affairs, Dr. Una Mae Reck was selected as the Vice President; Dr. Paul Schwartz was selected as the Dean for Arts and Humanities; Dr. Stephen Stahl was selected as the Dean for Natural and Social Sciences and Professional Studies; and Dr. Leonard Faulk was selected as the Associate Vice President and Graduate Dean. Mr. Tracy Bennett was selected as the Vice President for Administration, and Ms. Jean Malinoski was selected as the Vice President for Development and College Relations.

The Faculty Student Association (FSA) is a separate corporation that provides a variety of auxiliary services to the College. (See Appendix B5 for organizational chart.) The major responsibilities of FSA include Food Service Operations and Bookstore Operations, as well as providing other services to the College. It also owns and maintains the College Lodge and the new Alumni House and Conference Center.

Governance. The primary governing body on this campus is Faculty Council. Faculty participation in College governance is stipulated in the *Policies of the Board of Trustees of the State University of New York* and is implemented on this campus through the *Bylaws of the Faculty of the State University College at Fredonia*. These bylaws are contained in the *Faculty Handbook*. The Faculty Bylaws establish the Faculty Council which ". . . shall be composed of representatives of the academic staff, the professional staff, and students, as well as *ex officio* members. . . . The Faculty Council functions as the representative body of the faculty in carrying out the responsibilities of the faculty." As stated in the Faculty Bylaws, these responsibilities include the obligation to participate significantly in the initiation, development, and implementation of the educational program of the College, and the conduct of the College's instruction, research, and service programs.

The Standing Committees of Faculty Council are Governance, Academic Affairs, Professional Service, Student Affairs, Planning and Budget, and General College Program. There are also numerous Ad Hoc and Advisory Committees.

The President also maintains intracampus liaison both informally and formally by means of a number of regular meetings with the President's Cabinet, Student Cabinet, Second Friday Group (includes Vice Presidents, Directors, and other administrative officers), the Executive Committee of UUP, the Executive Committee of the Faculty Council, and the Administrative Council.

The student body at SUNY Fredonia has its own governing structure (see Appendix B6 for chart). Also, students serve on many of the Faculty Council committees.

MISSION, GOALS AND OBJECTIVES

The State University of New York consists of 64 distinctly individual colleges located in urban and rural communities across New York State. The system includes 4 university centers, 13 university colleges, 4 health science centers (2 of which are integral parts of university centers), 6 colleges of technology, 4 specialized colleges, 5 statutory colleges, and 30 community colleges. SUNY Fredonia is one of the university colleges, which began as arts and sciences colleges and offer baccalaureate and master's degrees.

SUNY is currently conducting a mission review for each state-operated campus. In September 1998, Fredonia submitted to the Provost its responses to 38 questions. Based on that document, the mission review team assigned to Fredonia generated a list of additional questions which was the basis for a dialogue on campus when the review team visited in April 1999. This process will result in a memo of understanding from the Chancellor, outlining the system's commitments to help us achieve our aspirations.

SUNY Fredonia's *Vision Statement* was drafted by the Planning and Budget Committee of Faculty Council, distributed to the campus, and discussed at public hearings during the Spring 1997 semester. It was formally adopted by Faculty Council and accepted by President Hefner in November 1997. Although a mission statement was developed and adopted by the campus in May, 1990, the *Vision Statement* currently serves as the guiding document for the campus.

SUNY Fredonia Vision Statement

The SUNY College at Fredonia aspires to be a comprehensive, selective, diverse, residential institution that is above all a community of learners. It aims to provide a challenging, safe, and supportive educational environment in which every participant has the flexibility to develop his or her best talents, attaining the highest standards of excellence in liberal arts and in one or more chosen fields. At the center of our curricula is a broad, integrated General College Program that will increasingly emphasize writing, problem-solving, scientific reasoning, a global perspective, and socio-ethical understanding, while introducing students to arts, humanities, mathematics, and natural and social sciences. All specializations build from this core.

Fredonia's faculty will continue to be dedicated teachers and also practicing scholars and performers/artists whose continuous learning animates their teaching. The College both requires and will foster their research, creativity, and other professional service as members of our learning community.

A broad range of liberal arts and professional programs at the undergraduate level and increasing numbers of programs at the master's level will provide a great variety of academic choices. Academic fields which will continue to attract large numbers of students include:

- professionally accredited programs in the fine and performing arts, including nationally renowned and comprehensive programs in music;*
- nationally recognized programs in elementary and secondary education and speech pathology;*
- successful programs in the natural sciences, including a unique undergraduate program in recombinant gene technology;*
- significant programs in psychology and in social sciences with applied and international orientations;*
- distinctive programs in English, centered on American and world literature, and in communication;*
- professional programs in business, accounting, and computer science, with a focus on*

applications of information technology.

These academic strengths will increasingly be enhanced by writing across the curriculum, a variety of interdisciplinary programs, the appropriate use of new technologies, and an emphasis on international and multicultural studies.

Our commitment to high standards for our students and to individual learning and development will continue to find expression in a college-wide emphasis on student-centered teaching and advising. The resulting close relationships among students, faculty, and staff will be augmented by ever easier access to faculty outside of class, by an emphasis on joint student/faculty research, and by opportunities for internships and independent studies in all programs. Our Honors Program, which provides unusual intellectual challenges in specially designed courses, will grow in scope. Hallmarks of the College will continue to be genuine collaborative education and exceptional graduation rates.

In a setting of well-maintained buildings and grounds, co-curricular activities and sports will continue to develop leadership and unite participants in the pursuit of shared interests. Fredonia's professional staff will continue its strong contribution to student development and learning outside of class.

As a community of learners, we must respect both individual differences and cultural differences. We will strengthen understanding of and respect for others through general education requirements, multicultural courses, academic programs, student activities, and opportunities for study abroad.

Our service to the region will include an increasing range of volunteer services and greater support for the region's economic and educational development. Fredonia also aspires to bring our distinguished cultural programming to wider audiences in our area.

Fredonia believes in its students' ability to excel. They will leave us prepared to think and communicate critically and creatively, to see themselves as self-respecting men and women responsible for the consequences of their choices, engaged with their communities, able to work together with diverse people, and ready to face unpredictable challenges in a rapidly changing world.

In his address to the campus community in August 1997, President Hefner identified four overarching long term initiatives for the institution. These goals have been reiterated at the beginning of each semester since then, with reports on our progress toward them.

1. **Assessment.** In the area of assessment, Fredonia will continue to build upon its strengths. For example, Fredonia has benefited from two major FIPSE grants, one to assess the effectiveness of the General College Program, and another to assess specific programs. All college academic programs are reviewed periodically with outside evaluators, and all academic programs are expected to be engaged in assessment activities. Every academic department has now defined, and most have implemented, a student outcomes assessment program. Summaries of departmental assessment activities are included in Appendix C. These efforts, combined with the development of assessment plans for the entire campus, as well as the assessment of personal growth, intellectual growth and campus climate, form the basis of the Middle States self-study. Assessment plans for the rest of the campus are included in Appendices D, E, F, and G.
2. **Strategic Planning.** As part of the strategic planning process, a forward-thinking academic master plan will be developed, which will provide both a summary of our current academic offerings and a blueprint for possible new directions within the curriculum. The Academic Affairs division has collected and compiled baseline data to support the Academic Master Plan, which identifies the programmatic steps to be taken over the next 5-10 years in order to achieve our vision. Drafts of this document were forwarded to the Planning and Budget Committee of Faculty Council at the end of the Spring 1999 semester. The Academic Master Plan is a first step in strategic planning. It is anticipated that further steps in strategic planning will depend on the outcomes of this self-study.

3. **Diversity of the Student Body.** Enrollment of underrepresented students remains a top priority for the campus. Positive changes have already been implemented in the recruitment of Educational Development Program (EDP) students, and the Task Force on Recruitment and Retention of Minority Students submitted its final report in December 1998. The report provides a number of useful recommendations, such as integrating multiculturalism across the curriculum in the General College Program (GCP), initiating a series of on-going lectures to celebrate diversity, and approaches to diversifying our student body. Work on implementation of a number of these recommendations began in Spring 1999.
4. **Capital Campaign.** Several years ago the College completed a successful capital campaign, which raised slightly more than \$5 million, and another campaign has been initiated. Each department and division was asked to assist in identifying campus needs that might be addressed through the campaign. Many of the ideas were then developed into a campaign proposal. The feasibility study was completed; the case statement was finalized; and the silent phase of the campaign, working on major gifts, was initiated during the spring of 1999. The public phase of the campaign will be initiated in 2000-2001, to coincide with the 175th anniversary of SUNY Fredonia.

PLANNING AND RESOURCE ALLOCATION

Brief History. The previous administration at SUNY Fredonia, under the leadership of Dr. Donald A. MacPhee, developed an *Institutional Plan for 1990-1995* based on the 1990 Mission Statement and the document *Preparing for the Nineties*. This document articulated the major issues the College would likely face in the 1990's, as well as seven institutional goals. The Planning and Budget Committee of Faculty Council was instrumental in the development of this five year plan, and resource allocations during this time frame were linked to the identified goals. In early 1995, the College began deliberations on an *Institutional Plan for 1995-2000*. Hearings were conducted, and the goals were modified. Further discussion was postponed until the Fall due to budget uncertainties. In the Fall of 1995, President MacPhee distributed a *Protocol for Planning* which reduced the planning process to a two year time period due to budget volatility at the state, system, and campus levels. In the Spring of 1996, President MacPhee disseminated the document, *Priorities and Strategies 1996-98*. The three priorities identified at this time were: Enrollment, Finances, and Maintaining Quality. Strategies for meeting these priorities were discussed in the document. President MacPhee announced his plans to retire shortly thereafter, and planning was put on hold until the arrival of President Hefner in January 1997.

The Present. The current administration has given considerable thought to long range planning. The cornerstone of this process has been the *Vision Statement*, which was written in the Fall of 1997. Various planning initiatives are currently being undertaken which are linked to the goals and objectives outlined in this document.

1. **Mission Review.** The mission review document which has been submitted to SUNY Central Administration links priorities and anticipated program changes to the *Vision Statement*. Changes within academic programs will tie back to the college *Vision Statement*. Focus on arts programs and education, including expanded graduate education offerings, increases our support for the Western New York region. Our anticipated program directions reinforce our academic strengths by offering a variety of interdisciplinary programs, appropriate use of new technologies, and emphasis on international and multicultural studies. Increased integration of General College Program skills into our liberal arts and professional programs is stressed in the first paragraph of our *Vision Statement*.

Furthermore, the Mission Review document discusses the relationship between the current Middle States self-study and the Vision Statement. The current Middle States self-study focuses on the student outcomes identified in our *Vision Statement*. Providing an atmosphere where students can grow intellectually as well as in other areas of their life is obviously central to our mission. All areas of the college will be working on their respective assessment plans, and the result will be the utilization of sound assessment practices in order to further positive changes in all areas that contribute to the mission of the college.

2. **Academic Planning.** Despite recent budgetary woes, Fredonia has moved forward in the area

of program development. The following new undergraduate majors have recently been approved by the State Education Department: B.A. in Communication Disorders and Sciences; B.A., B.S. and B.F.A. in Media Arts; B.S. in Social Work; B.F.A. in Acting; B.F.A. in Theatre Arts Production Design; and B.S. in Biochemistry. A major in Environmental Sciences is currently being reviewed by System Administration, and a major in International Studies is soon to be submitted for consideration. SUNY Fredonia has also recently been developing distance learning courses, both synchronous and asynchronous. These offerings are still in their formative stage, and further assessment is needed to determine how prominent they will be in the curriculum of the future.

The Division of Academic Affairs has initiated an academic planning process. (See Appendix H.) All current major and minor programs must submit an Academic Master Plan which establishes their relationship to the Vision Statement, provides enrollment projections, the rationale for those projections, a rationale for personnel and non-personnel resource needs, and space needs. Proposals for new programs must contain an estimate of student and "industry" demand for the program. Also, the relationship to existing programs must be explained. Proposals must contain an initiation plan and an assessment plan which includes benchmarks for the program to be judged a success.

Each academic department must undergo an external program review every fifth year. The objective is to assess the quality of programs in terms of curriculum, resources, faculty and students.

- 3. Department Based Assessment of Student Outcomes.** All academic departments have submitted a summary of their assessment activities, and a detailed report of their work is provided later in this document. Briefly, each department was asked to identify goals for student learning in the major, and has been asked to explain how these goals relate to the goals of the General College Program. They have also been asked to state methodologies, findings, conclusions, and action plans for improvement.

Furthermore, assessment-based planning has been extended to units throughout the College. Each unit has been asked to identify its mission, goals and objectives, measurement instruments, results, and plans for improvement. This self-analysis should presumably increase their effectiveness as they identify their strengths, and areas that need improvement.

The primary purpose of this Middle States self-study is to learn as much as we can about our students' campus experiences so that we can maximize their growth and development. The data gathered for the self-study, the individual assessments of each department and unit, as well as the recommendations generated from these activities, will form the basis of an institutional strategic planning process to be implemented following completion of the Middle States review.

ENROLLMENT

SUNY Fredonia is planning for a period of enrollment growth. The campus enrollment plans as submitted to SUNY Central Administration in Spring 1997 called for an AAFTE of 4900 by 2001-02.

The College has the opportunity to readjust these figures annually. Recently, based on a higher than expected growth in student enrollment, these objectives were reviewed component by component and adjusted upward to 5000 AAFTE. In reaching this objective for campus enrollment growth, the college is dedicated to maintaining and enhancing its high selectivity of students.

Headcount enrollment for Fall 1998 was 4809, and for Spring 1999 was 4578, with an AAFTE for 1998-99 of 4744, compared with an AAFTE of 4527 for 1997-98 and 4412 for 1996-97. This represents a continuing positive trend for the past three years, with headcount up after several years of declining enrollments. Fall 1998 first-time freshmen and transfer admissions showed strong increases in applications as well as in deposits: a 9.9 percent increase in applications for freshmen, while transfer applications were up 8.6 percent from SUNY campuses and 17.5 percent from non-SUNY campuses. After a statewide as well as a regional downturn, this represented the largest transfer class in the history of the college.

SUNY Fredonia is in a positive position in relation to our sister institutions in Western New York, partly because of our yield rates. Our yield for freshmen applications is 35%, consistently one of the highest of all SUNY four year colleges. The yield for transfer applications increased from 55% to 60%, perhaps because of increased support to offer necessary courses for popular programs. In the 1997-98 operating budget, a special allocation of \$208,600 was transferred to Academic Affairs to assure additional classes were made available to meet enrollment needs. Since access to classes had been identified as one of the major concerns of students on campus, this reallocation permitted the campus to address this serious issue.

Our retention rates have also contributed to our positive enrollment status. Comparative data are available for full-time, first-time students entering in Fall 1991; transfer students entering as lower division students in Fall 1991; and transfer students entering as upper division students in Fall 1994. In two of the three categories, we rank second among the 13 SUNY university colleges. Full-time, first-time students had a graduation rate of 66.3% within six years, and full-time transfer students entering as lower division students in Fall 1991 had a graduation rate of 72.3% within six years. While we are fifth among our SUNY peers in the graduation rate within three years for full time transfer students entering as upper division students (64.7%), we are first in the graduation rate within two years (41.9%) for the same cohort group.

Growing student enrollment has been accomplished while at the same time the college's commitment to high selectivity of students has continued. Fredonia is classified between *most selective* and *highly selective* (SAT mean of 1098 and high school mean of 87+ for Fall 1998).

Planned enrollments over the next five years anticipate increasing numbers of full-time freshmen and transfer students enrolling each year. While our recruitment is statewide, nearly 70% of the student body is recruited from the three western regions of the state. Most recent projections of New York State high school graduates show increases for the three regions. By 2001-02, graduates from the Southern Tier West, Western, and Genesee-Finger Lakes regions, in the aggregate, are expected to increase by nearly 2000 graduates, or 7 percent. Recent recruitment efforts have given extra attention to the Southern Tier and the Syracuse areas, in addition to the traditional recruitment areas. Although all applications except readmits must first go through the Application Processing Center at SUNY Central Administration, an inquiry center has been established in the Admissions Office to enable more timely processing of inquiries on campus, usually within 24 hours.

As Fredonia aspires to be a diverse community of learners, the college has enhanced its efforts to increase the diversity of the student body. It continues to be a challenge to recruit minority students, particularly from urban settings, because of the College's small town location and the relatively small percentage of minorities on the faculty and staff, in the student body, and in the community. A range of recruitment and retention activities is aimed at substantially increasing the numbers of students of color. Two new admissions publications focusing on diversity have been developed, a brochure and an *UPDATE* newsletter focusing on diversity, which were sent to guidance counselors at 305 high schools identified as having a reasonably high percentage of minorities. On campus, a new Center for Multicultural Affairs was created in 1997 that is dedicated to the premise that all cultural heritages can be celebrated on the campus. Additionally, the Office of International Programs is now staffed by a full-time person, who has been charged with increasing our enrollment of international students. Other sections of this self-study will discuss diversity issues as they affect current students.

The college is also in the process of strengthening existing graduate programs. The MS. Ed. in Reading has recently been reactivated, and the Educational Administration Certificate of Advanced Study (CAS) will be reactivated by Fall 1999. These two programs and possibly others are expected to increase graduate enrollment. Recruitment activities have been initiated that are designed to increase out-of-state student enrollment at Fredonia. Scholarships for academically talented out-of-state students as well as the growth of our Internet offerings on the SUNY Learning Network are expected to generate at least a moderate increase in our out-of-state student population.

FINANCIAL RESOURCES AND FACILITIES

SUNY Fredonia's Consolidated Operating Budget consists of several separate budget components, including the College Operating Budget, which consists of state appropriations, tuition and fees. Other components of the Consolidated Operating Budget include Residence Halls, Faculty Student Association, College Foundation, and Income Fund Reimbursable. The budget process is predicated on the SUNY resource allocation model (RAM). Based on the RAM formula, campus allocation is determined primarily by enrollment. Therefore, in determining our budget, anticipated enrollment numbers are analyzed in the RAM model, and a projected budget is developed. The President, in conjunction with the Planning and Budget Committee of Faculty Council and the President's Cabinet, develops institutional priorities to be incorporated into the College Operating Budget. Other budget components are also developed by boards of directors for FSA and the College Foundation, or by committees in the case of the residence halls.

During the past five years, total costs for undergraduate New York State Resident students living on campus have increased from \$3,714.50 per semester to \$4,662.50; an increase of \$948.00 or 25.5%. (See Appendix I for trends in college costs from 1970-71 to 1998-99.) Accordingly, the revenue generated from tuition has increased from \$11.8 million to over \$15.0 million while State support for the college operating budget decreased from \$14.2 million to \$11.5 million. (In 1989, state support for college operating expenses reached a high of \$19.3 million.) In an attempt to maintain quality services to students as state support has been withdrawn, fees have been implemented to allow the campus to continue providing these services. As a result students now pay significantly more in fees than they have in prior years. These include fees for intercollegiate athletics, college health services, parking, technology, and others. These fees have been consolidated into a single Student Services and Program charge, which permits all students to receive all services and reduces the administrative cost of maintaining separate sets of rules for each fee. Revenues generated by the student comprehensive fee now exceed \$3.3 million dollars annually. The trend of more reliance on fees to provide quality services is expected to continue.

Based on our current understanding of the resource allocation methodology, we feel the formula will help the campus as our enrollment increases. We also anticipate that RAM will assist us once funding is allocated for mission review and performance measures. Using the current formula and our anticipated enrollment growth, we anticipate an increase in the state operating budget of \$552,200 for the 1999-2000 fiscal year.

Nevertheless, there is concern statewide about adequate funding for the RAM. This funding is the key for our entire Operating Budget, and it is absolutely critical that the system receives adequate funding to cover such things as salary increases, inflationary adjustments, and growth in the campus enrollment.

The College Operating Budget supported 523.24 FTE positions in 1994-95 as compared to 498.64 FTE positions in 1998-99 (See Appendix I.). Over the past five years the percentages between divisions have remained relatively stable; however, over the long term a sizeable decrease in state funding has made it necessary for Student Affairs to transfer the salaries of a significant number (10) of its employees to the health center fee. Over the past two years (1998-99 Budget and the proposed 1999-2000 Budget), a significant portion of new funds have been allocated to Academic Affairs to assist in restoring the core funding to this division.

Our two major costs are personal services (82%) and utilities (9%). The College has been very aggressive in the area of Utilities Management and has worked for a number of years to secure the best possible contract for the purchase of deregulated natural gas. During the past year we have also entered the deregulated electricity market and have been able to sign a contract which should reduce the college cost of electricity by approximately fifteen percent. Also being continually evaluated is whether in some cases it may be more cost effective for us to provide services which were previously contracted out, or for a vendor to provide a service that we previously performed. We continually review costs associated with routine supplies and whenever possible take advantage of pricing opportunities for high volume commodities.

The most recent significant physical change to the campus has been the Library addition and renovation, completed in 1994. The College has now embarked on a five year capital construction program which will cost \$39,792,469. (See Appendix I.) This has been made possible because the State has, for the first time, allocated construction money for a five year period instead of on an annual basis.

Capital Projects are funded from a variety of sources:

- Academic and Administration Buildings are funded from New York State.
- Residence halls are funded through revenues derived from the rents paid by students.
- Parking and Roadway construction and improvements are funded through the Student Services and Program fee, which includes a component for transportation.

As part of the new five year capital construction program, the Steele Hall Natatorium and Phase I of Mason Hall renovation (which are both currently in the design stage) will be completed. In addition, under the Five Year Capital Construction Plan the campus begins the first stage of moving to a decentralized heating system. This ultimately means that each building will have its own heating system, and at some point the college utilities plant which is housed in the Services Complex will be closed. This will give us more flexibility in the operations of the campus throughout the year.

LIBRARY AND LEARNING RESOURCES

Significant developments in the area of student access to learning resources have been taking place recently on the campus, particularly in the library and in the area of information technology services.

The Library. An overview of the book collection, microform collection, journal subscriptions, staffing, and circulation patterns of Daniel A. Reed Library is contained in Appendix J. The library has made progress in four broad areas.

1. **Development of the Physical Facility.** A series of renovation and construction projects has helped to remedy many problems including the lack of shelf space, the lack of study space, poor workflow in technical services areas, and a need for improved office space for library faculty and staff. A library addition was built (completed in 1991) and the main structure was renovated (completed in 1994). Throughout the projects, the College was able to benefit from the availability of capital funds to purchase computers and wiring as well as necessary furnishings and carpeting so that when the building was complete, the library had equipment which was technically at nearly state-of-the-art level. New photocopy machines, microform equipment, and personal computers made services much more user-oriented.
2. **Access to Electronic Information.** From the provision of shared cataloging, to electronically generated Interlibrary Loan (ILL) services, the College has participated in shared computing resources. The local catalog system, PALS, was one of the first integrated online library systems in Chautauqua County. The library has recently added Ariel for full-text transmission of ILL documents. In the early 1990's, *Carl UnCover* was adopted as a tool for locating periodical articles which were not in the library's collection. Then it adopted OCLC's *FirstSearch* capability as a provider of both citations and growing full-text services, and has since, through SUNY, been able to add significantly to the availability of full-text services for students and faculty through 31 public terminals (ASCII) and four public World Wide Web workstations. Many such services are available through links to the library's Web page. The library is participating in SUNY's ongoing virtual library project, SUNYConnect, which, in addition to the full-text services already mentioned, will soon include an online catalog that will link this library to all other SUNY libraries.
3. **Library Instruction and Information Literacy.** Before 1995 library instruction had been a general responsibility of the Reference Department, and was not coordinated in any meaningful way. Recently, the library has made more of an effort to educate students about library resources, especially since the burgeoning of the electronic services which are now available.
4. **Faculty and Staff Development.** Most librarians have attended numerous workshops, conferences and seminars. Also, classified staff are encouraged to attend both on campus and off campus workshops. Both library faculty and staff have benefited from seminars on skills related to computer usage and electronic databases.

Daniel A. Reed Library has made much progress by the adoption of new technology; however, state budget difficulties combined with the rising cost of journal subscriptions have affected holdings. The number of journal subscriptions has increased substantially from the low point of 1994-95, but is still less than it was ten years ago. Acquisition of books sunk as low as 1000 titles in 1993, but has grown since that year. Faculty input has become especially important at this time. In some cases, where disciplines had electronic alternatives to paper journals which could be substituted with a cost savings, departments like Chemistry, Geosciences, Mathematics, and Physics have been eager to participate. The hope is that over the next few years, a balance will be achieved that will provide adequate funding for future needs, while maintaining quality traditional materials and services.

Information Technology Services. The College has made a considerable investment in the area of information technology. Funding has come from the Student Technology Fee, SCAP Funding, Residence Life, grants, and a special \$1 million capital project allocation. The initiatives are summarized below.

1. **Banner.** The Banner project is a multiyear conversion of the administrative systems on campus with the total cost of the conversion at \$1,460,000. The Banner software suite from SCT was chosen to replace the existing MCS custom-programmed software for administrative computing. The Unisys mainframe computer will be replaced by two Digital mini-servers running the Open VMS operating system with Oracle 7.0 as the database. This is being funded from a number of sources exclusive of campus operating funds because the intention of the funding proposal for Banner was that existing campus operations should not be affected. Funding sources include Dormitory Funds, Faculty Student Association, Income Fund Reimbursable, SUTRA, the Technology Fee and Technology Funding from the Construction Fund.
2. **Electronic-Mail.** The student E-mail fileserver has been replaced by three Digital Alpha 800 mini-computers running the Digital Unix operating system.
3. **Ethernet Backbone.** The campus backbone has been upgraded to provide 1000 MBPS connections between major nodes with all academic buildings serviced with minimum dual 100 MBPS channels providing 400 MBPS throughout.
4. **Residence Hall Ethernet.** A separate T1 Internet connection was completed in December 1998. Routed subnets have been implemented to minimize network congestion and localize problems associated with defective or improperly configured workstations.
5. **Campus Network.** All of the fiber optic backbone has been completed and the last academic building has been wired. All but two buildings have had repeater style hubs replaced with 100 MBPS switches. Excessive collisions and network congestion have been alleviated by routing traffic into smaller logical networks. A SNMP workstation with network monitoring software has been purchased. Configuration and training are to be completed this year.
6. **Smart Classrooms.** Eight new Smart Classrooms have been equipped since 1997, bringing the total number to eleven. The rooms seat from 41 to 320 and are capable of computer/video projection, electronic overhead (Elmo) and laptop connectivity.
7. **Computer Labs.** The Information Technology Advisory Board (ITAB) Classroom Sub-Committee created a plan to refurbish all the computer classrooms. Physical Plant funds have been used to upgrade the electrical power and room aesthetics.
8. **Faculty and Staff Computers.** Many faculty and staff have received new computers. Over the period 1995 through 1999, \$929,000 has been allocated to support these purchases.
9. **Distance Learning.** The SUNY System Administration Office of Advanced Learning and Information Services funded a \$115,000 WESTNET grant for a Distance Learning Classroom. A consortium of colleges is transmitting courses, primarily in Philosophy and Foreign Languages, from one campus to another.

The Vice President for Academic Affairs has created a 5-Year Technology Plan Committee to advise campus leadership on the direction Information Technology Services should take in the future. A review of IT services was recently conducted by SUNY consultants, and their recommendations are being incorporated into a planning document. Additionally, an interim Associate Vice President for Information Technology was appointed for two years to give leadership to the technology development of the campus.

The remaining chapters of this self-study contain the findings, conclusions and recommendations of the task groups. Chapters 2, 3, 4, and 5 focus on student outcomes and assessment. Chapter 6 discusses the assessment activities of the two administrative divisions that are less directly involved in teaching and learning. The final chapter contains recommendations for improvement at SUNY Fredonia.

ACADEMIC PROGRAMS, EXPERIENTIAL LEARNING AND STUDENT MOBILITY

The Task Group on Academic Programs was charged with assessing the extent to which desired student outcomes are being met for the academic programs and for the General College Program, and with summarizing and analyzing the departmental data submitted. More specifically, the task group focused on the ten questions developed by the Steering Committee as contained in the *Self-Study Design, 1998-99*. The analysis was divided into four general areas: the General College Program (GCP), Academic Programs, Experiential Learning, and Academic Mobility.

ASSESSMENT IN THE GENERAL COLLEGE PROGRAM

The overall structure of Fredonia's General College Program has been essentially unchanged since 1982. This liberal education component of the curriculum consists of 36 credit hours (12 courses), organized into three parts. The Part I courses develop basic skills, and include: English Composition (EN 100); a second writing-intensive course, which is often but not always in the student's major; a math or statistics course; and a course for the development of oral communication *or* analytical and creative thinking *or* creative/perceptual skills. The six Part II courses serve as introductions to the disciplines. Two courses are required (from two different departments) in each of three broad areas: the natural sciences, arts and humanities, and social sciences. Finally, two Part III courses serve as advanced, integrative experiences which build on the skills developed in Parts I and II. Ideally, students complete Parts I and II by the end of their sophomore year. Part III courses are designed to be taught at the junior level.

Assessment Methodologies

Beginning in 1986, a large-scale assessment of the General College Program was carried out under the supervision of the office of the Dean for Special Programs and General Studies. Financial support for this project was obtained *via* a FIPSE (Fund for the Improvement of Post-Secondary Education) grant. At that time, twelve faculty constructed a set of nine tests and scoring schemes. These tests were administered to two groups of Fredonia students—those who were just beginning, and those who were just completing their General College Program requirements (in essence, to approximately equal numbers of incoming freshmen and juniors). For purposes of comparison, the same tests were administered to students at Miami University of Ohio, and also at Western College (an honors college within Miami University). Each test was taken by 240 students—40 freshmen and 40 juniors at each of the three schools. The tests were designed to measure progress in the following categories: growth in socioethical reasoning (3 tests); reflexive reasoning (1); mathematical problem solving (2); scientific reasoning and research methodology (1); and writing and reading ability (2). The findings were summarized to the campus in August of 1989 in a report titled, "The GCP and Student Learning."

Roughly five years later, a second assessment was begun using these same tests. At that time a total of 900 incoming freshmen each took one of the nine tests (100 students per test). Initially it was planned to retest those same students two years later, with the expectation that direct comparisons would be possible. However, attrition and other factors limited the number of juniors available for testing; hence other students, matched by grade point average, were added to that pool. (It was subsequently found that the results obtained from the subjects matched by G.P.A. were virtually identical to those from repeat tests.) The data from this study were compiled in a second report to the campus, issued in the Fall of 1995.

In addition to these two formal rounds of assessment, the current Director of the General College Program has carried out continuous monitoring and re-evaluation in conjunction with the General College Program Committee. The committee collects and examines course syllabi and assignments for GCP-approved courses, approves new courses for the program, and advises and makes recommendations to the Director, as well as to the campus at large.

In preparing this report, the task group submitted two questions to the CSEQ (College Student Experiences Questionnaire), administered in Fall 1998 (See Appendix K8.); our purpose was to discern students' perspectives regarding two specific goals—reading ability and scientific reasoning. The questions were:

- 1) In thinking about your college or university experience up to now, to what extent do you feel you have gained or made progress in developing the ability to identify the main point of a reading, or to grasp the author's meaning?
- 2) In thinking about your college or university experience up to now, to what extent do you feel you have gained or made progress in developing the ability to reason scientifically on a basic level?

Assessment Results and Analysis

The 1987-89 study yielded both positive and negative results. On the positive side, it was found that overall, Fredonia students showed more improvement between their freshman and junior years than their counterparts at Miami University. Among the individual tests, our students made significant gains in reading and writing ability, and in socioethical reasoning. The improvement in writing was anticipated (although perhaps less than hoped for) because of the considerable emphasis placed on a "writing across the curriculum" approach within the GCP framework.

On the other hand, only a small, non-significant improvement was demonstrated in reflexive reasoning. Even worse, in the area of quantitative reasoning, Fredonia's students showed no significant improvement from their freshman to junior year. This was in contrast to Miami University students, who did improve in that area, and who therefore performed considerably better at the junior level than did our students. Fredonia students also performed less well in scientific reasoning, and in particular found it hard to identify assumptions and biases.

About a year after dissemination of the initial FIPSE results, members of specially convened faculty committees produced two supplemental reports. These documents, titled "Biases and Assumptions" and "Problem Solving" sought to aid those faculty who wished to add such content to their courses. Each report began with a summary and analysis of the FIPSE findings. "Biases and Assumptions" included examples of assignments, readings, and essay questions contributed by faculty from a variety of departments in the Arts, Humanities, and Social Sciences. "Problem Solving" provided both quantitative and non-quantitative exercises, as well as an annotated bibliography.

Several different kinds of workshops were offered in support of faculty teaching GCP-related courses. Approximately 12-15 writing workshops were taught by members of the English Department; these continued until 1993. Also, a summer workshop for teaching problem solving techniques was led by professors in the Mathematics Department; and in 1991, a total of 20 faculty participated in workshops focusing on cross-culturalism/internationalism, led by a professor in the Political Science Department. In response to the first assessment, Faculty Council approved a change to Part III of the GCP. Although courses in Part IIIB already have cross-cultural or international components, it was recommended that courses in Part IIIA should also have such components, even if these are not their main focus.

The results of the second FIPSE assessment were released in a Fall 1995 report to the campus. Again the results were mixed, and quite different from the previous study. Improvement from the freshman to junior year was noted on eight of the nine tests; however, the gains were statistically significant in only five cases (quantitative problem solving, scientific thinking, and the three socioethical reasoning tests). Somewhat disappointing was the finding that there was no significant improvement on the reflexive thinking test.

Partly in response to these results, and partly because of the perception of growing faculty dissatisfaction with the program, the college has recently begun another review. During the Spring 1998 semester, the Director of the General College Program and members of the GCP Committee held meetings with individual departments across the campus. Their goal was to obtain faculty opinions and suggestions on the relationship between general education and the major, and on the ideal conception of the GCP.

Concerning the CSEQ survey, there is evidence that (at least in the minds of our students) improvement occurs during their college career. In responding to Question #1 (Ability to identify the main point of a reading), 54% of freshmen and sophomore students reported either “very much” or “some” improvement, compared to 72% of the junior and senior respondents. For Question #2 (Ability to reason scientifically), 27% of lower division and 39% of upper-division students perceived at least some improvement.

Not surprisingly, responses to the second question were very dependent on academic major. For example, 63% of natural science majors reported improvement in scientific reasoning, compared to only 29% for the balance of the campus. In fact, 28% of the latter group chose the “very little” response.

Proposal for Changes in the General College Program

A summary of comments from the Director of the General College Program arising both from personal experiences and observations and from meetings with academic departments, is as follows:

First, the GCP Committee is developing a model for modification of the program which is constructed around the following areas of skills development: writing, oral communication, creative expression, quantitative reasoning, scientific reasoning, historical mindedness and socioethical reasoning. Each would begin with a basic skills course that would be followed by an experience across the disciplines. A new capstone experience would allow for integration of the GCP and the major. Courses included in the program would be expected to place substantial emphasis on the development of skills and intellectual competencies, rather than focus on coverage of specific content.

While there appears to be little campus-wide agreement about what knowledge domains students should be exposed to, there is significant agreement that students need to develop a common set of skills during their undergraduate careers, and that providing the proper context for developing those skills is a responsibility of general education. To ensure breadth, courses covering the scientific reasoning skills would span the natural and social sciences, while those covering creative expression would draw upon the arts and humanities. Skills such as critical thinking, analytical thinking, and reflexive reasoning would be developed in all general education courses.

Faculty observations regarding student writing skills were nearly uniform. Although the writing- across-the-curriculum approach appeared to be successful after the 1989 assessment, the failure to demonstrate significant improvement in writing in 1995 led to discouragement regarding that component. There is general consensus that the termination of faculty development workshops in 1993 has undermined the level of commitment needed for success in this area. The GCP Committee has recommended that these workshops be restored, and the task group concurs.

Two recent developments from beyond the campus boundaries can be expected to impact on Fredonia’s General College Program in the near future. In October 1997, the Joint Task Force on General Education (a committee established jointly by the SUNY Faculty Senate and the SUNY Faculty Council of Community Colleges) issued a report.

Its purpose was to answer the question, “What is the responsibility of SUNY, as a system, for general education?” The Task Force defined these learning goals for undergraduate students:

Skills: written and oral communication; ability to unify various modes of thought/integrative skills; information management; and quantitative skills

Knowledge and Inquiry Domains: arts and humanities; natural science; social science; pluralism; global studies/foreign language/study abroad; environmental issues; and ethical issues

Just over one year later (December 1998), the SUNY Board of Trustees adopted their own guidelines for general education. They seek a common, system-wide program, which covers these defined areas: basic communication; information management; mathematics; arts and humanities; natural science; social science; world civilization/foreign language; American history; and western civilization.

In response, Fredonia's Faculty Council has passed a resolution asking SUNY's Chancellor and Board of Trustees to adopt the recommendations of the Joint Task Force. Since that time, our GCP Committee has written in support of that resolution. There is obviously considerable overlap in the two schemes (and much of our program complies with either). An across-the-curriculum approach was suggested for information management skills. Another suggestion was that the foreign language requirement might be broadly interpreted to accommodate such opportunities as literature and culture courses taught within the foreign language department, study abroad experiences, and other possibilities for immersion in a different culture. A system-wide task force will be making further recommendations in the near future.

The GCP Committee is presently involved in a review of the syllabi and assignments used in both the Part IA (English Composition) and IB (writing intensive) courses, in order to ensure adherence to the program's rationale and guidelines. Recently, discussions of the need to improve certain problematic courses have been held with two departments. Other departments have been asked to supply details regarding assignments in certain courses. In addition, the English Department has clarified its goals for English Composition.

The quantitative skills component is also being actively examined. The Mathematics Department's Curriculum Committee is presently evaluating their GCP-approved courses, which presently number 15. There is general agreement within the department that this area could be strengthened by reducing the number of courses offered, and simultaneously increasing the emphasis on mathematical reasoning and problem solving at the expense of computation or theory. It is expected that the basic quantitative course (Part IC) would be followed by further quantitative coursework in the disciplines, and that such later coverage would build on the Part IC experience.

Recommendations

- Reinstitute the writing workshops mentioned previously.
- Whatever form the GCP ultimately takes, the task group recommends the continuation of the GCP Committee's evaluation of program goals and implementation, and the development of ongoing assessment of the program.

ASSESSMENT IN ACADEMIC PROGRAMS

SUNY College at Fredonia has a rich history of academic assessment activity. In addition to the assessment of general education discussed previously, placement testing has been used for entering freshmen math skills; proficiency testing is used for language arts and learning styles in the Educational Development Program; portfolio assessment has been widely examined in campus-wide colloquia and committees; and some departments developed initial assessment techniques as part of several initiatives in program reviews. More specifically related to this study, several departments (Biology, Foreign Languages, History, Psychology and Teacher Education) participated in an earlier SUNY Consortium Project on Assessment in the Major, a project funded by a FIPSE grant designed to assist departments in the development of approaches and instruments for student outcomes assessment in their various disciplines. To analyze current student outcomes assessment, the task group focused on the following questions constructed by the steering committee:

- * *To what extent are Fredonia's academic programs successful in achieving their desired outcomes?*
- * *What evidence has been provided?*
- * *What common strengths and weaknesses emerge?*
- * *What factors are being overlooked?*

Early in the process, the task group identified student outcomes assessment as the technique for determining what students know, can do or think. With this as a guide, the task group gathered specific information from 32 academic programs using the department questionnaire developed by the Steering Committee (Appendix K1). The department chairpersons or program coordinators were then asked by the

task group to answer the following eight questions and report their findings in a uniform format (Appendix K2).

- * *What are your department's major goals for student learning?*
- * *In what way(s) do any of these goals relate to one or more goals of the GCP?*
- * *What steps have you taken to discover students' success in meeting your goals?*
- * *What are your findings?*
- * *What conclusions have you drawn from these findings?*
- * *What is known to you about your graduates' success in finding jobs? gaining admission to graduate programs? completing graduate programs?*
- * *If your program requires an internship, practicum, or student teaching experience, and if assessment of it is not part of your current assessment design, what is known to you about the quality of student performance and experience in such practica? If you do not require such practica, but do provide them, are there significant differences between the academic performance of students who have had these experiences and students with similar previous averages who have not?*
- * *Please comment on any strengths of your department in teaching and learning that are not adequately represented in your answers to some of the questions above.*

The goal of this task group was to evaluate issues relating to the assessment process, rather than to evaluate individual programs. Major techniques and findings for each academic department are summarized in Appendix C. Full program reports are contained in the binder, *Student Outcomes Assessment: Program Reports*.

