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ABSTRACT

This annual report provides evaluation of specific academic centers at Nova Southeastern University in Fort Lauderdale, Florida, reflecting specific goals, associated outcome measures, and attainment status relative to the goals. Twelve sections focus on the: (1) Abraham S. Fischler Center for the Advancement of Education; (2) Center for Computer and Information Sciences; (3) Center for Hospitality Management; (4) Center for Psychological Studies; (5) Family and School Center; (6) Health Professions Division; (7) James M. Farquhar Center for Undergraduate Studies; (8) Oceanographic Center; (9) School of Business and Entrepreneurship; (10) School of Social and Systemic Studies; (11) Shepard Broad Law Center; and (12) Student Services. Each section contains a descriptive overview of center programs and services; a statement of center goals; a delineation of outcome measures, procedures, and attainment status relative to each goal; and a summary of the status of attainment and discussion of the impact of findings on improvements in programs, services, and operations. (MDM)

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NOVA SOUTHEASTERN UNIVERSITY

**STATUS REPORT ON
INSTITUTIONAL EFFECTIVENESS**

1993-1994

September 1994

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NOVA SOUTHEASTERN UNIVERSITY

**STATUS REPORT ON
INSTITUTIONAL EFFECTIVENESS
1993-1994**

September 1994

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Foreword

Nova Southeastern University conducts an on-going, multi-level monitoring and evaluation process focused on overall institutional effectiveness. The scope and intensity of the University's institutional assessment initiatives have broadened significantly over the past decade, this year encompassing all academic and service and support units, including those of the newly merged Health Professions Division.

This document, which is produced annually, focuses assessment on individual academic centers, reflecting specific goals, associated outcome measures, and attainment status relative to the goals. The process undertaken by the academic units and culminating in this document represents four categories of center focus and assessment, as follows:

- A descriptive overview of center programs and services
- A statement of center goals
- A delineation of outcome measures, procedures, and attainment status relative to each goal
- A summary of the status of attainment of goals and discussion of the impact of findings on improvements in programs, services, and operations

In summarizing the status of attainment of goals, academic deans were to address general findings as well as exceptional findings, the latter with respect to significant trends/patterns (e.g., enrollment and learning outcomes), significant fiscal impact, substantial changes regarding degree offerings, and the need for or action taken relative to major program reorganization. In addressing the impact of assessment findings on improvements in programs, services, and operations, academic deans were to focus on such areas as: curriculum content, program delivery, teaching modalities, learning assessment procedures, faculty/staff recruitment and assessment, program marketing, services offered, the use of technology, and collaboration with internal centers/departments or outside entities. Deans were asked to relate activities undertaken and changes implemented to the findings associated with specific goals, indicating the rationale for change and the anticipated future impact.

Complementing this endeavor, the annual assessment of the status of key factors identified in the University's *Strategic Plan* as critical to the on-going growth, stability, and success of the University, represents a University-wide perspective across all academic and administrative units. A third level of assessment represents a departmental-level review, narrowing the assessment focus to individual service and support units, and evaluating the University's success in maintaining continuous improvement in their efficiency and effectiveness. The essential purpose of these monitoring and evaluation processes is to focus attention on institutional effectiveness in such a way as to positively and constructively impact decision-making throughout the University.

The various assessments of institutional effectiveness conducted by the University over the next two years will be particularly critical in informing, facilitating, and complementing assessments being undertaken in connection with the University's current Self-Study targeting reaffirmation in 1996. Accordingly, the processes employed in these assessment initiatives will continue to be broadly participatory at all levels to ensure appropriate and comprehensive review and input, and documents produced as an outgrowth of these processes will be distributed widely throughout the University.

John Losak, Dean
Research and Planning
October 1994

ABRAHAM S. FISCHLER
CENTER FOR THE ADVANCEMENT OF EDUCATION

Section I

DESCRIPTION OF PROGRAMS AND SERVICES

The Abraham S. Fischler Center for the Advancement of Education is the University's graduate school of education. The Fischler Center administers six field-based degree programs, three at the doctoral level and three at the Master's level.

The National Ed.D. Program for Educational Leaders (EDL) enrolls K-12 school administrators and focuses on the acquisition of the leadership skills needed to improve the nation's school system.

The Ed.D. Programs for Higher Education (PHE) offers an integrated program of formal instruction, supervised study, and applied research, with specialties in adult education, computing and information technology, health care education, higher education, and vocational, technical, and occupational education.

The mission of the Ed.D. Programs in Child and Youth Studies (CYS) is to improve the lives of children and youth by improving the leadership skills of the educators and other child and youth professionals who work with them. Professional specialization study is offered in curriculum development and systemic change, management of programs for children and youth, special services for children and youth, and the application of technology to education and training.

The Graduate Education Module (GEM) Program is an array of 18 major fields of study in teacher education for practitioners at the Master's or the educational specialist degree level, focusing on the improvement of professional practice, the application to practice of current research and theory, and the acquisition and enhancement of leadership capacities.

The Master's Program in Speech-Language Pathology provides the coursework and clinical experiences needed to obtain Florida licensure as a speech pathologist, the speech-language impaired certification coverage for work in Florida schools, and the Certificate of Clinical Competence awarded by the American Speech-Language Hearing Association.

The Master's Programs in Life Span Care and Administration offer programs for child care, youth care, and elder care administrators, and family support professionals. Each contains integrated study in leadership, management, public policy, human development, and human dynamics, as these apply to the particular clientele.

Approximately 3500 students are enrolled in Fischler Center programs. Courses, study areas, and seminars are conducted in 49 cities in 20 states and Canada. A number of foreign students are enrolled through a variety of systems combining electronic delivery of instruction with live class sessions on campus or at regional locations.

Section II

GOALS

- Goal 1.** Provide academic programs of high quality.
- Goal 2.** Provide academic programs and services that satisfy the clientele.
- Goal 3.** Produce program graduates perceived by their employers and supervisors as professionally competent.
- Goal 4.** Improve instructional delivery systems through the use of appropriate electronic technologies.
- Goal 5.** Generate and disseminate new knowledge through research and publishing.
- Goal 6.** Recruit and develop highly effective faculty members.
- Goal 7.** Recruit and develop highly effective staff members.
- Goal 8.** Articulate and collaborate effectively with the teacher education programs at the James M. Farquhar Center for Undergraduate Studies.
- Goal 9.** Collaborate on productive projects with the Broward County Schools.

Section III

OUTCOME MEASURES, PROCEDURES, AND ATTAINMENT STATUS

Goal 1. Provide academic programs of high quality.

Outcome Measure A: At least 80 percent of the Speech-Language Pathology graduates sitting during 1992-93 for the National Examination in Speech-Language Pathology and Audiology (NESPA) will have obtained passing scores. (The speech pathology profession considers the NESPA—the board-certifying examination of the program's accrediting agency, the American Speech-Language and Hearing Association, ASHA—a particularly meaningful measure of preparation program quality.)

Procedure: ASHA will submit a report to the program on the pass/fail performance of its graduates on the 1992-93 NESPA. Attainment of the measure will be determined.

Attainment Status: Of the 74 graduates who took the NESPA, 57, or 77 percent passed. (See Section IV for discussion.)

Outcome Measure B: On an open ended exit evaluation instrument, 80 percent or more of the 1993-94 graduates of the EDL Program will express exclusively positive feelings or observations about their degree work.

Procedure: The exit instrument, "Individualized Evaluation Questionnaire" will be mailed to all graduates during the year. Qualitative analysis of the returns will involve study by senior program staff of responses to items #3 and #8, "List the least helpful aspect of Ed. Leaders" and "What is your overall assessment on how the Program prepared you for your personal professional goals and career aspirations?" Any words used in either of these responses connoting negative feelings or observations will exclude the respondent from the minimum 80 percent target group.

Attainment Status: The procedure was begun in March 1994, and 21 completed forms have been returned to date. The analysis was performed and only four of the 21 respondents were excluded from the positive group. Thus, 17 (or 81 percent) expressed exclusively positive perceptions about the program. (See discussion in Section IV.) This measure will be performed again throughout the 1994-95 year, with a substantially larger number of respondents involved.

Outcome Measure C: The quality of practicums, the culminating educational improvement projects produced by GEM Program students, will be shown to have significantly improved during the period 1990-94.

Procedure: A comparative analysis will be performed on a sample of practicum documents spanning 1990-94, using blind review and a 30 point scale.

Attainment Status: This study was not conducted during 1993-94 and will be carried over to the 1994-95 academic year.

Goal 2. Provide academic programs and services that satisfy the clientele.

Outcome Measure A: Students attending the 1993 Summer Institute of the Master's Programs in Life Span Care and Administration (formerly Child Care, Youth Care and Family Support) will rate key satisfaction variables as "Excellent" or "Good", with mean ratings above 3.00 on a four-point scale.

Procedure: In the Summer Institute evaluation instrument, the nine items selected by program senior staff as key satisfaction variables are as follows:

22. Your assessment of speakers and presenters at the Institute
23. Your impression of the Nova University Faculty at the Institute.
24. The level of networking skills acquired this week.
25. The level of professional development gained this week.
26. Your impression of other students in the Program at the Institute.
27. Overall evaluation of the Summer Institute.
28. General reactions to the Master's Program thus far.
29. The image of the Master's Program among co-workers and colleagues.
33. The quality of support from Master's Program staff.

Subsequent to the Institute, program faculty will analyze the data and determine the attainment status of the measure.

Attainment Status: With an average of 69 respondents to each of the nine key items, the percentages indicating "Excellent" or "Good" and the mean ratings were as follows:

Item	Excellent	Good	Mean Rating
22	30.8%	55.4%	3.17
23	58.2%	37.3%	3.52
24	40.9%	43.9%	3.23
25	48.5%	28.8%	3.18
26	55.2%	41.8%	3.52
27	31.3%	49.3%	3.07
28	47.1%	51.5%	3.44
29	30.9%	60.3%	3.21
33	69.1%	23.5%	3.62

Outcome Measure B: At least 80 percent of the students enrolled in the CYS Program will report direct applicability of their study area and specialization area content to the needs of the clients in their work settings.