Evaluation of outcomes assessment centers on program goals, instruments, outcomes and uses of the results. Although goals vary widely across programs, types of assessment instruments are contained within a relatively small number of categories as shown in Table 1. It appears that the most frequently used assessment instruments at Fredonia are portfolios, senior seminars, alumni and other student surveys, field work and standardized specific and comprehensive testing. One indication of a healthy baseline structure for assessment among the departments is the pattern of multiple instrument usage for assessing student outcomes. Very few of the departments rely on a single instrument. Of course, the type of instrument indicates little about the assessment process itself. The relationships among the goals of the departments, the instruments and the outcomes must be examined for common strengths and weaknesses.

Departments are categorized into groupings using the structure provided by the Office of Institutional Studies. Although any departmental grouping is somewhat arbitrary with respect to common missions, those listed in Table 1, are fairly common and provide a convenient structure for assessment comparison. The goals, outcomes and uses of the assessment in each group and then across groups are examined to answer some of the following specific questions based on the *Principles of Good Practice for Assessing Student Learning* developed by the American Association for Higher Education:

- * Are the objectives of departments stated in ways that lend themselves to assessments?
- * Are objectives clearly tied to the stated goals? Do the outcomes of assessment strategies support the stated goals? Will the objectives, as formulated, provide information about curriculum and structures that will lead to change and improvement?
- * Have departments specifically related the ways in which the goals of the GCP are integrated into the major?
- * To what extent do departmental activities and reports reflect the College's Vision Statement?
- * Are there commonalties that recur in departmental reports?
- * Do departments have plans to carry their assessment activities beyond next year?
- * What are we doing well? What can we do better? Do the departmental reports point toward a useful answer to the question: What do we want to know about our students?

Table 1

Summary of Student Outcomes Assessment Instruments in the Departments/Programs

Program Group	Portfolio	Seminar	Standard Test	Alumni Survey	Student Survey	Comps	Barrier	Research	Field Work	Pre-Post	Grad Admin	External Eval	Other
EDUCATIONAL STUDIES													
Education			X	X	X				X ^S				Survey Employers
Speech/Hearing									X				
Speech/Hearing (Grad)			X			X ^O			X				
FINE ARTS													
Art	X	X		X ^P	X ^{FE}		X			X			Alum Exhibits
Communication	P									X ^{ES}			
Music	P			X	X ^E		X						Careful Recruitment
Theatre	X	P					X		X	X			Close Monitoring
HUMANITIES													
English	X	X											Course Grade Audits
Spanish	X	X		X									
French	X	X		X					X ^S				
Philosophy					X								Senior Essays
NATURAL SCIENCES													
Biology		X			X	X ^A		X					Labwork; Prof. Stud Present.
Biology (Grad)		X		X		X	X						Thesis
Chemistry		X	X	X				X				X	Grad Database:ACS Curr
Physics		X		X				X					
Geosciences	X	X							X				Course Performance
Math		X											Mini Assessments
Computer Sci			X										
SOCIAL SCI													
Business Admin				X	P				X				Intern Supervisor Survey
Economics		X		X	X ^E								S/F Discussion/Eval
Health Services Admin	X			X				X				X	
History	A	A	A							X ^E			Coursework
Political Science	P			P	P								
Psychology		X		X	X				X	X ^{SP}	X		Track career goals
Sociology/Anthropology			P	X	P								Contest oriented assignmt
Social Work	X		P	P	P				X				Focus groups
INTERDISCIPLINARY													
American Studies		X											
Arts Administration				X									
Criminal Justice			P										
Environmental Sciences				P									
Music Business													
G.I.S.													Informal student contact
Multi Ethnic Studies													
Women's Studies					X ^E								Student Evaluations

A = Attempted Experimentally & Abandoned; X= in use; P= proposed; X^A = Local Assessment Exam; X^E = exit; X^{ES} = essay; X^{FE} = Freshman and Exit; X^O = or thesis; X^P = periodic; X^S = student teaching; X^{SP} = Standardized pre-post test.

ASSESSMENT IN EDUCATIONAL STUDIES

The task group's category designated Educational Studies encompasses four undergraduate programs: Early Childhood Education, Elementary Education, Cooperative Special Education, and Speech Pathology and Audiology (See Appendix C8 and C24.). In addition, graduate programs are offered within the School of Education and the Department of Speech Pathology and Audiology. Unlike many programs offered at Fredonia, the programs within Educational Studies must not only comply with college requirements, they must also conform to standards established by the accreditation and certification agencies in which they are registered (i.e., New York State Education Department, American Speech and Hearing Association). Answering to more than one governing agency can be a time-consuming matter and can impede quick action and directness in changing procedures.

Program Goals and Means of Assessment

Program goals are articulated for both the undergraduate and graduate programs in Speech Pathology and Audiology, with graduate goals focused heavily on student demonstration (i.e., application) of knowledge, assessment, and treatment within the clinical setting.

The School of Education articulates its undergraduate goals in three broad areas (knowledge, skills, and attitudes) and then sub-defines the goals (e.g., literacy skills, critical thinking skills, and self-evaluation). Its graduate goals stress pedagogy, NYS certification, and enhancement of skills, although specific means of assessing each of the graduate goals is not clearly delineated in the departmental report.

Many assessment tools are used within the School of Education to evaluate undergraduate program goals and to stimulate necessary change. Current and former majors have been surveyed to determine the level of preparedness for classrooms within and outside of the borders of New York State. In addition, area schools have been surveyed and a sample of administrators has been interviewed to determine what Fredonia education majors know and can do. Each survey lists the competencies a person must have to become an effective teacher. These competencies are necessary components of the three categories identified in the goals of the School of Education (i.e., knowledge, skills, and attitudes). A review of the instruments used indicates a strong correlation between the assessment completed and School of Education goals. For example, surveys of current students, graduates, and school administration contain items that assess the knowledge, skills, and attitudes developed within Fredonia's teacher preparation programs. Furthermore, as part of the Fredonia Reflective and Responsive Educator (RARE) program, all elementary and early childhood education majors successfully complete the senior or Professional Year capstone experience designed to expose prospective teachers to teaching experiences intended to provide: integration across curricular areas, application of knowledge, authentic assessment of personal knowledge and skills, development of a personal philosophy of teaching and learning, and recognition of the need for continued personal and professional development.

Education students have fared well on these measures as well as on statewide teacher examinations. Student preparedness in general knowledge, specific content knowledge, and writing skills was assessed by standardized state or national exams. The mean performance of Fredonia Education students on all components of the New York State Teacher Exams exceeds the mean performance of all SUNY students, which provides evidence of the rigor of the Education program. For April 1998, the department lists a 100% pass rate on four of five tests their students take and indicates that on all five tests the pass rate equals and in most cases significantly exceeds the pass rates for all SUNY schools and all schools statewide. Similar results are listed for July, 1998.

But from the surveys, the department analysis has also identified several areas to investigate for possible improvement of its generally strong program. Ninety percent of school administrators surveyed indicate that they were highly satisfied with Fredonia education graduates. One-fifth of these administrators reported that Education students needed more training in dealing with students with special needs, in the application of the New York State standards, in classroom management, and in awareness of school to work programs. However, the department indicates that the NYS standards have only recently been added to Education's upper level courses and that the finding of a deficiency for students graduating prior to 1998 is

not unexpected and does not indicate a negative departmental outcome. Another documented area of need concerns the teaching of children from culturally diverse backgrounds. Similar conclusions can be inferred from surveys of graduates. Current undergraduates identified the NYS Standards as well as inclusion and integration of content across the curriculum as necessary components of a teacher training program. Respondents identified specific topics under the Knowledge Goal that need further coverage in their undergraduate program. But it may be that the survey assessment measures do not adequately evaluate student performance in these areas.

The Department of Speech Pathology and Audiology uses a survey that addresses the competence of its undergraduates and is completed by field supervisors. Although this survey touches upon the areas included in the department's goals, some of these goals might be usefully assessed throughout the undergraduate program rather than being assessed only in the final field experience, student teaching. Speech Pathology and Audiology graduates perform above the national average on the national exam; these data support the quality of Fredonia's clinical preparation program. However, field supervisors (of student teaching experiences) rated Speech Pathology and Audiology students as "average" in report writing but "below average" in the accurate and independent scoring of tests.

Uses of Assessment Information

Program summaries within Educational Studies indicate that assessment instruments used are appropriate to program goals, and that programs within Educational Studies are recognized both at the state and national levels. The School of Education uses assessment results by channeling them to appropriate committees. The Education report describes several changes in its undergraduate program in direct response to the results of measurements completed prior to 1998. For example, the graduates in the early 1990s reported being ill prepared in technology; as a result, the School of Education has developed a required education course that addresses the use of technology as an instructional tool. But not all concerns of alumni and administrators have been addressed; for example, additional required coursework in classroom management as well as reading instruction. The School of Education has amassed a considerable amount of data and may need time to sift through assessment results in order to revise its programs to reflect the concerns of consumers of the program (i.e., students, cooperating teachers, administrators). In addition, most of the assessments administered by the School of Education focus solely on the undergraduate program, which leads to initial certification. Comments from graduate students currently enrolled suggest that the content and accessibility of graduate courses, as well as student advisement and the quality of adjunct instructors, need to be reviewed by the School of Education as it considers program revisions. However, the department indicates that there appear to be two caveats concerning the use of survey data to make any conclusions regarding School of Education advisement: 1) there is no basis for normative comparison, and 2) the average number of advisees per advisor across campus is 14; the average for School of Education advisors is 50.

The Department of Speech Pathology and Audiology uses data generated by undergraduate and graduate field supervisors to restructure required courses on hearing disorders and advanced audiology. Comments from students concerning faculty accessibility and support received fleeting mention in the report. Multiple instruments of assessment of graduates of both the undergraduate and graduate programs would offer the Department more systematic feedback that could contribute to program revision, if needed.

The School of Education has surveyed its graduates on a regular basis (i.e., every three years) since 1984. Barring unforeseeable budgetary constraints, such as those in 1995, it is anticipated that Education will continue to poll alumni for feedback regarding the relevance of Fredonia's program to the reality of the classroom. The other assessments mentioned appear to be recent additions to Education's procedures that should and doubtless will continue beyond this year. Speech Pathology and Audiology offers field supervisors the opportunity to assess students by including its student outcomes form on the Fredonia College web page.

Relation to the General College Program

The goals of the programs within Educational Studies generally reflect the professional nature of the majors involved and the importance of instructional/therapeutic experiences for their students. General College Program goals are very nicely embedded in the goals outlined by the Department of Speech Pathology and Audiology for both undergraduate and graduate programs--the relationship between programmatic and GCP goals is readily comprehensible. For example, students enrolled in Speech Pathology and Audiology practice quantitative problem solving skills when they perform required quantitative assessments and measure client progress based on baseline and follow-up data. Goals for the Education programs appeared to correlate with GCP goals but the department may want to articulate better the connection between the two, such as indicating that writing skills are addressed by the production of appropriate lesson plans and the development of integrated units relevant to the field experiences. Because of the nature of the report, the precise linkages are not easily identified.

Relation to the College Vision Statement

The program goals of Educational Studies are consistent with Fredonia's Vision Statement. Both Education and Speech Pathology and Audiology provide a variety of experiences for their students that develop and maintain a community of learners. The design of the School of Education's Professional Year includes cohort groups of students (i.e., plans or sections) for methods courses and offers all students in the major or those interested in the major access to student activities (e.g., Teacher Education Club), exposure to cultural diversity (e.g., ED 305, Multicultural Education), and international opportunities (e.g., International Practicum). Although a diverse clientele is served by Speech Pathology and Audiology's Youngerman Clinic, the departmental report does not explicitly indicate how clinical practica develop an understanding of individual and cultural differences. Student activities within the department (e.g., Speech Pathology and Audiology Society), although quite substantial, were not mentioned.

The College's Vision Statement expresses Fredonia's commitment to student-centered learning and advising. Sixty-five percent of the undergraduate education majors surveyed reported that their major advisement had been helpful, with no significance differences across programs. Data generated by the Field Supervisor Student Outcome Assessment and the Externship Clinical Evaluation indicates that students in Speech Pathology and Audiology are strong clinicians who apply theory to practice. No assessment of student advisement is reported.

Recommendations

Programs within Educational Studies have engaged in a variety of assessment strategies to appraise student progress toward goals. Their assessment efforts reflect strong ties between the college programs and personnel within their fields. Feedback from supervisors, graduates, and administrators has proved to be valuable in reflecting on the programs' effectiveness. A review of the reports submitted by the School of Education and the Department of Speech Pathology and Audiology leads to the following recommendations:

- Separate means of assessment should be presented for graduate education programs where graduate goals are more relevant to the advanced nature of the graduate student.
- Education's program goals should identify more clearly the relationships that exist with GCP goals.
- Speech Pathology and Audiology should enhance their survey techniques by investigating the use of multiple assessment instruments that assess stated goals both prior to and during the student teaching experience.

ASSESSMENT IN THE FINE ARTS

Program Goals and Means of Assessment

The Fine Arts program grouping encompasses the departments of Art, Communication, Music and Theatre Arts (See Appendix C1, C5, C17, and C25.). The Fine Arts Departments of Art, Music and Theatre use an ongoing assessment of students as they proceed through the progressive nature of their course work. The major instrument used is a barrier test or evaluation.

In Art, a 24-credit-hour review and a senior seminar (composed of a senior exhibit, a senior exit questionnaire and a senior slide portfolio) are required for the B. A.; in addition, for the B.F.A., a minimum GPA of 3.0 in the core and 2.0 outside of the major are required. In Music, jury evaluation of an instrument, ensemble competition, a barrier test at the end of the sophomore year, and a piano proficiency test are used. In Theatre, the B. A. requires an ongoing evaluation of each semester's work with regard to the student's area of theatre and a sophomore year evaluation; the B.F.A. requires juries and portfolio reviews to determine continuance in the program, evaluations of student performances/productions, and a senior recital performance/formal portfolio review.

These barrier evaluations with specific criteria coupled with the portfolios and/or auditions required to enter into the major (with the exception of the B. A. in Theatre) allow the departments to determine what the student knows, can do, or thinks. It is particularly helpful when the original slide portfolio (such as in the case of Art) is used in conjunction with the senior slide portfolio so that definite comments can be made as to the visual record of the student's progress. Theatre has recently instituted a first year entering paper and is in the process of developing a senior seminar with an exit paper. This, too, will provide the kind of before and after assessment that is needed for understanding what the student has learned. Music's ongoing analysis of a student's ability to continue his/her course of study does the same thing, and the department is considering the addition of a portfolio requirement of jury evaluations. Inherent in these disciplines is a principle that a student cannot be allowed to enter the next level until s/he has mastered the level before, and the assessment of each student's ability to do that is an ongoing process. Each of these departments has developed specific goals and objectives for the major that can be measured in testable ways. However some of their goals and criteria could be stated more precisely. For example, the Art department lists "effective knowledge of visual vocabulary" and "a level of professional expression" as goals. Likewise, Theatre Arts lists "technical mastery of ... techniques" as a goal. But neither identifies the specific criteria for determining what is effective or professional or mastery even though the barrier instruments would include tests of them. Both Theatre and Music have found weaknesses in their assessment processes and have made proposals aimed at correcting the problems, as discussed below.

Communication is not set up to follow this pattern and is more like the other departments on campus in which a student can take a number of different courses before any assessment of that student's ability to be successful in the major (other than GPA) is available. Communication faculty have recently set up a pilot program to determine how assessment will work for them. They decided on six specifically testable goals for the department: Students should be able to 1). apply rhetorical principles in the design and evaluation of mediated and non-mediated messages; 2). explain the relationship among the components of the communication process; 3). explain the types, functions and relationships of verbal and non-verbal symbols in mediated and non-mediated communication contexts; 4). identify the major communication technologies, explain their functions and apply specialization-appropriate technologies to the design, production and distribution of messages; 5). recognize and explain the relevance of key historical and socio-cultural phenomena to the evolution, development and effects of communication, mediated and non-mediated; 6). understand and apply ethical principles to the practice of communication in mediated and non-mediated contexts. The department then decided to use this academic year to test their first goal thoroughly. The method used was to give the same written essay question to entering freshmen and exiting seniors. The question required an analysis of a hypothetical communication situation and was designed to test the students' abilities to analyze in terms of the persuasive strategies it employed and the audience constraints which conditioned it. The mean for persuasive strategies identified by freshmen was 2.35 compared with the senior mean of 7.78, representing substantial improvement in this area. However, the mean for audience constraints identified by freshmen was .74 compared with a senior mean of 1.13, representing slight improvement. Senior students also demonstrated a

clear improvement in writing skills in the areas of clarity, coherence, and development. The results in the area of audience constraints pinpointed a potential area for improvement in the curriculum. This plan promises an excellent way to test what the students think, can do or know. Unfortunately, while the department members would now like to do the same kind of thing for the remaining five goals, they feel that the amount of faculty time needed to design, administer and evaluate these kinds of essays makes it impractical to do so at this time. They will continue to discuss strategies for assessment that are more practical for the limited faculty time they have.

Uses of Assessment Information

Communication was able to draw a direct need from the information it gathered as noted above, and is using it to change their curriculum by strengthening the emphasis on audience constraints in the CM 201 Rhetoric and Criticism course and a number of follow through courses. Art discovered a need to include second-semester transfer students in the 24-credit-hour review; Music discovered a need to reconsider how their theory courses are being taught and what material is being covered; Theatre discovered a need to add a senior seminar to their general Theatre curriculum. Theatre notes that they need to provide better models of the value of theatre and that they need to make greater efforts to recruit more talented students to the B.F.A. programs. Music notes that weaknesses in the ensemble performances have led to an increase in recruitment for specific instrumental types and have also led to an evaluation of course material.

Relation to the General College Program

The General College Program correlation could be found in all of the reports. All listed socioethical understanding as inherent in the curriculum. All except Music listed writing and reading as integral to the discipline. Music emphasized the reflexive thinking and quantitative problem solving aspects of the GCP. Reflexive thinking was also part of the Art and Theatre GCP correlation.

Relation to the College Vision Statement

Connecting these departments to the Vision Statement and the idea of creating a community of learners creates somewhat of a paradox. They are all intimately involved with creating an atmosphere for learning on campus that goes beyond the more “traditional” majors. They create the art exhibits, theatre productions, musical performances and radio/television stations that connect the students to the college and each other. They create an environment for learning for all students on campus—yet they do not mention this in the analysis of their departments. It could be that the questions asked by the committee were too specific to allow for this, but we would be remiss in our analysis of these departments if we failed to see the importance of this contribution. A Biology major who attends a play is learning something outside of his/her major area, as is the English or Philosophy major who attends an art opening. It is these kinds of interdepartmental gatherings and lectures that make a community of a college. The Fine Arts area is expected to do this, and, perhaps because of this, they have lost sight of the important role they play for all members of the campus community—not just their majors.

Recommendations

- The Department of Communication might consider working toward devising an entry/exit assessment instrument that covers all of its objectives. If the Department is not successful in developing one, they might consider moving toward a staggered system of assessment, in which the assessment instrument for a given year would measure only two of their six goals. In the following year two other goals could be measured and in the year following that the final two goals. In this way, the Department would have a constant sampling that should, given the large number of students majoring in the field, provide valid results and useful information for improving instruction.
- The departments using barrier assessment need to define more precisely the assessment criteria within the barrier and their relationships to the goals.

ASSESSMENT IN THE HUMANITIES

Program Goals and Means of Assessment

The Humanities program grouping encompasses the programs of English, French, Philosophy and Spanish (See Appendix C9, C10 and C18.). The subjective nature of studies in the Humanities is reflected in the goals of the four departments surveyed for this study. In setting forth goals, of the four, except for those specific skills assessed in the English portfolios, only the Department of Philosophy pointed to specific tasks that incorporate more general goals: in the spring semester of the senior year to identify and evaluate in an essay the main arguments of a short excerpt from a philosophy book and to identify and evaluate in an essay the main arguments of a newspaper or magazine article. The Department's objectives led directly to their means of assessment: review and evaluation by at least two faculty members, with reference to a list of objectives derived from the Department's stated goals. These listed objectives were articulated in a way that made assessment firmly relevant to the goals. It should be noted that the measurements of students' accomplishments are in themselves based on faculty perceptions, as must be expected in a discipline like Philosophy.

The French program of the Department of Foreign Languages articulated a more general set of goals but followed Philosophy in providing a set of less general conditions that must be met, thereby opening a reasonably direct path toward assessment. By contrast, the Spanish program's generalized single goal, to develop ability to move freely within a Spanish-speaking culture, while honestly encompassing what their course of study attempts, makes the path toward an instrument of assessment less direct.

Departments other than Philosophy relied upon individually built portfolios as their principal, although not exclusive, means of assessment, to allow each student to show how she or he has mastered the abilities set down in the department's goals. The English Department's portfolio approach, for example, is effective in identifying the percentage of graduates adequately meeting specific criteria in writing, critical thinking and metacognition. Since any portfolio approach risks missing assessment of some of the elements established as departmental goals, the English Department notes that it will review and broaden its assessment criteria and add requirements to assess other aspects of learning more directly, an approach others may want to emulate.

French and English cited senior seminars as assessment instruments, and seminars can indeed be expected to provide instructors with the close observation and scrutiny that should support judgments about the extent to which students have achieved established objectives. While seminars use traditional classroom measures like grades as indicators of students' accomplishments, together with the low faculty-student ratio in such courses, these seminars can be employed effectively for overall assessments of student achievements, especially when the seminar includes a capstone project. As in the case of Philosophy's terminal testing, results here must be based on faculty perceptions.

The Department of English, like departments in other groupings, names as one of its means of assessment groups of specified courses in which one or more of the Department's objectives are emphasized. But unlike other departments, it screens the course content for relevance to goals with the input of the faculty. Although grades add a degree of objectivity in assessment, they may incline toward subjectivity in the criteria being assessed. Any department using course grades for assessment needs to clarify the relationship of individual course criteria to the goals being assessed.

Student testimony has been initiated by Philosophy, in the form of an assessment survey, and Spanish, in the form of a required statement from each senior student. The efficacy of this approach cannot be measured because of the small number of responses. Yet it should be noted that a well-formed response from even one student might provide a valuable, fresh view in assessing a program. While this method of assessment would be dubious standing alone or as one of a few other instruments, it should certainly be considered as an ancillary support, especially if it were linked directly in some way to the unit's objectives.

Uses of Assessment Information

Other than the refinement of the English portfolio process and their note that their faculty need to devote more class time to specific writing/critical thinking abilities, none of the Humanities units surveyed here

indicated improvements that are needed or that could be made in its curriculum. English concluded that, on the basis of perceived outcomes, no other changes were necessary. French believed they were provided with some insights that might lead to change and adjustments, but neither the insights, the changes, nor the adjustments were made specific. Philosophy and Spanish did not name any ways in which the assessment process might lead to alterations in their curricula.

The scarcity of comment in explaining the uses of assessment findings by departments other than English may be a result of the assessment process being in its early stages. The units have not had time to complete and make use of assessments. All are forging ahead now, however, and this experience makes clear that the assessment process should be a continuing endeavor. Only then will the units be able to weigh the information they receive and give it timely application to their courses of study.

Numerical Disparities in Students Assessed

Of the units surveyed here, only English has substantial numbers of students. The units with smaller numbers have the advantage, therefore, of relatively low faculty-student ratios within the major, which fosters close attention to each student's work. But a disadvantage attaches itself to low numbers. The number of students being assessed might not provide a sample with enough validity to support instructional changes. The corollaries are true for English; a large number of majors makes independent observation more difficult, but the sample number is significant.

Relation to the General College Program

The connection of departmental goals to those of the General College Program is in all four units taken as strong because the goals of the General College Program are inherent in each of the disciplines and the activities in which their students engage. In future reports, however, departments should consider building firmer links between the objectives of the General College Program and the objectives and means of assessment established by the departments. Only the English Department's portfolio assessment of writing, critical thinking and metacognition skills forms a link between department outcomes and the GCP.

Relation to the College Vision Statement

The College's Vision Statement was being developed when departments and sub-units were carrying out the assessment procedures discussed in this document. To a large extent the College's goals and departmental goals are similar, although the wording in the Vision Statement invites individual units to fine tune their objectives and assessment procedures to make them consonant with the College's long-range objectives. Specifically, none of the units within the humanities directly addresses the concept of the College as a community of learners. In defining this concept, the Vision Statement lists three of its fundamental elements as student-centered teaching, collaborative learning, and a challenging yet safe environment that promotes individual choice and an appreciation and respect for differences. In humanistic disciplines with their essentially subjective approaches to learning and understanding, the last of these elements appears to be within easy reach. With some reorientation and modifications of emphases, departments and other units should be able to recast their objectives and their activities to assure that the other two elements, student-centered teaching and collaborative learning, are made central to the educational process in the future. Indeed, activities in individual classes indicate that these elements are already a part of the educational process in the humanities, although they are perhaps too new to have been reflected in this study.

Graduate Programs

Only English among the humanities has a continuing graduate program. As an extension of its experience with undergraduate portfolios, the Department has recently instituted as an assessment tool a required portfolio for graduate students. No results are available yet, although the reflexive questioning of the portfolio design and the low faculty-student ratio in graduate courses and the program overall promise that when they are available the results should be enlightening.

Recommendations

- Departments using portfolio and seminar approaches for assessment need to clarify the criteria for judging performance and the relationship of the criteria to the department goals, similar to what the English Department has done with its skills criteria.
- In general, the departments and programs in the humanities should work toward making firmer connections between their goals, the goals of the General College Program, and the assessment instruments they use. The way in which departments use their outcomes, or plan to use them, needs to be more clearly specified.
- All units could profitably make efforts to strengthen contacts with their alumni and to include in their assessment procedures analyses of long-term, post-graduation perceptions, observations, activities, and achievements of alumni. The perspectives provided by time and experience should make student testimonies, like those sought by Philosophy, valuable contributors to the assessment process.
- Units should review their goals and procedures in light of the College's Vision Statement and make adjustments that position instructional activities within the structure of this overall plan.

ASSESSMENT IN THE NATURAL SCIENCES

Program Goals and Means of Assessment

The Natural Sciences program grouping encompasses the departments of Biology, Chemistry, Computer Science, Geosciences, Mathematics and Physics (See Appendix C2, C4, C6, C11, C16 and C19.). The departmental reports show that the use of senior seminars as an assessment instrument is heavily concentrated in the natural sciences. With the exception of Computer Science, all natural science departments use the seminar for assessment of discipline specific goals near completion of the major. In most seminars skills being evaluated include topic discussion; literature review; interpretation and application of laws, theories and models; problem solving; and written and oral presentations of literature reviews or original research papers. Biology uses the seminar to assess six of its nine goals: appreciation of the values of the scientific enterprise, application of theories and models, judging the merit of articles, application of mathematical principles, appreciation of historical context, and communication of scientific results. To evaluate the goal of enabling students to read and critically evaluate chemical literature and report results orally and in writing, Chemistry requires students in the senior seminar to report on a recent publication in the discipline. Physics uses several seminar courses to evaluate its goal of teaching students to read and critically evaluate disciplinary materials and to report scientific results orally and in writing. Geosciences uses a formal senior seminar to assess its students' abilities to communicate scientific information and demonstrate research and presentation skills.

Mathematics relies heavily on its senior seminar as its only formal assessment instrument of students' problem solving and literature interpretation and presentation skills. In addition to the seminars, all the natural science departments except Computer Science use multiple assessment instruments, and all indicate success in achieving their goals. Some report very specific outcomes with respect to their goals and claim to know with a fair degree of certainty what their students know, think, or can do. In Biology, for example, an assessment exam, laboratory exercises and student surveys are used in addition to the seminar for assessing nine goals. Most of the goals are very specifically stated in ways that lend themselves to quantitative assessment. For example, one of Biology's goals is: "*Appreciate the uniqueness of scientific knowledge by understanding the nature of scientific laws, theories and models; the process of their formation; and their explanatory and predictive powers.*" Their means of assessment is the Biology Program Assessment Exam. Specific criteria are listed in testable format. For example, "*Fifty percent of our seniors will be able to satisfactorily answer items 4, 18, 20, 49, 67*" (relevant questions to the goal) on the exam. The results are then stated in terms of the percentage who correctly answer each question. Results can then be reported for each question and as an overall average for the indicated questions. In this case the goals were exceeded, with an average of 75% correct for all students on all indicated questions. A secondary assessment is carried

out on this goal using a senior survey: “*Our seniors should indicate a high level of familiarity with scientific theories and models in our senior surveys.*” Results were indicated in testable fashion: “*Sixty two percent indicated average level of familiarity with ozone depletion.*” Biology also formulates goals for the seminar very specifically. For example, with respect to the goal of appreciation of the values that characterize the scientific enterprise, the outcomes the faculty judge during the process are clearly specified, though not measured quantitatively. Their outcomes are particularly validated by the success that their students achieve presenting their papers at professional conferences. Chemistry uses standardized final exams supplied by the American Chemical Society for its cognitive testing and relies heavily on the ACS curriculum with external review. In addition to seminars, they use an alumni database and laboratory and collaborative research assessment. Like the Biology department’s goals, their goals are well stated and testable. However the conclusions are based on general consensus after the fact rather than pre-established criteria. For example, with respect to cognitive skills they report the percentile rankings of their tested students and collectively conclude that performance is acceptable.

Other departments indicate less specific findings. Several of the departments (Chemistry, Physics and Geosciences) measure success of their goals by the number of students passing a course or by the number attaining a certain grade or by a general faculty sentiment. The conclusions using this method are more general, and while results indicate that “*most students perform sufficiently well*” or “*students show marked improvement in writing ability*” or “*the majority of senior majors are capable of satisfactory performance*”, a more specific structuring of the assessment instruments and of criteria for success could indicate what abilities constitute performance, or on what basis improvement was measured. Geosciences is unique among the natural sciences in that it uses portfolio assessment. Although the criteria for performance success are listed on the portfolio evaluation form, the department is currently in the process of reviewing and evaluating the outcomes and their success. Nevertheless, the use of portfolios should enhance the department’s general conclusions about the ability of their students to present discipline-based knowledge capably. Although Mathematics’ assessment process is in its infancy, their approach is promising. The use of formal rating sheets in their seminar with specific criteria for success evaluated by the faculty should allow the department to establish minimum acceptable criteria for judgement across a variety of skills. The Computer Science program will rely on a field-based ETS exam for its content assessment. It is not clear how the test will be used and how specific questions will relate to goals, but the approach is consistent with acceptable assessment practices.

In general, the natural sciences departments do an excellent job of alumni tracking. Chemistry, Geosciences, and Physics have extensive knowledge about their graduates through alumni surveys or other tracking devices. They know how many attend graduate school, how many are teaching, positions held within their discipline, etc.

In addition, all of the sciences departments set goals for their students concerning reading, interpretation, writing and presenting content-specific information. The reported outcomes with respect to goals are positive. All report satisfactory performance of their students in these areas.

Uses of Assessment Information

All of the natural sciences departments indicate ongoing use of assessment. Mathematics and Computer Science indicate the use of new instruments which show some promise of success. Several uses of the results show a healthy ongoing assessment process. These include curriculum change, strategies for improvement of performance, application of successful assessment techniques from the seminar to assessment of mini-presentations in other courses, attempts to determine high or low results, and provision of feedback to students for improvement. The Biology Department is very specific in its uses of its outcomes to strengthen the achievement of its goals, and indicates specific curricular modifications such as increased emphasis on research methodology in introductory courses, increased emphasis on undergraduate research, and modification of their senior seminar to place greater emphasis on historical and contemporary context. All of these changes are related to and a result of their findings. On the whole, the natural sciences seem to be stating goals clearly and responding appropriately to the results of assessment of success in achieving those goals. The Biology Department submitted a statement on current assessment mechanisms for its graduate program which include barrier assessment techniques. Of particular interest is the use of a comprehensive examination to assess students' abilities in a specialty area as well as six general subject areas. The thesis

process is used as an assessment instrument as well. Reporting procedures are under current development. The Mathematics Department indicates that their Graduate Program in Mathematics Education is currently under review in light of new Regents' criteria for teacher certification. The department indicates that it will develop goals and assessment procedures upon completion of that review.

Relation to the College Vision Statement and the General College Program

Two generalizations emerge from these reports. First, the seminars in all of the departments embody the principles emphasized in the College Vision Statement: a community of learners, individual learning, a close relationship between students and faculty, writing across the curriculum and an enhancement of the ability to think and communicate critically and creatively. The College Vision Statement indicates a commitment to close relationships among students, faculty and staff and an emphasis on student/faculty research, a particular common strength of the natural sciences. Biology indicates that 25% of its students become involved with its undergraduate research program and that students' research skills exceed the assessment targets. Chemistry indicates that its students are heavily involved with collaborative student/faculty research projects and that formal presentation of results enhances the development of research skills. Geosciences reports that a majority of its students exceed the grade expectations in its capstone field course, a course that allows classroom knowledge to be tested in the field, while Physics indicates that laboratory seminars reflect a degree of maturity that is to be expected in a job environment.

Second, all of these departments link their goals to the goals of the GCP through the seminar. Biology, Geosciences and Mathematics tie each of the GCP goals to their departmental goals in such a way that testable linkages are demonstrated. Most of the other departments in the sciences are less precise concerning the specific GCP outcomes.

Recommendations

- Departments should ensure that their assessment criteria are specifically structured such that outcomes reflect achievement of their goals. Specifically, those departments using grades as a means of assessment need to structure instruments and criteria for success more precisely to show what abilities constitute performance, or on what basis improvement was measured.
- Criteria for success in meeting the goals should be specified in advance, preferably in quantitative terms where possible.
- Department goals should be reviewed to insure that they reflect the College Vision Statement fully and specifically.

ASSESSMENT IN THE SOCIAL SCIENCES

Program Goals and Means of Assessment

The Social Sciences program grouping encompasses the programs of Business Administration, Economics, Health Services Administration, History, Political Science, Psychology, Social Work and Sociology/Anthropology (See Appendix C3, C7, C12, C13, C20, C21, C22, and C23.). An examination of Table 1 shows that the Social Sciences rely heavily on student and alumni surveys for assessing outcomes. Furthermore, usage of multiple instruments for assessment is not as rich as in some of the other program groupings. Some assessment in several departments is relatively new or undergoing change such that outcomes are tentative or not available. Business Administration, Health Services Administration (HSA), Political Science, Sociology/Anthropology and Social Work, a relatively new program, all report either new, revised, or proposed instruments. This could be taken as a sign of a new or renewed focus on assessment in the programs.

HSA and Social Work will rely heavily on external professional organizations for their student outcomes objectives and for assessment instruments. HSA, for example, indicates that its goals are consistent with those established by the Association of University Programs in Health Services Administration. Its external

advisory committee will examine samples of each student's work. The reviewers will use a fairly detailed effectiveness rating scale to report on both student outcomes and program outcomes. Social Work is equally specific in its goal selection and has adopted nine student learning objectives from the Council on Social Work Education's Curriculum Policy Statements. The objectives clearly lend themselves to assessment. Of the new programs, Social Work has the most ambitious plan for assessment, with the proposed use of six well designed instruments. Assessment activity in both programs should provide specific outcomes evidence when in place.

Two departments in the social sciences, History and Psychology, were participants in the previously noted FIPSE sponsored SUNY Consortium Project on Assessment in the Major, and both practice precise assessment techniques. The particular instruments and outcomes noted in the assessment summaries in Appendix C differ significantly from those of other programs inside or outside the grouping. Psychology is the only department to report longitudinal assessment results dating back to 1991, and History is the only program on campus to rely almost exclusively on a locally developed pre-post-testing instrument.

A review of the History and Psychology goals, objectives, and uses of assessment shows that these departments are fully involved in extensive assessment activity. Psychology's process of reporting longitudinal outcomes is instructive. Their goals are limited to four curriculum delivery aspects, their means of assessment and criteria for student outcomes are clearly stated, and their outcomes are concisely presented and specifically linked to their goals. According to the Principles of Good Practice, this is a particularly effective technique of assessment, and when outcome records are maintained and compared annually, the technique is extremely valuable for program change. The use of this technique in the department is equally effective with their new major survey, senior survey and alumni survey as well. The department has obtained a wealth of information about its students and what they know, think, or can do. Other departments could use these techniques as models of effective, efficient outcomes assessment.

Although History uses only one instrument, its unique approach of defining very specific primary local goals and then assessing the extent of student improvement through a pre- and post-test developed within the department is effective. The department uses its Historical Awareness Test to assess students' *"expansion of historical knowledge and understanding of historical significance; movement from a parochial (ethnocentric) to a cosmopolitan (global) world view; expansion of understanding of historical causation and consequences; development of sensitivity to multiplicity (of perspectives, interpretations and causation); and development of awareness of knowledge as a construction."* Through an analysis of specific questions on the test, the department compares pre and post-test scores and reports both strengths and weaknesses in their process.

But while History and Psychology have very specific objectives that are precisely correlated and addressed in their assessment techniques, and the new programs are developing fairly precise goals and techniques of assessment, others, even with specifically stated objectives, present less clearly correlated results. From a review of the materials, it appears this may be partially a result of the reliance on surveys designed for other purposes and partially a result of the relatively large number of proposed instruments not fully implemented. As in other areas, several of the departments (Economics in particular) measure achievement of their goals by the percentage of students passing a course or by grades or by a general faculty sentiment. As noted elsewhere, outcomes obtained using this method are less specific with respect to goal and outcome correlation.

Every department in the Social Sciences grouping uses some form of either alumni or student survey for assessment. Economics and Psychology currently report results from student surveys while Business Administration, Political Science, Sociology/Anthropology and Social Work all report proposed use. While Psychology's senior survey uses specific testable academic criteria directly related to its goals, several other departments use or propose to use surveys more loosely. Business Administration, for example, indicates that its proposed survey is *"designed to assess the level of understanding that students have of key business topics,"* and that exit interviews may be conducted this year with a group of graduating majors. Although the proposed survey is not available, it appears that the emphasis may relate more to satisfaction with program inputs since student outcomes and criteria are not clearly specified in the list of goals or instruments. Economics lists outcomes for its exit interview which relate to instructional delivery, not specifically to the stated student outcome goals. Knowing graduation plans and what students think of instructional quality and opportunities to engage in student/faculty research is a valuable part of the assessment process, but unless the responses are related specifically to the departmental goals, outcomes

will not be useful for program effectiveness. Sociology/Anthropology's exit interview of seniors is more useful in that it asks specific questions concerning program delivery and the specific outcomes from class presentations, data analysis, student/faculty research etc., all related to its goals. Results from an initial implementation of the interview are currently being analyzed.

All departments but History indicate that they use or propose to use alumni surveys. Most of the instruments provide information about graduates' careers, graduate school admissions, curriculum and course evaluation and opinions regarding methods of instructional delivery. This material is also a significant part of program assessment and indirectly relates to what students know, feel or can do. But unlike the exit interviews, several of the alumni surveys indicate some degree of student outcomes success. Although results are not yet available, the alumni survey in Business Administration includes questions asking for students' perceptions concerning the impact of the program on their awareness of the business world, communication skills, understanding of cultural issues and ethics, and small group skills, all information relevant to the stated department goals. The Economics and Sociology/Anthropology surveys ask the alumni for their impressions concerning the value of various courses. Economics includes questions concerning students' communication skills and discipline-specific skills upon entering graduate school. Although students indicate a high degree of satisfaction with their course content and communication skills preparation, the general nature of the survey questions in these departments, as well as that of Political Science, does specifically relate outcomes to the stated goals of the departments.

Psychology and HSA have particularly effective alumni surveys. One of Psychology's goals is *"to contribute to the building of an integrated liberal education, designed to equip the student for post-graduate employment or further specialized education."* Its survey is structured so that results can indicate the percentage who felt adequately prepared for continuing education, the percentage who had difficulty finding employment, and so on, tying results specifically to the department's goals. Responses are similarly well-structured for the assessment of their other goals. HSA's alumni survey is perhaps the most extensive with respect to the outcomes information elicited. Alumni are asked to rate the effectiveness of the program in nineteen specific areas of competence in four broad categories: liberal education, management, health services, and professional development. Although no a priori criteria were used, the program makes judgmental analysis of effectiveness upon review of the data. With regard to liberal education, slightly less than 60% of the alumni rated the program effective in developing communication skills, a result that is almost identical to that in Economics. Furthermore, over 70% of the alumni in the HSA program see the program as effective in developing critical thinking skills.

Uses of the Assessment Information

The reports from the departments in the social sciences grouping indicate a very ambitious agenda of future assessment activity as noted above. As in other areas, the indicated uses of the Middle States assessment studies include course and curriculum adjustment as well as the revision of the assessment process itself. After using a portfolio approach for some time, History adopted a local test which is under constant review. They report that *"We have found that the History Department's program and teaching help students develop a more sophisticated, deeper, and broader perspective on history. However, our results also suggest that some students who have gone through the program continue to be presentist in their thinking. We have some ideas about improving the tests that we administer."* They then report proposed changes for improvement in their curriculum, courses and the instrument. This is an instructive approach for other departments which are attempting to construct assessment of locally unique goals and learn how to use assessment to improve the assessment process itself.

Psychology has continually upgraded its instruments as it has refocused its goals. Other departments indicate additions to their instruments and a willingness to experiment with surveys, tests and other new assessment strategies, although there appears to be some resistance to quantifying some student outcomes. For example, the Economics report notes, *"In our view, quantitative student outcomes assessment, as a science, has simply not yet advanced to the point where it can provide information of the same quality that we obtain through more informal mechanisms."* Nevertheless, there appears to be a healthy attempt in all departments to adopt a variety of quantitative and qualitative assessment techniques.

Relation to the College Vision Statement and the General College Program

The departments in the social sciences, as in other areas, all relate the department goals to the GCP through their course offerings and curriculum structure. Business Administration indicates that the GCP is an essential prerequisite to the accomplishment of its goals; Political Science indicates that in many respects, the department goals are reinforcing the GCP goals. Some, as noted above, use survey results to validate the liberal education outcomes of their programs. Others, particularly History and Psychology, indicate curriculum and goals highly correlated to the GCP. Psychology indicates that its program is particularly conscious of the correspondence between its goals and those of the GCP and lists very specific methods it uses to correlate the two. But with the exception of those outcomes noted in the alumni surveys and the outcomes of the Psychology and History departments, very few of the departments specifically link their outcomes to the individual components of the GCP, even though they tie the GCP to their goals.

The goals of all the departments in the social sciences, by nature of the disciplines, support the college's vision of an institution committed to the respect of individual and cultural differences. Some of the program goals and outcomes are more specifically tied to the Vision than are others. In Psychology, for example, one of the specific goals is to demonstrate the relevance of psychological analysis to current social problems and applications in many areas of society, and to provide students with the knowledge to better understand themselves and others. History's total assessment approach is tied to an assessment of the multicultural and historical understanding of the students.

Recommendations

- Student outcomes assessment in the social sciences could be improved by restructuring alumni and student survey questions to focus more clearly on information about student abilities relative to the goals of the program. In programs other than History, Psychology, Health Services Administration and Social Work there is a need to reevaluate the types of questions that will elicit useful information with respect to student outcomes and their relationships to departmental goals.
- As in other areas, those departments using grades as a means of assessment or general faculty/student discussions must structure instruments and define criteria for success more precisely to show what abilities constitute performance, or on what basis improvement was measured.
- Continued development of multiple means of assessment is encouraged and should give the departments more supportive evidence of what their students know, think, or can do. But given the time constraints on assessment and the large number of goals listed in some cases, departments need to prioritize, consolidate and concentrate on what is doable and what can be done well.
- Departments need to emphasize the relationships of some of their goals to the College Vision Statement more specifically.

ASSESSMENT IN THE INTERDISCIPLINARY STUDIES PROGRAMS

The Interdisciplinary programs submitting analyses for this report encompass the majors in American Studies, Arts Administration, Criminal Justice, Environmental Sciences and Music Business (See Appendix C14.). Interdisciplinary programs continue to find assessment difficult for several reasons: first, some of the programs are relatively new; second, responsibility for overseeing these programs is often divided among departments or is placed in the hands of a faculty member with divided responsibilities between a major and the interdisciplinary program; and third, the programs are to a large extent dependent on the contributions of courses from various departments.

Recommendations

- Future assessment of interdisciplinary programs could profit from closer cooperation with contributing departments.

- A potential course of action is to have the program director and a liaison member from each contributing department's assessment committee devise a means of assessment consonant with the instruments used by the contributing departments. This instrument might be derived from procedures used in those departments.
- Capstone experiences appear to be effective sites for assessment of students' progress in drawing together the disciplinary streams of their learning. The findings on student progress might also be useful grounds for program assessment. Departments involved in interdisciplinary studies and other units not using capstone experiences might explore the possibility of establishing them in their fields.

Honors Program

As the report of the Honors Program states in its opening sentence, Honors is not a major, a minor, or a concentration. Honors students must declare a major in a subject area. No formal assessment procedures have been used in the Honors Program to monitor the progress of students. The small number of students in the Program, however, makes it possible for Honors instructors and advisors to work with students individually. In addition, most Honors students take a one-credit colloquium in each year of study. The class is structured as a forum in which students self-assess their work and its progress. Honors courses are often developed in response to students' expressed needs. Students with academic problems are quickly identified and begin immediate intensive counseling with an advisor. Graduation rates are high, and few students leave the Program. Most of those who do are majors in Music who find it impossible because of demands in the major to schedule Honors courses in their later years of study.

ASSESSMENT AND EXPERIENTIAL LEARNING

The task group was charged with the following questions: Are there significant differences in the academic performance of students who have engaged in experiential learning and those who have not? To what extent are the on-site supervisors and faculty sponsors of these experiences satisfied with the performance of these students, and to what extent do students feel these experiences have positively affected their educational preparation? To what extent do alumni feel these experiences have positively affected their educational preparation? In what ways?

Since one of the purposes of the Middle States process is to establish a baseline of data and analysis, and since the committee could find no systematic overall evaluation of experiential learning at Fredonia, a series of constituent surveys was constructed based on the existing off-campus *Supervisor's FINAL Evaluation Form* used by the Office of Experiential Learning. The surveys were constructed so that responses concerning not only student outcomes, but also faculty and supervisor attitudes could be compared. All of the students, faculty supervisors, and agency supervisors who participated in experiential learning experiences for the Fall 1997, Spring 1998 and Summer 1998 semesters were identified and surveyed. Students enrolled in experiential learning experiences that were required for their degree programs (i.e., Medical Technology, Early Childhood, Elementary Education, Secondary Education, Music Therapy, Speech Pathology and Audiology programs) were not included in the population surveyed as they often have little control over their placements and tasks. Survey instruments are listed in Appendix K3, K4, and K5.

With respect to the initial charge, since over 62% of the students surveyed did not participate in an experiential learning experience until their senior year and over 93% did not participate until at least their junior year, comparisons of academic performance of students who have engaged in experiential learning and those who have not become difficult since the longitudinal impact of the experience on student outcomes post hoc is not available. The response from Political Science perhaps is typical of the response from other departments when asked to evaluate the primary charge. "We have anecdotal information that students doing internships do better in classes following their return to campus, but it is only anecdotal. Because it is the more highly motivated students who do an internship, and because they also tend to have higher GPAs than students not doing internships, it is difficult to draw conclusions without more systematic study."

Outcomes with Respect to Learning

Students believe that experiential learning contributes significantly to their classroom performance and degree programs. Over 46 percent of the students surveyed responded that their classroom performance improved "Quite a bit" or "Very much" as a result of their experience, while 80 percent of the students surveyed and over 82 percent of the faculty surveyed responded that the experiential learning activity contributed "Quite a bit" or "Very much" to the degree program. Furthermore, the data indicate that these results appear to be similar across all departments. Data from the College Student Experiences Questionnaire (CSEQ) confirm the findings. When asked the extent to which they feel experiential learning has contributed to their education on that survey, 53 percent responded "Very much" or "Quite a bit." On the Middle States Student Survey, 51 percent of those surveyed indicated that an internship had a positive influence on learning.

Much of the literature that examines benefits of experiential learning touts the rewards of seeing theories placed into practice. Fredonia student, faculty and agency survey responses indicate that this is indeed a significant part of experiential learning at Fredonia. Over 80 percent of the students, 87 percent of the faculty and 85 percent of the agency supervisors responded that the students were able to put theory into practice "Quite a bit" or "Very much" during their experiential learning experiences.

A comparison of students' evaluations of their oral, written and judgement skills before and after the experience shows that 38 of 70 (54%) of those who indicated that their oral skills were satisfactory or needed improvement before the experience indicated that their oral skills had improved after the experience. Six of the 23 faculty respondents and 23 of the 86 agency supervisors indicated that they saw improvement of their students' oral skills after experiential learning experiences.

A similar analysis with respect to written communication skills shows that 25 of 53 (47%) of those that indicated that their writing skills were satisfactory or needed improvement before the experience indicated that their writing skills had improved after the experience. Again, six of 23 faculty respondents and 19 of the 86 agency supervisors indicated that they saw improvement in their students' writing skills after experiential learning experiences.

With respect to judgement, the analysis shows that 44 of 92 (48%) of those that indicated that their judgement was either immature, average or good before the experience indicated that their judgement had improved after the experience. Eight of the 23 faculty respondents and 29 of the 86 agency supervisors indicated that they saw improvement in their students' judgement after experiential learning experiences.

Outcomes With Respect To Career Development

The respondents view experiential learning as a significant contributor to the six particular skills that may affect career development as identified by the Internship Office. Over 74 percent of the respondents indicate that within the six areas examined, experiential learning enhanced these attributes either "Quite a bit" or "Very much."

In addition, there appears to be a fairly significant correlation between each of the six career development attributes and the responses indicating that experiential learning enabled the student to put theory into practice. The average Pearson correlation coefficient for these attributes is 0.41. A similar correlation exists between each of the six career development attributes and the responses indicating that the experiential learning contributed to the degree program. The average Pearson correlation coefficient for these attributes is 0.36. There appear to be very few significant gender differences in the above analysis.

Respondent Comments

Students, faculty, and agency sponsors were given the opportunity to comment about the value of their experiential learning opportunity. Student comments could be organized into two categories: using the experiential learning opportunity to solidify their career choice or to experiment in another field, and to develop the skills critical to success in the work force (e.g., confidence, professionalism, interpersonal

communication skills). Students recommended that college advisors inform their advisees of experiential learning opportunities early in their studies, noting that some programs should require experiential learning opportunities for their majors (e.g., Business, Accounting). Expectations of students in experiential learning opportunities need to be clearly identified and student achievement toward the stated expectations should be regularly monitored by faculty sponsors.

Recent graduates report that experiential learning opportunities enhanced their employability as a result of required duties that paralleled those demanded in real-life situations (e.g., job, graduate school). These alumni recommended that all undergraduate students be encouraged and even required to complete an internship.

Faculty sponsors commented that experiential learning opportunities provide students with the chance to review and even redirect their career decisions. Faculty noted that students that complete experiential learning opportunities develop skills that are valuable to young professionals.

The faculty respondents recommended that faculty sponsors need time to complete site visits, develop additional experiential learning sites, and prepare seminars relevant to experiential learning opportunities.

Internship Agency Supervisors noted that experiential learning reinforced the students' comfort level with their chosen career. Interns have been valuable assets to the various sites. In exchange, the students have outstanding opportunities to network with professional contacts. Most students who seek internships have high qualities to begin with; therefore, they are already "ahead of the game." Sponsors are mostly highly impressed with the quality of maturity and performance of Fredonia students.

Some agency supervisors commented that faculty sponsors are not very helpful. There needs to be more communication between supervisor and campus advisor. Some commented that experiential learning may be the only way for the student to "test the water" and know if a career choice is right for him/her. Even if the students realize that this is not the career for them, at least they come out of the internship with improvements such as in communication (phone etiquette, cooperation with co-workers, etc.), and may have a better idea of what kind of job they are really looking for. It is recommended that this hands-on learning experience be required for all students in some way so that they may use this time of learning as a "stepping stone" into the work world.

Conclusions

The task group acknowledges an upward bias in the type of surveys undertaken in this analysis and the dangers of relying heavily on self-reported data. But in the absence of an extensive longitudinal analysis of those participating in experiential learning, the survey data and departmental statements form the basis for the following instructive observations.

First, there appears to be a substantial percentage of participating students, faculty and agency supervisors who perceive that student judgement, oral, and writing skills have improved after participating in experiential learning. Likewise there is evidence that both students and faculty perceive that experiential learning helps develop career preparation skills. When asked whether others should participate in experiential learning, students (97%), faculty (91%), and agency supervisors (93%) said they should do so "Often" or "Always." Furthermore, 100% of the student respondents indicated that they would participate in an internship if they had to do college over again. This is a strong affirmation that experiential learning is perceived as an important learning environment providing the student with valuable learning outcomes.

These findings are confirmed by anecdotal data from the SUNY Fredonia Career Development Office's Graduate "Follow-up Survey" for 1997 and 1998. An examination of responses to the question "What was your most valuable learning experience while at Fredonia?" reveals that in teaching disciplines, over ninety percent of the responses indicated that student teaching or field experience was their most valuable experience. In non-teaching disciplines, 84 of 424 (20%) responded that an internship or some other form of experiential learning was their most valuable experience while at Fredonia.

Even discounting the survey data for the biases mentioned above, the general observation is that experiential learning contributes significantly in various ways to a student's education. But the response to question number 20 on the Middle States Student Survey indicates that almost fifty-five percent of the respondents had no involvement in an internship as part of their major. Data in the departmental reports indicate that few departments, other than Business Administration, some of the student teaching programs, or those with specific external organizational assessments, specifically track their students or alumni who have participated in experiential learning. Several, like the Criminal Justice program, use supervisor evaluations as a mechanism for assessing the extent to which the student has achieved the goals of the learning contract, but indicate no longitudinal or comparative use for outcomes or program assessment. Business Administration surveys student internship supervisors for data concerning performance and preparation for careers, but not concerning academic skill enhancement. Some have anecdotal information and indicate that those who take internships perform better than those who do not, but few indicate how or in what ways. Improvements could be made in assessing internship outcomes.

Recommendations

- The college should investigate the feasibility of forming a network or mechanism to provide students with information about experiential learning opportunities, procedures and expectations in each department and across departments early in their studies. Campus-wide internship workshops similar to the career development workshops may be an effective vehicle for information dissemination and exchange among students, faculty and agency sponsors.
- The college should develop a process for ongoing assessment of experiential learning through coordination of departmental, Office of Career Development, and SUNY-wide alumni surveys not only to ask more specific questions concerning "experiential learning student outcomes," but also to develop a database of information for the improvement of student outcomes and curriculum enhancement.

ASSESSMENT AND STUDENT MOBILITY

As part of the evaluation of student mobility the task group was asked to "examine to what extent successful outcomes are related to positive retention-to-graduation rates and what differences occur in academic programs whose retention to graduation rates vary significantly from the college mean." The task group was also asked to examine how often students change majors and why. Using data supplied by the Office of Institutional Studies, the task group examined change of major, retention and attrition data by department for first-time, full-time students entering the college in the academic years, 1990 through 1993 (graduating classes of 1994 through 1997). Because some departments with few majors may skew the analysis, the data from departments were combined into broader groupings in an attempt to ascertain the degree of variability of retention among departments with numbers of majors that would dampen the perceived bias. The data reveal that the variation in retention rates among the groupings is rather small.

Furthermore, an analysis of some of the departmental characteristics that may influence retention across the high and low retention groups indicates that suggestive relationships are very inconsistent. The Mean Cumulative GPA of Majors in the high retention group is larger, but student quality characteristics of entering freshmen are higher in the lower retention group. Likewise, the student/ faculty ratio and student credit hours generated per full-time equivalent faculty are higher in the high retention group than the low retention group. This leads the task group to be very cautious about making conclusions on suggestive relationships. The task group concluded that:

- Retention-to-graduation rates within majors, adjusted for adequate sample numbers of students in the chosen cohorts, do not vary significantly from the college mean.
- The term "successful outcomes" in the charge to the task group is vague. The group interpreted the charge to apply to departments' retention of majors to graduation and, given the timelines and nature of the data, makes the following observations and conclusions: A department's rate of retention-to-

graduation of majors continuing their enrollment in the College may be per se neither an indicator of failure/weakness nor success/strength and conclusions based solely on an isolated study of retention factors may be misleading. After a discussion of possible causal relationships and a cursory analysis of some of the data supplied, the group concludes that reasons for non-retention vary greatly from case to case, and, in a liberal arts college, may not be meaningfully specific to any single department. Lateral movement of students from department to department within the college could be interpreted as desirable flexibility and as a strength indicative of growth and increasing self-awareness on the part of the student. A more detailed analysis of the role that retention-to-graduation rates play in assessment is beyond the scope of the task group's resources.

Change of Major

In considering how often students change majors and why, data from the College Fact Book were used to analyze the number of major changes recorded by cohort. The 1993 entering cohort of first time full time freshmen (1997 graduating class) for example, recorded 361 major changes over eight semesters, or 43% of the cohort. Data generated by the computing center for 1995 and 1996 entering cohorts track all students who changed their major by semester by cohort and yield more detailed information. Of the 853 first-time, full time freshmen entering Fredonia in the fall semester of 1995, 180 (21%) had changed their major at least once by the spring semester of 1998. Of the 864 entering in the fall of 1996, 137 (16%) had changed their major by 1998. Those students who had begun in General Studies or who had changed majors at least once by the end of the junior year were surveyed regarding their reasons for changing majors and their thoughts regarding their academic performance in relation to changing majors. (See Appendix K6.) One hundred and twelve of 325 students who had changed majors and 95 of 261 students who had begun as General Studies students responded to the surveys.

Change of Major Survey

No clear patterns of movement among majors emerge from an examination of the responses. Most departments both gained and lost a relatively small number of majors. Many of the changes occurred between related fields, such as business administration and accounting. By far the most common single movement was from Elementary Education into Early Childhood Education. Most of the 15 students who had made that move described the change as extremely positive and viewed it as resulting from a clarification of their goals and interests and a better understanding of their academic options.

Students tended to change majors relatively early, most commonly while holding sophomore status, and very few members of this cohort changed majors during the junior year.

Overwhelmingly, students expressed positive feelings about having changed majors. In fact, over 70% described the change as extremely positive and another 22.5% described the change as somewhat positive. Eighty two percent of those who responded said they became better students as a result of changing majors. When asked in what way they had become better students, most mentioned that they had become more interested in their course work and more motivated with clearer career goals. A majority also reported that their grade point averages had gone up, and fewer than two percent reported a decreased grade point average.

By far the most common reasons given for changing majors were changes in interests and career goals. Three quarters of respondents did not check the space indicating dissatisfaction with the faculty or courses in their previous majors. Only two of the 112 students reported changing majors because of earning too low a grade point average in the original major, and only twenty percent reported that the original major had been too difficult. Few students cited the influence of family, faculty and staff or of other students as a factor in their decisions. Slightly more reported having been influenced by others in the selection of their original majors and said that changing meant finally making their own choices.

Although the total number of students moving into or out of most departments was quite small, in a few cases individual departments seem to have elicited responses which stood out from the norm. For example, overall, few students cited the difficulty of the previous major as a reason for their decision to change, but all three students who left Computer Science noted that reason, while none of the 20 who left the Elementary

Education major did so. Only four students noted as a primary reason for switching majors the lack of time to pursue other aspects of college life, and two of them were drawn from among the three students who had originally majored in Medical Technology.

In responding to the survey, students were asked for any additional comments. Most made rather specific comments about the reasons for their decision to change, and most of those reflected the theme of refining interests and career goals. Some indicated an appreciation of the assistance they received from the Office of Academic Advising. However some students made unsolicited comments about the process of changing majors and a few indicated that they encountered administrative difficulties in changing their major such as pressure not to pursue a change or lack of support from their departments or advisors in making the change. These comments point to the importance of competent and easily available advising, and suggest that at least a few students had difficulty accessing that help.

General Studies Survey

Those who entered in the General Studies program gave reasons for their choice of major that closely mirrored those given by students who changed majors. Career considerations, interest in a particular area of study, and interest in particular faculty and courses were the reasons given most often for students' choices. Nineteen of the 95 students who responded reported having changed majors at least once after the original declaration, and they reported further refinement of interests and goals when explaining those changes. Slightly over half reported that their grade point averages had improved once they declared a major.

Conclusions and Recommendations

Over half of the students in the cohort we examined either declared a major after beginning in General Studies or changed their major at least once by the end of the junior year. The great majority of those who responded to our surveys reported satisfaction with their decisions and reported that they had based their decisions on evolving interests and career goals. Most reported increased academic success in new majors because of heightened interest and motivation.

Where there is uncertainty about a major, entering freshmen should be encouraged to carefully consider the General Studies option as a means to explore interests and career options before choosing a major field of study. Faculty and staff should support students in continuing to explore new options as they move through their college experience, especially during the first two years. The sophomore year seems to be a critical year for the crystallization of interests. Academic advisors should be coached to ask students about possible new goals and interests, rather than taking for granted that students will remain in the original major. If students express uncertainty about their focus, advisors should either be open to spending time discussing these things or to referring students to the Academic Advising office, the Career Development office, and/or the Counseling Center.

GENERAL OBSERVATIONS AND RECOMMENDATIONS

In addition to program assessment analysis, the task group was asked to answer the following question: "What college-wide steps need to be taken for improvement in student outcomes related to academic programs?" In addition to the recommendations made in the individual sections of this report, the task group makes the following general observations and recommendations:

- Evidence from the reports shows that many departments have well-structured goals and processes, particularly those that have experience or a genuine interest in student outcomes assessment. All departments have made an earnest attempt to describe what they expect of their students. For some, this is the first time they addressed the issue of student goals and outcomes. But, there is a general need to formulate the goals more specifically so that assessment criteria can meaningfully relate the outcomes to the goals. Departments need to focus on goals and assessment instruments that could lead to program improvement. Some departments, for example, list information about their graduates' occupations but do not seem to be clear about how it will be used in the assessment process (how will the finding that X% of a program's graduates find jobs be used to improve the program?). Furthermore, in

some departments, there is a need to clarify the relationships between the findings and the stated goals. Sometimes a finding has no explained relationship to the goal it is said to assess, and in some of the reports there is little attempt to relate outcomes to any specific goal.

- There is also a need to clarify the difference between student learning outcome goals and program input goals. Some of the confusion is mainly verbal -- e.g., "prepare students for a lifetime of intelligent participation..." really means "students will acquire the skills and knowledge that will prepare them..." But sometimes the confusion is real, e.g., "provide a nurturing teaching-learning environment" is a faculty goal, not necessarily a student outcomes goal (faculty could nurture, but students could still fail to achieve). Some of the departmental reports list numerous very complex goals that may need much discussion concerning the nature of assessing outcomes, and some list uses of the outcomes that show a certain conceptual confusion. It is not clear, for example, why some departments indicate a need to revise their curriculum or courses or "establish tutoring" when in fact they indicate that their goals have been met.
- It is also clear that the campus needs an open discussion on the use of grades in the assessment process. Experts indicate that good techniques usually call for assessment beyond the course level and encompass a process of examining the integration of the student's learning across courses rather than from a specific course. The key problem of using course grades for assessment is that they may not necessarily indicate the disaggregated achievement (or lack of achievement) by the student for separate goals the department is trying to accomplish. One student may receive an A in a course while another receives a C. But the C student may achieve a higher degree of accomplishment in one of the assessment goals than the A student. This disaggregated goal achievement may be lost in relying heavily on grades as assessment indicators. The pros and cons of grades in assessment need to be addressed in light of their usage on campus.
- Departments need to focus on what is doable given their time and resource constraints. One conclusion is relatively strong: some units by their nature are better positioned to assess their students' progress. These units tend to require highly visible work or public demonstrations on which to base their assessments: e.g. art portfolios, laboratory procedures, and musical and theatrical performances. Each unit should try to find the modes of assessment best suited to its discipline. The College should respect, encourage, and reward these efforts. At the same time, departments and programs should coordinate their efforts and exchange information, especially among units in related disciplines. Departments such as Psychology, History, Biology and others that have some experience in the assessment process could provide a valuable mentoring role in the further development of ongoing outcomes assessment.
- A variety of assessment tools is being used across the campus, yet some departments rely heavily on one or two assessment devices to measure student outcomes. As time permits, those departments may want to explore the use of multiple assessment instruments to better evaluate student progress toward program goals.
- In general, department assessment reporting is verbose and in some cases beyond that needed for efficient student outcomes reporting. If the college is committed to ongoing assessment reporting, there is a need to involve the departments in the development of a uniform, concise continual reporting format for student outcomes assessment.
- Departments with graduate programs should consider developing an assessment process with goals that clearly differentiate these programs from their undergraduate programs.
- There is a need to involve the Office of Institutional Studies more extensively in the assessment process and to develop with the departments and the college ongoing assessment data series such as that used for examining the change of major.
- The responses to this study from departments and other units indicate that there is a need to reach a consensus about what assessment is, what it should do, or how it should be done. The process of outcomes assessment is relatively new to some departments and many have new or proposed techniques in progress. As mentioned above, there is some confusion about the meaning of outcomes, instruments

and uses of assessment. Efforts must be made to "educate those who educate" to enable them to respond knowledgeably to these problems. If there is to be meaningful ongoing assessment on campus, there is a need for a campus-wide dialog on the nature and meaning of student outcomes assessment, the techniques of assessment and the time and resources needed for assessment. Some of the responses, as well as anecdotal comments to the task group, indicate that some faculty do not see either the value or the validity of formalized assessment procedures and regard them as a time-consuming redundancy and an encumbrance on the forward movement of the educational process. These concerns must be aired and debated. A perusal of the documents on good assessment shows a general consensus that assessment procedures that are forced upon an unwilling faculty will surely fail. Outcomes assessment must be departmentally driven. Some of the initial departmental concerns that must be addressed are noted by assessment consultant James Nichols: "Why is our department being asked to implement educational outcomes assessment activities? What specifically is expected as a result of the department's efforts and by when? What are other components of the institution being asked to accomplish and how should our departmental implementation relate to theirs? What coordination, technical expertise, and/or logistical and financial support can the department expect from the institution's central administration? Is there a standardized institutional form or format for recording departmental assessment activities?"

- Given the above concerns, the college should investigate the creation of a coordinating body such as an assessment committee of faculty representing department groupings and an assessment coordinator or coordinators to assist departments and the General College Program in the development of assessment techniques and the development of an ongoing assessment process. The need for such a body is recognized by institutions heavily involved and respected in the student outcomes process such as Ball State University, Ohio University, Eastern New Mexico University and others who have either an office of assessment or coordinators and/or standing committees for assessment. Ohio University, for example, after being cited for a lack of assessment-in-the-major by the North Central Accrediting Association during a 1993-94 review, developed a highly integrated plan of outcomes assessment with a Policy Committee on Assessment and a coordinator guiding the departments. The Committee focused on processes of faculty involvement and motivation, resources and rewards, goal integration, reporting systems and outcomes usage. It has well-defined duties that are clearly focused on assisting departments in their development and implementation of assessment plans on one hand, and assisting the college in the development of an ongoing linkage of departmental plans to college goals on the other. This appears to be a reasonable approach to recommend for Fredonia.

References

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INTELLECTUAL GROWTH AND DEVELOPMENT

This task group was given the charge to assess the extent to which Fredonia students are being intellectually challenged and the extent to which we affect their intellectual values. In preparing its report the task group relied primarily upon findings from the following sources:

- The *College Student Experiences Questionnaire* (CSEQ) was given to 474 freshmen, sophomore, junior and senior students in the fall of 1998. This is a nationally normed survey that asks students to indicate how they use their time in college. Included are questions about library use; course learning; writing experiences; experiences with faculty; the students' involvement with art, music and theater; the nature of their interactions with other students; the types of conversations they hold with others; their reading, etc. Respondents are asked to comment on the college environment and to provide an estimate of the gains in learning they believe they have made while at college. Fredonia prepared twenty additional questions for the CSEQ to provide the college with information specific to the Middle States review. (See Appendix K8.)
- The *Middle States Student Survey* was administered to 199 students at all class levels in the fall of 1998. This survey was designed to provide information on the range of learning experiences open to our students, the value they attach to these experiences, and the extent to which the college is a supportive learning and social environment for individuals from differing ethnic, racial and cultural groups. (See Appendix K9.)
- The *Middle States Faculty Survey* was completed by 122 faculty members in January 1999. This survey was designed in part to provide us with faculty responses to a variety of questions asked of students on the CSEQ or the Middle States Student Survey. (See Appendix K10.)
- *Focus group discussions* were held with undergraduate students. The total number of students was small (N=15), so the results of these discussions must be cautiously used. These groups included students with high GPAs, students on probation and students who fell into the mid-range on grades. Each group was asked a set of questions under four headings: study habits, class experience, student curiosity and motivation, and, finally, intellectual values.
- Additional reports and studies are identified elsewhere in the text of the chapter.

INTELLECTUAL CHALLENGE

Student And Faculty Perceptions Of Challenge

Fredonia students report that they find their courses intellectually challenging. When asked on the CSEQ to rate the challenge of their courses, 88.5% responded that their classes are either extremely or moderately challenging. Responses by class level differ little from overall responses, with upper division students rating their courses slightly more challenging than lower division students did. Responses by academic grouping vary somewhat. At the high end, 32.8% of natural sciences students rated their courses extremely challenging; followed by general studies (undeclared) students, 32.0%; social sciences students, 27.0%; education majors, 23.8%; fine arts students, 22.7%; and humanities majors, 21.4%. A substantial majority of our students at each grade level and in all academic divisions report that their courses are challenging.

All of the students in the focus groups reported being challenged by their courses. None reported being too challenged. There seemed to be a consensus that the level of challenge was "about right." None of the students expressed a desire for a more challenging environment at Fredonia.

What do faculty report? Faculty were asked on the *Middle States Faculty Survey* to rate the extent to which their courses intellectually challenge their students. A total of 42.7% said that their 100-200 level courses challenge their students a great deal; 55.9% said that their 300-400 level courses challenge students a great deal. Though the questions asked of students and faculty were not identical, the responses indicate that our

students and faculty consider Fredonia's courses quite challenging, and that faculty perceive their courses as more challenging than the students do.

Hours of Study - Student Reports

It is encouraging that students indicate that they are challenged by the curriculum, but these results must be evaluated in light of the data indicating that a substantial number of students do not spend very much time on their academic work. Students were asked on the CSEQ to indicate the number of hours per week they usually spend outside of class on activities related to their academic program, including such activities as studying, writing, reading, lab work, rehearsing and the like (Table 1).

Table 1

“During the time school is in session, about how many hours a week do you usually spend outside of class on activities related to your academic program, such as studying, writing, reading, lab work, rehearsing, etc.?”

5 or less hrs. weekly	14.4%
6-10 hrs weekly	33.0
11-15 hrs weekly	22.0
16-20 hrs weekly	14.0
21-25 hrs weekly	8.9
26-30 hrs weekly	4.7
more than 30 hrs	3.2
Total	100.0%

More than 47% of our students spend 10 hours or less on out-of-class academic work. A similar question was asked later on the CSEQ (ADD5). In this question students were asked to indicate the total number of hours they spend on their academic work, including the hours each week spent in classes. See Table 2, below.

Table 2

“During the time school is in session, about how many hours a week do you spend on activities that are related to your school work? This includes time spent in class and time spent studying.”

About 50 hours a week or more	8.7%
About 40 hours a week	19.7
About 30 hours a week	32.5
About 20 hours a week	27.3
Less than 20 hours a week	11.7
Total	100.0%

Almost 40% report that they spend 20 or fewer hours per week on their academic work, which includes time spent in class. Only 1.7% of the students responding were part-time (fewer than 12 credit hours), so this group of 8 respondents has a small impact on the outcome. Class level has a modest impact on the hours spent on school work. Forty-two per cent (41.7%) of freshmen and sophomores spend 20 hours or less on their work, while 36.2% of juniors and seniors spend 20 or fewer hours. In contrast, 26.5% of the freshman and sophomore respondents devote 40 or more hours to their studies (including class time), while 29.9% of juniors and seniors give 40 or more hours to their work. There is, it seems, a modest increase among upper-division students over lower-division students in hours devoted to academic work.

Some differences are apparent in hours of study among the academic divisions. More than 50% of students majoring in the natural sciences, the social sciences, the humanities and general studies report 10 or fewer hours of study weekly. In contrast, 22.7% of fine arts students spend 10 or fewer hours weekly on academic work, while 32.5% of education majors report spending 10 or fewer hours.

On the CSEQ question which asks students to identify total weekly hours of academic work combining class and out-of-class activity, 36% of fine arts students reported 50 or more hours. Only 8% of the next highest academic grouping reported 50 or more hours. When asked to indicate the number of out-of-class hours on academic work alone, only 4.5% gave a commensurate answer. Is there an inconsistency in these responses? We think not. The line dividing classroom-based from out-of-classroom based work for fine arts students is blurred because these students are so heavily involved in productions and rehearsals. For them, the better question asks for total, undivided hours of work. We conclude that 36% of fine arts students are very probably working 50 or more hours on their studies, as indicated in responses to this question.

Is there any relationship between the number of hours reported of out-of-class work and perception of challenge? The data indicate a weak but significant correlation between the number of hours spent on out-of-class academic work and whether students feel that their classes are challenging. Students who spend more time on their academic work view their classes as more challenging. Students who rate themselves as more intellectually challenged by their courses also rate themselves as using computers more. They participate more in courses and complete course reading assignments more often. They report putting more time and preparation into writing assignments, having more interactions with faculty and more interest and participation in science and math. There is also a relationship between being intellectually challenged and having a positive overall opinion of the college.

Other significant relationships exist between hours of out-of-class academic work and measures of intellectual growth and development. Responses on the CSEQ point up moderate but significant correlations between hours of study and scores on the scales for library use; course learning; writing experiences; experiences with faculty; and involvement with art, music and theater.

A survey of incoming freshmen was conducted during Summer Orientation in July 1998 (See Appendix K11.) These soon-to-be freshmen were asked to indicate the total number of hours they *expected* to devote to class and study time during the time school is in session. In advance of their arrival, 15.9% of freshmen said they expected to spend 20 or fewer hours per week on school-related work, while 36.9% expected to spend 40 or more hours per week. In contrast, 43.4% of the freshmen reported on the CSEQ four months later that they were putting 20 or fewer hours into their work. Only 28.4% were working 40 or more hours per week. Responses to these questionnaires indicate that freshmen apparently are studying far less than they expected to when asked soon before their arrival. One would expect first time students to overstate the number of hours they will study when they arrive at college, but the difference in expectations and behavior among freshmen is striking.

Incoming freshmen were asked in the *New Student Survey* how challenging they expected their classes to be. A total of 22.2% expected them to be extremely challenging. A slightly higher number, 24.5%, indicated on the CSEQ that they found their courses extremely challenging. How do responses vary regarding the number of written reports freshmen expect to write during the academic year? In the summer, 9.2% of the freshmen expected to write fewer than five reports, while 8.3% expected to write more than 20. Four months later their expectations had changed in both directions: 21.4% expected to write fewer than five, 19.5% more than 20.

Most focus group students reported that they study between 10 and 15 hours weekly, an amount they thought was reasonable given the demands of their courses. The group of high GPA students reported studying more than 20 hours in a week. One student with a mid-range GPA reported studying 10 hours weekly at most. This student vouched that her study habits had declined, meaning she was doing less of it, since coming to college (she was not as scared now as in the freshman year). Most of the students spent about as many hours watching television as studying. Two high GPA students did not have a television in their rooms and rarely watched television. One student indicated that she watches television more hours than she studies. The impression left with the members of the task group is that most students have a television in their rooms and that it is frequently on.

The students generally report spending more time studying for courses in their major, less time, in some cases much less time, on courses which are part of the general college program. Most study more than when they were freshmen. Most also study alone, finding that group study too easily becomes a social activity or one in which the responsibility is not equally shared.

Students were asked what kinds of outside activities influence their study habits. Six of the fifteen students are employed (a higher percentage than for the campus as a whole). None felt that their academic performance suffers as a result of employment. Several students are involved in activities of some sort, campus organizations, being a resident assistant in a dorm, sponsored athletics or intramural sports. These activities require them to manage their time more carefully, but none felt that these commitments hamper academic performance.

Hours of Study - Faculty Views

How do faculty estimates of student study hours compare with the self-reports of students? They were asked on the *Middle States Faculty Survey* how many hours per week they think students usually spend outside of class on activities related to their academic program (studying, writing, reading, lab work, rehearsing, etc.). A total of 41.5% of the faculty responded that they think students study 10 or fewer hours weekly, although we don't know whether they interpreted this to mean the average student, all students, or most students. Recall that 47.4% of the students told us they study 10 or fewer hours per week. Faculty were asked what they think is the number of hours per week the (presumably) average student studies, while each student was asked the actual number of hours he or she studies. These questions do not yield strictly commensurable results, but taken independently they yield important information. If we hold to the traditional view that a student should spend about 2 hours of out-of-class study per week for each credit hour enrolled, it is clear that many of our students are falling well below this standard. It is clear as well that many faculty members believe a large group of students are devoting far too little time to their studies. These findings raise a serious question. Can a significant number of the students who tell us they are challenged by their courses be truly challenged when they are putting so little time into them?

Hours of Student Employment

Faculty and staff commonly believe that a large number of students are employed, many of them for long hours. We attempted to ascertain whether faculty perception of student employment matches the students' self-reported incidence of employment. Unfortunately, the question put to faculty on the *Middle States Faculty Survey* is ambiguous. The question asked of faculty on the survey was this: "During the time school is in session, about how many hours a week do you think students spend working on a job for pay"? Faculty responding to this question might have thought they were being asked to estimate the number of hours worked per week among those students who are employed (respondents were not able to choose 0 hours worked to account for the number of students without jobs). Or, alternatively, they might have intended to indicate the average number of hours worked weekly by all students. Ambiguity aside, 25.4% of the faculty think students (most students, the average student?) are employed 1-10 hours weekly; 59.3% think students work 11-20 hours weekly.

Does employment have much impact upon our students' propensity to study? It seems not. Nearly 44% of respondents on the CSEQ report that they are not employed either on or off campus. Among those who are employed, 52% report no interference with their school work, while only 8% report that employment takes a lot of their time. Among those who work, a relatively small number report that employment has much impact on their study habits.

Incoming freshmen were asked in the July 1998 *New Student Survey* how many hours they expected to work for pay during the time school is in session. More than a third (36.2%) did not plan to work during the school year; 33.8% expected to work less than 10 hours each week. On the CSEQ almost 57% of fresh/soph respondents indicated that they were not employed, while 23% were working 10 or fewer hours weekly. As noted previously, juniors and seniors are devoting more time to their studies than freshmen and sophomores and are more likely to be employed (65% vs. 43%). Among those students who have jobs, juniors and seniors tend to be employed more hours per week. Based on the responses to the CSEQ there is no relationship between grades and hours of employment. Employment does not seem to limit study time for most of our students.

Substantive Measures of Challenge

The CSEQ includes a broad range of questions that relate to such matters as library use; course learning; writing; interactions with faculty; involvement with art, music and theater; involvement with campus clubs and organizations; scientific and quantitative experiences; the kinds of conversations students hold and the amount of student reading. Responses to a number of these questions provide insight into the extent of challenge Fredonia students experience.

Library Use

Three of eight library-use items point to the question of challenge. One third of the students have never found something interesting while browsing in the library. Nearly seventy per cent never or only occasionally read assigned materials on library reserve. Sixty per cent report never having gone back to read a basic reference or document that other authors referred to. Nevertheless, Fredonia students scored slightly higher on the eight item library scale than students at comprehensive colleges and universities nationwide.

Course Learning

One quarter of the students report only occasionally completing the assigned readings for class. When the responses are tabulated by GPA, we find that students reporting high GPAs are substantially more likely to indicate that they usually complete reading assignments than students with lower GPAs.

Faculty were asked a similar question on the *Middle States Faculty Survey*. Approximately 50% of the faculty believe that students in their 100 and 200 level courses complete the assigned readings before they come to class about half the time or more. An equal percentage report that they believe the assigned readings are completed half the time or less. For 300 and 400 level courses, 79% of the faculty reported that students complete assigned readings before class about half the time or more, whereas 21% of the faculty believe that students complete assigned readings before class about half the time or less. Almost certainly the faculty would report higher rates of course reading completed over the duration of the semester, but there remains little doubt that a substantial percentage of the faculty believe that students are not completing (or coming close to completing) assigned reading.