Procedure: CYS Program content is grounded in the professional diversity of the student body. Assignments are designed to allow individual focus based on the student's own work environment. Evaluation procedures completed by students following each program component (study/specialization areas) ask for their validation of the applicability feature. These evaluation data will be analyzed by the faculty and attainment of the target measure determined.

Attainment Status: Spanning the 1993-94 academic year, 87 percent of the student responses to the applicability issue acknowledged a direct relationship between instructional content and the needs of their clients.

Goal 3. Produce program graduates perceived by their employers and supervisors as professionally competent.

Outcome Measure A: Eighty-five percent or more of the graduates of the Master's Program in Speech-Language Pathology will be rated by their employers as "good" to "excellent" in their professional performance as speech pathologists.

Procedure: A survey instrument will be mailed to employers of Speech/Language Pathology graduates spanning the five academic years 1988-93. Using a four-point scale designating poor, fair, good, and excellent (with an additional designation for "no opportunity to observe"), employers and/or supervisors will be asked to rate the program graduates across the following dimensions:

1. Ability to perform routine screenings
2. Ability to perform appropriate diagnostic procedures
3. Ability to establish appropriate client goals/objectives
4. Ability to apply current research findings
5. Ability to work on a one-to-one basis
6. Ability to work with client groups
7. Ability to plan and implement treatment
8. Ability to write reports
9. Client-clinician relationships
10. Intraprofessional relationships
11. Interprofessional relationships
12. Response to supervision

Attainment Status: Of the 135 survey instruments mailed this year to employers of graduates during the five-year period, 90 were returned. The percentages of ratings in the "good" to "excellent" range for the 12 items and overall for all ratings are shown below. Further discussion is provided in Section IV.

Item 1:	96%
Item 2:	91%
Item 3:	96%
Item 4:	83%
Item 5:	87%
Item 6:	89%
Item 7:	96%
Item 8:	96%
Item 9:	87%
Item 10:	96%
Item 11:	94%
Item 12:	86%
Overall:	92%

Goal 4. Improve instructional delivery systems through the use of appropriate electronic technologies.

Outcome Measure A: Instruction in one or more Fischler Center distance programs will be delivered to students at remote sites via two-way (interactive) compressed video.

Procedure 1: Continue planning begun on a smaller scale in 1991 (see discussion in Section IV) for instructional use of two-way compressed video. Involved in the planning will be:

- At the University level: the Board of Trustees, the Vice President for Computer and Information Technology, and the Director of the Center for Media and Technology.
- At the Fischler Center: the Dean, the Director of the GEM Program, the Director of Technology, and an additional program director (if applicable).

Procedure 2: Request cost study and purchase of basic equipment needed, such as codecs (coder/decoders to convert video and audio signals from analog to digital and back to analog); audio and video receiving and transmitting hardware (e.g., microphones, cameras, monitors); and transmission links (telephone lines or other means of transmission). Under the leadership of the Director of the GEM Program, plan initial schedule, sites, and faculty members who will participate in initial compressed video delivery of instruction. Install equipment (if purchased) at project sites. Design evaluation component and implement project.

Attainment Status: With the support of the Board of Trustees and the administration, particularly the Vice President for Computer and Information Technology, approximately \$500,000 was allocated by the University to purchase ten PictureTel units (compressed video systems) and several transmission links to bridge GEM Program sites at locations accessible also to other University distance programs. Six of these units were installed in the field, at Phoenix, Arizona, Las Vegas, Nevada, and, in Florida, at

Bradenton/Sarasota, Fort Myers, Orlando, and Tampa. Three units were installed on campus, in the TV studio at the Center for Media and Technology, on the East Campus, and at the Fischler Center offices.

In June 1994 the GEM Program conducted Nova Southeastern University's first course via compressed video, an intensively scheduled three-credit workshop, "Teaching Children in a Culturally Diverse Community: A Workshop for Primary/Elementary Teachers." Two GEM Program faculty members taught from the campus TV studio, with students present, and the transmission bridge linked Las Vegas and Phoenix in addition. A total of 23 students attended across the three sites, eight hours per day for the five days. Adjustment to the new delivery system by students and faculty was quick, and intra-site interaction was highly effective.

Since the June workshop, five additional Summer Term courses have been taught to dual-site groups of GEM Program students, two from Las Vegas to Phoenix and one each from the campus to Orlando, Tampa and Bradenton. Another Fischler Center program, Life Span Care and Administration, utilized compressed video to deliver an address from a Distinguished Guest Lecturer in Phoenix to 25 student participants in the program's 1994 summer institute. The lecturer and students interacted much as would have been the case had she been present in person. Given the recency of these compressed video instructional activities, an evaluation report has not yet been prepared. (See, however, the discussion on this in Section IV.)

Goal 5. Generate and disseminate new knowledge through research and publishing.

Outcome Measure A: The CYS Program will publish and disseminate the third in a series of monographs, *Bridges: Connecting Theory and Practice in Programs for Children and Youth*, designed to present significant practicum research findings of its doctoral students across a variety of topical themes.

Procedure: The Director of Practicums will solicit recommendations from all CYS practicum faculty members for consideration of student practicum reports related to the role of technology in education and recruit a monograph author. Successive procedural steps will follow, culminating in the publication and wide distribution of the monograph, nationally and internationally.

Attainment Status: The monograph, entitled *Becoming Lifelong Learners through the Use of Technology: The Beginnings*, was written by Trudy Jermanovich, Ed.D., a CYS graduate and a recently-named Florida Computer Teacher of the Year. It will be published and distributed after the start of the 1994-95 academic year. The approximately 40 page book features the findings of 16 CYS students resulting from their research projects related to such topics as the role of technology in school improvement and restructuring, the use of telecommunications to enlarge the school community, and the impact of technology on teacher preparation and training programs.

Outcome Measure B: The Fischler Center will publish and distribute a number of journals sharing scholarly and professional knowledge—from its own program faculties and students as well as from faculty and professionals at other institutions and agencies—with broad national and international audiences.

Procedure: Continue support for and distribution of Center publication series.

Attainment Status: In a continuation of its publishing activities of recent years, the following journals and other publications (in addition to the Bridges monograph described above) were disseminated to substantial state, national, and international readerships during 1993-94:

■ The Child and Youth Care Administrator

This journal serves a national audience of subscribers in the child and youth care professions. Published twice annually, it contains articles related to the applications of theory to practice. It is published jointly by the Life Span Care and Administration and CYS Programs.

■ Florida ASCD Journal

Sponsored and published by the Fischler Center, this journal is the voice of the state affiliate of the national Association of Supervision and Curriculum Development (ASCD). The journal reaches a wide audience of teachers, school administrators, and teacher educators across Florida and in other states, in two issues each year. Its articles focus on a broad array of professional, instructional, and policy issues of the day.

■ New Horizons

Published by the PHE, this adult education journal appears online via the Internet. Accompanied by an online discussion forum called AEDNET, the telecommunications journal reaches a worldwide audience of adult educators and others interested in the field.

■ The Online Chronicle of Distance Education and Communications

This telecommunicated publication, co-edited by Nova Southeastern University and the University of Alaska, is primarily the responsibility of the CYS Program and the Fischler Center's Office of Technology. It reaches over 2,000 subscribers worldwide on the Internet.

■ Focus on Change

This new annual publication of the GEM Program describes practicum research findings resulting from school improvement projects. Featured is the work of 20 honors award students, from the approximately 1,000 who complete practicums each year. The publication is distributed widely in the education communities in Florida, Arizona, and Nevada.

Goal 6. Recruit and develop highly effective faculty members.

Outcome Measure A: At least 80 percent of the participants (students) in the EDL Program will use only positive terms in qualitatively assessing the performance of their National Lecturers (instructors).

Procedure: Analyze responses to three-item "Participant Evaluation of National Lecturer" forms, collected and submitted by nine Cluster Coordinators (site managers) at the conclusion of various study area class sessions during the Winter Term, 1994. Categorize each participant's assessment of the performance of individual Lecturers as "positive" or "negative." Classify as "positive" only those forms containing no negative terms. Tally the "positives" for each Lecturer and convert these to percentages of the total number of forms for that lecturer.

Attainment Status: Analysis of the forms yielded the following: (See discussion in Section IV).

Cluster	Lecturer	Total Forms	Total Positive	%
Jacksonville VIII	A	15	13	87%
	B	8	6	75%
Richmond III-B	C	12	11	92%
	D	12	11	92%
Chicago VI-VII	E	17	12	71%
	F	20	14	70%
	G	23	18	78%
Columbia IV	H	21	15	71%
	I	20	14	70%
	J	17	14	82%
Louisiana IA-B	K	12	10	83%
	L	13	13	100%
Atlanta VI	M	7	6	86%
	N	5	5	100%
	O	8	6	75%
Wilmington IX A/B	P	28	18	64%
	Q	20	15	75%
Dallas	R	22	20	91%
Springfield IV	S	16	12	75%
	T	15	13	87%
Totals	20	311	246	79%

Lecturers receiving 80 percent "positive" or higher: 10 (50 percent)

Lecturers receiving less than 75 percent "positive": 5 (25 percent)

Outcome Measure B: Students in the Ed.D. Programs for Higher Education (PHE) will positively evaluate, at a 75 percent rating or higher, the performance of each faculty member in each of six categories: Core National Lecturers (teaching seminars at cluster sites), Specialization National Lecturers (teaching in-class components of seminars at summer institutes), Practicum Evaluators, Major Applied Research Project (MARP) Advisors, Cluster Coordinators, and Local Research Associates.

Procedure 1: Administer procedure for student evaluation of performance of Core and Specialization National Lecturers throughout 1993-94. Compute student ratings in response to item, "Overall the quality of instruction was good." Determine attainment of outcome measure target 75 percent, or 3.75 on a five point scale, for each Lecturer.

Procedure 2. Administer annual procedure for student evaluation of Practicum Evaluators, MARP Advisors, Cluster Coordinators, and Local Research Associates. Analyze results in terms of attainment of target 75 percent positive evaluation (3.0 on a four point scale) for each faculty member.

Attainment Status: Results of analyses of the various evaluation findings were as follows:

End of Term Procedures (3.75, 75 percent or higher positive rating target)

- 21 of the 24 Core National Lecturers evaluated reached the target.
- 16 of 18 Specialization National Lecturers reached the target.