Thirty per cent of the students have never or only occasionally worked on a paper or project integrating ideas from various sources, while 70% report that they have done so often or very often. We should note that responses to a number of the course learning questions indicate that substantial numbers of students are doing the right things in class--taking detailed notes, participating in class discussions, summarizing information from class notes and reading, and so on. What the data indicate is that there is a good deal of variation or spread to these responses--many students apparently doing things right, many not. Fredonia students scored slightly higher on the course learning scale than the national average among comprehensive colleges and universities.

Writing Experiences

Almost 50% have never (16.2%) or occasionally (32.7%) revised a paper or composition two or more times, while the other 50% have done so either often (28.3%) or very often (22.8%). While most students have at least occasionally asked an instructor or staff member for advice or help to improve their writing, more than a third have never done so. Fredonia students scored at the national average on the writing scale.

Experiences with Faculty

Do students work harder due to instructor feedback? Twelve per cent (12%) said never; 37% said occasionally; 36% said often; and 36% said very often. Have they worked harder than they thought they could to meet faculty expectations? Almost 20% report never having done so, while 39% indicate they occasionally have done so, 29% often have done so, and 12% very often have done so. The mean score for Fredonia students on the experiences with faculty scale was slightly higher than the national average (20.77 vs. 20.27).

Scientific and Quantitative Experiences

Twenty-seven percent (27%) have never used mathematical terms to express a set of relationships, whereas 73% have at least occasionally done so. More than 60% never read non-assigned articles about scientific or mathematical theories or concepts. Forty-five percent have never completed an experiment using scientific methods, whereas 55% have at least occasionally done so. Although the Fredonia mean score on the scientific and quantitative experiences scale was the next to lowest among the quality of effort scales ($m=19.11/40$), it was still slightly above the national average.

Reading and Writing

Students were asked to indicate the number of textbooks or assigned books they have read during the current school year. Responses to the question may not be too helpful, given that the CSEQ was administered in mid-November, about two thirds of the way through the first semester. In any case, 37% noted that they had read five or fewer assigned books. Unfortunately, we do not know whether they are telling us that they have *finished* five or fewer books, or read from this number. More instructive are responses to the question on the number of unassigned books read by the students (again, by mid-November): 41% report having read no unassigned books; 45% report reading between one and five books. Focus group students reported limited outside reading. Four students described themselves as voracious readers while most indicated they do little or no reading that is not assigned for a course. Few read a newspaper (other than the weekly campus newspaper, *The Leader*) or a newsweekly. Finally, a locally added question asked students how many written reports they expect to complete during the academic year. Twenty per cent expected to write five or fewer papers during the year, 33% expected to write between 5 and 10, 32% between 10 and 20, 13% more than 20.

Review of Course Syllabi

In the fall of 1993, the Faculty Council and Fredonia's president jointly established a committee of faculty and academic administrators to study the structure and coherence of the undergraduate curriculum. As part of this study, the committee reviewed virtually all syllabi for courses given in fall 1993. The committee was particularly interested in developing a profile of the kinds of reading and writing students are engaged in as they move through the curriculum. Deriving this information from course syllabi proved to be very difficult because descriptions of course requirements varied substantially from syllabus to syllabus. The committee followed this review with a survey of faculty in the fall of 1994 that requested information on a standardized form. This clarified the picture somewhat, but still left the committee with only sketchy results.

Bearing this in mind, what did the committee uncover? First, 69% of reporting faculty indicated that they require out-of-class papers of some sort. As expected, the amount of writing varied by academic grouping. Fifteen per cent (15%) of courses from responding faculty in the natural sciences and mathematics employed papers of any description. For the humanities, the corresponding figure was 90%, while for the social sciences it was 79%, for the fine arts 74%, and for professional programs 74%.

Second, in comparison with courses at the 200, 300 and 400 level, writing in 100 level courses tends to emphasize papers of 1-2 pages. However, there does not appear to be much variation in the length of papers or the amount of writing between 200, 300 and 400 level courses. Third, 13% of all courses represented in the survey require a paper of 10-20 pages (9% of 100 level courses, 18% of 400 level courses). Only a small fraction of courses require the traditional term paper, i.e., a research paper of 20 or more pages undertaken during the course of the semester.

Fourth, a substantial number of Fredonia's courses require textbooks, especially at the 100 level. In the natural sciences 83% of the courses identified in the survey rely exclusively upon a textbook (and lab manuals in some cases) for required reading. Substantially smaller percentages among the social sciences, humanities, the fine arts and professional programs require textbooks alone. The amount of reading appears to go up from the 100 to 300 level, while no apparent increase is detectable between 300 and 400 level courses. (See *Curriculum Task Force, Partial Analysis of Course Requirement Reports*, Fall 1994.)

A review of syllabi for courses completing a requirement of Fredonia's General College Program was done in the spring of 1993. A total of 181 GCP syllabi were reviewed. In 98 of the courses represented by these

syllabi, the required reading was confined to a textbook. In 144 of the courses, a textbook was either the sole required reading or was part of the assigned reading. (See *GCP Newsletter*, Vol. XI, No. 12, April 8, 1993.)

Academic Probation Students

In examining academic challenge, it may be instructive to examine students who have been placed on academic probation. Fredonia students who achieve a cumulative grade point average of less than 2.00 (4.0 scale) are placed on academic probation. They remain on probation until their GPA is raised to 2.00 or higher, or until required to withdraw from the college.

At the conclusion of the Fall 1995 (F 95) semester, 250 matriculated students were placed on first time probation. (This number excludes students who were previously placed on probation and continued on probation following the F 95 semester.) This group included 140 freshmen (56% of those on first time probation, approximately 15% of the freshmen admits for F 95). In F 95, freshmen were 21% of total undergraduates. In addition, 39 sophomores (16%), 63 juniors (25%) and 15 seniors (6%) were placed on first time probation. All but 5 of the juniors were new transfer students. Of the 250 first time probation students, 48% were men, compared to 44.1% of undergraduates on campus that semester.

In terms of their proportions on first probation at the end of F 95, freshmen are underrepresented in the RW (required withdrawal) and FP (final probation) groups following Spring 1996, and over-represented in OP (off probation). Men are somewhat overrepresented in general, and markedly in all RW categories.

Of the 140 freshmen, 50 (36%) were seniors as of Spring 1999, 7 (5%) were juniors, and one was a sophomore. The persistence rate for these 140 F 95 probation freshmen, therefore, was 41%, considerably lower than the college average for all freshmen, which has varied from 55.8-72.4% over the last ten years. This is expected given the weakness of this group of students.

Comparing students (of the 250 first time probation after F 95) who were off probation in S 96 to those who were RW in S or F 96, there are no sharp distinctions in F 95 GPA or in quality point deficiency. Although the modal GPA of both freshmen (53) and upperclassmen (30) in the OP group was 1.90-1.99, the modal GPA of upperclassmen (30) in the RW group was also 1.90-1.99 (freshmen [28] had modal GPA of 1.40-1.49).

We can draw no firm conclusions from the data on probationary students from the F 95 term without examining the data from prior semesters. This was impractical given the conversion to a new administrative software system that the college has undertaken. However, these findings do invite some comment.

First, given the small number of hours many freshmen are devoting to study, it is not surprising that 15% are placed on probation following their first semester of college. We expect a larger per cent of freshmen to stumble, but it seems that an unnecessarily large number of them are doing so because they work too little rather than because they cannot meet the academic requirements of their courses. If this were not so, we would not expect to see freshmen overrepresented among the students who leave probation after S 96.

Second, male students are more likely to be placed on probation and less likely to get off probation before being required to withdraw. We do not know why, though this is a matter worth investigating further.

Third, accounting, biology, business, general studies, psychology and interdisciplinary studies majors were significantly overrepresented among the 388 students who were on probation or final probation after F 95. Four of these majors are housed in three of the five departments that have the highest faculty-student advisee ratios on campus: Biology, Business Administration and Psychology. A discussion of faculty advisement is included in the chapter on Campus Climate. Of the probation students, the largest percentage of biology majors got off probation in S 96, followed by education majors and then general studies students. Of the final probation students, the largest per cent of psychology majors got off probation in one semester. We can draw no conclusions from these results, though we wonder if access to one's advisor is implicated in the likelihood of being placed on probation.

Conclusions

We believe the conclusion to be drawn from student self-reports and faculty judgments is clear: devoting 10 or fewer hours weekly, more than 40% of our students are spending too little time on their studies. Class level has a positive, but minimal influence on hours of study. A significant number of juniors and seniors, 36%, tell us they are spending no more than 10 hours studying each week. Hours of study differ by academic division, but the differences are no cause for satisfaction. As noted, more than 50% of students majoring in the natural sciences, the social sciences, the humanities and general studies report 10 or fewer hours of study weekly. Assuming that 16 hours per week is a minimum commitment to one's studies, the results of the CSEQ indicate that only 30% of our students meet this standard by their own report. The faculty apparently holds a similar view; only 24% of the faculty believe that students are studying 16 or more hours per week (*Middle States Faculty Survey*). Fredonia students indicate that they feel challenged by their courses, yet substantial numbers of them are not studying very much. Fredonia faculty report that their courses are challenging, yet they, too, note that many students study too little to meet the challenge of their courses.

However, Fredonia students scored lower than students in the national sample of comprehensive colleges and universities on only two of eleven quality of effort scales from the CSEQ, the scale identifying involvement with campus clubs and organizations and the scale that examines the kinds of interactions students have with their acquaintances. This suggests that our students match the behavior of their peers in comparable colleges and universities nationwide, or maybe even apply themselves more diligently to their work than their peers around the country. Nonetheless, we conclude that this is no basis for satisfaction. Too many Fredonia students are not being challenged as they should be. Their numbers *may* be smaller than one would find at comparable institutions, but this does not diminish the weight of our findings.

CURIOSITY AND INTELLECTUAL VALUES

Classroom Learning

The intellectual values of our students can be inferred, though cautiously, from the kinds of classroom experiences they find most valuable. Some insight into what students value is given by responses on the *General Student Survey on Diversity*. This survey comprises the second half of the *Middle States Student Survey*. Students were asked to rate the value (very valuable, somewhat valuable, not valuable) placed by the faculty on a number of items related to instruction. They were then asked to rate the importance they attach to each of the items. Items included information from texts, lectures and audience (presumably peer) experiences; small group work; exams, both essay and objective; papers, short and long; oral presentations; regular homework; and class attendance.

There are a number of findings from the relative weights students attach to these items. First, information from lectures is most often rated very valuable in the students' own judgment (66.4%), followed by class attendance (59.2%). Students are more ambivalent about the value of information from texts, 32.4% ranking it very valuable, with nearly 10% ranking it not valuable. Indeed, the value attached to information from texts is ranked at the lower end of the list. Interestingly, students perceive the widest disparity between their judgment of the value of texts and their perception of the faculty's judgment: a spread of 24.7 percentage points. A nearly identical disparity is noted concerning judgments of small group work, students favoring it by 24.6 percentage points over the value they think faculty attach to it. Second, by a small margin students seem to value essay over objective exams, a preference we noted as well among the focus group participants. Third, they ascribe greater value to short over long papers (45.2% very valuable vs. 26.4%). Fourth, nearly half the students (44.8%) indicate that they think regular homework is very valuable—more valuable than they think the faculty hold it to be (a perception they also hold about class attendance). The finding regarding regular homework is supported by comments from some students during our focus group discussions. They recognize that regular homework (and required attendance) provides an inducement to stay focused on the material required in the course.

The chapter on Campus Climate provides a detailed discussion of the methods of instruction at Fredonia. There is no need to cover this ground here. However, one question from this discussion can be usefully

examined in this section. Students and faculty were asked on the Middle States surveys to rate on a scale from 1 (not at all) to 5 (very much) the extent to which a group of changes would improve student learning at Fredonia. Items included smaller classes, greater use of instructional technology in class, more quiet places to study, higher academic standards, more frequent meetings with faculty advisers, more faculty office hours, and better chance of getting courses students want. Responses of each group diverge considerably. Faculty rank higher academic standards first, students rank this item last. Faculty and students differ widely over the benefit of smaller class size (more favored by faculty) and increased faculty office hours (students weighing this more favorably than faculty). There were no significant differences in responses by class level. However, students with higher GPAs were significantly more likely to support an increase in academic standards to improve the climate for learning at Fredonia.

Three items from the Course Learning scale of the CSEQ are also instructive on the question of intellectual curiosity. Forty-three per cent (43%) of the students either never (3%) or occasionally (40%) contribute to class discussions, while 57% participate either often or very often. Similarly, 35% work to put together different facts and ideas from their courses either never or occasionally, with 65% doing so often or very often. Thirty-seven per cent (37%) apply material learned in class to other areas either never or occasionally; 63% do so often or very often. There is, quite plainly, a spread of responses to these questions, permitting us to infer that there is also, plainly, a spread among our students from those who have little confidence or interest in pressing themselves intellectually to those with considerable confidence and interest in doing so.

What do we learn by examining the data by class level? Responses to each of these questions show a strong upward trend as students move through the curriculum. The extent to which our students contribute very often to class discussion moved from 20% among freshmen to 29% among seniors. The percentage of students who very often put together different facts and ideas increased from 20% to 50% from the freshmen to senior year. While 15% of freshmen report applying class material to other areas of their lives very often, 44% of seniors report doing so.

All students in the focus groups commented that going to class is valuable (paraphrasing: if you go to class it is probably impossible to fail; or, I feel guilty if I don't go to class). Some students thought class attendance should be required. This helps students stay focused on their studies. They were more likely to attend classes in their major, less likely to attend a general education class. There was no consensus on the kinds of classroom activities they find most valuable. Some thought small group work and discussion groups are useful; others thought group work a waste of time. Most commented on the importance of using a variety of learning activities in the classroom (lectures, class discussion, guest speakers, paper and pencil exercises, films, etc.). While the students generally expressed satisfaction with the way faculty conduct their classes, some noted that too many faculty seem unprepared for class, particularly faculty giving general education courses.

One group was asked how class size affects their behavior or performance in a course. They thought small classes (30 or fewer students) are good because students "feel more comfortable talking in a small class." Larger classes are intimidating to the less confident students. So smaller classes are livelier. They permit more contact with the faculty member as well.

Focus group students were also asked to comment on what motivates them to work hard in a course and in school. The readiest response from students was "getting a job." One student pursuing one of our professional studies majors referred to the drive to get a job as "kind of scary." Earning high grades was also emphasized in its connection with finding a good job or beginning a career. One student emphasized the importance of being challenged by her courses. The high GPA group of students emphasized the importance of being well-rounded, knowledgeable persons.

How often did students explore a topic of personal interest (not for a class requirement)? One student, who confessed to being undisciplined in her studies, remarked that she spends a great deal of time exploring such topics—too much time. Most of the other students told us that they infrequently pursue a subject that is not required for a course. However, two high GPA students told us they read a great deal on their own (the other two high GPA students reporting little on their own). None of the focus group students were regular newsreaders. What information they acquire about the world comes largely from television. One student expressed appreciation for PBS.

Experiences With Faculty

The CSEQ asks students a number of questions about their experiences with faculty. One question asks them how often during the current school year they have discussed ideas for a term paper or other class project with a faculty member. One quarter of the students (25.2%) report never having done so, 31% often or very often. Nearly half the freshmen (47%) report never having done so (though, recall that the survey was given in mid-November). If we focus on the percentage of students who discuss their projects with their faculty either often or very often, we observe that 18.3% of freshmen do so while 42.6% of seniors report doing so (sophomores, 24.4%, juniors, 30.4%).

A substantial number of our students are apparently not asking their instructors for comments and criticisms on their academic performance. Almost half the freshmen tell us that they have not sought comments of this sort from their teachers, but neither have forty per cent of sophomores and juniors. Among seniors, the group who never hold such discussions with their faculty drops to 24% (still not a small number). At the other end of the scale, 17% of freshmen and 30% of seniors ask their instructors about their performance either often or very often.

Students were asked this question on the CSEQ: “During the current school year, have you worked harder than you thought you could to meet an instructor's expectations and standards?” Twenty percent (20%) said they had not. How does this number change when compared by class level? The percentage of students who never work harder (than they thought they could) to meet faculty expectations moves down from 27% of the freshmen to 10% of seniors, while the percentage who often or very often work harder increases progressively from 32% to 50%.

One third (34.5%) of our freshmen and sophomores report on the CSEQ that they have no interactions with faculty outside the classroom. The number having no out-of-class interactions with faculty is reduced to 18.5% among juniors and seniors. Put differently, two-thirds of the students who have no out-of-class contact with faculty are in their first or second year of studies. To what extent do students think participation with faculty in their research or creative activity contributes to learning? Among those who have participated with a faculty member, the responses vary. Forty-two per cent (42%) of freshmen and sophomores report very little impact on learning, with 21% saying that it had quite a bit or much impact. In contrast, 21% of juniors and seniors concluded that their involvement had very little impact, with 34% saying it had quite a bit or much impact.

Student Conversations

What students talk about gives us some insight into the nature of their intellectual life. We think of the college years as an opportunity for students to examine their views about the fundamental questions in life. Indeed, the college claims that the purpose of its general education program—really, the entire curriculum—is to “help students understand human society and their relationship to it. But it should also enable students to develop as individuals with a fundamental philosophy or basic world view that is consciously personal, yet based on an awareness of culture, history, and society.” (*Undergraduate Catalog 1999-2001*) Some indication that this is happening is provided by information about the topics of their conversations with others. The CSEQ asks students the following question: “In conversations with others (students, family member, co-workers, etc.) outside the classroom during this school year, about how often have you talked about each of the following?” The response rates for freshmen and seniors for each item are provided in Table 3.

Table 3
Topics of Conversation by Per Cent of Freshmen/Seniors

	Never Fr/Sr	Occasionally Fr/Sr	Often Fr/Sr	Very often Fr/Sr
Current events in the news	3.8/1.7	52.6/40.9	35.3/31.3	8.3/26.1
Social issues, such as peace, justice, human rights, equality, race relations	13.9/7.8	58.2/35.7	19.6/35.7	8.2/20.9
Different lifestyles, customs and religions	8.9/7.8	50.6/33.0	29.1/42.6	11.4/16.5
The ideas and views of other people such as writers, philosophers, historians	36.1/18.3	45.6/39.1	11.4/26.1	7.0/16.5
The arts (painting, poetry, dance, theatrical productions, symphony, movies, etc.)	17.1/13.9	44.9/40.0	20.9/16.5	17.1/29.6
Science (theories, experiments, methods, etc)	51.9/36.5	41.8/38.3	4.4/12.2	1.9/13.0
Computers and other technologies	19.6/13.0	49.4/37.4	25.3/33.9	5.7/15.7
Social and ethical issues related to science and technology such as energy, pollution, chemicals, genetics, military use	34.2/19.1	49.4/50.4	11.4/22.6	5.1/7.8
The economy (employment, wealth, poverty, debt, trade, etc)	25.9/7.0	51.3/39.1	18.4/37.4	4.4/16.5
International relations (human rights, free trade, military activities, political differences, etc.)	30.4/14.8	48.7/53.0	13.9/18.3	7.0/13.9

What conclusions can we draw from these responses? First, the frequency with which students hold conversations on these topics goes up with class level, particularly conversations involving current events, social issues, the ideas of others (such as writers, philosophers and historians) and science (theories, experiments, methods). Second, while students discuss all of these topics more often as they move through the curriculum (or simply grow up), there is little change in the implicit ranking of these topics according to the percentage of students who discuss them very often. Different lifestyles is the second most often discussed topic among freshmen, but tied for fourth among seniors. The economy is next to last among freshmen, while it is tied for fourth among seniors. Otherwise, the rankings are stable over time.

Third, the number of students who never discuss some of these topics remains high among seniors. Nearly one in five seniors (18.3%) apparently never discusses the ideas of writers, philosophers or historians outside the classroom. Nearly one in five seniors (19.1%) never discusses social and ethical issues related to science. More than a third of our seniors (36.5%) never talk about scientific theories or methods with others outside the classroom. This finding is consistent with responses on other questions from the CSEQ. Sixty-one per cent (61%) reported that they never read articles about science that have not been assigned in class. In addition, 45% have never completed an experiment or project using scientific methods. Sixty-five per cent (65%) have never used laboratory equipment, and 54% have never explained an experimental procedure to someone else. More than fifty per cent have never compared the scientific method with other methods used for gaining knowledge and understanding.

There is another finding from the CSEQ which is interesting in light of the discussion about student intellectual curiosity. Seven in ten freshmen tell us they have not gone to any lectures or panel discussions on campus during the year (by mid-November). This is probably not a surprising finding. However, one third of seniors also report that they have attended no lectures or panel discussions so far in the semester (sophomores, 44% never; juniors 51% never).

Learning Outside the Classroom

Colleges and universities provide students with the opportunity to expand their knowledge and skills by means other than class and laboratory based learning. Two of these means are opportunities for experiential learning, or internships, and participation in campus-based clubs and organizations.

Co-Curricular Experiential Education

A number of Fredonia's majors require the completion of some sort of field-based experience. Many majors offer such experiences, most of them identified as internships, to their students as electives. Students were asked on the CSEQ to indicate the extent to which they think experiential education has contributed to their education. The question included the following as examples of experiential education: internships, a practicum, lab supervision, field experience, teaching/research assistant. By the senior year, more than 85% of the students indicate having completed at least one such activity. Among freshmen and sophomores who completed some sort of experiential activity, 43% told us they contributed quite a bit or very much to their education; 62% of juniors and seniors reported that the contribution was quite a bit or very much.

Are there significant differences in the academic performance of students involved in co-curricular learning experiences and those who are not? We cannot determine that there are. There were no significant differences in responses on the CSEQ between students on the basis of GPA. A similar finding resulted from the *Middle States Student Survey*. Students were asked to rate the significance of an internship to their learning. No significant differences are noted on the basis of GPA. Because experiential learning opportunities are so widely available to students—again, 85% of the students responding to the CSEQ report having had such an opportunity by the senior year—it would be surprising to find any differences based on GPA.

Two surveys were conducted by the Academic Programs task group to ascertain attitudes among students and faculty toward experiential learning at Fredonia. Each set of respondents consistently noted that experiential education makes a significant contribution to a student's learning. For example, students noted frequently that following the completion of an internship their oral and written communication skills improved considerably. Faculty shared these judgments. No doubt the responses to these questionnaires exhibit an upward bias. Nonetheless, the judgment is unmistakable that faculty and students do indeed think that experiential learning contributes strongly to student learning.

Impact of Clubs and Organizations on Learning

The impact of student involvement with clubs and organizations on learning is addressed in detail in the section of this self-study devoted to Campus Climate and additionally referred to in the section on Personal Growth and Development. Our purpose here will be simply to underscore the association between involvement and learning. We believe that results from the CSEQ provide indirect support for the conclusion that involvement with campus-based organizations (no distinctions were made between types of organizations) correlates with academic achievement. As an example, a moderately positive correlation exists between hours spent on out-of-class academic work and the clubs and organizations scale. Students who spend more time studying are also the students who spend more time actively involved in clubs and organizations on campus. There is also a positive correlation between GPA and scores on the clubs and organizations scale. Students with high GPAs are significantly more likely to report that involvement with clubs and organizations had a highly positive impact on their learning.

The College Environment

Students were asked on the CSEQ to rate the extent to which Fredonia emphasizes certain aspects of development, from 1 (weak emphasis) to 7 (strong emphasis). Mean scores and ranking of items are reported in Table 4.

Table 4

<i>Item: Emphasis on</i>	<i>Mean Score</i>	<i>Rank</i>
Developing academic, scholarly, and intellectual qualities	5.47	1
Developing aesthetic, expressive and creative qualities	5.20	4
Developing critical, evaluative, and analytical qualities	5.25	2
Developing an understanding and appreciation of human diversity	4.88	6
Developing information literacy (using computers, other info sources)	5.25	2
Developing vocational and occupational competence	4.80	7
The personal relevance and practical value of your courses	4.94	5

Students at all class levels ranked academic, scholarly and intellectual development as the type of growth most emphasized by the college, followed by development of analytical competence and information literacy (tied for second). These are reassuring findings. However, students were also asked on the CSEQ to identify the most important function of the college among a list of five. Forty-seven percent (46.7%) told us that the most important function is to make sure that classes are relevant to their career goals and objectives, while 29% indicated that quality teaching is the foremost responsibility of the college. Students with lower GPAs were significantly more likely to choose relevant classes as the college's most important function. Also noteworthy is the rank given to developing an understanding and appreciation of human diversity, which ranked next to last (among freshmen, it was last). However, it is worth pointing out that students may have understood the item in two different ways. Some may have thought the question concerns the awareness of cultural, ethnic, religious and gender differences found in American society, while others may have supposed the item alludes to diversity across nations and regions. Whatever the meaning given to the question, the response is probably accurate in terms of the actual (not simply perceived) development of Fredonia students (see discussion of estimates of gain in intellectual development).

How do Fredonia students match up with their peers? The mean Fredonia scores on each college environment question are higher. Indeed, with a mean of 5.20/7, Fredonia scored higher in its emphasis upon developing aesthetic qualities than the norm for every category of college or university, not just for the category in which Fredonia falls. In developing critical skills, students rated Fredonia higher than the norm for all but selective liberal arts colleges. On environmental questions asking students to rate the quality of their relationships with other students, administrative and office staff, and the faculty, only students attending selective liberal arts colleges scored their schools higher on relationships with students and administrators. On relationships with faculty, only students at selective and general liberal arts colleges gave higher scores than Fredonia.

Two additional observations are warranted. First, there are no significant differences in mean scores by class level or GPA. Second, mean scores go *down* on every item from freshman to senior year. Freshmen had a mean score for the entire scale of 5.29 (out of 7.00), seniors 4.99.

Conclusions

The foregoing discussion suggests two conclusions. First, a majority of our students are developing the intellectual skills and interests that a college education is designed to impart. In general, those students who study more learn more. They make greater use of the library. They work more closely with the faculty. They earn higher grades. They are mastering a discipline, enlarging their understanding of the ways in which knowledge is expanded and evaluated, growing in their appreciation for the arts, testing their own beliefs, perfecting an interest in learning that will last long after they leave Fredonia. They have, we believe, richer intellectual lives.

Second, a large number of students, perhaps 20-25%, are under-worked and under-challenged. Many of them are freshmen, as we would expect. But many of them are juniors and seniors. What behaviors do we note among these students? They do not study very much. They read very little which isn't assigned in their courses. They too often fail to complete the reading assigned for their courses. They are less likely to attend a lecture or discussion on campus, less likely to go to a play or concert, less likely to discuss intellectually demanding subjects outside of a class setting. They are less involved in the life of the college. Much of what we are here to help them learn passes them by.

GENERAL INTELLECTUAL GROWTH

Student Estimates of Gain

To what extent has Fredonia helped our students gain intellectual values? We may acquire some insight into this question by examining the responses to the Estimate of Gains scale of the CSEQ. This scale consists of 25 items on which students are asked to indicate the extent of their learning during their period at Fredonia. Responses are provided on a four point scale (1=very little, 2=some, 3=quite a bit, 4=very much). We have divided these items into three categories of gain: intellectual, personal and vocational. Mean scores and rank among all 25 items are provided below

A. Intellectual Gains	Mean	Rank
• Gaining a broad general education about different fields of knowledge	2.79	11
• Developing an understanding and enjoyment of art, music, and drama	2.29	19
• Broadening your acquaintance with and enjoyment of literature	2.29	19
• Seeing the importance of history for understanding the present & past	2.31	18
• Gaining knowledge about other parts of the world and other people	2.02	25
• Writing clearly and effectively	2.87	9
• Presenting ideas and information effectively when speaking with others	2.73	13
• Becoming aware of different philosophies, cultures and ways of life	2.54	16
• Understanding the nature of science and experimentation	2.04	24
• Understanding new developments in science and technology	2.08	23
• Becoming aware of the consequences of new applications of science/tech	2.16	22
• Thinking analytically and logically	2.74	12
• Analyzing quantitative problems	2.19	21
• Putting ideas together, seeing relationships, etc., between ideas	2.85	10
• Learning on your own, pursuing ideas, and finding information you need	3.05	3
B. Personal Gains	Mean	Rank
• Using computers and other information technologies	2.91	7
• Developing your own values and ethical standards	2.96	5
• Understanding yourself, your abilities, interests, and personality	3.21	1
• Developing the ability to get along with different kinds of people	3.18	2
• Developing the ability to function as a member of a team	2.90	8
• Developing good health habits and physical fitness	2.42	17
• Learning to adapt to change (new technologies, personal circumstances)	3.04	4
C. Vocational Gains	Mean	Rank
• Acquiring knowledge and skills applicable to a specific job or type of work	2.68	14
• Acquiring background/specialization for further education in prof. field	2.68	14
• Gaining a range of information that may be relevant to a career	2.93	6

Students appear to feel strongest about personal gains, weakest about intellectual gains. All but one of the personal gain items is ranked among the top third. All items ranked in the lowest third are intellectual gain items. Estimates of gain uniformly go up between the freshman and senior year, though there is one exception. Seniors have a lower estimate of gain in the ability to get along with others.

When the responses for estimate of gain are separated into lower division and upper division students, we note that upper division students report more gain than lower division students do. Focusing on the list of intellectual abilities, we find, for example, that very much gain in acquaintance with literature goes up from 18.5% to 25.2%. Understanding history very much increases from 8.4% to 17.0%. Awareness of other philosophies increases from 10.5% to 18.7%, while gains in synthesizing ideas increases from 15.5% to 29%.

However, in some areas students predictably report only anemic gains. Nearly one in three freshmen told us that they see very little gain in their understanding and enjoyment of art, music and drama, while one in five seniors noted the same. Forty-four percent of our seniors estimate that the gain in their acquaintance

with literature is either quite a bit or very much, but 17% also say that that they have gained very little. Almost forty-two per cent (41.8%) of freshmen say that their gain in knowledge of the world has been very little. Remember, though, they were surveyed in mid-November. However, 22.6% of seniors also report very little gain in knowledge of the world. Twenty-six per cent (25.7%) of seniors tell us they have made very little gain in their understanding of science and experimentation. A comparable lack of gain is reported in understanding new technology and its consequences, as well as in the ability to analyze quantitative problems.

On each of these last items--knowledge of the world, understanding of science, understanding of technology, and quantitative problem-solving--Fredonia students scored lower than students at all other types of colleges or universities. This is also so of Fredonia's score on gains in knowledge of history. In contrast, Fredonia students reported mean gains in nearly every other category that were not only higher than those at comparable institutions, but higher than those at every other type of institution.

A number of the locally added questions on the CSEQ also address the issue of intellectual growth. Students were asked to estimate their gain during the period of their college studies in the ability to identify the main point of a reading. Almost 16% of freshmen and sophomores told us that their gain has been very much. The percentage jumps to 26% among juniors and seniors. The percentage of both groups reporting very little gain falls from 6.4% of freshmen and sophomores to 2.2% of juniors and seniors.

Another question asks students the extent to which they think they have made progress in developing the ability to reason scientifically on a basic level. The percentage of juniors and seniors indicating very much progress nearly doubled over freshmen and sophomores, 11% vs. 6%, respectively. Consistent with their responses on other questions concerning science, 27% of freshmen and sophomores and 19.5% of juniors and seniors reported very little gain.

Three questions were added to the CSEQ that ask students to comment on their involvement with faculty on their research or creative endeavors. Responses to these questions and matching questions asked of the faculty are examined more fully in the section devoted to campus climate and learning environment, though some comment here is appropriate. As expected, juniors and seniors report greater involvement with faculty. Twenty three percent (23%) of these students were either often or very often involved, while 15.5% of freshmen and sophomores were involved either often or very often. Juniors and seniors are also more likely to judge this involvement as having a positive impact on their learning. Twenty-three per cent (22.8%) of juniors and seniors report that the positive impact on their learning was quite a bit or very much; 13% report the same among freshmen and sophomores. Among seniors alone one third of them say that the positive impact of this participation was quite a bit or very much. When asked if they would like more opportunities to participate in the scholarly or creative activity of a faculty member, 34% of our freshmen and sophomores and 29% of the juniors and seniors said they would like this very little or not at all. In contrast, 14% of freshmen and sophomores and 23% of juniors and seniors said they would like this quite a bit or very much.

Finally, students were asked on the CSEQ to estimate the total number of hours they spend with faculty outside of class on an average weekly basis. The types of interactions with faculty include visits during office hours, academic advising, work with a club advisor, work on a research project or independent study. Eighteen per cent (18%) of freshmen and sophomores told us they rated the impact of these interactions on their learning as quite a bit or very much. Almost 40% of juniors and seniors reported this level of impact.

Eighty-nine percent (88.7%) of the faculty who participated in the *Middle States Faculty Survey* report that they spend three or more hours each week with students outside the classroom. This number differs strikingly from what the students reported on the CSEQ. However, there is no necessary inconsistency in these reports. Each student was providing an estimate of the time spent outside of class with their faculty—many students spending small portions of time with a small number of faculty. Each faculty member, on the other hand, was accounting for the time spent with all students—not the average amount of time with each. To what extent does this interaction with students impact positively on their learning? All faculty responded that the positive impact was quite a bit (22.7%) or very much (77.3%). Forty-one per cent (41%) of the faculty encourage students to participate in their scholarly or creative activities quite a bit or

very much. Among the two-thirds of faculty who report involvement of students in their scholarly or creative activity, 68% of these believe the positive impact of this involvement was quite a bit or very much.

The high GPA students in the focus groups were satisfied that they had grown intellectually since arriving at Fredonia; however, they were reluctant to give the college very much credit in this regard. One noted that she was an indifferent student in high school, but has become more serious and dedicated in her two years of study at Fredonia. A sophomore told us that she had not changed much since leaving high school, though she is pleased with her major and with the faculty she has studied with at the college. Other students said that in their time at Fredonia they had learned to concentrate more on their studies and less on the social aspects of college. None of the students spoke very specifically about their intellectual growth.

Conclusions

Fredonia students at all levels express confidence that they are developing the skills and knowledge traditionally associated with a college education. They feel most confident about their acquisition of personal skills, like understanding one's self and one's abilities, interests and personality. They feel less confident of their intellectual gains while at Fredonia. This is a pattern which is characteristic of students at comparable institutions around the country. However, in marked contrast with Fredonia's higher mean scores on most other measures of gain, our students report lower gains than the norms for every type of school in understanding of history, knowledge of the world, understanding of science, and quantitative problem solving.

SUMMARY OF FINDINGS

- Fredonia students report being challenged by their courses. Upper division students indicate that their courses are slightly more challenging than lower division students report. There is some variation by academic grouping.
- Almost half of the faculty said that their 100-200 level courses challenge their students a great deal; and more than half said that their 300-400 level courses challenge students a great deal.
- Slightly less than half of our students spend 10 hours a week or less on out-of-class academic work. In contrast, more than a quarter of our students devote 40 or more hours to their studies (including class time).
- Students who spend more time on their academic work view their classes as more challenging. They participate more in courses and complete course reading assignments more often. They report putting more time and preparation into writing assignments, having more interactions with faculty and more interest and participation in science and math.
- Before their arrival, entering freshmen expect to work harder than they actually are four months after arrival.
- A large percentage of students either are not employed during the academic year or report that their employment does not impair the quality of their academic work.
- One quarter of the students report only occasionally completing the assigned readings for class; even more report having read no unassigned books during the semester.
- Two-thirds of the students consider information from class lectures very valuable to their learning. Slightly fewer say that class attendance is very valuable. One-third think information from texts is very valuable.
- When asked to comment on changes that would improve learning at Fredonia, faculty ranked higher academic standards first, while students ranked this change last.
- Nearly one in five seniors (18.3%) apparently never discusses the ideas of writers, philosophers or historians outside the classroom. Nearly one in five seniors (19.1%) never discusses social and ethical issues related to science. More than a third of our seniors (36.5%) never talk about scientific theories or

methods with others outside the classroom. Sixty-one per cent (61%) reported that they never read articles about science that have not been assigned in class. In addition, 45% have never completed an experiment or project using scientific methods. Sixty-five per cent (65%) have never used laboratory equipment, and 54% have never explained an experimental procedure to someone else. More than fifty per cent have never compared the scientific method with other methods used for gaining knowledge and understanding.

- Students at all class levels ranked academic, scholarly and intellectual development as the type of growth most emphasized by the college, followed by development of analytical competence and information literacy (tied for second).
- When asked to estimate the gains they have made since arriving at Fredonia, students appear to feel strongest about personal gains, weakest about intellectual gains. All but one of the personal gain items is ranked among the top third. All items ranked in the lowest third are intellectual gain items. Estimates of gain uniformly go up between the freshman and senior year, though there is one exception. Seniors have a lower estimate of gain in the ability to get along with others.
- A substantial number of students report gains in a variety of areas. However, some students report minimal gains. Nearly one in three freshmen see very little gain in their understanding and enjoyment of art, music and drama, while one in five seniors noted the same. Forty-four percent of our seniors estimate that the gain in their acquaintance with literature is either quite a bit or very much, but 17% say that that they have gained very little. Forty-two per cent (41.8%) of freshmen say that their gain in knowledge of the world has been very little. However, 22.6% of seniors also report very little gain in knowledge of the world. Twenty-six per cent (25.7%) of seniors tell us they have made very little gain in their understanding of science and experimentation. A comparable lack of gain is reported in understanding new technology and its consequences, as well as in the ability to analyze quantitative problems.
- The vast majority of the faculty report that they spend three or more hours each week with students outside the classroom, and most of them say this time with students contributes to learning quite a bit or very much.
- On all but two quality of effort scales from the CSEQ Fredonia students scored higher than those among comparable institutions. The exceptions were on the scale for involvement with campus organizations and the scale of interactions with student acquaintances.
- On many gain questions Fredonia's mean responses are higher than mean scores of schools in all categories, including research universities and selective liberal arts colleges. On growth in historical knowledge, quantitative problem solving, knowledge of the world and knowledge of science, Fredonia students estimate their gains to be lower on average than those reported at all other institutions regardless of type.

RECOMMENDATIONS

The majority of the students who graduate from the College at Fredonia do so with the assurance that their degrees reflect a genuine challenge, a challenge they work hard to meet. These students estimate most of their academic gains as significantly larger than do students at comparable and even more selective colleges and universities. There is much evidence here on which we may rightly pride ourselves. However, too many students simply are not working hard enough. They study too little, despite their perception that our college emphasizes intellectual development. For many freshmen and transfer students, their first semester at Fredonia is especially likely to be wasted time, at least academically. Also, the general education we offer our students clearly needs strengthening in certain areas. In the light of all the evidence summarized above, we have the following recommendations:

1. We should take steps to strengthen our General College Program curriculum.

- In the light of a relative weakness in our students' knowledge of science, technology, quantitative problem solving, and the methodological and ethical issues they raise, a weakness attested by student responses to a variety of questions, thought should be given to strengthening our GCP science courses: for example, through the addition of problem solving, actual or virtual laboratory experiences, and writing requirements, perhaps also through more attention in those courses to methodological and ethical issues.
 - In the light of similar findings about knowledge of the world, thought should be given to strengthening this component of the GCP in the current revision process.
2. We should take steps to raise academic expectations and demands.
- Faculty should consider ways of ensuring that students must read the assigned texts – whether purchased or on library reserve – in order to pass their courses. They should also consider requiring reading beyond the textbook in courses that do not presently have such requirements (54% of GCP courses in the last survey required only a textbook).
 - Faculty should consider assigning more papers that require higher order thinking, such as combining and analyzing information from a variety of sources, and should require longer papers in 100-level courses. Since 53% of our students expect to write fewer than one paper per course during the academic year, and since writing is an effective way of learning, faculty might also consider adding paper requirements in courses that do not presently have them. Possibly increased use of undergraduate teaching assistants would make it easier to use writing in large classes.
 - Faculty should give renewed thought, and perhaps study, to the issue of grading.
3. We should find ways to enhance the campus climate for learning by celebrating academic engagement and performance, even though students already recognize our intellectual emphasis.
- We might establish cash awards for juniors and graduating seniors in each academic division based solely on exceptional academic achievement. At present, the two largest awards given to graduating seniors do not give priority to academic accomplishment. Also, we might consider more frequent public recognition of academic work.
 - We might consider establishing a special Dean's List for students with a GPA of 3.5 (or higher) to supplement the current Dean's List, which, at 3.3 includes about 20% of our students. Or we might raise the honors criteria altogether.
 - Faculty who do not already do so might consider ways of encouraging and rewarding student attendance at lectures, discussions, and arts programming relevant to their courses.
4. We should consider tightening certain academic regulations or policies.
- We might make the drop deadline for first semester freshmen the same as that for upperclassmen.
 - We might make the criteria for required withdrawal the same for freshmen as for upperclassmen.
 - Other changes we should evaluate are moving the course withdrawal deadline up for all students and discontinuing the Pass/Fail option.
 - Once Banner is running, midterm grade reports should congratulate students performing at the Dean's List level, and should warn students whose performance will result in probation or required withdrawal if their final grades for the semester are unchanged.

5. We should improve the academic support we offer all students, but especially first semester freshmen and transfer students. It is important that existing resources reach students earlier.
 - Academic departments and the Office of Academic Advising should consider ways of making it necessary for first semester students to see their advisers early in the semester.
 - The College should fund expansion of the Freshman Seminar to provide seats for all freshmen. This seminar, among other things, requires students to evaluate the time they spend studying and to speak with their teachers out of class, both activities connected with academic success in our findings.
 - The Learning Center should be funded to supply all the peer tutoring that is needed, and the Center should be moved to a more accessible (and disabled-student-accessible) location on campus. Learning Center studies have shown that students who use its services improve their academic performance, often substantially, yet the Center has sometimes lacked means to employ needed tutors. When it was moved from Gregory Hall to the periphery of the campus, it lost tutees, despite many efforts to entice them back. One suggestion is that FSA be moved to the proposed Cranston addition, and the Learning Center be moved to the present FSA offices in Gregory.
 - An inquiry should be made into the usefulness of expanding the number of courses in which supplemental instruction is provided by Learning Center tutors, to increase the likelihood that students will stay engaged in their courses without having to load an impossible burden on faculty. Such instruction has dramatically reduced the failure and withdrawal rates in targeted courses.
6. Research on some of the problems raised in this report should continue, and certain kinds of information should be made available on a regular basis.
 - Now that we have learned a fair amount about intellectual curiosity, meager study time, and intellectual challenge, we have a clearer idea of the questions that still need answers, and can make productive use of follow-up student focus groups to help us understand more about student feelings, beliefs, and learning, and actions we might take.
 - Now that we have discovered some ambiguities in our questionnaires, we should rewrite the problematic questions, and put into place a formal assessment mechanism by which we repeatedly survey a random set of students from freshman year on, perhaps twice a year, with suitable compensation for the students' time.
 - We need evidence by which to corroborate or question student CSEQ gain perceptions, and should consider ways to obtain it. Possibly our GCP assessment instruments could supply some of the evidence.
 - We need an improved survey and analysis of syllabi to provide better information about faculty challenge of students.
 - Some thought might be given to ways of discovering the degree to which involvement in student clubs and activities helps or reflects academic achievement. At present we have only some weak correlations.
 - Banner should make it possible for us to follow the fates of students on probation for each cohort. Suitable programming should be put in place.
 - Further study should be given to the apparent overrepresentation of men among students on the probation and required withdrawal "trouble" lists.

- Banner should make it possible for us to track student use of academic support services in relation to GPA, retention, and academic awards. Suitable programming should be put in place.

PERSONAL AND SOCIAL GROWTH AND DEVELOPMENT

By the very nature of institutions of higher education, colleges become intimately involved in the development of the whole person. This task group was given the charge of assessing student personal and social growth and development by focusing on questions about the extent to which our students achieve the self-awareness, self-reliance, responsibility for choices, awareness of values, develop interpersonal relations, cooperation skills, and leadership that our Vision Statement sees the campus as fostering. The specific questions that delineate this charge can be found in Appendix A. A major goal of higher education is to promote academic and intellectual development. In addition, colleges are a major agent in enhancing the personal development of their student population. Exposure to faculty, friendship groups, new values and ideas all have a major impact on the students' development of self and world views.

In order to provide a context for this section, a brief literature review on college student development was conducted. Student development represents a positive growth process in which the individual becomes increasingly able to integrate and apply different experiences and influences as a result of enrollment in an educational institution. Theories of student development provide insights about affective and behavioral growth and intellectual changes during the college years. Research informed by theoretical approaches indicates that involvement in college life encourages student development. For example, Astin reports that personal and social development and learning arise from student involvement, which he defines by terms such as "engage in," "show enthusiasm for" and "join in."

Especially during the college years, young adults seek to resolve the child-parent relationship in a search for independence, to establish a sense of identity and self-worth, and to form concepts about themselves as separate adult persons. They also develop increasingly mature patterns of interpersonal behaviors, coping styles, career orientations, values systems, and lifestyles that will greatly influence the shape of their futures.

Just as there is intellectual knowledge to be gained and there are academic skills to be acquired in college, there is also knowledge about one's self to be learned and there are interpersonal skills to be developed. Likewise, just as academic competence can be taught and learned, so can personal assessment, goal setting, interpersonal relationship skills, and other important life skills.

Theories of student development provide a rationale for framing student goals and designing effective learning environments. Arthur Chickering proposes a model which assumes that a nurturing, challenging college environment guides students toward personal, social and intellectual development during late adolescence and adulthood. The theoretical work of Chickering was a major influence in guiding the creation and evolution of the *Student Developmental Task and Lifestyle Inventory*, the foundation for this report. Data from student responses to this questionnaire will be supplemented by the *College Student Experiences Questionnaire*, *Middle States Student Survey*, and the *SUNY Student Opinion Survey* results. In addition, information gleaned from student focus groups will help us to reflect on student involvement and preparation for life after the Fredonia experience.

Student Developmental Task and Lifestyle Inventory (SDTLI)

The SDTLI (See Appendix K12.) is an assessment instrument designed for use with traditional college-age students (17 to 24 years).

It is based on the following assumptions:

- One should be able to act independently without continual reassurance or direction from others.
- Relationships among people should be characterized by openness, honesty, trust, mutual respect and equality.
- One should be able to exhibit self-discipline, understand personal motivations, and employ rational processes to solve problems and make decisions.

- Altruism, charity, democratic processes, individual freedom, social responsibility, and self-directedness are positively valued concepts.
- Prejudice and discriminatory treatment of people based on race, sex, religion, national origin, affectional preference, handicapping condition, or physical appearance are morally wrong and inhibiting to personal happiness.
- Knowledge and learning are worthy of pursuit for their own sakes.
- Behavioral change and growth occur as a direct result of the stimulation accruing from the interaction between individuals and their environments.
- Health engendering lifestyles encourage positive personal development.

During the 1995 Summer Orientation Program, 464 incoming freshmen were administered the SDTLI. This instrument, with well-established reliability and validity estimates, created a baseline measure of the developmental levels of the study participants in the following areas: *Establishing and Clarifying Purpose*, *Developing Mature Interpersonal Relationships*, *Academic Autonomy* and *Salubrious Lifestyle*. This instrument was administered to a subset (n=81) of the same cohort group at the end of the sophomore (1997) year. Of these 81 students, 36 responded to the instrument at the end of their senior (1999) year, and their data will be available in the fall of 1999.

The instrument contains content items describing activities, attitudes and feelings plus additional items designed to identify response bias. Students respond to each statement by determining whether it is basically an accurate description (true) or an inaccurate description (false) of them.

The SDTLI is composed of three developmental tasks, two of which are further defined by subtasks, and one scale:

I. *Establishing and Clarifying Purpose Task* (66 items)

- A. Educational Involvement subtask
- B. Career Planning subtask
- C. Life Management subtask
- D. Cultural Participation subtask

II. *Developing Mature Interpersonal Relationships Task* (30 items)

- A. Peer Relationship subtask
- B. Tolerance subtask
- C. Emotional Autonomy subtask

III. *Academic Autonomy Task* (10 items)

IV. *Salubrious Life Style Scale* (8 items)

Additional Measures:

The **College Student Experiences Questionnaire (CSEQ)** described on page 51 was given to 474 freshmen, sophomore, junior and senior students in the fall of 1998 (See Appendix K8).

The **Middle States Student Survey (MSSS)** also described on page 51 was administered to 199 students at all class levels in the fall of 1998 (See Appendix K9).

The **1997 SUNY Student Opinion Survey (SOS)** (Appendix K13.) was completed by students at 52 SUNY institutions. Fredonia administered this satisfaction questionnaire to 621 students at all class levels during class time.

Focus Group Discussions (Table 4) were held with 64 undergraduate student leaders in February 1999.

Results:

Table 1 contains demographic information about the respondents to the SDTLI.

Table 1

		Orientation	End of Sophomore year	End of senior year
N		464	81	36
Gender	Male	172	14	
	Female	285	67	
	Missing	7		
Ethnicity	Non-White	11	1	
	White	445	79	
	Missing	8	1	
Religion	Urban	56	6	
	Rural	50	13	
	Suburban	207	44	
	Small Town	142	17	
	Missing	9	1	
Residence	Single Sex Dorm	N.A.	17	
	Co-ed Dorm	N.A.	58	
	Off Campus	N.A.	4	
	Home	N.A.	2	

It is important to note that the Fredonia sophomore sample (n=81) is a self-selected sub-sample of the original 464 students surveyed at orientation. These students chose to continue with the study and could consequently be demonstrating more growth and development than those students who chose not to continue participation.

Table 2 summarizes the results from the SDTLI.

Table 2

TASK/SUBTASK/SCALE Class	N	\bar{X}	SD
Establishing and Clarifying Purpose Task			
Freshmen Norm	386	32.41	11.18
Fredonia Freshmen	464	32.15	10.72
Sophomore Norm	307	36.68	11.34
** Fredonia Sophomores	81	41.85	9.32
Educational Involvement Subtask			
Freshmen Norm	386	7.72	3.37
Fredonia Freshmen	464	7.12	3.17
Sophomore Norm	307	9.32	3.43
** Fredonia Sophomores	81	10.60	2.60
Career Planning Subtask			
Freshmen Norm	386	8.12	4.04
Fredonia Freshmen	464	7.74	4.07
Sophomore Norm	307	9.16	4.11
** Fredonia Sophomores	81	11.38	4.00
Lifestyle Planning Subtask			
Freshmen Norm	386	5.80	2.52
Fredonia Freshmen	464	5.56	2.38
Sophomore Norm	307	6.21	2.53
* Fredonia Sophomores	81	6.33	2.37
Life Management Subtask			
Freshmen Norm	386	7.60	3.26
Fredonia Freshmen	464	8.09	3.01
Sophomore Norm	307	8.65	3.26
** Fredonia Sophomores	81	10.23	2.80
Cultural Participation Subtask			
Freshmen Norm	386	3.17	1.49
Fredonia Freshmen	464	3.63	1.38
Sophomore Norm	307	3.38	1.51
Fredonia Sophomores	81	3.23	1.46
Developing Mature Interpersonal Relationships Task			
Freshmen Norm	386	17.71	5.20
Fredonia Freshmen	464	18.49	4.98
Sophomore Norm	307	19.14	4.77
* Fredonia Sophomores	81	19.72	4.51
Peer Relationship Subtask			
Freshmen Norm	386	7.72	2.61
Fredonia Freshmen	464	7.79	2.62
Sophomore Norm	307	8.33	2.54
Fredonia Sophomores	81	8.33	2.32
Tolerance Subtask			
Freshmen Norm	386	5.99	1.92
Fredonia Freshmen	464	6.06	1.91
Sophomore Norm	307	6.36	1.88
Fredonia Sophomores	81	6.79	1.74
Emotional Autonomy Subtask			
Freshmen Norm	386	4.07	1.97
Fredonia Freshmen	464	4.65	1.79
Sophomore Norm	307	4.47	1.71
Fredonia Sophomores	81	4.60	1.94
Academic Autonomy Task			
Freshmen Norm	386	4.59	2.35
Fredonia Freshmen	464	4.95	2.57
Sophomore Norm	307	4.98	2.40
** Fredonia Sophomores	81	5.71	2.55
Salubrious Lifestyle Scale			
Freshmen Norm	386	4.59	2.16
Fredonia Freshmen	464	4.58	2.05
Sophomore Norm	307	4.74	2.28
Fredonia Sophomores	81	4.90	2.26

Means and Standard Deviations for Fredonia Students and the for the Normative Sample (Entering Freshmen, Second Semester Sophomores)

INDICATORS

* significant growth from 1995 to 1997

** significant growth from 1995 to 1997 and significant difference between Fredonia sophomores and the national norming sample

SUNY Fredonia freshmen appear to be fairly typical of entering college students. No significant differences were found between the Fredonia entering freshmen and the national norming sample on any of the tasks, subtasks or scales of the SDTLI. However, an analysis of standardized scores revealed significant differences between our white and non-white freshmen students (1995) and our male and female freshmen students (1995) on several of the assessed areas. Non-whites scored significantly higher than whites on the Establishing and Clarifying Purpose Task (m=57.0 vs. 49.6) and the Educational Involvement (m=54.8 vs. 48.2), Lifestyle Planning (m=57.5 vs. 49.0) and Cultural Participation (m=58.6 vs. 53.1) subtasks. Fredonia female students scored significantly higher than their male freshmen counterparts on the Establishing and Clarifying Purpose Task (m=50.7 vs. 48.3), Developing Mature Interpersonal Relationships Task (m=52.5 vs. 49.8), and the Lifestyle Planning (m=50.3 vs. 47.6), Life Management (m=52.2 vs. 50.0), Cultural Participation (m=53.9 vs. 51.9), Tolerance (m=51.8 vs. 49.7) and Peer Relationships (m=51.4 vs. 48.6) subtasks. In addition, our entering freshmen from small towns scored significantly higher on the Tolerance subtask than our entering freshmen from urban areas.

However, at the end of the sophomore year our student sample scored significantly higher than the national sophomore norming sample on the Establishing and Clarifying Purpose Task, Educational Involvement subtask, Career Planning subtask, the Life Management subtask and the Academic Autonomy Task (Table 2). It is especially interesting to note that by the end of the sophomore year all demographic differences between whites and non-whites and between males and females diminished with the exception that our female students demonstrated significantly more growth in Life Management than did our male sophomore students.

ESTABLISHING AND CLARIFYING PURPOSE

Students who have developed in this area (a) have well-defined and thoroughly explored educational goals and plans and are active, self-directed learners; (b) have synthesized knowledge about themselves and the world of work into appropriate career plans, both making an emotional commitment and taking steps now to allow realization of career goals; (c) have established a personal direction in their lives and made plans for their futures that take into account personal, ethical, and religious values, future family plans, and vocational and educational objectives; (d) exhibit a wide range of cultural interests and are active participants in traditional cultural events; and (e) structure their lives and manipulate their environment in ways that allow them to satisfy daily needs, meet personal responsibilities, manage personal finances appropriately, and satisfactorily meet academic demands. Scores on the subtasks were summed to yield the total score for Establishing and Clarifying Life Purpose.

Fredonia students showed significant growth from orientation to the end of their sophomore year (m=32.15 vs. 41.85) and outscored the sophomore norming sample on this task (m=36.68 vs. 41.85). Significant growth was also demonstrated on all of the subtasks (Educational Involvement, Career Planning, Lifestyle Planning, Life Management) with the exception of Cultural Participation.

Educational Involvement Subtask

Students who have developed in this area have well-defined educational goals and plans, are knowledgeable about available resources, and are actively involved in the academic life of the college. After careful investigation and analysis, they have selected areas of academic concentration for which they are intellectually suited and academically qualified, and with which they are temperamentally compatible. They are not passive learners; they take initiatives to insure that they are obtaining relevant and appropriate educational experiences through activity such as initiating personal study projects, attending non-required lectures and programs, and making regular contact with academic advisors and faculty and staff members.

Significant growth was experienced by Fredonia students from orientation to sophomore year (m=7.72 vs. 10.60). Questions such as "I know all the basic requirements for my academic major," and "When I don't think I am learning what I should in a course, I take the initiative to do something about it" are reflective of this subtask.

Career Planning Subtask

An awareness of the world of work, an accurate understanding of one's abilities, a knowledge of requirements for various occupations, and an understanding of the emotional and educational demands of different kinds of jobs are evidence of development in this area. Students who have achieved in this area have synthesized knowledge about themselves and the world of work into a rational order which enables them to make a commitment to a chosen career field and formulate specific vocational plans. They have taken the initial steps necessary to prepare themselves through both educational and practical experiences for eventual employment, and have taken steps necessary for beginning a job search.

Significant growth was experienced from orientation to sophomore year on this subtask ($m=7.74$ vs. 11.38). Questions such as "In the past year I have discussed my career goals in the field that interests me most," and "I know at least five requirements necessary for the occupation I am thinking about entering" are reflective of this subtask. In addition, the CSEQ suggests that over 70% of our students believe that during their years at Fredonia, they have gained a range of information that is relevant to their career direction and helpful in life management and planning. Fredonia students also feel that they have made significantly more progress in "Gaining a range of information that may be relevant to a career" than does the Comprehensive Colleges and Universities norm sample ($m=2.93$ vs. 2.83).

Lifestyle Planning Subtask

Development in this area includes establishing a personal direction and orientation in one's life that takes into account personal, ethical and religious values, future family plans, and vocational and educational objectives. Plans need not be highly specific nor committed to an absolute, but must be of sufficient clarity to permit identification of appropriate present steps and reflect the establishment of well-thought-out long-range goals. Students who have high achievement in this area are self-aware, can objectively analyze their own behaviors, attitudes, and beliefs, and exhibit the capacity to follow through on personal plans and commitments. They can specify how current activities relate to the realization of the kind of future they envision for themselves.

Significant growth was experienced from the 1995 orientation to the end of the 1997 sophomore year by our students ($m=5.56$ vs. 6.33). Questions such as "I am currently involved in one or more activities that I have identified as being of help in determining what I will do with the rest of my life" and "I have made a decision about the number of children (including none) I plan to have" are reflective of the *Lifestyle Planning* subtask. Additionally, 72% of surveyed students on the CSEQ believe they have grown substantially in the area of establishing values and ethical standards as a function of their college experience.

Life Management Subtask

Students who have developed in this area demonstrate an ability to structure their lives and to manipulate their environment in ways that allow them to satisfy daily needs and meet responsibilities without extensive direction from others. They are able to manage their time and other aspects of their lives in ways that allow them to meet academic demands, satisfy personal needs, fulfill community and family responsibilities; to establish and follow through on realistic plans; to manage their financial affairs satisfactorily; and to solve most problems that arise. Involved in and contributors to the community in which they live, they are independent, goal-directed, resourceful, and self-sufficient persons who also are able to recognize when they need assistance and who seek and accept help when the need arises.

Our student sample showed significant growth on this subtask from 1995 orientation to the end of their sophomore year ($m=8.09$ vs. 10.23). This is also the only area in which gender differences were found. Female Fredonia students seem to be exhibiting significantly more growth ($m=59.00$) than our male students ($m=52.70$) in the area of *Life Management*. Questions such as "I set aside time each day to deal with schoolwork and assignments," and "I make time in my schedule for my hobbies" are reflective of the *Life Management* Subtask.

Cultural Participation Subtask

Students who have developed in this area are actively involved in a wide variety of activities, including traditional cultural events such as attending plays, ballets, museums, art exhibits, and classical music concerts. Their leisure time is spent productively in such activities as reading, pursuit of hobbies, and voluntary participation in student organizations. They exhibit a wide array of cultural interests and have developed a sense of aesthetic appreciation.

This is the only subtask of *Establishing and Clarifying Purpose* in which no growth was exhibited between freshmen orientation (1995) and sophomore year (1997). A question such as "Over the past year I have participated in cultural activities on a regular basis" is reflective of this subtask.

On the CSEQ, students were asked to rate how much emphasis the college places on developing aesthetic, expressive and creative qualities. Scores could range from 1 (weak emphasis) to 7 (strong emphasis). Seventy-four percent of our student sample believes that Fredonia has a moderate to strong emphasis on developing aesthetic, expressive and creative qualities. Understandably, Fine Arts majors ($m=5.75$) scored higher than all other majors in their rating of the college's emphasis on aesthetics. Our resident students ($m=5.29$) along with students who began their college experience at Fredonia ($m=5.24$) indicated significantly more college emphasis on aesthetics than did non-resident students ($m=5.07$) and transfer students ($m=4.98$) respectively. Fredonia students also indicated a higher degree of college emphasis on aesthetics as compared to students at other Comprehensive Colleges and Universities (CCU) ($m=5.21$ vs. 4.72). Fredonia students also indicate making significantly more progress in developing an understanding and enjoyment of art, music and drama than the CCU norming sample ($m=2.29$ vs. 2.05). This perceived emphasis on aesthetics is confusing since the CSEQ shows that 64% of our students show minimal involvement in the extensive cultural activities available and indicated little growth in enjoying cultural activities. However, Fredonia's upper class students ($m=16.06$) between the ages of 20 and 23 participated in cultural activities to a significantly greater extent than did freshmen and sophomore students ($m=14.86$) or older non-traditional students ($m=14.40$). This lack of participation by freshmen and sophomores could explain why no growth was exhibited on the SDTLI between orientation and the sophomore year on the *Cultural Participation* subtask, given the obvious campus availability of cultural activities.

In summary, Fredonia students seem to be experiencing substantial growth in their ability to establish and clarify purpose. These students exhibited development and outscored the sophomore norming sample in their *Educational Involvement*, *Career Planning*, *Lifestyle Planning* and *Life Management*. With the exception of *Life Management* (females>males), all gender, race and hometown variable differences observed upon entering Fredonia (1995 Orientation) were minimized by the end of their sophomore year (1997). Although Fredonia students recognize that a wide variety of cultural activities are available to them, participation is rather low, particularly among freshmen, sophomores and non-traditional students.

DEVELOPING MATURE INTERPERSONAL RELATIONSHIPS

Students who have developed in this area have developed relationships with peers characterized by independence, frankness, and trust; they appreciate individual differences among friends and acquaintances and feel reduced pressure to conform to group norms or to conceal disagreements. In relationships with persons from different cultures, races, and backgrounds they exhibit high levels of respect and acceptance and have a general attitude of openness to and appreciation for differences. Students high on this task are free from the need for continuous reassurance and approval from others and have minimal dependence on parents for direction in decision making.

Results (Table 2) indicate that SUNY Fredonia students have grown significantly from 1995-1997 on this developmental task ($m=18.49$ vs. 19.72). However, no significant growth was observed on any of the subtasks which include *Peer Relationships*, *Tolerance* and *Emotional Autonomy*.

Peer Relationships Subtask

Students who have developed in this area describe their relationships with peers as shifting toward greater trust, independence, frankness, and individuality as well as feeling less need to conform to the standards of friends or to conceal shortcomings or disagreements. Students can distinguish between friends and acquaintances and have both kinds of relationships. Friendships survive the development of differences in activities, beliefs, and values, and reflect an appreciation for individual differences. Relationships with peers and authority figures are open and honest; disagreements are resolved or accepted.

Although no significant development was evidenced between entering freshmen and sophomores on this subtask ($m=7.79$ vs. 8.33), some minimal growth occurred. Questions such as "It is important for me to be liked by everyone," and "I sometimes hold back my true feelings from a friend because I'm afraid I might embarrass myself" are reflective of this subtask.

The CSEQ findings indicate that our students do, however, perceive growth in the relationship area. More than 60% of the sample indicate that they have friends from different backgrounds, interests and ages. Of this group, 80% said they found relationships with other students to be friendly and supportive, and they believe they have grown substantially in being able to get along with different kinds of people. Further, 83% of our students believe they have made quite a bit of progress in understanding themselves; 80% believed they have progressed in getting along with others; and 68% feel they are developing the ability to function as a team member. One item asked students to rate the quality of their relationships with other students on a scale from 1 to 7. Students younger than 24 ($m=5.71$) and who began college at Fredonia ($m=5.86$) showed more positive attitudes with regard to student relationships (friendly, supportive, sense of belonging) than did Fredonia's older, non-traditional students ($m=4.80$) and our transfer students ($m=5.25$). In addition, students who began college at Fredonia exhibited a higher Quality of Effort in both their Personal Experiences ($m=20.91$) and in their Student Acquaintances ($m=24.30$) than did our transfer students ($m=19.54$ & 22.27). Scores could range from 8 to 32. Finally, as compared to other SUNY campuses, the 1997 *Student Opinion Survey* (SOS) indicated that Fredonia students believed more vigorously that they developed strong student friendships and that these friendships have positively influenced their personal growth, values and attitudes.

Tolerance Subtask

Respect for and acceptance of those of different backgrounds, beliefs, cultures, races, lifestyles, and appearances describe students who have high achievement on this subtask. They respond to people as individuals; do not employ racial, sexual, or cultural stereotypes; have an openness to new or unconventional ideas and beliefs; and are appreciative of individual differences. Tolerance involves an openness to and acceptance of differences and does not mean the development of screening devices to shield one from the values and ideas of those with different backgrounds, lifestyles, or belief systems. Students high in tolerance do not shy from or reject contact with those with different ethnic, racial, or cultural heritages or with different religious beliefs, political views, or lifestyles.

Similar to the *Peer Relationships* subtask, non-significant growth occurred between 1995 and 1997 ($m=6.06$ vs. 6.79) in the area of *Tolerance*. Questions such as "I would prefer not to room with someone who is from a different culture," and "I find it annoying when I hear people speaking in a language I don't understand" are reflective of this subtask.

Findings from the CSEQ indicate that 61% of our students feel the college itself has a moderate to strong emphasis on diversity. This is curious since, on the same survey, the majority of Fredonia students say that they have minimal (never/occasionally) contact with students different from themselves. Also, according to the SOS, Fredonia students showed a lower level of satisfaction as compared to other SUNY campuses in the area of racial harmony. This could be explained by the timing of the survey (Spring 1997) in relationship to a specific incident on campus.

Results from the *Middle States Student Survey* (MSSS) shed some light on the tolerance/diversity issue at Fredonia. Of the students completing the MSSS, 64% indicated that they feel maximum diversity should be present at Fredonia, but only 19% believe that this actually exists. It appears that many of our own

students experience little interaction with others different from themselves but what they experience is largely positive or mixed.

Fredonia students feel that they are growing in the area of tolerance and diversity, and value this growth. However, they seem to have little exposure to differences outside of class that could facilitate development in this area; and according to the MSSS, our students have little in-class exposure to diversity issues during their freshmen and sophomore years. It is clear that the number of courses which devote time to various diversity issues is minimal during the first two years of college and gradually increases during a student's junior and senior years at Fredonia.

Given the limited interaction with students from diverse backgrounds and the lack of early classroom exposure to diversity/tolerance issues, Fredonia students seem to show a substantial amount of respect for students from under-represented populations (Table 3).

Table 3

	N	Mean
How much respect do you have for these groups (0-100) - Gay men	154	74.7013
How much respect do you have for these groups (0-100) - Blacks/African Americans	154	87.7143
How much respect do you have for these groups (0-100) - Hispanic American	154	85.7208
How much respect do you have for these groups (0-100) - Lesbians	154	77.9870
How much respect do you have for these groups (0-100) - Men	154	89.0649
How much respect do you have for these groups (0-100) - Native Americans	154	88.4610
How much respect do you have for these groups (0-100) - People with Disabilities	154	90.9675
How much respect do you have for these groups (0-100) - Women	154	90.1623
How much respect do you have for these groups (0-100) - People from other countries	154	88.6623
How much respect do you have for these groups (0-100) - Asian Americans	153	87.2614
Valid N (listwise)	153	

Emotional Autonomy Subtask

Students who have developed in this area are free from the need for continuous reassurance and approval from others. Trusting their own ideas and feelings, they have the self-assurance to be confident decision-makers and to voice dissenting opinions in groups. They have confidence in their abilities and are prudent risk-takers. They have resolved many of the conflicts inherent in the child-parent relationship to the extent that reliance on parents for direction is minimal.

No growth was evidenced from 1995 orientation ($m=4.65$) to the end of the sophomore year ($m=4.60$) on this subtask (Table 2). This suggests that our students are slow to break away from parents, needing parental help in decision-making and reassurance and approval from others. These students have difficulty trusting their own ideas and feelings, and are cautious of voicing dissenting opinions in groups. Questions such as "I need to feel sure of the outcome before attempting something new or different," and "I feel guilty when I don't obey my parent's wishes" are reflective of this subtask.

In summary, results from the SDTLI show that Fredonia students are experiencing minimal growth in the area of Developing Mature Interpersonal Relationships. Although some growth was evidenced on the overall task, no significant development occurred on any of the subtasks including *Peer Relationships*, *Tolerance* and *Emotional Autonomy*. There is, however, a discrepancy between measures of development: CSEQ and SOS findings suggest that the majority of our students believe that they have grown in this area with our younger students who began college at Fredonia indicating a higher level of relationship satisfaction than our non-traditional and transfer students. The same discrepancy between perceptions and growth measures is also present on the *Tolerance* subtask. Fredonia students believe they are growing in this area and indicate fairly high levels of respect for difference, but are not showing significant development on the SDTLI. This difference could be resolved when the SDTLI data from seniors becomes available. The

majority of Fredonia students would like more diversity but are dissatisfied with the current extent of diversity (MSSS) and the level of racial harmony on campus (SOS). Finally, it seems that our students are slow to break away from family and still require reassurance and approval from their parents and rely on them for direction.

ACADEMIC AUTONOMY

Students who have accomplished this task have the capacity to deal well with ambiguity and to monitor and control their behavior in ways that allow them to attain personal goals and fulfill responsibilities. High scorers devise and execute effective study plans and schedules, perform academically at levels with which they are satisfied and which are consistent with their abilities, are self-disciplined, and require minimal amounts of direction from others. While they are independent learners, they are also willing to seek academic help when needed.

Fredonia students showed significant growth from orientation to the end of their sophomore year ($m=4.95$ vs. 5.71) and significantly outscored the sophomore norming sample on this task ($m=5.71$ vs. 4.98). Questions such as "I have a difficult time in courses when the instructor doesn't regularly check up on completion of assignments," and "My grades are not as good because I don't like asking for help" are reflective of this task.

SALUBRIOUS LIFESTYLE

This scale measures the degree to which a student's lifestyle is consistent with or promotes good health and wellness practices. A high score includes eating well-balanced, nutritious meals, maintaining an appropriate body weight, planning for and getting sufficient amounts of sleep and physical exercise, using effective stress reduction techniques, and evaluating one's physical appearance positively.

Growth was not evidenced on this scale from the 1995 orientation ($m=4.58$) to the Spring 1997 semester ($m=4.90$) for Fredonia students (Table 2). Questions such as "I have one or more effective techniques (not involving alcohol or drugs) that I use to help relieve stress," and "I usually eat well-balanced meals" are reflective of this scale. In addition, 55% of students completing the CSEQ indicated that they have made little progress in developing good health habits and physical fitness.

STUDENT INVOLVEMENT AND PREPARATION FOR LIFE AFTER GRADUATION

According to the results from the Middle States Student Survey, 72% of our students rarely participate in out-of-class activities; of the students who do participate, only 34% feel that their involvement has a positive impact on their learning. In addition, significant class G.P.A. and ethnic differences were found in the extent and impact of student involvement. As students progress from freshmen to senior year, their participation in Career Development activities significantly increases (32%-77%). In addition, students with lower G.P.A.'s are more likely to take advantage of the Learning Center support services (75%) than students with higher G.P.A.'s (18%). These results make logical sense; however, the most intriguing results center on the participation levels of our underrepresented population. Non-white students indicated significantly more involvement in out-of-class activities along with a more positive impact on learning than did the white student population completing the survey.

To explore student involvement further, 64 student leaders agreed to participate in a series of structured focus groups and were asked the following questions:

1. What value does participating in clubs/organizations/activities as part of your college experience have for you?
2. What are you doing on campus and/or in the community that you value?
3. Is Fredonia meeting your expectations?

Question 1: Do you value participating in clubs/ organizations/activities as an important part of your college experience? What value does participating have for you?

Response Categories	Responses	%
<i>Meeting new people</i>	15	29
<ul style="list-style-type: none"> ▪ Socializing ▪ Making friends ▪ Having fun 		
<i>Skill Building</i>	10	20
<ul style="list-style-type: none"> ▪ Leadership ▪ Cooperation (Team Work) ▪ Communication 		
<i>Learning from other different from self</i>	8	16
<ul style="list-style-type: none"> ▪ Diversity ▪ Awareness ▪ New ideas 		
<i>Career Enhancer</i>	7	14
<ul style="list-style-type: none"> ▪ Internship connections ▪ Professional interactions ▪ Real world experiences ▪ Builds Resume 		
<i>Helps you mature</i>	5	9
<ul style="list-style-type: none"> ▪ Responsibility ▪ Character 		
<i>A place to belong</i>	3	6
<ul style="list-style-type: none"> ▪ Support ▪ Community 		
<i>Public service</i>	3	6
<ul style="list-style-type: none"> ▪ Self rewarding ▪ Sense of accomplishment 		
TOTAL	51	100

Question 2: What are you doing on campus and/or the community that you value?

Response Categories	Responses	%
<i>Working with youth</i>	7	26
<ul style="list-style-type: none"> ▪ Boys/Girls club ▪ Upward Bound tutor ▪ Sunday School teacher 		
<i>Giving Back to Community</i>	6	22
<ul style="list-style-type: none"> ▪ Superdance ▪ Help Service ▪ Fire Fighter ▪ STEPS 		
<i>Professional Growth/Networking</i>	5	19
<ul style="list-style-type: none"> ▪ Academic Clubs ▪ Internships ▪ Honors Program 		
<i>Sense of Belonging</i>	3	11
<ul style="list-style-type: none"> ▪ Team activities ▪ Resident Hall activities 		
<i>Spiritual Connection</i>	2	7
<ul style="list-style-type: none"> ▪ Inter-Varsity Christian Fellowship ▪ Newman Center 		
<i>Creating Cultural Awareness</i>	2	7
<ul style="list-style-type: none"> ▪ Women's Student Union ▪ Planning multicultural activities 		
<i>Living off campus</i>	2	7
<ul style="list-style-type: none"> ▪ Responsibility ▪ Maturity ▪ Cooperation ▪ Independence 		
TOTAL	27	100

Question 3: Is Fredonia meeting your expectations?

Response Categories	Responses	%
<i>YES</i>	39	57
<ul style="list-style-type: none"> ▪ Professors are good/faculty supportive ▪ Good advisement ▪ Good facilities/good music faculty ▪ Nice campus ▪ Campus life office ▪ Opportunities for involvement ▪ Excellent activities ▪ EDP - Individual attention ▪ Library ▪ Athletic facilities ▪ College Lodge ▪ School is creative -- tries new things ▪ Bus system ▪ Emergency phones ▪ Feel safe ▪ Classes are challenging ▪ Fredonia helps you develop as a whole person <ul style="list-style-type: none"> ▪ "I have grown a lot, at least my Mom thinks so" ▪ "Feel half-rounded -- not well rounded" ▪ "You create your own experiences" 		
<i>NO</i>	28	41
<ul style="list-style-type: none"> ▪ I didn't get as much out of it as I had hoped ▪ Professors are not personal enough ▪ Not socially ▪ Student apathy/lack of participation ▪ Need more weekend activities ▪ Need more alternatives to "down town" ▪ Lack of diversity ▪ Music therapy students are second-class citizens in music dept. ▪ Poor professional turn-out for events ▪ Room selection is a problem ▪ Poor advisement ▪ Limited class availability ▪ Needs work on handicapped access ▪ Health Center has problems/needs equipment 		
<i>YES and NO</i>	2	2
<ul style="list-style-type: none"> ▪ Hard socially as a minority ▪ Diversity is a problem, but getting better (Office of Multicultural Affairs is helping) 		
TOTAL	69	100

Question 4: Do you feel Fredonia is preparing you to handle life after your college experience?

Response Categories	Responses	%
<i>YES</i>	30	88
<ul style="list-style-type: none"> ▪ I've grown ▪ As prepared as I can be ▪ Growing away from parents ▪ Racial issues have helped me grow ▪ Field experiences help ▪ Internships ▪ Organizations ▪ Leadership class ▪ Cultural experiences ▪ Volunteering ▪ Education Major – practical experience <ul style="list-style-type: none"> ▪ Living off-campus ▪ Career Development Office ▪ Counseling Center 		
<i>NO</i>	2	6
<ul style="list-style-type: none"> ▪ Need more training ▪ Disappointed in Career Development Office 		
<i>DONT KNOW</i>	2	6
<ul style="list-style-type: none"> ▪ "school is a comfort zone" ▪ "Feel half-rounded -- not well rounded" 		
TOTAL	34	100

Students were asked what value participation in clubs and activities held for them. The four most frequently mentioned reasons were meeting new people (29% of responses), building skills (20% of responses), gaining an awareness of diverse ideas (16% of responses), and enhancing career (14% of responses).

In addition, these same students feel they are intrinsically motivated to be actively involved. When asked what they valued most about their participation, working with youth (26%), and giving back to the campus community (22%) gave them the strongest sense of satisfaction. They also mentioned the importance of professional growth/networking, belonging, gaining a spiritual connection and creating cultural awareness as important reasons for participating in out-of-class activities.

When asked about their Fredonia experience, 57% of the focus group participants indicated that their expectations are being met. Discussing areas of concern, the 41% who believe that their expectations have not been met identified a variety of individual reasons including lack of diversity, student apathy, and limited class availability.

Finally, a resounding 88% of the focus group participants believe that Fredonia is preparing them to handle life after their college experience. They feel they have grown personally, gained awareness of differences and cite the Career Development Office and Counseling Center as being instrumental in their growth.

It appears as if many of our students choose not to participate in out-of-class structured activities. However, those who do seem to gain substantially in their personal and social growth from the experience. Perhaps encouragement of participation in clubs and organizations through a newly designed freshman year experience which would have participation requirements would be a way to address this issue.

SUMMARY OF FINDINGS:

- It appears that Fredonia students are not only growing personally, but are out-doing the national sample in several areas. Also, it seems that the Fredonia experience has a tendency to equalize student growth and development so that initial differences are minimized as a student moves through four years of education and consequent growth. In fact, all significant variable differences evidenced by our 1995 freshmen group were eliminated by the Spring 1997 sophomore year with the exception of gender (females>males in the area of Life Management).
- Fredonia students appear to be representative of the college-age entering freshmen population. However, by the end of the sophomore year our sample scored significantly higher than the sophomore norming sample on the *Establishing and Clarifying Purpose Task* (including all the subtasks except *Cultural Participation*) and the *Academic Autonomy Task*. Interestingly enough, our sophomore sample showed significant growth as compared to the freshmen sample in those same areas. This suggests that our students are developing personally and "out doing" the national sophomore norming sample in their ability to manage their lives, set goals and look to future career involvement. In addition, these same students seem to be more personally involved in planning their education than students in the norming sample.
- On the less positive side, our students exhibited minimal to no growth from freshmen orientation to the end of the sophomore year in areas closely related to social development. Their growth in the *Cultural Participation* subtask declined, and they exhibited only slight movement on the *Mature Interpersonal Relationship Task* and the related subtasks including *Peer Relationships*, *Tolerance* and *Emotional Autonomy*. Also, no growth was evidenced in their attitudes toward personal health and well being as reflected on the *Salubrious Lifestyle Scale*. It is possible that the data obtained from seniors will show more growth in these areas.
- Even though minimal growth was evidenced on the Mature Interpersonal Relationship Task (SDTLI), students perceive that they have grown in peer relationships and tolerance (CSEQ). Traditional age students (19-23) and those who began their college career at Fredonia indicate a more positive feeling with regard to peer relationships than do older, non-traditional students and transfer students. Quality

of Effort in personal experiences and in student acquaintances is higher for those who began their education here than for transfer students, indicating that transfer students may not invest as much in this area of development as students who come to Fredonia as freshmen.

- The data are somewhat mixed on the issue of diversity. This may be a function of the wording of the various instruments and the time at which each was administered. Students perceive a moderate to strong emphasis on diversity at Fredonia. Actually, there is evidence that the number of courses including diversity issues is minimal during the freshman/sophomore years and increases as our students move into upper level courses (junior/senior). Students indicate that they have minimal contact with others different from themselves, but this contact appears to be mostly positive. They indicate a high level of respect for others different from themselves, yet they express a low level of satisfaction with racial harmony. Finally, they would like to have maximum diversity, but feel little exists on campus.