Annual Procedures (3.0, 75 percent or higher positive rating target)

- 9 of 10 Practicum Evaluators reached the target.
- 24 of 27 MARP Advisors reached the target.
- 16 of 18 Cluster Coordinators reached the target.
- 14 of 15 Local Research Associates reached the target.

(See Section IV for discussion of actions taken in response to the findings.)

Goal 7. Recruit and develop highly effective staff members.

Outcome Measure A: The Center will implement a motivational program aimed at promoting in all its employees pride in their work and a sense of ownership of the organization.

Procedure: Design and implement a program, open to all employees, rewarding the submission of creative ideas for providing more effective and efficient student services, cost savings, improving support services for field-based personnel, creating the most productive work environments possible, and other related areas.

Attainment Status: In January, 1994, a program named All Ideas Count (AIC) was established by the Dean and the Center's Director of Administrative Operations. By the end of the year, approximately 160 ideas had been submitted by some 55 employees at all levels of the organization on official application forms. Of those who submitted these, nine were selected by a Center-wide committee of four judges, representing all position levels, to receive awards (gift certificates from the campus bookstore) for the potential positive results of their ideas. Two award ceremonies were held, with the majority of the Center's 141 employees in attendance. A number of the ideas, award winners or not, were implemented immediately and a number of others requiring longer periods of time to be implemented will be put into place. The outcome measure target has been reached, with persons in all job categories exhibiting ownership and pride through the conceptualization of ways in which the Center's work can improve.

Outcome Measure B: The Fischler Center will provide a supportive and informationally helpful initial work period to its new employees.

Procedure: Continue the mentorship program, established during 1992-93, the objective of which is to assign an effective mentor, an employee of comparable rank from another program or departmental unit, to the new staff member for his or her first two weeks on the job. The responsibilities of the mentor are to a) check-in with the new person each day to monitor progress, answer questions, and provide as much support as possible, b) introduce the new person to as many others at the Center as possible over the two week period, and c) have lunch together at least twice during the period. A comprehensive packet of information on the Center and the University is provided to the new employee.

Attainment Status: The program was implemented 20 times during 1993-94. The new employees reported that the mentors were supportive and provided much needed information to them as they began their work at the Center. (In addition, the mentors often reported benefits they derived, such as learning much more about the entire Center than was previously known.)

Goal 8. Articulate and collaborate effectively with the teacher education programs at the James M. Farquhar Center for Undergraduate Studies.

Outcome Measure A: Faculty and staff of the Abraham S. Fischler Center for the Advancement of education and James M. Farquhar Center for Undergraduate Studies will collaborate extensively and intensively in order to gain at least conditional program approval from the Florida Department of Education for 21 teacher education programs spanning the undergraduate and graduate levels.

Procedure: Under the leadership of the Director of the GEM Program at the Fischler Center and the Director of the Teacher Education Department at the Farquhar Center, plan and take all steps needed to achieve four major process objectives, a) completion of reaction documents to the DOE in response to its reactions to the curriculum portfolios submitted during 1992-93, b) completion of a lengthy Institutional Report (self-study), describing all aspects of program operation, c) preparation of an extensive documentation room for use of the DOE site visit team in Spring 1994, and d) completion of all other arrangements (e.g., housing, local transportation, appointment schedules) for the team's five-day stay on campus.

Attainment Status: The nine-person DOE team, comprised of peers from other Florida universities and colleges, visited Nova Southeastern University on April 20-24, 1994. As a result of their interviews with students, alumni, faculty, staff, University administration, and public school personnel, and their observations of class sessions, the team members validated virtually every detail contained in the Institutional Report. The team subsequently recommended full approval of all 21 programs without conditions, a distinction rarely accorded in Florida.

Outcome Measure B: The James M. Fischler Center for the Advancement of Education and the Department of Teacher Education at the James M. Farquhar Center for Undergraduate Studies jointly will pursue and obtain grant monies relative to the programs' strengths and extensive experience in practice-based teacher preparation.

Procedure: Under the leadership of the Broward County School Board Liaison, the staff member whose position is jointly funded by the Abraham S. Fischler Center for the Advancement of Education and the Broward Schools, explore possibilities of collaborative pursuit of grant support within the larger context of collaboration with the Broward Schools.

Attainment Status: See Attainment Status for Outcome Measure B, Goal 9, below.

Goal 9. Collaborate on productive projects with the Broward County Schools.

Outcome Measure A: The EDL, the Center's educational administration doctoral program, will provide direct services to the Broward Schools, assisting in the establishment of Nova Southeastern University as a preeminent university partner with the nation's seventh largest school district.

Procedure: The Center Dean, the Director of the EDL program, and the Broward County School Board Liaison will explore possibilities for extended partnership, with the Superintendent, the chairperson of the School Board, and other district officials.

Attainment Status: After several months of planning and several information meetings, a special EDL cluster exclusively for Broward Schools administrators has been established and began its three-year cycle of study in June 1994. The Broward County School Board Liaison serves as the Cluster Coordinator and the program will be tailored to the particular needs of the Broward schools.

The EDL summer institute in July 1994 was opened to Broward school administrators. An offering in the Broward administrator summer inservice program was provided by EDL, featuring the former Commissioner of Education in Connecticut as the presenter.

Outcome Measure B: Collaborate with the Broward Schools in the pursuit of grants related to mutual strengths and interests.

Procedure: Under the initiative of the Broward County School Board Liaison, continue exploration of collaborative grantsmanship.

Attainment Status: A joint proposal is being written to the John S. and James L. Knight Foundation for funding of a Nova Southeastern University/Broward Schools technology project, bridging the University and the Deerfield Beach Innovation Zone (feeder system). The schools in this Zone include six elementary, three middle, and one high school. The Department of Teacher Education at the James M. Farquhar Center for Undergraduate Studies will be involved, with its students working with Zone teachers and pupils. The Abraham S. Fischler Center for the Advancement of Education's new two-way (interactive) compressed video facilities (see Goal 4 above) will provide the training bridge to network the Zone schools. The aims of the project include the provision of ready access to current educational research to assist in decision making, and the provision of research findings to help schools develop their school improvement plans and grant proposals.

Outcome Measure C: Provide technical assistance and meeting facilities as requested by the Broward Schools.

Procedure: The Dean and the Liaison will extend these offers to the Superintendent, the Board, and other district officials. The Center will respond as requested.

Attainment Status: The Center provided the following to the Broward Schools during 1993-94:

- The district's Human Resource Development division met approximately 20 times at the Center and other University locations, hosted by the Center. Technical assistance was provided by the Dean (future trends) and the Director of Technology (telecommunications).
- A Broward School Board strategic planning retreat was hosted by the Center and technical assistance (technology) was provided.
- A large meeting of Broward Exceptional Student Education personnel was hosted by the Center.

Section IV

OVERVIEW AND USE OF FINDINGS TO IMPROVE INSTITUTIONAL PROGRAMS, SERVICES, AND OPERATIONS

Summary of the Status of Attainment of Goals

The Center's primary goals for 1993-94 are listed in Section II. The outcome measures selected to test for attainment of the goals are listed in Section III, along with the findings ("attainment status") related to each. In retrospect, many but not all of the important developments of the year emanate from these goals and outcomes measures. Not mentioned in the findings, for example, is that 31 percent of the Center's total FY1994 revenues of \$21,533,925 (unaudited) was returned to the University. This third-column return was six points higher than projected.

- Unmentioned also is the allocation by the Florida Legislature of funding support (estimated \$215,280) for 30 FTE students in the Speech-Language Pathology program. The Postsecondary Education Planning Commission had recommended a state academic contract providing this support, particularly for minority group students and those living in rural areas. The basis for the recommendation was the high level of quality demonstrated by the program.
- Also not appearing in Section III are the external statistical data verifying the Center's success in recruitment, retention, and graduation of minority group representatives. The May 19, 1994, issue of *Black Issues in Higher Education* reports, as it does annually, data provided by the United States Department of Education, this time for the 1990-91 academic year. The University was the seventh largest producer of minority doctorates in the nation and the ninth largest producer of minority group Master's degrees. The Center generated almost 50 percent of these enrollments across both categories.
- A final positive development is the formation at the end of the year of a Research and Evaluation Committee. Consisting of faculty and staff representatives of each of the six academic programs and the Department of Technology, the function of this group will be to provide substantial input to the Assistant Dean regarding Center planning, research, and evaluation. In addition, as the year ended, a new position, Director of Research and Evaluation, was created. Beginning in mid-August, this will be a joint appointment between the Abraham S. Fischler Center for the Advancement of Education and the James M. Farquhar Center for Undergraduate Studies. Its primary purpose is to provide research and evaluation support to the deans, faculty, and professional staff in meeting goals and objectives of the programs and Centers.

The attainment of the Center's goals is essential to its continued viability. Each goal represents an intention, agreed to by persons throughout the Center organization, to produce quality—quality of instruction and programs, delivery systems, student services and services to the external education communities, publications and research, faculty and staff performance, and the professional performance of program graduates as viewed by themselves and their employers. To the extent that high levels of quality are reached in each and all of these ways, interested professionals in the marketplace for practice-oriented advanced degrees are attracted and recruited. Program populations thus are replenished and budget projections met.

The research findings reported in Section III are the results of 18 outcome measures related to the nine Center goals. In each case, a target was established by which attainment of the desired outcome could

reasonably be determined. The targets are expressed in a variety of ways depending on the nature of the particular outcome, for example:

- In Goal 1, Outcome Measure A, a straightforward numerical target was indicated because the aim was to infer continuing program quality by counting the number of Speech-Language Pathology graduates who passed an important national examination for which the program intends to prepare them comprehensively .
- Goal 7, Outcome Measure A presents a different situation. The target was simply a "yes" to the existence of an employee incentive program through which attainment of the measure and the goal could be empirically validated.

Of the 18 outcome measure targets, 14 were reached or exceeded, and four were not reached—one because the particular procedure was delayed until the 1994-95 year.

Impact of Findings on Improvements in Programs, Services, and Operations

Each finding was considered highly significant to the faculty and staff of at least one program and to the Center administration, just as the outcome measures were considered important at the beginning of the 1993-94 year. Some findings exerted much more impact than others. Some had major impact and, thus, were viewed as highly significant by many at the Center. Four high impact findings are described briefly here.

- The attainment of full approval for Nova Southeastern University's teacher education programs by the Florida Department of Education (Goal 8, Outcome Measure A) was a major accomplishment of 1993-94, as indicated in Section III. The eleven programs approved are the Speech-Language Pathology program and ten majors within the GEM Program. The combined revenues generated by these two programs in 1993-94 accounted for 48 percent of total Center revenues—GEM Program at 37 percent and Speech-Language Pathology at 11 percent. The alternatives to full program approval would have resulted in a number of possibly aversive situations, ranging from major redesign of the programs denied to a virtually complete decrease in marketability of the programs due to adverse publicity, and a loss of substantial amounts of future revenue. (The same scenario can be drawn for effects on the James M. Farquhar Center for Undergraduate Studies' teacher education programs.) The achievement of full approval, on the other hand, validates the philosophy, design, delivery, and evaluation of the programs. Finally, since the two and one-half year effort involved extremely close collaborative work between the Centers' faculty and staff during the documentation stages and the team visit, the goal, to "articulate and collaborate effectively," was clearly reached.
- The initial instructional use of two-way compressed video (Goal 4, Outcome Measure A) by the GEM Program was an exceptionally important finding. Over the past five years, electronic technologies have become increasingly integral to Center programming. In planning for over three years, the compressed video project required allocation of substantial dollars to purchase the equipment. This reflects an unequivocal institutional commitment to technological prominence for the University. Given the world-wide network of students enrolled in the Center programs, the potentialities appear unlimited for distance applications of compressed video and related new technologies. In the not too distant future, when homes everywhere are wired to accommodate these technologies (or when wireless delivery becomes possible), the Center intends to be prepared for delivery of interactive instruction from programs to students at home, wherever they may live.

- The establishment of the All Ideas Count (AIC) employee motivation program (Goal 7, Outcome Measure A) was a significant achievement. Approximately 40 percent of the Center's employees, representing all position levels, participated by submitting ideas for a variety of improvements in the programs and work environments. The impact clearly is positive. As a reflection of the positive work climate the Center consistently strives to provide its over 140 full-time employees, AIC has and should continue to promote increased productivity.
- The formation of a special cluster of the EDL Program for administrators in the Broward Schools was another high impact finding (Goal 9, Outcome Measure A). Collaboration on a number of fronts with the University's home school district, the seventh largest in the nation, is vital to the success of the Fischler Center. A great number of its students are Broward Schools employees. Public school settings for the completion of academic requirements, such as practicum research projects, are critically important. Local recruitment of students occurs within a multi-institutional marketplace. The new EDL cluster represents a significantly increased level of collaboration with the district, already substantial, with a number of high ranking administrators enrolled. The new Superintendent is an EDL graduate and has indicated that the district desires increased collaboration with Nova Southeastern.

As described above, the 18 findings for 1993-94, (i.e., the attainment status for each of 18 outcome measures) were of several types. For the discussion here of the impact of the findings on improvements, two categories of findings are identified.

- A category I finding results from a quantifiable outcome measure target that has or has not been reached. It indicates the need for corrective or remedial action in the case of an unreached target. If the target has been reached, the faculty and staff involved may decide that the target level should be raised for the subsequent period, or that the level of attainment should simply be maintained and improvement efforts shifted elsewhere. (In this way, outcome measures come and go from institutional effectiveness reporting.)
- A category II finding results from an outcome measure target that calls for the creation, establishment, or implementation of a program, service, system, or methodology. The finding itself is the answer "yes" or "no" to the target. Category II outcome measures tend to be highly significant activities, the existence of which speak strongly to the achievement of the goals to which they are attached. They should lead, subsequently, to Category I outcome measures (a number of the "high impact" outcome measures included in the present report will generate Category I measures for the 1994-95 academic year).

Of the 18 findings, eight are Category I and ten are Category II. The impact of each Category I finding is reported briefly below.

Goal 1, Outcome Measure A:

For this target to have been reached, 80 percent of the Speech-Language Pathology students taking the national board-certifying NESPA examination during 1992-93 would have obtained passing scores. Since the percentage fell below (77 percent) the target for the first time in several years, program faculty and staff planned and implemented remedial steps during 1993-94. Several weeks prior to the administration of NESPA, the graduates registered to take it are provided, at no charge, a review program, covering all program content, in two one and one-half day segments totalling 24 hours.

Goal 1, Outcome Measure B:

The target for this measure was the provision of exclusively positive feedback by graduates of the National Ed.D. Program for Educational Leaders in response to several key items on an open-ended exit evaluation form. The evaluation procedure was not implemented until March 1994, and the resulting yield of 21 respondents was considered too small for valid conclusions. Analysis revealed that 81 percent of the respondents were exclusively positive. The measure will be taken again in 1994-95 with a substantially larger group of graduates. The immediate impact of this year's finding, however, is that the program director has begun, and will complete, personal interviews with the four graduates who expressed negative perceptions, in order to fully understand their statements.

Goal 1, Outcome Measure C:

This measure, of the comparative quality of GEM Program practicum research projects conducted by students over a four-year period, was not taken this year. Since the study involved is considered to be highly significant, it will be undertaken in 1994-95.

Goal 2, Outcome Measure A:

The target here was that the students attending the 1993 Life Span Care and Administration Summer Institute would rate each of nine key satisfaction variables, on an ending evaluation form, at a mean rating of at least 3.00 on a four-point scale. The target was reached, as displayed in Section III, and program administrators have decided to retain the measure for 1994-95 since it is considered to be valuable. The target, however, will be increased to a minimum mean rating of 3.25 on the key items.

Goal 2, Outcome Measure B:

The target for this measure was that 80 percent or more of the student body in the CYS Program would report a direct relationship between program content and the needs of the clients in their professional work settings. The 87 percent finding demonstrated to the program that a major element of its mission continues to be achieved. The measure and the same target will be continued into 1994-95.

Goal 3, Outcome Measure A:

For this meaningful measure testing for achievement of the goal to "produce program graduates perceived by their employers and supervisors as professionally competent," the employers of graduates of the Speech-Language Pathology program over a five-year-period were surveyed. Professional competence was defined by the faculty in terms of 12 performance dimensions, listed in Section III. The target, perceived competence of 85 percent of the graduates, was surpassed overall (92 percent) and on each of the 12 dimensions except one, "ability to apply current research," at 83 percent. The program's reaction to this less positive employer perception was decisive. The faculty and staff determined that the research sequence within the program should be strengthened. The expectations for the two courses in question, SLP 6070, "Research Methods in Speech Pathology", and SLP 6080, "Directed Research" (independent and directed), were raised. The research application dimension of the survey will be monitored carefully in 1994-95 and beyond.

Goal 6, Outcome Measure A:

The target of this new measure for the National Ed.D. Program for Educational Leaders was that 80 percent or more of the 1994 Winter Term students would use only positive terms on an evaluation form in assessing the performance of their instructors (National Lecturers). Of the 20 lecturers teaching, only ten received totally positive feedback from the target 80 percent of their students. Five lecturers received less than 75 percent. The data analysis for the measure was completed late in the year, at the height of the preparations for the 1994 Summer Institute. Impact and reaction to these findings, therefore, have yet to be objectified, as does assessment of the measure and procedure themselves.

Goal 6, Outcome Measure B:

A number of national, part-time faculty members are important to the success of the PHE. The performance of six categories of these (Core National Lecturers, Specialization National Lecturers, Practicum Evaluators, Major Applied Research Project Advisors, Cluster Coordinators, and Local Research Associates) is evaluated by students. This measure calls for 75 percent positive evaluation for each of the 112 persons in these positions during 1993-94. As indicated in Section III, the target was reached for 100 of them. For the 12 persons below target, specific actions were taken by program administration. These are as follows:

Resignation after performance review	5
Not rehired	3
Receiving assistance; will be reconsidered	3
Assigned reduced load; will be reconsidered	1

**CENTER FOR COMPUTER AND
INFORMATION SCIENCES**

Section I

DESCRIPTION OF PROGRAMS AND SERVICES

The Center for Computer and Information Sciences (CCIS) offers undergraduate and graduate programs in the computing and information disciplines that are timely yet provide an enduring foundation for future professional growth. The CCIS uses both traditional and non-traditional instructional delivery systems at the undergraduate and graduate levels in the computer and information sciences.

The CCIS has 12 full-time faculty members. With the exception of one lecturer who only teaches undergraduate students, all faculty are terminally-degreed and teach in their respective areas of specialization. Although the Center takes advantage of the flexibility of adjunct faculty, 67.57 percent of all instruction (as of December 1993) in the CCIS is offered by a full-time member of the CCIS faculty. The Center plans to expand the faculty and anticipates hiring three more terminally-degreed faculty.

PROGRAMS

The CCIS is vertically organized along its three distinct programs and associated specializations:

■ Computer Science and Computer Information Systems

- Computer Science
- Computer Information Systems
- Management Information Systems

■ Information Systems and Science

- Information Systems
- Information Science

■ Computing Technology in Education

- Computer Education
- Computing Systems in Education
- Training and Learning

SERVICES

■ Corporate Short Courses

■ Training Programs

- Student
- Faculty and Staff
- Community Service

Section II

GOALS

- Goal 1.** Attract and retain a faculty committed to excellence in teaching and research.
- Goal 2.** Develop and maintain curricula responsive to changes in both technology and educational philosophy.
- Goal 3.** Provide students with an education of lasting value despite changes in society, industry, and educational systems.
- Goal 4.** Continue to provide supportive online and traditional environments to stimulate the student in meeting the challenges of educational experiences.
- Goal 5.** Enhance opportunities for students to experience scholarly activities.
- Goal 6.** Bring graduate education to students throughout the world via telecommunications.
- Goal 7.** Develop programs to keep students abreast of emerging technologies and to use effectively the applications of learning technology.
- Goal 8.** Increase instructional effectiveness through use of new technology (i.e., interactive video disc, CD-ROM).
- Goal 9.** Promote critical learning skills for students and faculty, including computer literacy.
- Goal 10.** Continue to evaluate the training and learning received by students in the online environment.
- Goal 11.** Conduct research to generate knowledge in program disciplines, where appropriate, and to apply research where it is effective in the learning environment.
- Goal 12.** Obtain grants and contracts to exploit the University's strengths in the computer and information sciences.