Recommendations will be made to address these areas of minimal social and personal development; however, it is important to note that no significant differences were found between our sophomore sample and the national norming sample on any of the tasks or subtasks where growth was minimal (*Cultural Participation, Peer Relationships, Tolerance, Emotional Autonomy, and Salubrious Lifestyle*). Apparently American college students generally are slow to develop in these areas. Perhaps we as university professionals should explore ways of facilitating personal and social growth with an emphasis on what we should be doing to encourage development as well as what we are currently doing that may be hindering growth and development.

RECOMMENDATIONS:

Cultural Participation

Students believe that the campus emphasizes aesthetics and that a wide variety of cultural activities are available; however, the majority of our students rarely participate in or attend these activities. Perhaps if course requirements included attending activities when appropriate, more students would begin to appreciate the importance of cultural participation.

Mature Interpersonal Relationships

Freshman Seminar would be an ideal place to enhance social and personal growth and development. Perhaps a year-long required freshman experience could be developed that would include a structured personal growth component. This could include elements to encourage participation in clubs and organizations. Many programs are available that could be easily adapted to our population. Professional staff could facilitate this process and provide training as well as support to Freshman Experience instructors.

Special focus needs to be given to our transfer students and our older, non-traditional students. These students show minimal involvement in campus activities, indicate low satisfaction with peer relationships and put minimal effort into creating positive personal experiences and developing acquaintances. The Counseling Center staff along with other support services could provide opportunities for our non-traditional students through brown-bag lunches, breakfast get-togethers, etc. These support initiatives could be developed along with input from older students as to the "when, where and how" of the activities. Recommendations for more transfer student inclusion needs to be brainstormed with the students themselves and perhaps with the Orientation committee, Residence Life, etc.

To address the tolerance/diversity issue the campus needs to continue student, faculty and staff minority recruitment. In addition, faculty, when appropriate, could include more material from and related to under-represented populations in their lower level courses. Also, this could be an important, structured component of our "newly" created year-long Freshman Experience. Once again, professional staff could facilitate this process.

Salubrious Lifestyle

Currently the Counseling Center and Health Center are working together (Health Services) to provide an integrated, educational emphasis on health and well-being. All campus wellness components could be incorporated together through a Wellness Committee format. Physical Education, Health Services, and Residence Life could begin more aggressive, relevant programming in this area. Also, the Freshman Seminar (Experience) format could be used to integrate health and wellness thinking into the mindset of our students.

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CAMPUS CLIMATE/LEARNING ENVIRONMENT/COMMUNITY OF LEARNERS

According to our vision statement, Fredonia aspires to be “above all a community of learners.” Community, of course, implies far more than physical boundaries and institutional membership. A hallmark of community is the development of extensive and complex networks of face to face interaction among members. Communities must also have, and provide individual members with, resources sufficient to maintain a spirit of community, implement its values, and pursue its goals. A community must foster diversity at all levels and of many types. And it should provide a comfortable, safe and nurturing physical environment. What holds communities together are not roles or procedures or budgets, but an ethos. If the community is a university, learning is at the heart of that ethos. In a community of learners, learning can not be confined to the classroom. This task group was charged with examining the climate of our campus and our learning environment in order to assess where we stand on the way toward our highest aspiration. (See Appendix A.)

This task group was assigned a range of questions on disparate topics. In order to maintain coherence in our narrative, we have organized these questions under three general headings: community interaction and involvement, learning resources, and living-learning environment.

The community interaction and involvement section deals with three sets of questions. First there are questions pertaining to student-faculty interaction, both in and out of the classroom, and in connection with the scholarly and creative activities of faculty members. Second, questions are considered that pertain to student activities, student involvement in co-curricular learning experiences, and student involvement in activities that bridge the gap between the campus and the larger Fredonia community. Third, the success of Fredonia’s efforts to promote a climate for understanding and appreciating racial and ethnic diversity is examined by focusing on the relevant interactions, involvements, and perceptions of our majority and minority populations.

The learning resources section focuses on several questions that refer to resources, or resource allocation issues, that are essential to our educational mission. Class size, student-faculty advising ratios, and computer technology are considered in this section.

The living-learning environment section considers questions concerning the extent to which community members experience our residential environment as comfortable and our campus environment as safe. A community cannot foster learning if it does not provide comfortable and meaningful living quarters and a sense of security.

COMMUNITY INTERACTION AND INVOLVEMENT

In a community of learners, learning can not be confined to the classroom. On the contrary, all actions and interactions of members must promote mutual learning.

OUT OF CLASS STUDENT-FACULTY INTERACTION

A number of summary measures of interaction between students and faculty outside of the classroom are available. On the CSEQ survey, students were asked to estimate the total number of hours they spend with faculty outside of class on average during a week when school is in session. Responses of the 448 students answering this question are: 0 hours, 26%; _ to 2 hours, 57%; 3-5 hours, 12%; 6-10 hours, 3%; and more than 10 hours 2%. On the 1997 SUNY Student Opinion Survey, 583 students provided an annual measure of their interactions with faculty. Asked how many times during the past year they had discussions, meetings or informal conversations with their instructors/professors, they responded as follows: none, 4%; 1-2 times, 19%; 3-5 times, 35%; 6-10 times, 21%; and 11 times or more, 21%. A question on the Middle States Faculty Survey was phrased to parallel the question asked of students on the CSEQ: Estimate the total number of hours you spend with students outside of class on average during a week when school is in session (visiting during office hours, academic advising, as a club or group adviser, on a research project or independent study). The distribution of responses from 120 faculty members was: 0 hours, 0%; _-2 hours, 11%; 3-5 hours, 35%; more than 5 hours, 54%.

The volume of out of class student-faculty interaction at Fredonia is substantial. On a weekly basis, 74% of our students engage in some form of interaction with faculty, and for 17% the amount of interaction exceeds five hours per week. On a yearly basis, 77% of students interact with faculty at least three or more times outside of class, and 43% interact six times or more. For 89% of our faculty, at least three hours per week are spent interacting with students outside of class, and for 54%, the number exceeds five hours per week.

It is clear that Fredonia students find the faculty approachable and available. On a CSEQ item that asks students to rate approachability on a scale from 1 (remote) to 7 (approachable), only 9% rate approachability at a 3 or less, while 78% rate it at 5 or above, and over half, 55%, rate the approachability of faculty in the highest two categories. On a SUNY Student Opinion Survey question asking students about their level of satisfaction with the out of class availability of faculty, two-thirds indicated they were satisfied or very satisfied. Only 9% were dissatisfied or very dissatisfied. Fredonia's students reported significantly higher levels of satisfaction on this item than students at the other 26 state-operated colleges.

The exact nature of out of class interaction is not known in great detail. Ten CSEQ questions about different types of student-faculty interaction comprise an "Experiences with Faculty" scale. Some of these items specifically refer to out of class activities, while others are ambiguous with respect to whether they occur outside of class or in class. Interactions such as discussing academic programs or career plans may be more likely to occur outside of class, but others, such as asking for course information or discussing a term paper could occur during a class. It seems reasonable, though, to treat these items as general indicators of interaction occurring outside of class, recognizing that in some instances it may, in fact, occur as part of a class. The most frequently engaged-in interactions, those that occur often or very often, involve discussions of academic programs (53% of all students), faculty feedback that results in working harder (51%), and asking for course information (47%). The least frequently engaged-in interactions, those with the smallest percentages reporting often or very often, are working with faculty on research (5%), socializing with faculty (11%), and participating with other students in a discussion with one or more faculty members (16%).

Student Characteristics and Frequency of Out-of-Class Student-Faculty Interaction

Differences in these frequencies of interaction require more careful examination. Who are the 26% of our students who in an average week have no-out-of-class interaction with faculty, or the 23% who in the course of an academic year are engaged with faculty members outside of class only the two times or less that are barely sufficient for course selection? At the same time, to understand more fully the connection between out-of-class interaction and student learning, it is necessary to look more systematically at the characteristics of those students who most frequently interact outside of class with faculty.

Of the students in the CSEQ sample who report no interaction with faculty members outside of class during an average week, 65% are freshmen or sophomores, and 63% are 19 or younger. For both the CSEQ and SUNY Student Opinion Survey samples, a statistically significant association exists between chronological age and class level and frequency of interaction with faculty. As students move through their academic program, the number who do interact with faculty on a weekly basis increases from 63% for freshmen to 69% for sophomores, 77% for juniors, and 86% for seniors. Among seniors, 32% report three or more hours of interaction per week. No significant associations appear with other factors that might be suspected of limiting student-faculty interaction, such as course load or employment. The social sciences (32%) and education (31%) have the highest percentages of students who engage in no out-of-class interaction. Increasing age and class levels are also associated with higher composite scores on the CSEQ "Quality of Effort: Experiences with Faculty" scale, the sum of scores on ten different types of student-faculty interaction, at statistically significant levels. Students older than nineteen, those who are generally juniors or seniors, interact more frequently and in a greater variety of ways with faculty. Frequency of interaction, as measured by the "Quality of Effort: Experiences with Faculty" scale also differs by academic division (excluding students who checked general studies or other), with the fine arts having the highest mean, and the natural sciences and humanities occupying a second tier, followed by education and social science. Transfer students, who would of course tend to be in the upper class levels, have a somewhat higher level of interaction with faculty than non-transfer students.

Student Learning and Out-of-Class Student-Faculty Interaction

Is out-of-class interaction with faculty related to student learning? One way to approach this question is to use the CSEQ sample to examine the association between GPA and the number of hours per week students spend in out-of-class interaction with faculty. Controlling for the sizeable number of freshmen and transfers who had no GPA at the time the survey was given, no statistically significant relationship exists between GPA and student reports of average weekly frequency of interaction with faculty. Using the SUNY Student Opinion Survey sample, which measures frequency of interaction on a yearly basis, grades and interaction with faculty are positively related overall, and the relationship remains when only juniors and seniors are taken into account. Again considering only students who are juniors or seniors, higher levels of interaction with faculty are associated with students' perceptions of the gains they have made in thinking analytically and logically, but with no other items on the CSEQ Estimate of Gains scales.

A more interesting approach is to examine the association between the composite "Quality of Effort: Experiences with Faculty" score and various other indicators of learning found in the "College Activities" and "College Environment," sections of the CSEQ. The relationship between the "Experiences with Faculty" score and these measures is rather striking. "Experiences with Faculty" correlates with the "Course Learning" scale, the "Writing Experiences" scale, the "Library" scale, and the "Topics of Conversation" scale. These relationships hold, although the correlations are slightly lower, when class level is controlled by taking only juniors and seniors into account. In addition, the highest significant correlations with the "College Environment" items are also with items directly related to learning, although the correlations themselves are weak to moderate. "Experiences with Faculty" correlates with student assessments of the college's "Emphasis on developing academic, scholarly, and intellectual qualities," "Emphasis on developing aesthetic, expressive, and creative qualities," and "Emphasis on developing critical, evaluative, and analytical qualities."

Finally, both students taking the CSEQ survey and faculty were asked directly to what extent out-of-class interaction had a positive impact on student learning. Faculty response was overwhelmingly in favor of the positive impact of the interaction, with 77% responding the impact was "very much" and 23% that it was "quite a bit." Of the students who engaged in some interaction with faculty, 38% answered that the positive impact was quite a bit or very much, 38% answered somewhat, and 24% answered very little. The relationship between average hours of weekly interaction with faculty and assessment of its positive impact reaches a statistically significant level.

Conclusions

Fredonia's faculty is available and approachable, and students routinely take advantage of opportunities for out-of-class interaction. For the most part, they do so frequently and on a variety of matters. Interaction is understandably less frequent with newer students, but it increases with class level, as students mature, choose majors, become better acquainted with individual faculty, and focus more seriously on career issues. Presumably, the relationship is reciprocal: students are more motivated to interact as they progress in their academic programs, and faculty are more likely to seek out interactions with students as they demonstrate greater interest and motivation.

Analysis of the data shows a clear relationship between out of class interaction with faculty and indicators of student learning. But positive correlations among all CSEQ scales, also suggests that the students who interact most with faculty, or who motivate faculty members to interact with them, are also those who engage in more learning experiences and activities in general. Frequent and extensive interaction with faculty surely promotes student learning, but it is also the case that those students who engage in such interaction are aggressive learners and doers in many other aspects of college life. What is most important, though, is not a precise determination of cause and effect, but the clear evidence that Fredonia students and faculty are available to each other outside of the classroom for interactions that are frequent, varied, and an established element of the overall learning climate at Fredonia.

IN-CLASS INSTRUCTIONAL INTERACTIONS

What types of instructional interactions occur in typical classes taught at Fredonia? What impact, positive or negative, do students and faculty believe that these various teaching interactions have on student

learning of critical course content? What types of changes would most likely improve student learning at Fredonia? The Middle States Student Survey and the Middle States Faculty Survey included sets of questions that required respondents to indicate: (a) the frequency with which certain types of instructional interactions took place, (b) the extent to which such activities made a positive impact on learning, and (c) the extent to which certain changes in instructional arrangements (e.g., smaller classes, higher academic standards) would improve the climate for student learning. All items were rated on a 5-point scale from 1 (not at all) to 5 (very much). In addition, the Diversity Survey completed by the same student sample included a series of questions asking students to assess how much value faculty members place on certain learning methods and to indicate how valuable those strategies were from students' perspectives.

In-Class Interactions from the Students' Perspective

Student responses to the Campus Climate/Learning Environment Survey can be seen in Table 1. Since the frequencies of types of interactions are linked to class size, content area, class level of participants, etc., each column contains two numbers. The first number shows student responses of 3, 4, and 5 (occasionally to very often or much) on the "extent of interaction," while responses of 4 and 5 (often to very often; much to very much) are reflected in percentages in parentheses. The first salient finding is that most students reported they were exposed to a large amount and wide variety of instructional interactions in their typical classes. They indicated, for example, that they were often involved in small group discussions and cooperative learning groups, that they routinely used information or experience from other areas of life (e.g., job, family, internship) in class, and they were required to explain critical course content to their peers during class sessions. In addition, the majority of students asked questions of their instructors, had their oral presentations and written work critiqued by faculty, and less often peers, and said that they worked harder as a result of encouragement and/or direction from the instructor.

Virtually all students reportedly were exposed to some variety of "in-class" instructional interactions. For the great majority of these, such interactions were encountered rather routinely in typical classes. For example, over 40% of all students responded in the two highest categories (much or very much) on at least seven instructional interaction items.

Table 1**EXTENT TO WHICH THE FOLLOWING
TYPES OF INTERACTION OCCUR IN A
TYPICAL CLASS YOU TAKE****STUDENT RESPONSES**

	Extent Of Interaction	Positive Impact On Learning
	Occasionally to Very Often (Often To Very Often)	Somewhat to Very Much (Much To Very Much)
Small Group discussions	80% (38%)	82% (54%)
Cooperative Learning Groups	68% (30%)	72% (43%)
Giving class presentations	62% (29%)	66% (35%)
Faculty critique of papers/presentations	80% (63%)	89% (66%)
Peer critique of papers/presentations	73% (35%)	73% (51%)
Role playing or practice activities	47% (21%)	62% (37%)
Student-faculty discussions	75% (47%)	85% (54%)
Student-student interactions, discussions, etc.	73% (41%)	78% (45%)
Class discussions using electronic medium	48% (26%)	56% (31%)
Asking for information relating to a course assignment, grades, etc.	80% (53%)	90% (63%)
Discussed idea for a paper or project with instructor	75% (42%)	86% (61%)
Discussed career plans	59% (34%)	73% (52%)
Worked harder as a result of instructors direction/encouragement	75% (47%)	90% (68%)
Used information or experience from other areas of life	81% (45%)	82% (54%)
Explained course material to someone else	80% (39%)	83% (47%)
One to one instruction	40% (22%)	69% (53%)
Faculty members making changes based on course evaluations	57% (35%)	78% (51%)

Students' Perspective on the Impact of Instructional Interactions on Learning

Students were quite clear about the positive impact most "in class" interactions have on their learning. With the exception of class discussions using electronic media (one of the more infrequently experienced interactions), over 60% of students rated all forms of instructional interactions as having at least a somewhat positive impact on their learning. Moreover, over 80% reported similar reactions on eight separate items (e.g., student-faculty discussions regarding important course content, explaining course content to someone else in class, etc.). On 11 items, over half of the students rated the positive impact of these interactions in the two highest categories. Such findings are quite consistent with Astin's results involving almost 500,000 undergraduates. For example, Astin reported that pedagogical practices such as cooperative learning, giving class presentations, frequent student-faculty and student-student interactions, and having papers critiqued by faculty were consistently and positively related to most important cognitive outcomes. Fredonia students frequently experience these interactions, and their view of the positive impact they have on learning reflects Astin's findings.

There was little differentiation among students in their responses to items based upon demographic or academic characteristics. No statistically significant differences were found in mean scores by gender or racial/ethnic grouping on any item. There were only a few items (e.g., small group discussions, asking for information related to a course, and discussing ideas related to a term paper or class project with the instructor) on which scores differed by class level, always in the direction of upperclass students having higher mean scores than their underclass counterparts.

An additional perspective on classroom interaction was gleaned by examining student responses to the instructional methods questions on the Diversity Questionnaire. Various methods of learning are listed in Table 2. The numbers reflect the percentage of students who perceive that faculty place a lot of value on

those methods of learning and the percentage of students who themselves place a lot of value on those methods.

Table 2

METHODS OF LEARNING	STUDENT PERCEPTION OF VALUE FACULTY PLACE ON METHODS OF LEARNING	METHODS OF LEARNING STUDENTS FIND MOST VALUABLE
Information from texts	56%	34%
Information from lectures	80%	72%
Information from audience experiences	13%	28%
Small group work	18%	40%
Essay exams	32%	25%
Objective exams	51%	33%
Short papers	42%	43%
Long papers	36%	27%
Oral presentations	16%	26%
Regular homework problems	32%	49%
Class attendance	56%	58%

Class assignments and examinations are, of course, also forms of instructional interaction. In general, students see their own values as most consistent with faculty values with respect to the relative importance of lectures, essay exams, short papers, class attendance, and long papers (i.e., all items show less than a 10% difference). Students feel, however, that faculty place greater value on textbook information and objective exams whereas they place greater value on information from life experiences, small group work, oral presentations, and regular homework assignments.

In-Class Interactions from the Faculty's Perspective

All forms of instructional interactions were also well represented in typical courses taught by our faculty. As seen in Table 3, over 70% of responding faculty said that they used small group discussions, had students make oral presentations, critiqued student papers/presentations, engaged in class discussions regarding important course concepts, and discussed career options with their students.

Moreover, student-student interactions, discussions and debates, and one-to-one instruction, were reported by approximately two-thirds of responding faculty members. Faculty reported they used the remaining forms of in class interaction forty to fifty percent of the time. The only instructional interaction used by less than 40% of the faculty was using electronic media to communicate with students. Interestingly, over half of the faculty used at least six types of interaction often or very often in a typical class they were teaching. These findings are highly consistent with student perceptions that many different types of instructional interaction are being used in their typical classes. Such cross-validation adds a measure of strength to the findings that many different and exciting things are happening in our classes.

Table 3**EXTENT TO WHICH THE FOLLOWING
TYPES OF INTERACTION OCCUR IN A
TYPICAL CLASS YOU TEACH****FACULTY RESPONSES**

	EXTENT OF INTERACTION	POSITIVE IMPACT ON LEARNING
	Occasionally to Very Often (Often To Very Often)	Somewhat to Very Much (Much To Very Much)
Small group discussions	74% (50%)	95% (73%)
Cooperative learning groups	53% (41%)	83% (56%)
Giving class presentations	72% (41%)	91% (52%)
Faculty critique of papers/presentations	90% (78%)	96% (78%)
Peer critique of papers/presentations	44% (22%)	58% (40%)
Role playing or practice activities	45% (24%)	71% (51%)
Student-faculty discussions	87% (69%)	92% (76%)
Student-student interactions, discussions, etc.	63% (42%)	86% (66%)
Class discussions using electronic medium	36% (18%)	57% (30%)
Discussed idea for a paper or project with instructor	82% (65%)	90% (70%)
Discussed career plans	80% (50%)	84% (56%)
Used information or experience from other areas of life	75% (51%)	83% (59%)
Explained course material to someone else	56% (29%)	79% (51%)
One to one instruction	66% (40%)	90% (75%)

Faculty's Perspective on the Impact of Instructional Interactions on Learning

A more careful analysis of the data suggest further that there is broad support among faculty for almost all forms of in-class, instructional interaction. Only two items (i.e., having student papers and presentations critiqued by peers and using electronic media to communicate) were judged by under 60% of the faculty as having less than somewhat of a positive impact on student learning. In contrast, a substantial proportion of the faculty noted that the remaining in-class interactions had much to very much of a positive impact on learning. Again, such findings are quite consistent with Astin's results regarding pedagogical practices that make a significant difference in the development of undergraduate students.

There were very few significant differences among faculty responses based upon gender and/or length of service. The one exception was that female faculty members reportedly made significantly more extensive use of students to explain course material to someone else than their male counterparts. In contrast, there were considerably more significant differences among faculty members across academic divisions. For example, small group discussions and student presentations were more prevalent in the humanities, fine arts, and education. Faculty critiques of papers and presentations, discussions of ideas for papers, and using information from other areas of life, on the other hand, were reported more often within the social sciences, humanities, and education. Peer critiques of papers were more prevalent in the humanities, while one – to – one interaction was favored more often by the fine arts and natural sciences. Finally, the extent to which certain in-class interactions were used also differed somewhat by employment status. Temporary faculty were less likely to use student presentations, critiques of such presentations, role playing, and student-faculty discussions of important course concepts.

Conclusions

In-class interaction is varied and valued by both students and faculty at Fredonia. Faculty offer and students experience a wide range of interactional opportunities in typical classes, and in large numbers, both groups believe that these interactions have a positive impact on student learning. On a list of nine items

having to do with ways to improve the climate for student learning at Fredonia, faculty ranked more frequent in-class interactions third, after higher academic standards and smaller class size.

Why is this exposure to a variety of instructional arrangements important? First, there appears to be clear evidence that student retention in college is significantly enhanced by direct student involvement with faculty and peers. In fact, Astin's construct of Student Orientation of the Faculty (which includes using a variety of instructional methods) produced more substantial direct effects on students' academic and interpersonal outcomes than almost any other of 192 environmental variables. In Astin's words, "having a strong student-oriented faculty pays rich dividends in the affective and cognitive development of the undergraduate."

Additional support for variety in instructional interactions can also be gleaned from the work of Thousand, Villa, and Nevin on cooperative learning, peer teaching, and small group interaction. A considerable body of evidence suggests that students make the greatest academic gains when they are actively engaged in relevant instructional arrangements. Having to present papers orally to faculty and peers, explain critical course concepts, and engage in class discussions of important course material have been linked consistently with student growth in cognitive and affective domains. It would appear that Fredonia students are encountering such interactions rather often in their typical classes. Finally, according to Hodgkinson, instructional diversity, or the practice of using a variety of instructional methodologies, would appear to be a valuable asset in terms of students' differing learning styles and the rather spectacular changes that have occurred in the population of students attending college. Most data suggest that faculty are going to have to develop and utilize instructional methods that are responsive to a much wider variety of student needs. It is encouraging to see that this process has already begun to emerge at Fredonia.

Moreover, this faculty is self-consciously attentive to differences in student learning styles, and a willingness to take them seriously seems to be well established. Almost two thirds of faculty respondents, for example, noted that they have modified their teaching styles over time to accommodate such differences in learning style. Different teaching strategies are used in different classes quite a bit or very often by at least 70% of the faculty, presumably for a variety of reasons (e.g., class level, course content, etc.). Faculty members report making changes in their courses and how they teach on the basis of student course evaluations, 49% of them quite a bit or very much. Importantly, students concur: approximately 60% of student respondents feel that faculty members do change how they teach as a function of course evaluations. This perception that faculty members are, indeed, responsive to student needs is a strong correlate of Astin's concept of "student-orientation of the faculty."

SCHOLARLY AND CREATIVE ACTIVITY AND STUDENT-FACULTY INTERACTION

Information regarding student participation in faculty scholarly research and creative activities was gathered from both a faculty and student perspective. The CSEQ included several relevant questions. Students were asked if they had ever worked with a faculty member on a research project. The great majority, 85%, responded never, 10% occasionally, and 5% often or very often. A second question asked if students had ever participated in a faculty member's scholarly or creative activity. To this question 51% responded never or don't know, 29% said occasionally, and 20% often or very often. Student responses obviously varied to a large degree between these two questions. Students evidently distinguished between being a co-contributor or participant in a research project, and what may be more passive forms of participation, such as, perhaps, answering a survey, helping to unload work for an art exhibit, or simply being part of a class that involved examining the instructor's research. Students were also asked whether they would like more opportunities to participate in the scholarly or creative activity of a faculty member. Almost one-third responded not at all or very little, 50% somewhat, and only 18% quite a bit or very much.

Faculty responses to a wider range of questions contrast with student responses in some interesting ways. The scholarly work and creative work of the faculty are generally integrated into courses they teach. For 59% this integration occurs quite a bit or very much, and only 14% report that it occurs very little or not at all. It is not clear from the data what forms the integration takes. Some responses are likely to be based on the assumption that scholarly work necessarily becomes part of the content of courses, while others may

have restricted their answer to instances in which they directly utilized the results of research in their classroom presentations. Asked if they encourage students to participate in their scholarly or creative activities, 31% responded quite a bit or very much, and an additional 27% said somewhat, while 19% never offered such encouragement. In response to the question "Estimate the total number of students during an average semester who are directly involved in your scholarly or creative activity (co-authoring papers, participating in your research, performances, exhibits, attending conferences or presenting papers with you, etc.)", a sizeable majority of faculty members, 63%, responded that they involved one or more students in their work. Of the 63% of faculty who said students do participate in their scholarly or creative work, 22% have 6 or more students involved in an average semester, and an additional 28% involve 3-5 students. The average number of out-of-class hours per week faculty commit to directly involving students in their scholarly or creative activity is substantial. Of those who do involve students, 25% commit 6 or more hours per week, 29% 3-5 hours per week and 46% 1-2 hours.

Faculty members also voiced concern about constraints on their own scholarly and creative activity, and the inadequacy of resources provided to support the involvement of students. The extent to which time devoted to college service affects the time available to devote to scholarly or creative activities is quite a bit or very much for 41%, and somewhat for an additional 33%. Just over 50% feel the college provides no support or very little support for them to encourage students to participate in their research, whereas 17% feel there is quite a bit or very much support, and 32% say there is some support.

Students who have worked on a faculty member's research project differ from those who have not on several academic characteristics. The highest percentage of such students is found in the natural sciences, although overall no statistically significant association exists between involvement in research and academic division. A significant association is found with class level, showing greater involvement for juniors and seniors. No significant associations are found with gender, GPA, or intention to enroll for an advanced degree. No significant differences were found between faculty who involve students in their scholarly and creative activity and those who do not based on gender, length of service, employment status, or division.

Both students and faculty were asked to assess the impact on the student's learning of working on a faculty member's research project. Of those students who indicated they had participated, 28% said the impact was quite a bit or very much, while 72% felt the impact was somewhat or very little. Of faculty members who have students involved in their research, 68% believe the positive impact on student learning is quite a bit or very much, and 18% evaluate the positive impact as somewhat. Students who have worked on a research project achieve significantly higher mean scores on various CSEQ indicators of student learning than students with no such involvement. In particular, they score higher on the Quality of Effort indexes for course learning, library, writing experiences, and, not surprisingly, experiences with faculty.

In the Student Outcomes Assessment Reports for Departments/Programs, 1998-1999, few departments even mentioned collaborative research projects between faculty and students. Only two departments, both in the natural sciences, cite "collaborative student/faculty research" and "participation in faculty research" as a means to achieving student outcomes. However, most of the sciences (and American Studies) claim student research as one of their priorities. Certain other departments describe activities that are more difficult to define. For example, the Education department discusses a variety of "Experiential Learning Activities", usually enacted within the community, which very possibly overlap with faculty research. Also, the performing arts (specifically Theater Arts and Music) consider major performances as integral to the student's education, and as faculty are usually engaged in these activities (as conductors, directors, coaches, etc.) this may certainly count as collaborative creativity.

Conclusions

It may seem at first that a relatively small number of students are involved in faculty research. Yet 15% of our undergraduate student body amounts to almost 690 students, and the majority participating in research would likely be juniors and seniors. Considering also that 63% of all faculty involve one or more students in their scholarly and creative activity in a typical semester, and that 31% of all faculty spend three or more hours per week with these students, the opportunities provided to students to interact with faculty in connection with scholarly research may seem more reasonable. The fact that 68% of students say that they

are at least somewhat interested in having more opportunities to participate in faculty scholarly and creative activity is relevant also, inasmuch as it provides a basis for inferring that there is some unfulfilled student interest. However, many students may be quite unclear about what it is they are asking for. There are also practical obstacles and limitations to how many students could be accommodated as actual participants in faculty research. In addition, there are complex questions concerning which students would truly gain from this experience.

Fredonia does not promote itself as a research institution, nor does it have the resources of one. It follows then that student participation in faculty research is more limited than at other types of institutions. Nevertheless, 63% of our faculty involve students directly in their research, and spend a great deal of time doing so. But at the same time they express a strong sense of lack of support from the college for involving students, and experience constraints on their own research imposed by college service obligations. It seems there is an inherent strain in this situation that needs to be addressed. Presumably, some of this strain is associated with larger issues having to do with the existing balance or imbalance in faculty responsibilities for research, teaching, and community service, and with how rewards are distributed in relation to these responsibilities.

ACTIVITIES, CLUBS AND ORGANIZATIONS, AND STUDENT LEARNING

There are other realms of interaction and involvement that are essential in a community of learners. There are informal interactions among students, structured interactions in clubs and organizations, interactions between students and the professionals who staff our offices, maintain our facilities, and perform a vast array of critical functions, and interactions between students and members of the larger community of which this campus is a part. The following sections examine several aspects of these important components of student life and student learning.

Time Allocation and Community Involvement

A majority of our students are actively engaged in necessary and important activities. In the CSEQ population, 62% were taking a full course load (15-16 hrs), 12% were taking 17 or more credit hours, and almost all of the remainder between 12 and 14 hours of course work. Including the time they are in class, 28% of our students estimate they spend 40 or more hours a week engaged in activities related to their class work, an additional 33% spend about 30 hours a week, 27% spend 20 hours a week, and the remainder less. The library is used as a place to study often or very often by 38% of our students, and an additional 46% do so occasionally. Over half of our students work, 26% of them 10 hours or less, 15% 11-20 hours, and 13% upwards of 21 hours. Of those who do work, 48% say their job takes at least some time away from their schoolwork, though few find this a serious problem.

Some of our students are quite active in clubs and organizations. Seventeen percent (17%) spend 6-10 hours, and 13% spend 11 hours or more per week. In addition, 75% use campus recreational facilities, 41% often or very often; 34% play a team sport at some level, 14% often or very often; 75% attend cultural or social events, 25% often or very often; 48% have attended a lecture or panel discussion, 11%, often or very often; 73% have gone to an exhibit or performance, 35% often or very often; 89% attend concerts or other musical events, 51% often or very often. And of course they talk. Often or very often they talk about classes or readings (62%), things instructors have said (56%), current events in the news (54%), different ways of thinking (54%), different lifestyles (47%), social issues such as peace and justice (44%), the arts (41%), the economy and employment (40%), and other topics.

According to the 1998-1999 guide entitled *Fredonia State College Student Organizations*, there are 107 such organizations on campus. They include athletic clubs, campus service organizations, departmental organizations, general service organizations, governmental organizations, Greek social organizations, honorary organizations, performance organizations, professional organizations, religious organizations, and special interest organizations. An effort to survey these organizations in order to gain some sense of the size of their membership elicited responses from 61 groups. Some are understandably small, for example Acafella's (10) or paranormal research (5), while others have very sizeable memberships, such as the Teacher

Education Club (100), Orchesis Dance Company (100), and Upperclass Buddy (300). The average size of organizations responding to the survey was around 35. In addition to student involvement, the survival of these groups, as well as much of their value for student learning, often depends on the dedication of faculty and professional staff who serve as advisors.

Levels of involvement in organizations such as these vary, with some students devoting enormous amounts of time and effort over long periods of time, and others maintaining only peripheral involvement. Some students may become so over-involved that they neglect their schoolwork altogether. Students in the Middle States Student Survey provided some indication of the extent of involvement. On a scale ranging from 1 (not at all) to 5 (very much), students were asked to what extent selected activities were a significant part of their experience at Fredonia. Response frequencies of students checking the highest two categories include: involvement in student media (radio, newspaper, literary magazine club, etc.) 12%, involvement as a tutor or Resident Assistant 13%, involvement with a multicultural club 12%, involvement with a dorm council 8%, and involvement in a fraternity or sorority 10%.

A special case of student involvement has to do with activities that link them and the college to the larger community. A great deal of community involvement is linked to internships and other forms of experiential learning that are discussed in other sections of this document. These are often required by academic programs and involve students in career-related activities in local agencies, businesses, etc. There are other forms of community involvement that students themselves generate, typically in the form of volunteerism. Many of the clubs and organizations referred to support regular volunteer efforts. Some of these, such as Superdance, are institutionalized events that result in contributions to charity, others are less formally structured efforts that involve, for example, activities with local children and senior citizens. An effort was made to survey groups for data about their volunteer efforts, but after contacting the first 15 organizations, it became clear that few formal records are kept regarding number of participants, hours invested, etc. One group that does keep such records is Superdance. This annual event raises money for the Muscular Dystrophy Foundation of Western New York, and over a period of seven months involves approximately 7204 volunteer hours of work. During its 28 year history, Superdance has raised more than \$100,000 for muscular dystrophy.

Of course students also have friends, relax, watch TV, frequent bars, skip classes, and far too often devote less time to their schoolwork than they need to. Some simply behave irresponsibly with respect to their academic obligations. However, these students are more the exception than the rule, and the majority spend a great deal of their time involved in important and productive activities.

A few consistent patterns of variation in involvement are evident on the basis of demographic or academic variables. The "Quality Of Effort Score: Clubs and Organizations" on the CSEQ shows significant difference by academic division, with lower mean scores in the natural and social sciences, and the highest means in fine arts. There is also a difference by class level, with seniors having the highest means. On the Middle States Student Survey, minority students demonstrated consistently greater involvement in activities than majority students, a finding that is discussed further in the Diversity section.

Co-Curricular Activities and Student Learning

How are these important and productive activities linked to student learning? One way to look at this question is from the student's own point of view. Of those who do engage in some activities related to clubs and organizations (about 74%), students are very evenly divided: 34% believe their participation had quite a bit or very much positive impact on their learning, 33% said there was somewhat of a positive impact, and 33% said the positive impact was very little. Considering the vast array of such organizations and variation in the levels of student involvement, this range of responses is not surprising. On the Middle States Student Survey, students indicated on a five-point scale, ranging from 1 (not at all) to 5 (very much), to what extent they thought involvement in specific types of activities have a positive effect on their learning. Of those who did participate, the following percentages rated the positive impact of the experience on their learning in the highest two categories: 25% in the case of involvement on a dorm council, 48% in the case of involvement in student media, 69% with respect to involvement as an RA or tutor, 74% with respect to involvement with a multicultural club, and 68% for involvement in a fraternity or sorority.

Faculty members offer an additional perspective on this topic. When asked to what extent they think being involved in campus organizations and clubs has a positive impact on student learning, faculty members responded in roughly the same proportions as students. Quite a bit or very much was selected by 36%, 41% selected somewhat, and 19% very little, leaving 3% who responded not at all. If anything, the faculty leans slightly more heavily in the direction of the positive impact of participation in clubs and organizations than students do.

The relationship between co-curricular activities and student learning can be examined systematically using the composite Quality of Effort Scale for Clubs and Organizations from the CSEQ. The score on this scale is a composite of five items that range from simply attending a meeting of a campus organization, to working on a committee, organization, or project, to managing or providing leadership to an organization. Student scores on this scale are positively correlated at statistically significant levels with the CSEQ Quality of Effort indexes for course learning, library and writing experience scales. Significant mean differences are also found with regard to the relationship between the Quality of Effort score and student ratings of the positive impact of participation in clubs and organizations on learning. The mean score of those who see very little positive impact is 7.28, for those who see some impact 8.72, for those who see quite a bit of impact 10.93, and for those who see very much impact, 13.0. Excluding students who as yet have no GPA at Fredonia, significant differences in means are also evident with respect to GPA. Students with GPA's of 3.3-4.0 have the highest mean score, 9.95, on the Quality of Effort Index..

Student participation in clubs and organizations as measured by the Quality of Effort score is also positively related to a number of areas in which students feel they have made gains. The areas most closely related to learning include vocational preparation and acquiring skills for a professional career, gaining a broad general education, enjoyment of art music, and drama and acquaintance with literature, self understanding, and learning on one's own.

Conclusions

The majority of our students are involved in a range of important and productive activities. But it is important not to assume that all activities have learning value. The learning value of student involvement in a range of clubs and organizations is demonstrated by the data, and by the judgements of students and faculty. To some extent, it is our most involved students who are our best students academically.

However, there are also issues here that have to do with costs and balance. The faculty clearly indicates a desire for higher academic standards, ranking it first among a variety of changes that would improve the climate for learning at Fredonia. Students rate the imposition of higher standards dead last. We know also from their own responses, surely not underestimates of the amount of hours they spend on class-related activities per week, that many of them are simply not spending close to enough time studying to accomplish the work we assign them, let alone reach the highest academic achievements they are capable of. But the data also show that our most successful students academically are also most involved in student activities.

But what are so many students saying when they reject the idea of higher academic standards? That they don't want to work; they don't want to learn more? The data suggest that the majority of students are working hard at a variety of things and learning from many of them. But it seems that for many students the balance between course work and other forms of learning has been lost. They are not meeting the academic standards they can and should meet. The learning value of certain co-curricular activities is not in question; the issue is how to balance them with acceptable academic standards.

RACIAL AND ETHNIC DIVERSITY

Limited amounts of data were available from the CSEQ and SUNY Student Surveys. The former included 44 members of racial or ethnic minorities, or 9.3% of the total survey population, but asked a limited number of useful questions. The latter included only 18 minority students out of a population of 615, probably because a "prefer not to answer" response was offered in the question about racial/ethnic identity. In order to collect sufficient data concerning the campus climate for understanding and appreciating racial and

ethnic diversity, a General Student Survey on Diversity and a Minority Student Survey on Diversity, created by the Taskforce for the Recruitment and Retention of Minority Students, were conducted. The General Survey was administered along with the Middle States Student Survey to a sub-sample of students taking the CSEQ consisting of 140 Caucasian students. The Minority Student Survey was administered on separate occasions to 57 minority students in order to ensure a sample sufficient for comparison to the non-minority student population. Campus-wide there are 197 students who belong to racial/ethnic minority groups. Our sample of 57 represents 29% of this population. Approximately 74% of Fredonia's minority is Black or Hispanic, in almost equal numbers. In our sample 77% is Black or Hispanic, with Blacks outnumbering Hispanics 27 to 17. It is essential to remember that the non-minority responses are based on only 140 cases.

Several questions provide a general sense of the state of racial/ethnic diversity on our campus. Asked to assess the state of diversity at Fredonia on a five point scale ranging from 1 (no diversity) to 5 (maximum diversity), 45% of majority students say there is little or no diversity, while 61% of minority students believe this to be the case. At the same time, 21% of the majority feel we are at or near maximum diversity (scores of 4-5), while only 11% of minority students feel we are at or near maximum diversity. Using the same scale to indicate what they think diversity should be like at Fredonia, only 16% of majority students selected maximum diversity, as compared to 47% of the minority students. However, taking into consideration the top two categories (scores of 4 or 5), 62% of majority students and 78% of minority students believe diversity should be at or near maximum. Although what maximum diversity is or should be is ambiguous, these responses do provide a useful sense of differences in student sentiment.