Section III

OUTCOME MEASURES, PROCEDURES, AND ATTAINMENT STATUS

Goal 1. Attract and retain a faculty committed to excellence in teaching and research.

Outcome Measure A: Develop and maintain a responsive atmosphere for faculty with opportunities and incentives for further development and advancement.

Procedure: Enhance attention to the recently adopted faculty/staff policy and procedures manual, so that faculty/staff fully understand rights, responsibilities, and expectations.

Attainment Status: All full-time faculty have a copy of the policy and procedures manual. A copy will soon be issued to all adjunct faculty, to serve as a useful reference.

Procedure: Form a faculty council that meets regularly.

Attainment Status: A formal faculty council has been formed and meets monthly.

Outcome Measure B: Arrange for faculty presentations of research outcomes at internal and external activities.

Procedure: Schedule special faculty presentations, such as seminar-type presentations to colleagues and peers. Presentations should be open to the professional community, including interested students.

Attainment Status: Faculty presentations were offered at the CCIS 1993 Summer Institute. Students were very positive regarding these presentations and responded to the post-institute survey statement, "Faculty presentations should be included in future institutes," as follows: Mean = 4.20, SD = 1.01 (1 = LOW to 5 = HIGH).

Because of this rating, faculty presentations have been scheduled for the 1994 Summer Institute.

Outcome Measure C: Faculty will attend at least one conference each year where they will have the opportunity to interact with their peers.

Procedure: Funds will be allocated for faculty development, including conference attendance.

Attainment Status: Funds were set aside so that the CCIS was represented at ten conferences in FY 1993-94 reflected in the attached listing, as compared to seven conferences in FY 1992-93.

CCIS Participation in Professional Conferences: FY 1993-94		
Conference	Date	Location
NECC 93	Jun 27-30, 1993	Orlando, FL
HCI 93	Aug 8-13, 1993	Orlando, FL
SALT 93	Aug 25-27, 1993	Washington, D.C.
FODO 93	Oct 13-15, 1993	Evanston, IL
EDUCOM 93	Oct 16-20, 1993	Cincinnati, OH
Space Exploration 93	Oct 25-31, 1993	Houston, TX
FETC 94	Feb 1-4, 1994	Tampa, FL
INCITE/AECT 94	Feb 16-20, 1994	Nashville, TN
CHI 94	Apr 24-28, 1994	Boston, MA
ALA	Jun 25-28, 1994	Miami Beach, FL

Procedure: A report on faculty participation at conferences will be composed on a yearly basis.

Attainment Status: The report on faculty and staff participation at conferences and other forms of faculty development is composed each June, and then regularly updated.

Outcome Measure D: Faculty will have direct involvement in the development of policy and procedures for faculty as well as for students.

Procedure: As a periodic process, a faculty committee will suggest updates to the policy and procedures manual.

Attainment Status: A newly formed faculty committee has decided to address the curriculum, instead of policy and procedures, as its first priority.

Outcome Measure E: Opportunities will be provided so that faculty will enhance professional and related skills affecting research, teaching, professional advancement, and community service.

Procedure: Faculty-conducted workshops will be offered to meet identified and evolving needs. Workshops also will be conducted by invited discipline-specific experts. An evaluation of each workshop will be conducted to offer guidance on improvement of future workshops.

Attainment Status: Faculty-sponsored workshops for the general student body are offered at institute. Due to the high rating (Mean = 4.20, SD = 1.01) offered for this activity, faculty presentations are scheduled for future institutes.

Goal 2. Develop and maintain curricula responsive to changes in both technology and educational philosophy.

Outcome Measure A: Implement an off-campus master's program in computer science and information systems and an off-campus baccalaureate degree in information systems.

Procedure: Conduct a needs analysis. If there is a demonstrated need for the programs, faculty and advisory members will collaborate on program development.

Attainment Status: A prospectus on cluster-based instruction for M.S. and Ph.D. students specializing in Computer Science (CS) and Computer Information Systems (CIS) was submitted to SACS. However, due to the exceptional growth of the Center's CIS specialization offered in an online format (with physical presence in Fort Lauderdale at cluster and/or institute), the Center has decided to alter its direction and instead is investing additional resources in online tools instead of cluster development.

Outcome Measure B: Develop and implement a masters and baccalaureate program in applied mathematics and computer science.

Procedure: Conduct a needs analysis. If there is a demonstrated need for the joint program, faculty and advisory members will collaborate on program development.

Attainment Status: There has been a decline in enrollment in the undergraduate program in Computer Science. Accordingly, the Center is diverting resources to growth areas, such as online delivery in Management Information Systems and Computer Information Systems.

Outcome Measure C: Market the five-year program in computer science, leading to a combined masters and doctoral degree in computer science.

Procedure: Highlight the advantages of the combined masters/doctoral computer science degree option.

Attainment Status: The five-year M.S./Ph.D. program has shown acceptance by students enrolled in Computing Technology in Education and Information Systems curricula. This degree option for continuous matriculation is not widely accepted by Computer Science or Computer Information Systems students.

Outcome Measure D: Continue to develop and implement a curriculum in computer and information sciences for the liberal and professional studies program.

Procedure: Curriculum development for the undergraduate program will accelerate, with more students enrolling in the computer and information science curriculum.

Attainment Status: Overall enrollment in the CCIS undergraduate curriculum has declined (- 4.6 percent), even though the Center has consolidated the curriculum and placed computer engineering as a specialization within the computer science program.

Enrollment Trends in the CCIS B.S. Programs		
Program/Specialization	% Change 1993 to 1994	
	Day	Evening
Computer Science	-81.3	25.4
Computer Systems	-50.0	24.6
Computer Information Systems	-40.7	29.3
Computer Engineering	-41.4	-38.5

The CCIS intends to emphasize its evening program which is at an overall 10 percent growth rate.

Outcome Measure E: Develop new programs in the computer-based learning format for professionals who use the computer as a tool in their work.

Procedure: Conduct a needs analysis; if there is a demonstrated need for new programs, faculty and advisory members will collaborate on program development.

Attainment Status: The Computer Information Systems curriculum was developed to take advantage of growth areas in the computing disciplines. Enrollment in this curricular area has been quite satisfactory:

Enrollment Trends in Computer Information Systems	
Degree Level	% Change 1993 to 1994
Baccalaureate (Evening)	29.3
Masters	49.3
Doctoral	141.9

The CCIS recently introduced Management Information Systems to the curriculum and it is expected that this curricular area will also demonstrate similar growth.

Procedure: A report on the status of new programs will be composed on a yearly basis.

Attainment Status: The CCIS receives center-wide enrollment statistics on a weekly basis from the University's office of Research and Planning.

Outcome Measure F: Develop systematic procedures to continually monitor changes in the computer and information sciences.

Procedure: Conduct an environmental scan of industry to determine discipline specific changes; conduct a similar scan of other universities by networking with colleagues and reviewing readily available documentation.

Attainment Status: The faculty maintain close contact with industry and subsequently bring into their classes industrial practices. Curricular emphasis on Computer Information Systems and Management Information Systems and the increased enrollments for these areas are a result of the Center's attention to the profession and trends in industry.

Outcome Measure G: Determine outcomes and external validation measures.

Procedure: Advisory board members and faculty will be asked to collaborate on the identification of outcome measures that can be used to determine the efficacy of the CCIS.

Attainment Status: An outcomes study of CCIS graduates was previously conducted; a similar study is planned for Fall 1994.

Goal 3. Provide students with an education of lasting value despite changes in society, industry, and educational systems.

Outcome Measure A: Expose students to distinguished scholars and other recognized leaders so that students gain educational experiences that they will perceive to be of lasting value.

Procedure: Invite recognized experts to speak at institute, cluster meetings, seminars, symposia, and colloquia.

Attainment Status: Experts, often in collaboration with ACM and IEEE, are regularly scheduled to speak at institutes. The IEEE-sponsored speaker at the 1993 Summer Institute offered a half-day seminar on multimedia technology in a distributed computing environment.

Outcome Measure B: Encourage student participation in appropriate professional organizations.

Procedure: Highlight the importance of faculty and student participation in the student chapter of the ACM and the IEEE.

Attainment Status: Due to declining enrollment in the undergraduate day programs, the Center has begun to rethink the degree of involvement it should have in student chapters of the ACM and IEEE.

Outcome Measure C: Hold professional meetings on campus and encourage student attendance.

Procedure: Sponsor a symposium on current topics in the computer and information science disciplines. Structure course activities so that students will attend the symposium and become exposed to the professional process for the free exchange of ideas.

Attainment Status: The CCIS is investigating the feasibility of revising regional symposia. In particular, the Center would like to emphasize the national outreach of the Center by holding meetings in other states, away from the main campus in Fort Lauderdale.

Outcome Measure D: Include off-campus students in the presentation of value-added activities.

Procedure: When geography or personal and professional obligations become a concern, conduct sessions with invited guests through the Electronic format and/or through video/audio-tape.

Attainment Status: Weekly ECR-based advisement sessions are used in the CCIS so that distant students can remain in contact with program personnel.

Procedure: A report on value-added activities for campus-based and off-campus students will be composed on a yearly basis.

Attainment Status: Institute serves as a major event for off-campus students. Reports on Summer Institute and Winter Institute are routinely composed and distributed to all faculty, staff, and students. Student reactions to the report are used to monitor and assess value-added activities in the CCIS.

Goal 4. Continue to provide supportive online and traditional environments to stimulate the student in meeting the challenges of educational experiences.

Outcome Measure A: Integrate the applied research process throughout the curriculum.

Procedure: Through workshop presentations, ECRs, and redesigned study guides, initiate activities so that applied research becomes a pervasive part of the curriculum, and not only a summative experience.

Attainment Status: Research and statistics are now prerequisites for doctoral students in the Information Systems and Science program. This domain is structured into the curricula for M.S. and doctoral students in the Computing Technology in Education program.

Outcome Measure B: Enhance the notion that projects, practicums, and the dissertation are a demonstration of professional leadership.

Procedure: Initiate an applied research mentorship program to provide external validation of the local significance of student research projects.

Attainment Status: Doctoral students work with a dissertation chair and two other advisors. Students are allowed to have a local professional with appropriate credentials as one of the two dissertation advisors.

Outcome Measure C: Refine the process of determining student perception of curricular value.

Procedure: Continue with summative evaluation at the end of each course offered in the CCIS.

Attainment Status: Summative evaluations at the end of each course are standard practice in the CCIS.

Electronic Evaluation in the CCIS

Nearly all evaluation instruments for CCIS graduate students are now distributed online, to individual electronic mailboxes. This action has many advantages:

- Reduced turnaround time on evaluation distribution and return
- Reduced operating costs for evaluation distribution and return
- Higher-quality narrative feedback, as students can compose evaluative comments with an online text editor instead of handwritten margin notes
- Timely feedback to instructors and administrative staff
- Greater accountability is placed on students, since their identity cannot be masked when responding via electronic mail

Outcome Measure D: Offer special non-credit courses on topics of special interest.

Procedure: Offer activities at institutes, on campus, and through technology-based media on topics such as the dissertation process, so that standard requirements are complemented by the value-added nature of the degree program.

Attainment Status: Value-added activities are regularly scheduled at institutes. At the 1994 Summer Institute the Center plans to offer five nights of value-added training on telecommunications and the Internet.

Goal 5. Enhance opportunities for students to experience scholarly activities.

Outcome Measure A: Make outstanding projects and dissertations available to students.

Procedure: Open all accepted projects and dissertations for student review. Determine student use (number of students, frequency of requests) of these materials and survey participants to determine the value of this service.

Attainment Status: For off-campus students, practicums and dissertations are available by use of the *dsp* command. On-campus students can view related documents in the Einstein Library or in the CCIS reading room, where many research-oriented documents are stored.

Outcome Measure B: Publish a separate list of outstanding research projects, as judged by a faculty committee.

Procedure: Have dissertation advisors nominate outstanding research projects.

Attainment Status: A formal process for this procedure has not yet been implemented.

Outcome Measure C: Include student attendance (and participation) in professional societies and/or conferences as part of the total curriculum.

Procedure: Have students attend conferences which CCIS faculty attend, to take advantage of faculty-student networking beyond the main campus.

Attainment Status: Each conference attended by a member of the CCIS faculty has had concurrent attendance by CCIS students. In FY 1994-95, the Center plans to formalize this activity, possibly by sponsoring a value-added activity in the evening.

Outcome Measure D: Maintain an applied research component to each course so that "real-world" research issues/methodology permeate the curriculum.

Procedure: Request guidance on the CCIS curriculum by professionals in the computing and information disciplines.

Attainment Status: Faculty regularly consult with counterparts in industry and this information is used to bring applied activities into the curriculum.

Outcome Measure E: Offer opportunities for student presentations on topics of special interest.

Procedure: Schedule student presentations at institutes, symposia, and on campus.

Attainment Status: Student presentations have previously received unfavorable evaluations, with students instead stating preference for faculty presentations. A new strategy is needed if the Center is to have success in this area.

Goal 6. Bring graduate education to students throughout the world via telecommunications.

Outcome Measure A: Facilitate the use of technology-based education throughout the various levels of education by collaboration with schools and colleges.

Procedure: Publications, demonstrations, and related presentations at conferences, and networking will all serve to bring the utility of technology-based education to the attention of the profession.

Attainment Status: The CCIS and the efficacy of distance education by use of technology has been offered to the professional community at ten conferences during FY 1993-94.

Outcome Measure B: Provide full-motion video to supplement current technology-based classes.

Procedure: Offer instruction through a wide selection of delivery models, recognizing the value of self-selection for instructional modality.

Attainment Status: Technology-based instruction, both in real time and delayed time, remains text-based.

Procedure: Provide professional and technical leadership in technology-based distance education by allocating developmental resources (i.e., staff, resources, funds) for research into multimedia and how present and emerging technologies can be used to enhance pedagogy.

Attainment Status: The CCIS is positive regarding the improvement of the Electronic Classroom and the overall computing infrastructure at the University. The Center currently is developing a strategy on how a grant from a local sponsor will help enhance the computing infrastructure.

Outcome Measure C: Assist with the development of computer skills for University staff and provide training to University personnel in computer applications and online communications.

Procedure: Develop one interdisciplinary program with SBE by January, 1994.

Attainment Status: As an outcome of the formal affiliation between the CCIS and the SBE, the SBE has developed specialized curricular areas, as follows, that reflect emerging business interest in information technologies:

- MBA with a specialization in Information Systems
- DBA with a specialization in Information Systems
- Master of Science in Health Services Administration with emphasis on Medical Records and Information Management

These areas have a core in business and management, but they use new technologies that offer strategic opportunities in the acquisition and use of information.

Outcome Measure D: Assist the University in planning and developing programs using emerging technologies.

Procedure: Collaborate with colleagues from other centers. Include senior-level administrators in the planning process.

Attainment Status: The CCIS assists other centers regarding the effective use of technology in education. The CCIS has a new role in assisting the SBE; CCIS personnel now are active participants in developing the technology infrastructure in the SBE.

Outcome Measure E: Assist the training of University staff in online communication.

Procedure: Expand the presently implemented collaborative arrangement with colleagues from other centers.

Attainment Status: The CCIS assists in computer-mediated instruction with courses in the SBE and CAE.

Goal 7. Develop programs to keep students abreast of emerging technologies and to use effectively the applications of learning technology.

Outcome Measure A: Develop and maintain a computing environment that fosters excellence in teaching and research.

Procedure: Involve advisory council members and other external experts to review critically the computing environment.

Attainment Status: Faculty interact with colleagues in industry. This vehicle is used to place the CCIS before industry review.

Outcome Measure B: Provide students with extensive experience with current computing technology.

Procedure: Offer special seminars and on campus presentations to introduce students to cutting-edge computing developments.

Attainment Status: Special presentations on various topics are offered at institute and at cluster meetings. The Center has scheduled seven presentations on telecommunications and the Internet during the 14 days of the 1994 Summer Institute.

Outcome Measure C: Assist all University centers with courseware development for technology-based courses.

Procedure: Expand the presently implemented collaborative arrangement with colleagues from other centers. Offer technology-based expertise whenever requested.

Attainment Status: The CCIS assists other centers (especially SBE and CAE) regarding the effective use of technology in education.

Outcome Measure E: Conduct an environmental scan to identify niche markets that are best served through telecommunications.

Procedure: Encourage faculty to regularly monitor trends in business and the computing/information disciplines.

Attainment Status: Development of curricular areas in Computer Information Systems and Management Information Systems was a result of attention to the external environment.

Goal 8. Increase instructional effectiveness through the use of new technology (i.e., interactive video disc, CD-ROM).

Outcome Measure A: Identify the educational possibilities of new technologies.

Procedure: Review the literature and industry to develop a listing of technology with potential uses in the learning process.

Attainment Status: The literature demonstrated three distinct trends:

- Industry will place greater emphasis on the object-oriented paradigm.
- Enrollments will move away from computer science to computer information systems.
- Enrollments will move away from general management programs to technology-specific programs.

The CCIS has developed curricula that address these three trends.

Outcome Measure B: Encourage faculty experimentation in the use of new technology.

Procedure: Encourage faculty exploration of technology applications.

Attainment Status: Faculty in the CCIS, as experts in a technology-based discipline, continually bring new forms of technology into their areas of expertise. Applications of the Internet seems to be an area that many faculty are now bringing to their courses.

Outcome Measure C: Identify competing educational institutions.

Procedure: Conduct a marketing-oriented survey of other institutions using technology for instructional delivery.

Attainment Status: The Dean of the CCIS presented a comparative analysis of technology usage at other universities at a Fall 1993 Board of Directors meeting.

Outcome Measure D: Achieve effective and efficient use of existing resources to improve learning performance through technology.

Procedure: Continually monitor resource usage and student performance, and involve the advisory council, as well as faculty, in the review process.

Attainment Status: A yearly audit of student activity with the University's host computer was presented in the March 1994 Program Review Self Study.

Usage of Online Computing Resources (CPU Minutes) at Nova Southeastern University*			
User Group	CPU Minutes	N	Ratio of Usage per User
Business and Entrepreneurship	965	629	1.5 : 1
Early and Middle Childhood	397	267	1.5 : 1
Information Systems	114	143	0.8 : 1
Psychology	357	132	2.7 : 1

* Data reflect CPU minutes at alpha.acast.nova.edu, the University's host computer, from January 1, 1994 to March 21, 1994.

Outcome Measure E: Attain practical use from networks such as INTERNET, FIRN, BITNET, and LUIS.

Procedure: Form a task force to determine how pedagogy and access can be enhanced by the use of external networks.

Attainment Status: CCIS students are active users of other online information systems and the tools and information-rich databases used at these systems:

- Florida-based CCIS students are able to use Florida Information Resource Network (FIRN) to obtain toll-free access to online information systems throughout the Internet, including the University's host computer, Alpha.

Similar state-sponsored services are offered to students in Texas, Virginia, and soon Tennessee.

- From the convenience of their homes, CCIS students are able to use the University's Electronic Library to search and order Educational Resource Information Network (ERIC) documents. There is no fee for this service.
- CCIS students are able to use the University's host computer to access Broward County's online information system and in turn review abstracts placed in the ABI Inform database. The University's Electronic Library is then used to order full-text reproductions of requested articles.

In brief, CCIS students are active participants in the use of the Internet and its many information rich utilities:

Internet Tools used by CCIS Students to Support Research and Communication		
archie	jughead	Nova-links
finger	listserv	rn
ftp	lynx	talk
gopher	mail	telnet
hytelnet	ncftp	veronica
irc	netfind	world wide web

Goal 9. Promote critical learning skills for students and faculty, including computer literacy.

Outcome Measure A: Develop and maintain a model for an undergraduate curriculum that is competency-based and that utilizes a variety of educational delivery systems.

Procedure: Enhance the quality and variety of curricular offerings for undergraduate students.