Along the same lines, students were asked how much is being done to help African American, Hispanic, and Native American students to be as successful as they can be at Fredonia. Two-thirds of the minority students responded that help was being offered not very much or on occasion, and 40% of majority students responded the same way. Among majority students, 25% thought a lot was being done, a view only 9% of minority students subscribed to. A follow-up question asking how much Fredonia should be doing to help these groups was also asked. Among minority students, 54% thought a lot of help should be given, whereas 30% of majority students thought this way. 83% of minority students and 54% of majority students responded in the top two categories (a lot and just enough). Few students, 8% among majority students and 7% among minority students, felt Fredonia should be doing nothing or not very much.

On the SUNY Student Opinion Survey, 545 majority students responded to questions about their degree of satisfaction with the diversity of the student body, racial harmony on campus, and the occurrence of incidents of racial prejudice. This survey was conducted the semester following a well-publicized racial incident on campus. With respect to the diversity of the student body, 26% of the majority were satisfied or very satisfied and 17% were dissatisfied or very dissatisfied. However 42% were "neutral" and 15% answered don't know. On the question of racial harmony, only 19% of majority students were satisfied or very satisfied, while 42% were dissatisfied or very dissatisfied, and 39% answered neutral or don't know. Responding to the claim that incidents of racial prejudice by students seldom occur on this campus, 45% of majority students disagreed or disagreed strongly, and 29% agreed or agreed strongly, while the remainder were uncertain. Comparable figures for minority students cannot be calculated, since the proportion of minority students who answered the question about racial identity is too small.

The Diversity Survey asked a number of questions pertaining to interactions between minority and majority students. Estimating their own level of interaction with minority students from the U.S. on a four point scale ranging from 1 (none) to 4 (a lot), 63% of majority students selected the categories of none and not much, and 79% respond the same way regarding interaction with persons from a culture outside of the U.S. On the other hand, minority students, responding to a similar question about their interactions with White students outside of class, report more frequent interactions, with 61% interacting a lot, 23% some, and 16% not much or not at all. Majority students feel that their interactions with minority students are largely positive in 27% of the cases, and sometimes positive and sometimes negative in 61%. As a matter of fact they evaluate their interactions with other White students similarly: 30% positive, 68% sometimes positive sometimes negative. Minority students evaluate their interactions with White students similarly: 21% largely positive and 71% sometimes positive and sometimes negative.

Several CSEQ questions provide a better sense of the nature of these interactions. Regarding the frequency of becoming acquainted with students from a different racial or ethnic background, 44% of majority students say this occurs often or very often, whereas for 68% of the minority students it occurs often or very often. Very few members of either the majority group (5%) or the minority group (7%) fail to make any acquaintances. A second CSEQ question concerns the frequency of serious discussions with students of a different racial or ethnic background. These discussions occur often or very often for 24% of majority students and 36% of minority students, but for 31% of the majority group and 23% of the minority group, such discussions never occur.

The Diversity Survey asked students to assess their own respect toward various minority groups on a scale from 1 to 100. The mean scores of both majority students and minority students seem to indicate a high degree of respect toward minority groups. In the case of respect for African Americans, the mean score of majority students was 88 and of minority students 92. For respect toward Hispanics, the mean was 86 among majority students and 92 among minority, and the comparable mean scores regarding Native Americans were 89 and 90, toward Asians 88 and 89, and toward people from other countries 89 and 91. As these generally high means suggest, the vast majority of students indicated high degrees of respect toward other groups.

The college has responded to diversity issues by providing various programmatic resources which a number of survey questions were designed to look at. Workshops designed to develop a higher degree of cultural awareness have been attended by 52% of our minority students, but only 19% of majority students. Of those who did participate, a somewhat higher percentage of majority students found the workshops helpful or very helpful. Among majority students, 71% have never attended lectures or programs that focused on minority groups in America, and the same is true of 73% of these students with respect to cultures outside of the U.S. Only 6% of majority students have attended such lectures or programs 3 or more times, while the comparable figure for minority students is 46%. Only 33% of majority students view the Center for Multicultural Affairs as important or pretty important to the education of all students, and 36% regard it as important or pretty important to the retention of a diverse student body. In contrast, 73% of minority students view the Multicultural Center as important or pretty important to our overall educational effort, and 84% believe this is true with respect to the retention of a diverse student body.

Many minority students also feel they are treated differently. One-third of minority students believe they have been treated differently by one or two professors on the basis of their race or ethnicity, and an additional 9% believe this has been the case with three or more professors. Only 5% of majority students feel differently treated. Minority students feel less welcome in the community and significantly less welcome on campus than majority students: 87% of the white students feel welcome everywhere on campus, and 88% of them feel welcome everywhere in the community as opposed to 63% of the minority students who feel welcome everywhere on campus and 62% of them who feel welcome everywhere off campus. Fewer seniors than freshmen feel welcome everywhere, both on and off campus, and the percentage drops steadily as students move from each class level to the next.

Some differences based on majority/minority status are also evident in the way students' experience and value various learning methods, although on most items no statistically significant associations are found. On the Middle States Student Survey items pertaining to in-class interactions, the only statistically significant association is that minority students experience greater positive impact on learning from giving class presentations. A number of differences exist, however, on the Diversity Survey items. Minority students feel that faculty place less value on information from class lectures and short papers than do majority students, but minority students believe that faculty place greater value on oral presentations and regular homework problems. It is not surprising, then, that minority students find oral presentations a more valuable learning method than majority students, and that majority students favor short papers. There are also several significant associations between minority status and changes that students believe would improve the climate for learning. Minority students believe that more interaction, both in-class and out of class, and smaller classes are more likely to improve the climate for learning than majority students do.

The Diversity Survey also reveals differences between minority and majority students on involvement in-out-of class activities. On nine of thirteen items pertaining to out-of-class interactions and involvements, minority group membership is associated with both greater involvement in activities and a higher rating of

their positive impact on learning. The items include greater involvement in study abroad programs, student media, as a tutor or RA, in dorm councils, and with the offices of Career Development, Health Services and Campus Life. Overall, 31% of minority students belong to 3-5 clubs or organizations, while the comparable figure for majority students is 9%. Whereas 43% of majority students belong to no clubs or organizations, this is true of only 13% of minority students. The higher rate of participation of minority students is confirmed by the CSEQ sample, where the mean score on the composite Quality of Effort Clubs and Organizations index is 9.28 for minority students versus 8.28 for majority students.

Two other differences, one pertaining to financial pressures and the other to academic support groups, should be noted. For 73% of the majority students, employment never prevents them from doing schoolwork, whereas for 54% of the minority students it does, often for 5% of them. More interference with schoolwork due to employment among minority students is also found on the CSEQ, although the difference is smaller. Only 22% of the minority students say they have no problems with classes, vs. 77.8% of the majority students. Among minority students, 88% turn to the Educational Development Program (EDP), Full Opportunity Program (FOP) or Disabled Student Services (DSS) staffs for help with academic problems, while only 12% of the majority students do so. Interestingly, 86% of the majority students turn to residence life staff for help with academic problems, while 67% of them go to the Learning Center. Only 33% of the minority students go to the Learning Center, but this is probably because FOP, EDP and DSS provide assigned tutoring for their students. Only 31% of the minority students go to professors for help with academic problems, while 69% of the majority students do.

Conclusions

Much work remains to be done on the Fredonia campus to promote a climate for understanding and appreciating racial and ethnic diversity.

On questions pertaining to the overall state of diversity at Fredonia, such as how much diversity there is, how much there should be, how much help is being provided, and how much should be provided, minority students consistently express views that are less positive than those of the majority students. Some majority students do express supportive or sympathetic views on these issues: 45% say there is little or no diversity, 62% say diversity should be at or near maximum, 40% say help is being offered to minority students not at all or only on occasion, and 30% say a lot of help should be given.

On the CSEQ Survey, 44% of majority students often or very often become acquainted with minority students, and a much smaller number engage in serious discussions with the same frequencies. The Middle States Student Survey data show that only 4% of majority students have a lot of interaction with minority students and 33% more have some, and they rate those interactions as positive in almost exactly the same proportion as their interactions with other Caucasian students. It is interesting, though, to shift the focus to minority students, 61% of whom have a lot of interaction with majority students, and 23% of whom have some interaction. In addition, they evaluate these interactions as positive in almost the same proportions as their interactions with other minority students. Although the large number of our majority students who have no interaction with minority students is discouraging, it is important to keep in mind that there are less than 200 minority students on a campus of over 4500 undergraduates. In this context, the higher interaction rates of minority students with their majority counterparts offer some encouragement. Most minority students are not reluctant to engage in interactions with majority students, and when they do the results are positive.

Both majority and minority students consistently express high levels of respect toward specific racial and ethnic minority groups, with mean scores on a 100 point scale ranging from 85 to 92. Although the percentage differences are very small, minority students consistently indicate higher levels of respect than majority students do. There is no evidence of widespread hostility or overt hatred. However, a detailed examination of the scores on these scales reveals a small percentage that indicate a prejudicial lack of respect. For instance 11% of majority students rated their level of respect toward African American students at 50% or less, and the comparable figure for Hispanics was 13%. On a campus this size, these percentages translate into disturbing numbers.

The programmatic resources Fredonia has invested in up to this point are providing more services to minority than majority students, although they may be equally helpful to both. Opportunities to learn about diversity issues through lectures and programs are taken advantage of by minority students in far greater proportions than by majority students. Majority students fail to grasp the importance of, or even know about, the Center for Multicultural Affairs or its importance for retaining minority students. The insularity of majority students at Fredonia is clearly a problem. They do not seem to see what is important to minority students, and take little advantage of the opportunities that exist to increase their awareness of those different from themselves.

Difference in learning methods between minority and majority seem to center around a minority preference for activities focused on oral skills, such as giving classroom presentations. They mistakenly believe that faculty place high value on oral presentations, when in fact this is rated quite low by the faculty.

Finally, the campus climate for many of our minority students is a different climate than the more comfortable one experienced by other members of the community. It is a climate of differential treatment by faculty members (42%), feelings of unwelcomeness at locations both on campus (37%) and in the community (38%), financial needs that interfere with school work (54%), problems with classes (79%), heavy involvement in clubs and organizations (31%), and reliance on assistance from various academic support services (88%). Although the campus is supportive and sympathetic, the effects of these differences can be alienating.

TEACHING-LEARNING RESOURCES

STUDENT-FACULTY ADVISING AND TEACHING RATIOS

The measures available to examine the effects of student-faculty advising ratios on student learning and student-faculty interaction are rough, but useful, or at least suggestive. All of the survey data sources include information about major, in the case of students, or department membership, in the case of faculty. Also, data on the average number of advisees per faculty member in each department are available from the Advising Office. Unfortunately, each survey uses somewhat different categories for identifying departments or majors, thus producing a good deal of category ambiguity. This results in a substantial amount of missing data. In addition, department ratios may change from year to year as staff size varies.

Nevertheless, sufficient data remain to create a "High Faculty-Student Advisee Ratio" category, consisting of departments or majors with an average of between 22 and 46 student advisees per full time faculty member, and a "Low Faculty-Student Advisee Ratio" category, that includes departments or majors with an average of between 10 and 18 students per faculty member. The highest ratios at Fredonia are found in the departments of education, business, communication, biology, and psychology. It is important to keep in mind that these differences in advisee ratios are associated with very substantial differences in the character of the departments represented in each ratio. For example, music and theatre students may spend a great deal of time in studio classes, and chemistry and geology students may spend a lot of time in labs. Average class sizes, frequencies of opportunities for interaction, and other factors may vary in ways that change the nature of advising in these different areas.

On the SUNY Student Opinion Survey, 22% of all respondents are declared as missing data due to category ambiguities. Of the remainder, 81% (392) are in the high advisement ratio group and 19% (92) in the low ratio group. In both groups, a majority of students are satisfied or very satisfied with the availability of their advisor, but the percentage is lower in the high ratio group (56%) than in the low ratio group (72%). The remaining students are neutral, dissatisfied, or very dissatisfied. On the question of the value of the information provided by the adviser, 51% of the students in high ratio programs were satisfied or very satisfied, while in low ratio departments this percentage increased to 61%. A substantial amount of dissatisfaction was also found in both groups. One quarter of the high ratio group and 18% of the low ratio group were either dissatisfied or very dissatisfied with the value of the information received from their advisors.

The impact of advising ratios on the number of times during the year a student meets with his or her adviser is noteworthy, but not statistically significant. In the high ratio group, 40 % meet with their adviser 6 or more times per year, while in the low ratio group the number increases to 49%. At the other extreme, 26% of the high ratio group meet with their adviser 2 times or less, whereas this low frequency of interaction is characteristic of only 16% in the low ratio group. There is also no significant relationship between advising ratio and the variables on this survey that might serve as indicators of student learning. No differences are found on the degree to which students feel prepared for further academic study, and only small differences on how well they are prepared for a career.

Middle States Faculty Survey data are limited by the fact that department identification was listed as optional on the questionnaire to protect confidentiality for faculty in small departments, and 31% chose to leave the item blank. Of those who completed this item, 73% were from low ratio departments. In high ratio programs, 73% of those responding indicated they spend more than five hours per week with students, while this was the case with only 42% of those in low ratio departments, although in these departments a high percentage spend 3-5 hours per week with students. The question about time spent with students includes other forms of interaction than advising. But at the same time, it is in the low ratio departments, such as art, music, etc. that more frequent interactions might be expected overall. The greater number of hours spent with students by faculty in high ratio departments may well be due in important measure to advisement demands.

Whether they are in high or low ratio departments, the faculty is in general agreement (around 69%) that quite a bit or very much better advisement can be done with smaller advisement loads. Yet 27% of those in high ratio departments believe a much better job of advising can be done with smaller loads, as compared to 41% in low ratio departments. Perhaps there is some suggestion here that the high ratio advisers feel they are already doing a fine job, despite the higher loads. But at the same time, in their open-ended responses to a question on what they believe students find least satisfying at Fredonia, 27 of 124 faculty members offered responses that had to do with the advising or course registration process. The next most frequently mentioned category appeared in six responses.

When asked about the extent to which more frequent meetings with faculty advisers would improve the climate for student learning, 35% of the high ratio faculty check the highest two categories on a five-point scale, and 35% check the lowest two categories, indicating the least support for more frequent advising. The low ratio group, the other hand, supports more frequent advising 51% of the time, with only 16% checking the lowest two categories. In response to the equivalent question on the Campus Climate/Learning Environment Survey, almost an identical number of students (approximately 66%) in both the high and low advisee ratio groups believed the campus learning climate would be improved by more frequent meetings with faculty advisers.

The CSEQ provides the most adequate data for assessing the connection between advising ratios and student learning or faculty interaction. Transforming major into a high/low advising ratio score results in 41% missing data, but 282 cases remain, of which 58% fall into the high ratio category and 42% into the low category. No significant differences in the mean scores for these groups occur on Quality of Effort Indexes for either Course Learning scale or Experiences with Faculty. Nor is there any significant association between the Faculty Experiences item that most closely approximates advising (“discussed your academic program or course selection with a faculty member”) and these advising ratios.

Conclusions

Advising loads vary greatly, and in many instances this is tied to the nature of the discipline or disciplines represented in the department. It is also hard to know exactly where advising begins and ends, since it can occur in informal situations. In at least one area, education, advising responsibilities appear to be an impossible burden for faculty and a disservice to students that some way must be found to rectify.

A number of students express dissatisfaction with the advising they receive. In some instances this may be a matter of personality differences, or it may be that some students simply don't like what they have to be told, but in any case it seems that some additional strategies for monitoring the quality of advisement need to be put in place.

The data suggest that faculty from high ratio departments are getting the job done by spending more hours with students. The view that more frequent meetings with faculty advisers would improve the climate for student learning at Fredonia is supported very much or much by 44% of the faculty and 66% of the students. Overall, no significant associations are found between faculty advising ratios and indicators of student learning.

CLASS SIZE

Unfortunately, the same analytic strategy used with advising ratios cannot be used with student/faculty teaching ratios. Adviser ratios are a function of the average number of students a faculty member in a department has, and so the identification of students with that department means that the student will be interacting with a faculty member who, in most cases, advises some number of students close to the department average. S/F ratios are a function of class size, and so to associate that ratio with a student or a faculty member in a department would be arbitrary since class sizes vary so greatly. The available data do, however, provide a limited perspective on class size.

On both the Middle States Faculty Survey and the Middle States Student Survey a question appeared about the extent to which smaller class size would have a positive impact on the climate for learning at Fredonia. Moreover, the question was one of a series regarding factors that might change in ways that would improve the climate for learning. The question can be used, then, to compare both faculty and student responses and faculty-student rankings. Responding to a five-point scale ranging from 1 (not at all) to 5 (very much), 70% of faculty selected the top two categories, indicating strong support for the view that smaller classes would improve the climate for learning. Only 10% selected the bottom two categories. In the context of other changes that might improve the climate for learning, faculty ranked class size second, behind higher academic standards.

There is some statistically significant evidence for the relationship between strength of support for smaller classes and the extent to which faculty utilize certain interactive teaching strategies in their typical classes. Strong support for smaller classes is associated with greater use in class of student presentations; faculty critique of papers and presentations; peer critique of papers and presentations; student-faculty discussion of important concepts; student-student interactions, discussions and debates; discussion of careers; and using information from other areas of life in class discussions.

Student responses to the same question were quite different. Only 39% of students selected the categories indicating much or very much support for smaller classes as a way to improve the climate for learning, and 25% selected the bottom two categories. In the context of nine other changes that might improve the climate for learning, students ranked small classes 7th, ahead of quiet places to study and higher academic standards.

On the SUNY Student Opinion Survey, 70% of students indicated they were satisfied or very satisfied with class size relative to type of course, while only 11% were dissatisfied or very dissatisfied. Some differences were evident based on academic division, with the highest levels of satisfaction in the social sciences and humanities, both over 80%, and the lowest in education, 59%. Satisfaction with class size relative to type of course is associated at high levels of significance with the frequency of a number of positive experiences with classes, in particular: covering stimulating material, enjoyment of classes, learning something new, the preparation of faculty for classes, and how effectively faculty communicated. Of course it is not known what the sizes were of the classes students were satisfied with.

Conclusions

For students, there seems to be little connection between class size and their view of their own learning. Over 60% do not believe smaller classes would make much or very much of a difference in the climate for

learning, and 70% are satisfied or very satisfied with the class sizes they have experienced. What they have now seems to them to be about right. This sense of satisfaction with class size is related to a number of positive classroom experiences, and thus to student learning.

For faculty, on the other hand, class size has to do with workload, but it also has to do with how they teach, and in particular whether certain teaching strategies can be used or with what frequency. Consequently, 70% of faculty believe that smaller classes would improve the climate for learning, and overall they rate smaller classes very high among the changes that would improve the climate for learning. Support for smaller classes is related to student learning via the extent to which faculty who favor smaller classes employ a variety of interactive teaching techniques.

TECHNOLOGY

CSEQ data show that access to a computer is almost universal among Fredonia students, and its use in educational and course-related activities is varied. Over 96% of our students have access to a computer they can use for school work, and the same percentage use a computer or word processor routinely (often or very often) to prepare papers or reports. E-mail is used by 75% of our students routinely, and by an additional 14% occasionally, to communicate with instructors or other students. Over half of all students, 58%, routinely searched the World Wide Web for information related to a course, and an additional 31% did so occasionally. More specialized and sophisticated involvement in computer and information technology exists on a more limited basis. Twenty-three percent used a computer to analyze data, and 20% to create visual displays often or very often, although these figures rise to over 50% when occasional users are included. Participating in a class discussion using an electronic medium (e-mail, listserv, chat group, etc.) (21%), using a tutorial program to learn material for a course or developmental or remedial program (18%), and retrieving material from a library not at this institution (14%) are other uses of computer technology engaged in routinely by some students, and these figures rise to over 40% when occasional users are added. Three quarters of our students have never developed a Web page or multimedia presentation, but 25% have at least occasionally done so.

The Quality of Effort: Computer and Information Technology score for these activities is calculated by totaling the scores across all nine items to obtain a measure with a minimum value of nine (a score of 1, or never, on all items) and a maximum value of 36 (4, or very often, on all nine items). On this Quality of Effort score, no statistically significant differences in use of this technology occur on the basis of sex or GPA. Differences do occur based on class level, with juniors and seniors achieving higher scores, and academic division, with the highest scores achieved by students in the natural sciences, the lowest by students in the fine arts, and generally similar scores by those in the social sciences, humanities, and education.

The Quality of Effort score on computer and information technology correlates at statistically significant levels with other CSEQ scales that are indicators of learning, including Course Learning, Writing, Library, and Experiences with Faculty. The Quality of Effort score on computer and information technology is also related to several CSEQ items that ask students to what extent they feel the college places emphasis on certain qualities associated with learning. Positive, although weak, correlations exist with emphasis on developing academic, scholarly, and intellectual qualities and emphasis on developing critical, evaluative, and creative qualities. Significant relationships also exist with numerous estimates of gains (very little, some, quite a bit, and very much) students believe they have made. Higher quality of effort scores are associated with higher mean scores on a variety of learning indicators involving academic skills (writing effectively, thinking analytically, analyzing quantitative problems, and synthesizing ideas), and areas of knowledge content (other parts of the world, other philosophies, science).

Overall, students are quite satisfied with this aspect of their experience. On the seven point scale measuring students' sense of the emphasis the college places on developing computer and information literacy skills, 50% of our students place Fredonia in the top two categories, and 74% in the top three. In assessing their own gains using computers and other information technology, 32% say that have gained very much, and 35% quite a bit.

The use of information technology in general in classroom teaching is another aspect of this issue. Three quarters of our students have had at least one class that makes significant use of computer labs or smart

classroom technology. Of the students who have had such a class, 39% say they have learned quite a bit or very much more. On the general question of the extent to which greater use of the broader category of instructional technology would improve the campus climate for learning, 49% of students rated this item in the top two categories (much or very much).

Instructional technology is used (or in the planning stage) quite a bit or very much by 37% of the faculty, while only 7% do not use it at all and have no plan to. Only 18% of the faculty agree that students learn quite a bit or very much more in classes that make significant use of instructional technology, although 49% more agree that students learn somewhat more. On a related question on the extent to which greater use of instructional technology would improve the campus climate for learning, 37% of faculty rate this item in the top two categories (much or very much), and an additional 33% say it would improve the climate for learning somewhat.

Conclusions

Overall, Fredonia students almost universally have the ability to use and have access to computer technology. Students are somewhat more positive than faculty about the extent to which they learn more in classes that make significant use of computer technology, and also about the extent to which its increased use would improve the campus climate for learning. Use of computer technology by students is associated with a wide range of indicators of learning. However, the intercorrelations among CSEQ Quality of Effort Scales suggest that students use this technology, and learn from it, to the extent they are more active learners, not that the technology causes the learning. It would be appropriate, then, that the faculty is cautious concerning the learning value that should be attributed to instructional technology in the classroom, even though its use in classes is widespread.

LIVING-LEARNING ENVIRONMENT

A community can not foster learning if it does not provide comfortable and meaningful living quarters and an environment in which members feel safe and are secure. It is the responsibility of our residence hall staff and university police to maintain these elements of our environment.

RESIDENCE HALLS

The Office of Residence Life is a division of the Office of Student Affairs and is responsible for the coordination of all activities related to the residence hall system. The residence life program is an integral part of the educational program and academic support services of the institution.

Currently there are thirteen residence halls occupied by approximately 2200 students. Seven of the buildings contain computer labs that are available to all resident students, twenty-four hours a day, seven days a week. All buildings have ethernet access in individual student rooms. The residence halls also house and operate a Wellness Center and an Aerobics Center.

The total number of students residing on campus is 2249, or 47% of the total undergraduate population. A large majority of residents are freshmen (43%) and sophomores (33%). Juniors (16%) and seniors (7%) comprise slightly less than 25% of the residence hall population. The majority of residents, 59%, are women.

The residence life program supports a variety of student learning experiences. Leadership opportunities are provided to resident students through the Resident Assistant program and the resident advisory councils. Educational and social programming (Campus Life Awareness Series, Alumni Spotlight Series, Cruise Around the World, faculty presentations and interactions) are also available to all resident students. Resident students are organized to provide support to various campus wide volunteer activities, such as Buffalo News Kids' Day, American Red Cross Bloodmobiles, and Boys and Girls Clubs.

The Office of Residence Life administers a residence hall evaluation on an annual basis to all resident students in order to evaluate and improve conditions in the residence halls. Historically, approximately one fourth to one third of the population of the halls responds to the questionnaire. The main areas covered in the survey include the following: building condition, hall council and programming, residence hall director, resident assistant and miscellaneous items. Overall, the majority of students are satisfied with the residence hall experience. They find the buildings to be generally clean (81%) and damage free (96%). The noise level is appropriate for both sleep and study (90%).

Hall council meetings are attended by 22% of residents, but a far larger number participate in the activities planned by the various councils and are satisfied with those activities (53%). While 85% of resident students indicated that they would attend programming where faculty interact with students in the residence halls, and 86% felt this interaction would be somewhat to very important, about 25% of those surveyed actually have attended.

Most students, 82%, are satisfied with the performance of their residence director, and 85% are satisfied with their resident assistant. They are found to be visible in the building by 85% of respondents, 81% consider them objective and fair when dealing with students, and 83% believe them to be consistent in enforcing policy as well as helpful in providing information on a variety of issues. The vast majority of students living in the residence halls feel their hall is a safe place (91%) where they are able to meet and get to know people from different backgrounds with different interests (89%).

The SUNY Student Opinion Survey asked only a few questions pertaining to residence halls. Of those students actually living on campus 58% were satisfied or very satisfied with the condition of the residence halls, and 49% felt the same way about residence hall services and programs. Among all SUNY four-year colleges, Fredonia has few peers. Comparing student satisfaction levels among the thirteen four year colleges, Fredonia ranked 2 out of 13 in condition of the residence halls, 3 out of 13 in residence hall services and programs and 4 out of 13 in the clarity of residence hall rules and policies.

Residence On Campus and Student Learning

General comparisons between on campus and off campus residents reveal some differences with regard to such things as faculty relations, institutional relations, and leadership participation. Residential students appear more likely to use a college recreation facility and follow a regular exercise program, to have access to and use a computer in their academic pursuits, and to interact more with different kinds of students. However, when age and class levels are taken into account, these differences generally disappear, at least at statistically significant levels. Among upper class students, there are no significant differences on indicators of learning between those living on campus and those living off. Since they are required to live on campus, the number of freshmen and sophomores living off campus is very small, unfortunately too small to examine the interesting question of whether learning differences would occur in this age group when compared to their counterparts living on campus.

CAMPUS SAFETY

Personal security/safety on the Fredonia campus is regarded as satisfactory or very satisfactory by 60% of students in the SUNY Student Opinion Survey, while 10% are dissatisfied and the remainder are neutral. Small differences occur in the responses of males and females, with 65% of the former and 56% of the latter indicating they are satisfied or very satisfied. Of students who reside on campus, largely freshmen and sophomores, 66% are satisfied or very satisfied with their safety/security, whereas of students who live off campus 55% fall into these categories.

Feeling secure, however, is not being secure: a false sense of security can be dangerous. Crime statistics maintained by the Office of Public Safety support the view that the campus is, in fact, a safe environment. These statistics include every violation that is officially reported. The 107 cases of larceny recorded in 1998 are by far the most frequently reported crime, with drug abuse violations second at 20 cases, burglary third at 6 cases, and no other category of criminal behavior having a frequency greater than two. It is important

to emphasize that these statistics refer only to crimes reported to the campus police. Of course criminal behavior by students is handled by other law enforcement agencies, and many crimes that occur go unreported or the students involved are directed to other services, such as the Counseling Center.

The SUNY Student Opinion Survey collected information on several other aspects of campus safety. Excluding those who responded "Have not used, not available, or don't know," 238 students indicated their level of satisfaction with campus services to victims of crime. The majority of respondents, 55%, were neutral, 21% were satisfied or very satisfied, and 25% were dissatisfied. Students responded in very similar proportions to a question about the dissemination of crime statistics. Again excluding those who responded "Have not used, not available, or don't know," campus efforts to address date rape were found satisfactory or very satisfactory by 33%, unsatisfactory or very unsatisfactory by 23%, with the remainder neutral. Freedom from harassment on campus was regarded by 62% as satisfactory or very satisfactory, while 12% were dissatisfied or very dissatisfied, and the remainder neutral.

Conclusions

The Fredonia campus is a safe and secure environment both in fact and in the perceptions of students. The Office of University Police supports numerous crime prevention activities, projects, and publications involving presentations, architectural design, facilities surveys, and many others, all for the purpose of maintaining and increasing safety and security.

Efforts underway to survey students and faculty on issues related to sexual harassment should provide additional interesting information when the data become available.

RECOMMENDATIONS

Faculty Student Interaction

Faculty-student interactions outside and inside of classes are frequent, varied, and valued by both faculty and students. Moreover, these interactions are associated with student learning in the perceptions of students and faculty, and also in relation to numerous independent measures of student learning. Interactions in connection with direct student involvement in faculty scholarly or creative activities are more limited. Based on an examination of Departmental Assessment Plans, there appears to be no widespread, systematic effort to include this form of interaction among departmental goals. There are also clear practical obstacles and limitations to how many students could be accommodated as actual participants in faculty research, as well as questions concerning which students would truly gain from this experience. Based on student and faculty responses to relevant questions, however, there may be more potential in terms of student interest and faculty willingness than is presently being reached. With respect to these forms of student-faculty interaction, three recommendations are proposed.

First, the environmental factors that have fostered faculty-student interaction, and consensus regarding its positive impact on learning, should not be taken for granted. External or internal demands on either students or faculty must be weighed against how they might threaten or diminish the levels of interaction that now exist. Increased class size, heavier work loads, and reduced financial aid, to mention only a few of the most obvious demands, would be threats to a well established and critical element of our learning environment.

Second, the available data do not show how interactions are initiated, but it is clear they are initiated more often with students who are older, further along in their program, and more actively involved in their own learning. Knowing this, efforts should be made by individual faculty, or on a department or college-wide basis, to stimulate faculty interactions with students while they are in their first two years of study, and to seek out interactions with those students who are less active or less successful learners.

Third, the potential for greater involvement of students in the scholarly and creative activity of faculty must be pursued. Departments should take the lead in this process. In departments, collective decisions about the integration of students into faculty research can be formulated. This would promote greater communication within and among departments and divisions regarding the nature and value of student participation in research and creative activity. These decisions should then be formulated as departmental

goals subject to ongoing assessment. In addition, meaningfully involving students in research is inevitably time consuming and demanding. If there is to be a college wide effort to promote more of this kind of interaction, resources must be made available to subsidize it or no real change will occur. For example departments might include the coordination of such research as part of a member's course load. Similarly, faculty members who supervise several students on a regular basis should be allowed to accumulate FTE's over a number of semesters until a target figure is reached, and the faculty member is awarded a course reduction. Also internal grants for faculty research that include direct involvement of students might be favored over those that do not. Internal grants might be made to departments to support the development of student research opportunities by, for example, providing stipends to students. Funding to develop, and set aside for faculty-student research projects, work or studio space to which students would have easy access, and where equipment could be located and materials stored, should be considered.

Student Activities and Involvement

On the whole, our students spend a great deal of time engaged in a variety of activities and responding to multiple demands. Time spent in and on classes, employment, involvement in clubs and organizations, recreating, exercising, and just talking are among the necessary and productive activities that make our students, in general, very active people. Some types of activities, of course, have little or nothing to do with learning. But as students and faculty generally agree, some activities have an important and positive impact on learning. Involvement in clubs and organizations is one form of co-curricular experiential learning that the data show is positively associated with a number of learning indicators. At the same time, however, there is an imbalance between the extent of involvement in these activities and the amount of time students spend in course related work. This imbalance in turn raises larger questions about academic standards. How can balance be restored without diminishing the important learning value of student activities? The recommendations that follow involve an assumption that for an important number of our students this imbalance has less to do with any unwillingness to work hard or to learn, and more to do with where they choose to seek rewards for their efforts.

First, in a learning community many sources and forms of learning must be valued. Therefore, efforts to raise academic standards must take careful account of the other important forms of learning that students engage in and why they do so. If students have learning interests and energy and skills that they feel are not being rewarded by course work, or measures of learning heavily weighted in favor of print literacy, perhaps one aspect of establishing higher academic standards is to take advantage of this fact by offering more course-related ways to pursue these interests, use these skills, and achieve these rewards. As academic standards are raised, students must be provided with additional resources and motivation to achieve them. More performance-based forms of classroom assessment, and more systematic attention to a greater variety of student competencies might be among these resources. The discussion of experiential learning elsewhere in this report, the findings regarding the varieties of in-class interactions that already exist, and the previous recommendation regarding student involvement in faculty research, are also relevant in this respect. These matters can be pursued most effectively on the departmental level, in connection with ongoing assessment activities.

Second, students need more guidance with regard to the types of activities they commit themselves to. Faculty and professional staff need to be more direct and explicit with students about the choices they are making with regard to how much involvement and of what kinds are appropriate to maintain a balance between out-of-class learning and course work. Of course these are complex questions that faculty and staff must discuss and assess more carefully themselves, before more systematic guidance can be provided to students.

Third, despite these critical issues concerning balance, students and faculty are generally in agreement about the learning value of certain kinds of student activities and involvement. These activities are more often than not supported and maintained, frequently for long periods of time, by dedicated faculty and professional staff who receive little recognition, insufficient resources, and meager rewards, if any, for their work. Without this work student learning would be diminished. Clear and explicit links need to be established between this work and the real reward systems of tenure, promotion, and discretionary salary increases.

Racial and Ethnic Diversity

Data from the Diversity Survey show that majority students are not taking advantage of, and are too infrequently exposed to, opportunities to increase their awareness of diversity issues. Certain learning methods are valued more by minority students than by majority students or faculty. Minority students also experience differential treatment based on their racial/ethnic group membership. The campus climate is different for minority students than for the majority. These data were also used by the Taskforce for the Recruitment and Retention of Minority Students, and we concur with their more detailed list of recommendations. With regard to the more specific issues addressed in this report, several recommendations are offered, all in line with the general conclusion that important work remains to be done to improve the campus climate for our minority students.

First, exposure of majority students to diversity issues needs to be increased. Additional strategies for including or expanding systematic treatment of diversity issues throughout the curriculum need to be formulated and implemented, since too many students are still too infrequently exposed to these issues in their classes. Campus-wide programming needs to be implemented or expanded to include far greater numbers of majority students in experiences designed to increase diversity awareness, including understanding the central importance of the Multicultural Center and of multiethnic minors. Campus-wide activities, involving administration, faculty and professional staff, to develop these programs are also called for. Similarly, community-wide efforts, perhaps in the form of campus-community workshops, to enhance diversity awareness should be developed. To begin any of these tasks, real resources are essential. Stipends or release time for workshop organizers and participants would be one way to make participation less optional.

Second, two issues need to be more carefully explored and understood. Then they need to be quickly addressed. First, minority student differences in learning styles, and perceptions of the value that faculty members place on different learning methods, must be examined. Second, the perception of a disturbing number of minority students that they are differentially treated by faculty members, and unwelcome in certain locations on this campus, must be addressed immediately. Also, there is a lack of information and data on the perspectives of minority faculty members on these and other matters. Systematic exploration of their views is needed.

Third, in at least two respects minority students are often subject to greater pressures than their majority counterparts. First, they experience greater financial pressures. And second, they exert greater effort in clubs and organizations that, at least in many instances, are essential to their collective well being and to increasing awareness and understanding of diversity issues on the campus and in the community. Efforts to increase scholarship and financial aid opportunities for minority students are one way to relieve some of these pressures. Other ways should be explored as well.

Learning Resources

In many ways, resources such as faculty-student advising ratios, class size, and technology are influenced most by forces outside of the college that control policies and budgets. Locally, advising activities are inequitably distributed, but in most cases this is probably unavoidable. Faculty with high advising ratios are getting the job done anyhow. Overall, though, too many students are dissatisfied with the advising they receive. Class size is satisfactory to students, but not to faculty. For faculty it is among the highest priorities to improve the climate for learning on campus, and it is related to the extent to which they provide a variety of valuable in-class learning activities and experiences for students. Computers and learning technology are widely available and their use is increasing. To the extent that these resources are within our control, the following recommendations are in order.

First, reasons for student dissatisfaction with advising should be systematically explored and addressed on a departmental level within the context of ongoing assessment procedures. On a college-wide level, if there are any ways to achieve more equality of advising loads, they should be explored. In any case, though, clear and explicit links need to be established between advising and the real reward systems of tenure, promotion, and discretionary salary increases.

Second, for the faculty, smaller class size and higher academic standards are the highest priority changes for improving the climate for student learning. Preference for smaller class size is also related to variation in instructional activities in class. Departments need to propose, and administration needs to support, any

plausible ideas to provide both faculty and students with opportunities to experience the advantages of smaller classes.

Third, the vast increase in the availability and use of computer-based learning technology among students and faculty is evident. The general learning value of this technology also seems evident, although the nature and extent of its use in classes requires ongoing examination by departments and individual faculty members. The college needs to maintain, and where possible expand, its dedication to constantly upgrading our technological resources.

Living-Learning Environment

A comfortable and safe environment is a precondition for learning, and such an environment exists at Fredonia. Only a general recommendation that this climate must be constantly maintained and upgraded seems necessary.

References

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LEARNING SUPPORT STRUCTURE

This task group was charged with assessing the extent to which objectives that support SUNY Fredonia's Vision Statement are being met by the offices that report to the Vice President for Administration and the Vice President for Development and College Relations. The task group was not charged with evaluation of these areas per se, but rather with assessing the current status of self-evaluation by these functions. Each member of the task group personally interviewed at least two of the supervisors in the respective offices regarding defined goals and the extent to which these goals are being achieved. Individual directors were asked to submit stated goals and methods of assessment. If an office did not have a list of goals available, the director was encouraged to develop one. In some instances, committee members re-visited specific offices to assist with this development. Written summaries were then prepared and distributed to each task force member.

Results

Table 1 summarizes the results of the interviews and printed information received from each of the areas listed in response to these four questions:

- 1) Does this area have defined goals and objectives?
- 2) Are these goals quantifiable?
- 3) Are there any assessment procedures currently in place?
- 4) Is there any evidence that goals and objectives are successfully met?

Based on the information provided, one of the following six summary ratings was assigned:

- 1) Yes - the area clearly meets these criteria
- 2) Yes with Qualifications - qualifications are noted in the narrative
- 3) Yes, indirectly - many of the areas surveyed provide indirect support of the Vision Statement
- 4) Some – Some goals and objectives meet criteria indicated
- 5) Developing Area - the area is in the process of defining/relating/assessing these criteria
- 6) No - the area does not meet these criteria

Table 1

Area/Department	Contact Person	Does this area have defined goals and objectives?	If yes, are they quantifiable?	Are there any assessment procedures currently in place?	Is there any evidence that goals and objectives are successfully being met
V.P. for Administration	Tracy Bennett	Yes	No	Yes	Yes, with Qualifications
Budget Office	Carol Schwerk	Yes	No	Yes	Yes, with Qualifications
College Controller	Karen Porpiglia	Yes	No	Yes	Yes, with Qualifications
Environmental Health & Safety	Sylvia Clarke	Yes	Some	Yes	Yes
Personnel	Bernie Gerling	Yes	No	Yes	Yes, with Qualifications
College Services	Terry Tzitzis	Yes	Some	Yes	Yes, with Qualifications
Facilities Management	Jim Pepe	Yes	Yes	Yes	Yes, with Qualifications
Faculty Student Association	Chuck Notaro	Yes	No	Yes	Yes, with Qualifications
Student Accounts	Barb Servatius	Yes	No	Yes	Yes, with Qualifications
V.P. for Development	Jean Malinoski	Yes	No	Yes	Yes, with Qualifications
College Foundation	Rocco Doino	Yes	No	Yes	Yes, with Qualifications
Director Corporate/Foundation Public Relations	Karen West	Yes	No	Yes	Yes, with Qualifications
Publication Services	Tom Malinoski	Yes, with Qualifications	No	Yes, with Qualifications	Yes, with Qualifications
Public Information/Media Relations	Chris Davis Mantai	Yes	No	Yes	Yes, with Qualifications
Annual Fund	Carolyn Briggs	Developing Area	Some	Yes	Yes
Alumni Affairs	Patty Feraldi	Yes	No	Yes	Yes, with Qualifications

There are several caveats that must be observed with regard to the offices and functions evaluated by this group. These arise largely as the result of two fundamental factors affecting these offices/areas:

1. To a very large extent, it has been neither customary nor expected that these college functions would: (a) be expected to publish annual goals or objectives or, (b) be evaluated, by means other than self-

- evaluation, based on the accomplishment of such goals or objectives. Only recently has the Vice President for Administration instituted a practice of developing and publishing these for some offices.
2. Several of the offices/functions discussed herein are nonetheless, subject to considerable, routine, and detailed assessment in the form of financial audits. Unlike in the assessment of academic programs or student support services areas, law or principles of sound fiscal management mandate these audits, and compliance with the recommendations derived from these audits is obligatory. They are generally conducted by outside auditors, or in response to direction from outside auditing agencies (SUNY Central). The accounting, legal or fiscal principles upon which these audits are predicated are well established, and irregularities are subject to severe sanction. Compliance is not voluntary.