Attainment Status: The CCIS intends to give more attention to the marketing of its programs and specializations for B.S. students, with specific emphasis on the evening program which is showing 10 percent growth.

Outcome Measure B: Meet the needs of a broad range of students/markets in the fields of training and learning, telecommunications, information systems, information science, and computer science.

Procedure: Conduct a curricular needs analysis of all constituencies identified in the Center. Use the information gained from this analysis as validation for curricular and delivery modification(s).

Attainment Status: The CCIS has expanded programs in computer information systems and management information systems as a result of attention to industry needs. The CCIS currently is assisting the SBE in a similar manner to identify information-oriented niche curricular areas.

Outcome Measure C: Enhance the technical skills of faculty significantly to raise effectiveness of student learning.

Procedure: Provide release time and funds for continual upgrading of skills among faculty.

Attainment Status: CCIS faculty were represented at ten professional conferences in FY 1993-94.

Outcome Measure D: Assist with the development of computer skills of the University's personnel.

Procedure: Expand collaboration with colleagues from other centers.

Attainment Status: The CCIS assists in computer-mediated instruction with courses in the SBE and CAE.

Outcome Measure E: Achieve high-quality learning environments that use the full power and flexibility of computer and information technology.

Procedure: Conduct an outcomes study to determine the efficacy of the present learning environments.

Attainment Status: The yearly audit of student activity with the University's host computer is used, in part, to determine present and future computing needs. Through a variety of information sources, the Center assessed the computing needs of its students and used this baseline information to justify the recent upgrading of modem speeds for students using the University's host computer.

Goal 10. Continue to evaluate the training and learning received by students in the online environment.

Outcome Measure A: Develop and maintain an effective producer/consumer model of research and development as it relates to computer hardware, software, and systems.

Procedure: Continue with current research efforts and introduce new emphases when appropriate.

Attainment Status: Organized research activities remain a constant activity in the CCIS. In addition to standard research studies, special evaluations in FY 1993-94 included:

- Attenuation Patterns of Doctoral Students in the University's CCIS Online Programs
- Evaluation of the 1993 Summer Institute and 1994 Winter Institute
- Evaluation of Winter 1993 Doctoral Courses
- Program Review Self-Study Report

Outcome Measure B: Increase faculty use of outcomes associated with research activities.

Procedure: Distribute reports and other research findings to faculty and administrative personnel.

Attainment Status: All reports that are not confidential are released to faculty and staff. Many reports, such as institute evaluation, also are distributed to students via the electronic media.

Outcome Measure C: Increase student awareness of research results to encourage future participation in research activities.

Procedure: Post research summaries online and/or through other means appropriate for student access.

Attainment Status: Reports of a general nature, such as institute evaluation, are distributed to students via the electronic media. Students also have access to practicums and dissertations through the use of the *dsp* command.

Outcome Measure D: Expand research efforts to examine phenomena affecting student outcomes.

Procedure: Increase the use of qualitative research as well as quantitative research.

Attainment Status: Each evaluation instrument used in the CCIS gives students the opportunity to add narrative comments as well as responses to Likert selections. Most evaluation instruments are now distributed to CCIS graduate students by use of electronic mail. This medium is now the norm for communication for professionals associated with the computing and information disciplines. As such, an automated queuing system specific to the needs of electronic evaluation has been proposed, with a prototype expected by Fall 1994.

Goal 11. Conduct research to generate knowledge in program disciplines, where appropriate, and to apply research where it is effective in the learning environment.

Outcome Measure A: Publish in refereed journals the results of business/industry sponsored research, student course projects, practicums, and dissertations.

Procedure: Make publication in jury refereed journals, texts, and papers a highly rewarded activity with respect to: recognition, promotion, teaching assignment, and salary adjustment.

Attainment Status: Faculty publications are included on the continuum of activities associated with evaluation and promotion.

Outcome Measure B: Obtain external assistance on identification of areas of critical need in research.

Procedure: Faculty will confer with their counterparts in industry to remain on the cutting edge of research trends and opportunities.

Attainment Status: Faculty regularly confer with counterparts in industry and, in turn, this networking serves a role in the identification of potential research activities.

Outcome Measure C: Develop a direct research-oriented mentorship between faculty and on-campus students.

Procedure: When appropriate, encourage collaboration between faculty and graduate students on research projects.

Attainment Status: Most graduate students in the CCIS are involved in inservice research activities at their place of employment. As such, the "apprentice model" for research at traditional universities is not the norm in the CCIS.

Outcome Measure D: Expand the research infrastructure.

Procedure: Emphasize grant-type activities to obtain new equipment and software that could then be used for other research activities.

Attainment Status: The Center is still under consideration for a major United States Department of Education (DoEd) grant, specific to the Electronic Classroom. Private grant funds will be solicited if the DoEd does not wish to fund this activity.

Goal 12. Obtain grants and contracts to exploit the University's strengths in the computer and information sciences.

Outcome Measure A: Identify a listing of potential grant sources.

Procedure: Collaborate with the University's Office of Grants and Contracts and the Development Office for assistance on grant activities.

Attainment Status: The CCIS has not been active in grants-sponsored research; there is a need to articulate with University and community associates.

Outcome Measure B: Increase local/professional community awareness of the Center to increase exposure to granting personnel.

Procedure: Invite appropriate granting personnel to sponsored presentations of research activities.

Attainment Status: Senior CCIS faculty and directors maintain regular contact with their peers in industry. These contacts have resulted in donated software and hardware.

Outcome Measure C: Develop a specific commitment to the grant process.

Procedure: Provide release time for faculty to pursue grants.

Attainment Status: Staff time was allocated for development of the proposal associated with the federal grant on telecommunications.

Section IV

OVERVIEW AND USE OF FINDINGS TO IMPROVE INSTITUTIONAL PROGRAMS, SERVICES, AND OPERATIONS

Summary of the Status of Attainment of Goals

A major activity in the CCIS was the reorganization of programs and operating procedures in June 1993, with the appointment of Dr. Edward Lieblein as Dean. Of further importance, the CCIS entered into an affiliation with the University's School for Business and Entrepreneurship (SBE) in February 1994, when the Dean of the CCIS concurrently was appointed Dean of the SBE. The affiliation between the CCIS and SBE puts the University in a position to offer curricula and services that build on the strength of both centers:

- The CCIS is a leader in the use of technology-based distance education.
- The SBE is a leader in the use of cluster development for practitioners in the business professions.

A general trend in the CCIS is the significant growth in student enrollment, with 12.35 percent growth (e.g., credit hours) from 1993:*

- Undergraduate - 4.6 percent from 1993
- Masters + 7.8 percent from 1993
- Doctoral + 26.8 percent from 1993

Faculty have had many opportunities for growth and professional development during FY 1993-94. Exceptional activities related to faculty include:

- The strength of the CCIS was enhanced by the addition of three full-time faculty.
- The faculty have established a formal faculty council, adding to the leadership and involvement of the faculty in curricula, teaching, and research.
- Faculty made significant contributions to the profession:
 - Books were published by CCIS faculty.
 - Faculty participated in national conferences.
- The CCIS has greatly expanded its visibility in the professional community:
 - The CCIS now actively participates in professional conferences.
 - The CCIS placed its graduate catalog online for access to all Internet users. Since October 13, 1993, 2,937 Internet participants throughout the world have used this automated service.

The curriculum has been updated to better meet the current needs of CCIS students, with special attention to the development of their future problem-solving skills:

- CCIS now has achieved well-defined discrimination between programs and specializations. As a result of reorganization of the curriculum, the purpose of each program is focused on specific domains, assisting prospective students, students, and faculty.
- CCIS has added the Master of Science in Management Information Systems as a new specialization, which is offered online as well as on-campus. CCIS expects this specialization to show exceptional growth in the next three years, paralleling the strong growth of the Computer Information Systems specialization (Masters-CIS showed 49.3 percent growth from 1993, Doctoral-CIS showed 141.9 percent growth from 1993).
- CCIS now offers the Ph.D., as well as the Sc.D., for doctoral students.

The CCIS continues its attention to the research process; research and evaluation activities are pervasive throughout the Center. Special activities specific to current research activities include:

- A special series of internal evaluations to better determine the efficacy of programs, specializations, and curricula is planned for Fall 1994.
- Nearly all evaluations completed by students in the CCIS are presented in electronic format, reducing the waste and high cost of paper-based evaluation.

CCIS has also given attention to fiscal policy and its effect on operations. Policies and procedures have been put into place so that CCIS will complete FY 1993-94 at 25 percent under budgeted operating costs, while increasing overall revenue and services to students.

Impact of Findings on Improvements in Programs, Services, and Operations

The CCIS is committed to the practice of using internal research and evaluation as the basis for decision-making and subsequent changes to curricula and administration. Evaluation is a regularly scheduled activity that is pervasive throughout the Center and its many activities. As such, attention to outcomes relevant to the 12 goals of the CCIS served as the basis for the following activities, which, in turn, had an impact on programs, services, and operations:

FACULTY DEVELOPMENT

- The faculty formed a formal faculty council so that they can have a more defined role in internal governance.
- The frequency and length of faculty presentations have been increased, to enhance student interaction with faculty.
- Faculty participation and attendance at professional conferences and meetings were increased to further opportunities for professional growth.

CURRICULUM DEVELOPMENT

- The CCIS has shifted its planned focus and resource allocation from cluster development to further refinement of online tools and services.
- Curricula relevant to Information Systems and its many niche-specific specializations has received considerable attention. Information Systems is viewed as a major growth area, as opposed to the national decline in students majoring in the more theoretical area of Computer Science.
- In view of the "greying" of the potential student body, CCIS marketing efforts have been focused on Masters-level programs and specializations, as opposed to proactive recruitment of undergraduate students. In turn, the curriculum has increased its attention to applied projects for practitioners who are currently working in-field.
- Telecommunications as a supporting tool for distance education is of vital importance to all CCIS graduate students. In turn, CCIS has expanded significantly its value-added training sessions on the UNIX operating system and the Internet.
- A graduate-level course in Statistics has been adopted as a prerequisite course for all doctoral students. The only exception to this practice is doctoral students in the Computer Education specialization who instead have Research and Statistics offered as a specific course.
- Because of the CCIS goals specific to the research process, CCIS now offers extensive dissertation guidance sessions at all institutes and cluster meetings.
- Due to the affiliation between the CCIS and the SBE, the Center has adopted new curricula that address the management of information in a business environment and views Information Systems as a growth area.
- Through internal evaluations it became evident that CCIS students needed additional access to library services. In turn, the CCIS now directs students to use the University's Electronic Library as well as the Internet to seek bibliographic information, which is then provided in full-text through the University's electronic library ordering service.