Therefore, these caveats apply:

1. In many instances, the objectives developed by these offices/functions are dictated by sources outside of the office /function, and pertain to matters that are purely technical. These rarely impact student outcomes at Fredonia, except in very indirect ways.
2. Several of the areas surveyed developed goals and objectives for the first time in response to, or request for, these. In many instances, members of the committee were instrumental in this process.
3. Many of the goals and objectives developed, therefore, cannot be expected to have been the result of the normal deliberative and consultative process generally observed in these matters.
4. Nor can it be expected that these goals and objectives have been incorporated into a regular cycle of goal setting and annual assessment.

The task group, therefore, wishes to emphasize that the evaluative portions of this report should not be construed as criticism. Rather, we attempt to fairly characterize the current status of each area with regard to the criteria posed by the Middle States Assessment Steering Committee, and to note areas in which improvements can be made.

ADMINISTRATION

The Administrative Services division of SUNY Fredonia encompasses the offices of the Vice President for Administration, Budget, College Controller, Environmental Health & Safety, Personnel, College Services, Facilities Management, Faculty Student Association (FSA) and Student Accounts. (See Appendix B3 for organizational chart.)

VICE PRESIDENT FOR ADMINISTRATION

The Vice President for Administration serves as the chief financial officer for the campus; the eight functional areas referenced above report directly to the Vice President. The Vice President for Administration also functions as the Operations Manager for the Research Foundation, which is a private, non-profit educational corporation, chartered by the Board of Regents of the State of New York. The Research Foundation is primarily responsible for the fiscal administration of grants, contracts and gifts supporting research, training, and public service and related programs carried out by or under the supervision of faculty or staff members of the state operated campuses of State University of New York. The Vice President oversees the post-award office, which administers the financial aspects of the grant process, including payroll processing, vendor transactions, fiscal reporting, compiling budget data and monitoring expenditures.

The Vice President for Administration has instituted a policy of publishing an annual report, which now includes goals and objectives not only for the Vice President's office, but also for each of its units. In the Introduction of the *Administrative Services Annual Report for 1997-98, (ASAR)* the Vice President declares that the goal of the Administrative Services unit is to support the College's Vision Statement by providing a safe and supportive educational environment, developing appropriate use of new technologies, assuring well-maintained buildings and grounds, and supporting the region's economic and educational development. Portions of these apply to some of the division's eight major units and not others. With regard to the steps being taken to determine whether these goals are being met, these can generally be characterized as informal. The Vice President for Administration holds regular meetings with his directors to monitor ongoing work, issues, etc., and to meet internal expectations and deadlines. Formal assessment comes in the form of the extraordinary scrutiny that many of his divisions undergo from state, federal and SUNY audits.

It should be noted that the College President has begun a series of divisional reviews that will examine this division and obtain comprehensive feedback from across campus. The goals and objectives that link this division with the Vision Statement are not at present measurable quantitatively. However, subjective measurement is continuously applied through regular meetings with directors and weekly meetings with the president and other vice presidents. In general, this division currently measures attainment of the stated goals the unscientific way: by taking stock of the number of complaints it receives, the number of compliments, and by its own review. The feedback it receives from state, federal and SUNY auditors, as indicated above, should be neutral. That is, audits are expected to find nothing out of compliance. Should an instance of non-compliance be observed, immediate correction is mandatory.

BUDGET OFFICE

The Director of Budget is responsible for the functions of the State Payroll Office, the Student Payroll Office and the Human Resource Management System Coordinator. The Budget Office, upon passage of the annual New York State budget, is responsible for calculating the appropriate allocation to be distributed to the President and each Vice President, based on Cabinet decisions that support the mission and goals of the college. The Budget Office is also responsible for calculating salary needs and apprising each division of the allocation amount necessary to support current staffing. The Director continually advises faculty and staff concerning budget and payroll matters, implements the effects of various budget/payroll decisions and inputs requested allocation transfers between expense objects within departments as well as allocation transfers between departments. In addition, all campus appointments, changes in appointment or terminations are routed through the Budget Office for verification of fund availability and identification of line numbers with appropriate position characteristics such as title code and salary grade level.

The primary responsibility of both the State Payroll and Student Payroll offices is to effect accurate and timely payment of salaries and wages (including miscellaneous items such as overtime, inconvenience and holiday pay, and compensation for extra service and summer session) to all faculty, staff and students who are paid from State Purpose Funds, Income Fund Reimbursable Funds (IFR), Dormitory Income Fund Reimbursable Funds, State University Tuition Reimbursable Funds or College Work Study Funds. In addition to the biweekly preparation of the payrolls, these offices provide employee assistance in completing forms for tax withholding, payroll deduction, retirement, employment eligibility, employment verification forms for unemployment and loan requests, and assist with calculations pertaining to Tax Deferred Annuities (TDA) and Salary Reduction Annuities (SRA).

The Budget Office does have defined goals and objectives, as outlined in the *Administrative Services Annual Report*. Most goals for this area appear to derive from technological improvements and from practices instituted at similar institutions. For example, a major goal for 1997-98 is the implementation of a web site to allow clients direct access to routine information provided by this office. These goals, therefore, are not directly derived from the College Vision Statement, but are supportive of it. For example, the Budget Office is responsible for calculating the appropriate allocations to be distributed to the President and each Vice President, based on Cabinet decisions that support the mission and goals of the college. The Payroll Offices are supportive of the teaching/learning process in providing a major service to faculty, staff and students. Through the timely and accurate production of paychecks, the Payroll staff eliminates the need for concern on the part of the employees. In all of these areas, student employment and internship opportunities enhance learning outside the classroom. Informal self-evaluation procedures are employed annually in the production of the Administrative Services Annual Report. No formal method exists for obtaining feedback from the campus community. The State of New York and SUNY audits provide valuable assessment information. Attendance and participation in various local and statewide committees also provide an opportunity to compare current practices and procedures with those of similar institutions. Audit findings are indicative that procedural goals are being met successfully. Goals and objectives of this area are generally amenable to quantitative assessment. For example, a major goal was the creation of a budget/payroll database to better respond to client requests and to distribute the 1997-98 budget books earlier. What is generally lacking is any mechanism linking goal development with the College Vision Statement, formal assessment of goal attainment and assessment of client satisfaction.

Recommendations

The goals of the Budget Office are concrete, and to a degree, measurable. Articulation of these with the College Vision Statement is lacking, as is a formal mechanism for assessing goals. Goals tend to be narrowly focused on the internal functions of the office. Development of routinized assessment procedures and a mechanism for obtaining client satisfaction and suggestions are needed.

COLLEGE CONTROLLER

The Office of the College Controller encompasses the departments of Accounting, Internal Control, Revenue Accounting and SUNYCard (a multi-purpose identification, library, debit card). Together these areas provide the data, service and reporting necessary for monitoring college progress in meeting the tuition revenue component of the College Operating Budget and they practice stringent cash management techniques to maximize revenue potential. In addition, they are responsible for the preparation and timely submission of quarterly New York State Sales Tax Returns and the prompt payment of all expenses incurred by the college. (These expenses include, but are not limited to, purchases of office supplies and equipment, building materials, library acquisitions, utilities, travel expenses/reimbursements, honorariums, personal moving/relocation expenses and cooperating teacher stipends.)

The College Controller's area has defined goals and objectives, as outlined in the *Administrative Services Annual Report*. It is the aim of the departments under the Controller's area to ensure that administrative support functions such as travel reimbursements and the distribution of revenue to departmental IFR accounts are timely and accurate. Most of the goals of this office are technical in nature, and only indirectly are related to the College Vision Statement. For example, goals for 1998-99 include conversion of the current administrative accounting system to the SCT Banner System, and reducing the processing time for travel reimbursements to faculty and staff. Increased efficiency in this office will enable faculty to devote more of their time and energy to the education of our students. The College Controller most directly affects the education of students through student employment and internship opportunities in that office. Informal self-evaluation procedures are employed annually in the production of the Administrative Services Annual Report. State, SUNY and internal audit findings provide an objective measurement of compliance with accounting policies and practices. Attendance and participation in various local and statewide committees also provide an opportunity to compare current practices and procedures, and to learn about new practices. Goals and objectives of this area could be measured quantitatively, with relatively minor modifications to include quantitative indices. For example, the above mentioned goal of decreasing processing time for travel reimbursements could include a measure of the current average processing time, and indicate a target for improvement. Objective measures of financial and business practices are subject to external and internal audit, and these findings are indicative that goals are being met successfully.

Recommendations

The goals of the College Controller are objective, and could easily incorporate quantitative aspects. Support of student learning is indirect, but essential to the smooth running of the campus. The Office may wish to more clearly identify its clients, and seek to assess client satisfaction. Since internships are a vital part of student learning, an evaluation of the quality of the internship experience and students' perception of their experience is suggested.

ENVIRONMENTAL HEALTH & SAFETY

The Environmental Health and Safety Office monitors campus-wide compliance with all applicable federal and state laws, regulations and standards in an effort to provide a safe and healthy environment for all college employees, students and visitors. It is the clearinghouse for current information on safety and health issues. The office sponsors training seminars and safety lectures for employees, professional organizations and the Board of Cooperative Educational Services (BOCES). It offers active support for the region's economic and educational development through its involvement in the Northern Chautauqua Safety Council and the Department of Labor. On a regular basis, this office also conducts building, ventilation, radiation and fire inspections.

The Environmental Health & Safety Office has defined goals and objectives, as outlined in the *Administrative Services Annual Report*. The goals of the Environmental Health and Safety Office are very directly related to the Vision Statement, in that the Statement calls for a safe physical environment. The Annual Report lists a long series of accomplishments by this office, including extensive safety training for College employees and some students. In addition, student employment opportunities enhance learning outside the classroom. Self-evaluation procedures are employed annually in the production of the *Administrative Services Annual Report*. Local, state and federal regulations mandate the primary goals of Environmental Health and Safety and compliance with these regulations is mandatory. As an index of quality, the Environmental Health and Safety Office has won several awards.

Recommendations

An examination of the major goals of this office suggests that these tend to fall into two categories: process goals (e.g. update Physical Space Inventory) and outcomes (e.g. revise and distribute emergency response flip chart). The task group recommends that process goals be specifically linked with objective outcomes, where feasible. Outcome goals should include objective indices and/or target dates for completion. The quality of safety training and suggestions for improvements should be periodically assessed through surveys or interview of key personnel.

PERSONNEL

The Personnel Office is responsible for monitoring the College's hiring practices, posting and circulating vacancy notices and providing orientation for new employees. It conducts staff training and development and provides benefits administration and interpretation of collective bargaining agreements. The Personnel Office advises faculty, staff and administrators regarding civil service laws, SUNY Board of Trustees' policies and other relevant state policies. In close cooperation with the Payroll Office, Personnel oversees all retirement incentives from initial announcement through individual counseling and application filing.

The Personnel Office has defined goals and objectives, as outlined in the *Administrative Services Annual Report*. The Personnel Office's support of the College's Vision Statement is indirect. Student learning outcomes are supported by continuously refining and improving upon the processes necessary to recruit, appoint, enroll in and administer benefits for the entire workforce. This leaves the faculty unencumbered to pursue the academic mission of the college. Union contract administration and employee training also lend themselves to this same end. Student employment opportunities enhance learning outside the classroom. As with other administrative functions, self-evaluation procedures are employed annually in the production of the *Administrative Services Annual Report*. Many of the functions of this office are quantifiable: number of personnel evaluations recorded, number of workmen's compensation cases reviewed, etc., although the office exercises no control over the number and nature of these. Attendance and participation in various local and statewide committees also provide an opportunity to compare current practices and procedures with those of comparable institutions. Some of the goals and objectives of this office may be difficult to measure quantitatively, but several have potentially measurable outcomes. For example, an overriding goal for 1998-99 is the simplification of the appointment/reappointment process. This goal has obvious procedural and temporal dimensions - the number of steps needed to accomplish these processes and the time elapsed from initiation to completion.

Recommendations

The Personnel Office has an obvious constituency, in that many offices across campus are involved in personnel matters. Many of the goals outlined for this office are potentially measurable. We recommend, therefore, that the Personnel Office devise measures of consumer satisfaction with the services provided, and incorporate specific target qualities or target dates into goals and objectives proposed.

COLLEGE SERVICES

College Services oversees the departments of Purchasing, Mail Service, Property Control, Telecommunications, Photocopying, Central Storehouse and Recharge Coordination. These areas provide

the necessary support services to professional and academic departments enabling them to fulfill the college mission. The primary responsibilities of the Purchasing Office include contract negotiations for major purchases and services with State and Research Foundation funds, and the processing of campus wide purchase orders in a timely fashion assuring compliance with State policies and procedures. The Mailroom is the hub of all incoming and outgoing mail for the entire campus. Daily runs to and from the village post office, sorting, delivering and affixing proper postage comprise the main duties of this department. Property Control is responsible for assigning numbered asset tags to equipment purchases and performing the annual physical inventory of all college assets. Telecommunications encompasses all facets of telephone operations, including trunk lines, individual line numbers, MCI Pin number assignment and tracking, telephone contract negotiations and operation of the college switchboard. Photocopy centers are located across the campus and provide high-speed duplicating service to every department. In addition to individual copies, course related workbooks are compiled and bound for resale in the College Bookstore. Central Storehouse is responsible for the receipt and maintenance of campus inventory of goods and supplies and campus-wide delivery. Recharge coordination involves the timely calculation, billing and transfer of automotive, postage, duplicating, storehouse and long-distance telephone tolls.

The College Services area has defined goals and objectives, as outlined in the *Administrative Services Annual Report*. For the most part the goals of College Services are concrete and potentially measurable. Typical of these are "complete annual inventory of College's assets" "hiring of mailroom supervisor." Two goals refer to an evaluative function, evaluation of central warehouse and campus photocopy services and charge. These goals are not clearly related to the College Vision statements except in that College Services provides the necessary support services which enable the academic departments to pursue the objectives of the Vision Statement. College Services also provides student employment opportunities which enhance learning outside the classroom. Self-evaluation procedures are conducted annually in the production of the *Administrative Services Annual Report*. Attendance and participation in statewide committees is cited as a means to compare current practices with those of other colleges.

Recommendations

Some of the more concrete goals are amenable to objective evaluation. Most of the goals and objectives of this area are difficult to measure quantitatively, largely because of the manner in which they are presented. The goals related to evaluations, for example, do not describe who will do this evaluation, what means will be used to conduct the evaluation, the criteria to be used, or which constituency is to be surveyed. The task group recommends, therefore, that goal development in the future be far more specific in regard to these issues, and that a clear mechanism be established linking evaluation to procedural changes.

FACILITIES MANAGEMENT

Facilities Management (Maintenance and Operations Services) oversees Custodial Services (cleaning of academic buildings and residence halls as well as moving services), Structural Maintenance (carpentry, masonry, painting, roofing, locksmith services, asbestos abatement), Mechanical Services (plumbing, energy management, ventilation, air conditioning, refrigeration), Utilities Management (electrical and central heating plant), Grounds (landscaping, general grounds keeping and paving) and Automotive Garage (automotive services to campus vehicles and motorized equipment as well as gasoline fueling system.) The Maintenance and Operations staff contributes technical expertise and assistance to faculty, staff and students for special events and activities. The department is closely affiliated with the Capital Facilities Master Planning Office and works jointly with the Environmental Health and Safety Office and the SUNY Construction Fund. Each of the areas of Maintenance and Operations Services is committed to maintaining high standards and superior service in providing a setting of well-maintained buildings and grounds for faculty, staff and students.

Facilities Management has defined goals and objectives, as outlined in the *Administrative Services Annual Report*. There is no clear connection between the goals of this area and the College Vision Statement; however, it is apparent that a well functioning campus requires efficient and effective facilities management. As is the case with other administrative functions, self-evaluation procedures are employed annually in the production of the *Administrative Services Annual Report*. Most of the assessment procedures utilized in this

area are of such a technical nature that non-engineers would have difficulty interpreting them. The *Administrative Services Annual Report* contains massive amounts of data suggesting that goals and objectives are being met. The smooth running operation of the campus physical plant also suggests the same.

Recommendations

This administrative area has well developed and concrete goals. In-depth assessment of such a major operation, subsuming such diverse functions as plumbing and asbestos abatement would require greater expertise than was available to this committee. The task group suggests that Facilities Management consider its role in facilitating the accomplishment of the College Vision Statement, and develop at least some goals which explicitly relate to this Vision. Further, given the impact of the physical structure of the campus on the accomplishment of educational goals, the task group recommends that Facilities Management develop some indices of consumer satisfaction with the services it provides, and attempt to answer the question of how well instruction and learning are supported by the physical facilities and their maintenance.

FACULTY STUDENT ASSOCIATION

The Fredonia Faculty Student Association is a private corporation governed by the Not-for-Profit Corporation Laws of the State of New York. It encompasses the departments of Food Service Operations, Campus Bookstore, College Lodge, Alumni House and Conference Center, campus-wide Vending Services, Cable Television Service and College ID Cards. According to its mission statement, the focus of the auxiliary services comprising the Faculty Student Association is “...to identify and provide appropriate goods and services that may not be otherwise provided by the State of New York. Central to this effort is the ability to recognize the variety and dynamic nature of the population involved in an attempt to maximize customer satisfaction while maintaining the financial integrity of the Corporation.”

The Faculty Student Association also strives to provide program funds to the college. Support has steadily increased over the past few years in an effort to compensate for the decreasing level of support from the State. This has been accomplished through operating efficiency and staffing adjustments.

The Faculty Student Association (FSA) had clearly established goals at the outset of this self-study. These tended to be very concrete, and to pertain to practical matters, for example, “Enhance and Improve FSA Website.” Others tend to be process goals, with no specific outcome specified (e.g. “Improve campus and community recognition in the Collegiate Licensing Program.) As a result of the task group’s inquiry regarding goals, some were developed which support the SUNY Fredonia Vision Statement. For example, “FSA strives to provide program and scholarship funds in support of the overall vision of the college”. The Faculty Student Association is aware of the role of consumer satisfaction in the success of its operations. It also operates under a mandate to be self-supporting, which adds further accountability. As a result, assessment procedures are ongoing. The most recent example, the *Porter Market Research Report*, was completed in spring 1998 and is available in the Faculty Student Association Office. Based upon findings in the Porter study, plans are now underway to renovate existing dining facilities and to add to existing food services, and a marketing consultant was hired. FSA’s increased financial support of the college is a further index of its success. Students serve on the FSA Board of Directors, thus increasing accountability to student needs.

Recommendations

The FSA has clearly adopted a market-oriented approach and makes a concerted effort to be responsive to the needs of its constituency. The task group recommends the development of more carefully crafted goals that are clearly linked to measurable outcomes, to the outcomes of assessment, and to the College Vision Statement.

STUDENT ACCOUNTS

The Office of Student Accounts is responsible for providing timely and accurate billings to students, ensuring that payments and credits are received and applied promptly to individual accounts. The office also receipts and deposits campus IFR funds, distributes financial aid (including scholarships) and refunds excess aid to students according to regulations and procedures established by the State, the federal government, SUNY and college policy. This department manages the college hold list and a third party billing agreement with Academic Management Services Corporation. It also accounts for international health insurance payments, determines residency status for tuition billing purposes, distributes State payroll checks, processes vehicle registrations and parking violations, and bills and collects faculty/staff personal long distance telephone charges.

The Office of Student Accounts has defined goals and objectives, as outlined in the *Administrative Services Annual Report*. Most of these goals are concrete and pertain to improved operational efficiency and service to students and their parents, for example, the implementation of a new registration payment system. These lack a provision for monitoring of their accomplishment or measurement of the degree of success in attaining these goals. Through various administrative functions, this office supports the Vision Statement by providing a supportive educational environment and also through its development and use of new technologies. Self-evaluation procedures are employed annually in the production of the *Administrative Services Annual Report*. Audit scrutiny and responsive local monitoring of complaints and feedback from constituents provide valuable insight. Attendance and participation in statewide committees also provide an opportunity to compare current practices and procedures with those of comparable institutions. Goals and objectives of this area, as presented, are difficult to measure quantitatively; however, informal student feedback and audit findings are indicative that they are being met successfully.

Recommendations

The task force recommends that goals and objectives be stated in a more objective manner, and that these be more clearly connected to the College Vision Statement. Some provision should be made to quantify the accomplishment of these goals. Systematic evaluation of student and parent satisfaction is suggested.

DEVELOPMENT AND COLLEGE RELATIONS

The division of Development and College Relations encompasses the offices of the Vice President for Development and College Relations, the Fredonia College Foundation, Corporate/Foundation Public Relations, Publication Services, Public Information/Media Relations, Annual Fund, Alumni Affairs and Alumni Association. (See Appendix B4 for organizational chart.)

VICE PRESIDENT FOR DEVELOPMENT AND COLLEGE RELATIONS

The Vice President for Development and College Relations is the chief development and public relations officer for SUNY Fredonia and is responsible for planning and executing an institutional advancement program. Through planned giving, major gift programs, scholarship endowments and capital campaigns, the office oversees and organizes financial support for the college. The six functional areas referenced above report directly to the Vice President. The Vice President also serves as the Executive Director of the College Foundation.

The Office of the Vice President for Development has goals and objectives as defined in the Mission Statement for Development/Fredonia College Foundation (See Appendix F1.) The goals, objectives and performance program for the Vice President for Development are developed in accordance with specific objectives set by the President, all of which support the overall vision of the college. An assessment of the Development area by a Fredonia alumnus was recently completed although the results were not available at the time of this report. In addition, regular financial reports, outside audit findings, the support of the college by outside foundations, the success of meeting financial goals and the numbers associated with returns to direct mailing campaigns are all currently utilized to assess the productivity of this area.

Evidence for the success of this office is very clear in those areas that are quantifiable, namely fundraising, distribution of funds back to the college and alumni participation. In other areas, evidence of success or failure is less quantifiable. Indirect or informal evidence of success is suggested, however, by the ability of scholarships to raise enrollment in certain areas or raise the quality of the student body, the satisfaction of the campus community, the involvement of the Undergraduate Alumni Council and the attitude of scholarship recipients and families.

Recommendations

Goals and objectives developed in the future should include an assessment component indicating, where appropriate, the means for measuring success and the criteria for evaluating this success.

COLLEGE FOUNDATION

The Fredonia College Foundation manages the financial portfolio for the private support of the college. The Fredonia College Foundation has goals and objectives as defined in the Mission Statement for Development/Fredonia College Foundation. Goals of the Foundation are to identify potential sources of philanthropic support in the private sector. Funds solicited by the Fredonia College Foundation are intended to meet immediate priority needs and build long-term endowments as established in the SUNY Fredonia Vision Statement. Audited financial statements and the success/failure of fundraising activities are quantitative assessment tools. Evidence of the recent successes of the Foundation include a successful capital campaign, increased alumni giving and improved community awareness (as suggested by high attendance at the Distinguished Service Award Dinner, for example). The Foundation provided over \$250,000 in scholarships in 1998. Total assets of the foundation are \$8.5 million, an increase of \$1.4 million over the past year and 3.5 million in the past two years.

Recommendations

The Foundation is aware of the need to survey constituents and to develop more concrete and measurable goals. The task force recommends that, in addition to the current Foundation goals, specific annual objectives be established. Student, faculty, staff and community awareness of the functioning of the Foundation should be addressed by more direct measures.

CORPORATE/FOUNDATION PUBLIC RELATIONS

The Corporate/Foundation Public Relations area works to establish and maintain relationships with regional businesses and other foundations, soliciting support for SUNY Fredonia. The college relations component is focused on image enhancement strategies and maintaining a productive relationship with media constituencies.

The Office of Corporate/Foundation Public Relations does have defined goals and objectives that complement those defined in the Mission Statement for Development/Fredonia College Foundation, although these are not generally objective or measurable. The main thrust of these goals and objectives is friend-raising/fundraising, which indirectly supports the Vision Statement by providing an additional source of funding to enhance and develop the full potential of the institution. Informal self-assessment procedures are employed. However some of this area's most effective work comes through the "friend-raising," the results of which may not be measurable in the short term. Recent assessment efforts include a "Survey of Parents," designed to wisely utilize marketing and recruitment resources. An on-going review of college relations work does take place. Objective evidence of success of this office is increased giving and the grants awarded. However most of the work accomplished in this area is not easily quantifiable.

Recommendations

The task force recognizes the long-term and subjective outcomes of the efforts of this office. It is suggested, however, that long-term goals can be accomplished through a series of short-term objectives which would allow measurement of progress.

PUBLICATION SERVICES

Publication Services provides consultation, publication design, development and print production services that enable and/or enhance the activities of the college. All materials are produced to appropriately and consistently present the college's name and image to its diverse publics.

The goals and objectives of this area are relatively abstract and subjective. It is difficult to precisely define goals and objectives for this area because of the artistic nature of the work. The primary focus of Publications Services is to meet administrative needs (particularly those of the Office of Admissions) through publications, printing and service to college administrators and faculty. Thus, indirectly, this area supports the Vision Statement. Assessment in this area appears to be based primarily on production, which has increased significantly over the years, perhaps due to increased computerization and technological improvements. The area has also won external awards on a regular basis suggesting it is doing more than simply increasing production but is fulfilling a high artistic and professional standard as well. High level administrators would be best able to offer evidence of the success of this department. If they were displeased or unsatisfied, their dissatisfaction would be duly noted. The personnel of Publication Services appear to be steadily employed in meeting deadlines and making efforts to genuinely meet the needs of their campus constituents.

Recommendations

The task group agrees that the development of objective goals and measures of success in this area would be difficult, since the criteria for success are subjective, and much of the work is in response to immediate or short-term needs. It is suggested, however, that some effort be made to assess the success of this area by means of surveys or constituent evaluation of specific products.

PUBLIC INFORMATION/MEDIA RELATIONS

The Public Information /Media Relations director serves as the spokesperson for SUNY Fredonia. Preparations for all college event media coverage, press releases, quarterly alumni newspapers, weekly campus newsletters and the college's website are handled in this area. Public Information/Media Relations, as part of the Development Office/Fredonia College Foundation, shares the general goals and objectives of the area's Mission Statement. The primary goal of this office is the dissemination of information, which, while not explicitly mentioned in the SUNY Fredonia Vision Statement, is certainly a necessity in order to showcase our current students, faculty/staff and programs to the public (including prospective students) and to apprise the campus community of pertinent information and/or events. A Fredonia alumnus conducted an evaluation of the Public Information/Media Relations Office as part of an assessment of the Development area. Written results were not available at the time of this report. As with the Publication Services department, it would appear that the goals and objectives for Public Information/Media Relations are successfully being met, judged largely by the absence of criticism by constituents. The Office, in its role on the campus Media Advisory Committee, recently issued a request for evaluative feedback entitled "Is it serving you?" The Advisory Committee is attempting to clarify the role of media organizations in teaching and learning at Fredonia.

Recommendations

The task group recommends that this office develop function-specific goals and objectives. The constituency of Public Information/Media Relations is larger than the administrators to whom it answers. Information about the public's perception of the College, as projected by this office, would be helpful in shaping its activities. The "Is it serving you?" effort is laudable, but should be extended to solicit both evaluation of the broader mission of this office and suggestions from students, faculty and staff, community leaders and businesses.

ANNUAL FUND

The Director of the Annual Fund drafted a broadly defined statement of goals in response to the charge of this task force. The Office provides only indirect support of the College Vision Statement by providing opportunities for student volunteers and offers employment through internships, work-study and temporary service positions. These educational opportunities encourage effective public relations efforts, set examples of professionalism through speaking and acting positively about Fredonia and higher education, relay the importance and effectiveness of stewardship in public relations activities and raise awareness of Foundation and Development activities and their benefit to students. Assessment activities include a questionnaire that is distributed to phonathon (telephone fundraising program) workers. Responses are compiled and shared within the area of Development and College Relations. Student employees are trained in handling and documenting "difficult" calls; negative feedback pertaining to any area of the college campus is reported to the appropriate office for follow-up. Networking with peers in statewide committees as well as conference attendance provides opportunities to compare services, procedures and outcomes. Another index to the success of the Annual Fund is the amount raised and the number of contributors. The amounts raised from parents has increased only slightly over the past three years. However, from 1996-97 to 1998-99, alumni giving in response to a letter appeal increased from \$25,645 to \$65,246, a 146% increase. The number of contributors over the same period increased from 433 to 1031. Between 1997 and 1998, alumni giving in response to the Phonathon increased from almost \$59,000 to nearly 122,000 (106%), with a corresponding increase in the number of donors. Faculty/staff and emeritus giving increased by 30% over the same period.

Recommendations

The goals and objectives of the Annual Fund were developed in direct response to the inquiry by the task group. To be useful, goals must be carefully and collaboratively developed, and include measurable elements. It is recommended that annual goal development by the Annual Fund include consideration of the office's role in supporting the Vision Statement, include objective or measurable outcomes, and be used as the basis for self-evaluation and for the next round of goal setting.

ALUMNI AFFAIRS

The Alumni Affairs Office attempts to make every possible effort to keep all alumni informed about, and in contact with, SUNY Fredonia - primarily through class and regional reunions, Homecoming, other special events and undergraduate programming.

The Annual Fund is the primary basis of support for the Fredonia College Foundation. Alumni, friends, faculty, staff and parents of current students are invited to assist in supporting SUNY Fredonia. A written appeal to each constituency and the College Phonathon are the most significant methods of solicitation. An annual "Honor Roll Of Donors" publication is produced.

The Alumni Affairs Office has a printed list of goals in ranked priority order. Included with each goal is the rationale for its existence and the activities that will be undertaken to achieve it. The goals, objectives and activities of the Alumni Affairs Office support the College mission to continue its strong contribution to student development and learning outside of the classroom. They lend support to the mission to strengthen our students' understanding of and respect for others through student activities. Written objectives also reference the enhancement and development of more culturally diverse programs and emphasize the continuing improvement of its strong undergraduate programs. In order to offer any services or benefits, and to expect any support in return, it is necessary for the Alumni Affairs Office to respond to the demand of Fredonia alumni - in essence, to assess the effectiveness of all programs and services. A survey instrument has been developed that is included in regional gathering mailings and a "Suggestion Sheet" has been devised to offer culturally diverse groups the opportunity to make appropriate recommendations. Reunion data sheets continue to be included in honored class mailings and evaluation forms are distributed at campus events. Feedback is both solicited and unsolicited, with solicited information deriving from the items mentioned earlier in this section - survey instruments, suggestion sheets and reunion data sheets.

Information is incorporated in planning and program modification. Attendance and participation in statewide committees and conferences provide an opportunity to compare services and procedures with other educational institutions. Feedback from alumni and students indicates that the goals of the Alumni Affairs Office are being met. Alumni giving is on the increase and the number of new donors has increased. Attendance at reunions and on-campus events is also on the rise.

Recommendations

The Alumni Affairs Office appears to be conscientious in assessing the needs of alumni, attempting to identify ways in which these needs can be met, and in identifying new ways to address alumni concerns. What appears to be lacking is a systematic process of linking the outcomes of these surveys and suggestions to concrete goals and indices of program success. The task group recommends the establishment of a routine cycle of assessment of alumni needs, goal setting, and performance evaluation, as outlined in the overall recommendations below.

CONCLUSIONS

1. Most of the departments or areas studied support only one area of the College Vision Statement – that dealing with student development outside of the classroom. Most support student development by providing student employment, by acquiring and distributing funds for scholarships, by maintaining or enhancing the physical environment, by meeting basic student needs for food, shelter or safety, and by the efficient and unobtrusive conduct of business and financial affairs.
2. While most of the departments or areas assessed have some objectives related to their particular function or purpose, these objectives vary widely in their concreteness or usefulness in the assessment of these functions or purposes. Several Departments or Areas are routinely evaluated by means of formal audits, for example the College Controller, the Budget Office and Student Accounts, but these financial audits do not address the larger question of the direct or indirect support of student learning.
3. Departments and areas studied vary in the degree to which assessment is formal, and the extent to which assessments are conducted on a regular basis.

RECOMMENDATIONS

Based on the result of the interviews and assessments conducted, and in light of the conclusions above, the task group offers the following recommendations:

- 1) That each of the departments or areas addressed publish annual goals, based on the following:
 - a) A review of the College Mission Statement to determine the specific aspects of that Statement which are, or can be, supported by the department or area
 - b) A review of the specific responsibilities of the department or area
- 2) That based on these annual goals, a series of performance indicators should be established each year. These will be measurable or observable indices of the successful performance of the goals established. In general, a performance indicator answers the question – how will our department or area know that the goals have been accomplished? When establishing performance indicators, departments or areas may wish to consider their role in supporting student learning.
- 3) That the departments or areas covered in this report should give consideration to the establishment of regular, routinized surveys. These surveys would be addressed to the constituents served by the department or area, as identified in that department or area's annual goals and performance indicators. A combined survey by several areas should be considered which would assess, among other issues, student and faculty awareness of the functions performed, ratings of satisfaction with these functions, and suggestions and recommendations for improvement.

- 4) That the goals and performance indicators be compiled into an annual report, which will be reviewed annually by the appropriate administrator. This annual report should indicate clearly the extent to which the goals have been met by reference to the performance indicators, and to the extent that goals have not been met, indicate plans to improve the processes that contribute to meeting those goals. These results should be published, or otherwise be made available, to the widest appropriate constituency. Records should be maintained for at least 10 years so as to be available to future Middle States Evaluation Teams.

The departments or areas studied perform their tasks diligently and capably. While aware of the importance of their functions to the overall success of the College, staff have rarely considered their role in supporting the central function of the College – student learning. We hope that this report will serve as an impetus to do so.

In the time since this review was conducted, each department or area in these two divisions has prepared an assessment plan. These plans are contained in Appendices E and F.

INSTITUTIONAL RECOMMENDATIONS

The Steering Committee and Task Group Leaders met to discuss and identify the most important recommendations emerging from the self-study. Consensus was reached that the following recommendations should be important priorities for the College.

We should take steps to increase our intellectual challenge to students, while taking account of the other important forms of learning in which students engage. Note that as academic requirements are raised, students must be provided with additional resources and motivation to meet them.

Suggested specific steps include:

- a. faculty-wide discussion of the amount and kind of work required in courses, and of the issue of grading.
- b. enhancement of the campus climate for learning by increasing the celebration of academic engagement and performance.
- c. A possible tightening of academic policies in regard to course withdrawal dates for all students, drop dates for freshmen, and required withdrawal averages for first semester freshmen.

We should take steps to strengthen our General College Program curriculum to address the relative weakness in our students' knowledge of science, technology, quantitative problem solving, and the methodological and ethical issues they raise. Also, in view of a similar weakness in student knowledge of the world, we should strengthen this component of the GCP.

We should improve the academic support we offer all students, but especially first semester freshmen and transfer students.

Suggested specific steps include:

- a. A task group should be formed to study the feasibility of developing a year-long required freshmen experience, including a structured personal growth component, a wellness component, and a diversity component.
 - b. Special attention needs to be given to transfer students and older, non-traditional students; recommendations need to be brainstormed with the students themselves.
 - c. Efforts should be made by individual faculty, or on a department or college-wide basis, to stimulate early faculty interactions with students, and to seek out interactions with those who are less active or less successful learners.
 - d. All campus wellness components should be incorporated together into a wellness committee through which Physical Education, Health Services and Residence Life could begin earlier and more aggressive relevant programming in this area.
 - e. Students should be encouraged to appreciate the importance of cultural participation as early as possible in their college life; attending cultural activities should be a course requirement whenever appropriate.
- Improvement of the campus climate for diversity must be addressed more aggressively.**

Some specific suggestions include:

- a. The perception of a disturbing number of minority students that they are differentially treated by faculty members and unwelcome in certain locations on campus must be addressed immediately. Workshops to develop specific programs and strategies should be held, on the model of the GCP writing workshops, and should involve administration, faculty, and professional staff. Similarly, campus-community workshops or other community-wide efforts to enhance diversity awareness should be continued and developed. One component of faculty workshops should be information on minority student differences in learning styles and in perceptions of the value that faculty members place on different learning methods. Stipends or released time for workshop organizers and participants would be one way to encourage participation.
- b. More ways of exposing majority students to diversity issues must be found. Additional strategies for including or expanding systematic treatment of diversity issues throughout the curriculum should be formulated and implemented. Faculty should include more material from and related to underrepresented populations in their lower level courses, whenever appropriate. Campus-wide programming should be expanded to include far greater numbers of majority students in experiences designed to increase diversity awareness, including understanding the importance of the Multicultural Center and of multiethnic minors.
- c. Student, faculty, and staff minority recruitment must improve.
- d. Since minority students are under greater financial and co-curricular pressure than other students, efforts must be made to relieve some of those pressures through increased scholarship and financial aid. Other ways of relieving pressure should be explored as well.

Positive student/faculty/staff interaction should continue and be strengthened.

Some specific suggestions include:

- a. Concern for the quality and completeness of advising should be addressed, given findings of some dissatisfaction with it.
- b. Advisers should pay special attention to the needs of students considering a declaration or change of major. If students express uncertainty about their focus, advisers should help them explore their options or refer them to relevant campus offices.
- c. Students need more guidance with regard to the types of activities they commit themselves to. Faculty and staff should be more direct and explicit with students about the choices they are making, with a view to maintaining a balance between out-of-class learning and course work.
- d. The potential for greater involvement of students in the scholarly and creative activity of faculty must be pursued. Departments should take the lead in the process.
- e. Departments need to propose, and administration needs to support, any plausible ideas to provide both faculty and students with opportunities to experience the advantages of smaller classes.

Assessment should become a regular and supported campus activity.

Some specific suggestions include:

- a. A campus-wide dialogue on the nature and meaning of student outcomes assessment, the techniques of assessment, including the use of course grades, and the time and resources needed for assessment should be scheduled and supported by the vice presidents.

- b. A coordinating body such as an assessment committee of faculty, staff, and students representing department and office groupings should be established; an assessment coordinator should be recruited to lead this body and assist departments, offices, and the General College Program Committee in the development of assessment, with extensive help from the Office of Institutional Studies.
- c. Departments should focus on goals and assessment instruments that could lead to program improvement. To do so, most need to formulate goals more specifically, so that assessment can meaningfully relate the outcomes to the goals. In this connection, departments and programs should coordinate their efforts and exchange information, especially among units in related disciplines, with help from the assessment coordinator, as needed. Departments with graduate programs should develop an assessment process with goals that clearly differentiate these programs from their undergraduate programs.
- d. College-wide data collection should be expanded. Research on some of the issues related to intellectual growth and personal/social development should be ongoing, using focus groups and questionnaires, among other methods. Certain kinds of information should be made available on a regular basis. For example, Banner should be programmed to track students on probation and to relate student use of academic support services to GPA, retention and academic awards. Also, the College should develop a process for ongoing assessment of experiential learning through coordination of departmental, Office of Career Development and SUNY-wide alumni surveys, not only to ask more specific questions concerning “experiential learning outcomes,” but also to develop a database of information for the improvement of student outcomes and curriculum enhancement.
- e. Each department or area reporting to the Vice President for Administration and the Vice President for Development and College Relations should develop an assessment plan, beginning with the definition of goals. Based on these goals, each unit should establish a series of performance indicators, measurable or observable indices of the successful performance of the goals. In this connection, units should consider establishing regular surveys of their “clients.” To the extent that they find any goals have not been met, units should examine the processes that lead to those goals in order to plan improvements.

The considerable agenda outlined in these recommendations will impose additional burdens on faculty and staff; clear and explicit links need to be established between the dedicated work of faculty and professional staff in these areas and the allocation of resources through the real reward systems of tenure, promotion, and discretionary salary increases, and also, as appropriate, through released time and the maintenance or reduction of class size and workload.