RESEARCH AND EVALUATION

- The CCIS initiated the use of electronic evaluation techniques so that it could obtain highly reliable information, but information that is now gained quickly, easily, and at a low cost. The process has been very acceptable and the Center plans to add additional tools to assess how electronic evaluation is implemented.
- In response to the desire for broad-based participation in decision-making, reports are made available, when appropriate, to involved audiences, including faculty, staff, and students.

DEVELOPMENT

- Operational policies and procedures were implemented that improved the Center's budget, thus making it easier to improve services to students. The Center plans to continue with these new operational procedures.
- The CCIS Marketing Department is now affiliated with the SBE Marketing Department. This enables the Centers to present a unified image to students and makes programs more accessible and attractive to working professionals.

CENTER FOR HOSPITALITY MANAGEMENT

Section I

DESCRIPTION OF PROGRAMS AND SERVICES

The Center for Hospitality Management (HM) offers an undergraduate degree in Hospitality Management with three curricula areas from which students may choose. The three curricula areas are Hotel/Cruise Management, Food Industry Management, and Tourism/Events/Attractions Management. These curricula are offered primarily off-campus, in the evening and to non-traditional students. The HM offering is designed for working industry professionals who maintain their professional employment while pursuing the bachelor of science degree. Many students transfer credits from other colleges or universities. Credit for life experience is also available for qualified candidates up to a maximum of 30 credits.

The Center recently entered into an agreement with the Graduate School of Business and Entrepreneurship to offer a unique joint program of studies that combines traditional MBA course work with a component of courses from the hospitality and tourism industries. The students interested in this program will be required to demonstrate proficiency in the hotel/cruise, food industry, or tourism related areas. Evidence of this may be presented by academic preparation (transcripts) or life experience.

Additionally, an Ed.D. degree with a concentration in Hospitality and Tourism is now available for educators and trainers through the Programs in Higher Education of the Abraham S. Fischler Center for the Advancement of Education.

The Center also offers continuing education through the International Center for Professional Development (ICPD) to mature professionals in the hospitality and tourism industries. The ICPD develops, manages, and promotes seminars and workshops that reflect the business of tourism, both nationally and internationally.

Section II

GOALS

- Goal 1.** Blend industry relevant, practical learning with other areas of study to prepare graduates to understand and cope with the realities of their world at a micro and macro level.
- Goal 2.** Monitor closely all classes to ensure maintenance of optimal standards.
- Goal 3.** Continue to develop effective means to identify and recruit industry professionals as students.
- Goal 4.** Pursue the recruitment of qualified international students.
- Goal 5.** Establish full-time faculty positions assigned to coordinate each major teaching area to include Administrative Studies, Human Resources, Finance and Accounting, Food and Beverage Operations, Rooms Operations, Marketing, and Tourism Industry Management.
- Goal 6.** Retain faculty who are academically qualified, who are well versed in current industry issues, and who have a commitment to students, teaching, and the University.
- Goal 7.** Maintain and strengthen fiscal stability.
- Goal 8.** Develop sources of scholarship funds equivalent to 10% of the annual tuition revenue.
- Goal 9.** Develop resources to provide an administration building and maintain this building.
- Goal 10.** Involve alumni and students in an appropriate manner and communicate regularly with them.
- Goal 11.** Maintain a global continuing education program that will enhance the Center's reputation.
- Goal 12.** Maintain Advisory Councils appropriate to the Center's mission and meet regularly with council members.

Section III

OUTCOME MEASURES, PROCEDURES, AND ATTAINMENT STATUS

- Goal 1. Blend industry relevant, practical learning with other areas of study to prepare graduates to understand and cope with the realities of their world at a micro and macro level.**

Outcome Measure: The Center endeavors to be a leader in hospitality/tourism education and by doing so students and graduates are capable of functioning in responsible positions in the industry.

Procedure: Review the progress of students and graduates to ensure that the curriculum and delivery are meeting their needs. Students complete course evaluations, and regularly meet with advisors for counseling and other issues of concern. Graduates' comments are solicited via exit interviews and questionnaires.

Attainment Status: It has been determined that 79% of the students/graduates are in responsible decision making positions and functioning effectively in these positions.

- Goal 2. Monitor closely all classes to ensure maintenance of optimal standards.**

Outcome Measure: Students and faculty members agree that courses are consistent with course objectives; however, some changes relevant to the industry requirements were needed to reflect the changes occurring in the industries served.

Procedure: Course evaluations are completed by all students anonymously. Peer reviews are conducted for all new instructors and whenever the Center determines that additional assistance is needed by an instructor. Curriculum is reviewed by Advisory Councils and faculty meets quarterly by area and annually as a group to review these issues and recommend changes when appropriate.

Attainment Status: The Center has changed/updated the curricula annually and has monitored each course at the completion of the eight-week term. Syllabi have been upgraded to reflect changing course content and standards and we maintain these at the center.

- Goal 3. Continue to develop effective means to identify and recruit industry professionals as students.**

Outcome Measure: Compare increases in qualified applicants holding industry positions and their progress in courses.

Procedure: Re-evaluate and increase recruiting/marketing efforts. Promote to the students the Referral Scholarship available through The Society for Hospitality Professionals and the Nova Star program.

Attainment Status: The student count in FY 1993-94 compared to FY 1992-93 increased by 8 %. The Nova Star program attracted 36 new students and approximately six students were assisted by the alumni referral scholarship.

Goal 4. Pursue the recruitment of qualified international students.

Outcome Measure: Compare number of international students FY 1993-94 vs FY 1992-93.

Procedure: Send recruitment materials via direct mail to Hospitality Ambassadors located outside of the U.S.A.; market through contacts and faculty travelling to speak at seminars; promote degree programs with the International Center for Professional Development and through international alumni.

Attainment Status: In FY 1993-94 the international base of Center students reached 30 percent of the total student body. The tuition rate for international Center students is extremely marketable in comparison to state colleges. This is due to the tuition for state programs being higher for out-of-state (country) than in-state students.

Goal 5. Establish full-time faculty positions assigned to coordinate each major teaching area to include Administrative Studies, Human Resources, Finance and Accounting, Food and Beverage Operations, Rooms Operations, Marketing, and Tourism Industry Management.

Outcome Measure: Each teaching area as defined in the goal will have in place a full-time faculty person.

Procedure: Over three years and commencing with FY 1993-94, add faculty persons, two per year, to meet the SACS criteria.

Attainment Status: In FY 1993-94, the Center employed two additional full-time faculty members in the Administrative and Tourism areas. Additionally, the areas of Human Resources and Food/Beverage will be filled with two visiting faculty members by the completion of the Fall 1994 term. FY 1994-95 will then target the final two faculty members for Accounting and Rooms Operations.

Goal 6. Retain faculty who are academically qualified, who are well versed in current industry issues, and who have a commitment to students, teaching, and the University.

Outcome Measure: All faculty, full-time, part-time, or adjunct will meet the criteria as established by SACS.

Procedure: Only faculty that meet the SACS criteria will be retained to teach. In the case of current faculty, several are pursuing advanced graduate degrees to attain necessary academic credentials.

Attainment Status: Current faculty members will meet all SACS criteria by January 1995. This will be accomplished through completion of degree conferrals and in other cases qualification by "portfolio" for the "applied" subjects areas.

Goal 7. Maintain and strengthen fiscal stability.

Outcome Measure: Annual results should approximate projections (budgets) with only minor variations.

Procedure: Strive to increase revenue while maintaining tight control of expenses.

Attainment Status: The year over all was successful, but not all financial goals were met. FY 1994-95 looks more promising as the Center revamps its marketing efforts and the tuition rate increases. Also, clusters in Orlando and other locations should contribute dramatically to the revenue line.

Goal 8. Develop sources of scholarship funds equivalent to 10% of the annual tuition revenue.

Outcome Measure: Scholarship funds annually will equal or exceed 10% of projected tuition.

Procedure: Establish an aggressive program to increase scholarships which includes direct solicitation of the relevant business community, solicitation of alumni and other concerned individuals, as well as the staging of events to raise scholarship dollars.

Attainment Status: The results have been marginal to date.

Goal 9. Develop resources to provide an administration building and maintain this building.

Outcome Measure: \$300,000 has been promised for the construction of the new Robert A. Beck Hospitality House. An additional \$287,000 fundraising project is targeted for this year.

Procedure: Solicit major donors as well as other constituencies to raise the additional amount.

Attainment Status: One donor has committed \$300,000 and solicitation for other gifts is on-going. In addition, approximately \$75,000 has been raised through alumni, faculty, and other industry persons.

Goal 10. Involve alumni and students in an appropriate manner and communicate regularly with them.

Outcome Measure: There is a high degree of alumni and student involvement in the Center's activities and the students exhibit a high level of morale and interest in Center activities. Students and alumni recommend prospective students to the Center.

Procedure: Alumni and student organizations have been organized with officers, by-laws, and regular social activities. The alumni organization is the Society of Nova Hospitality Professionals. The student group is a "student chapter" of the alumni organization. The alumni publish the "Pineapple Post" and hold monthly and quarterly activities.

Attainment Status: Upon enrolling in the program, students become members of the student chapter and pay a yearly membership fee of \$15. Upon graduation, students are members for the first year of the alumni chapter at no charge and then pay a renewal fee to continue their membership.

Goal 11. Maintain a global continuing education program that will enhance the Center's reputation.

Outcome Measure: The contributions of the continuing education arm of the Center, the International Center for Professional Development (ICPD), can be measured by cash outflow vs inflow, however, there is also an intangible dimension from continuing education activities.

The exposure and public relations aspect that the ICPD/continuing education efforts provide is quite significant, however, not easily measured.

Procedure: Draw men and women from around the world who have recognized the importance of hospitality and tourism education and apply a unifying theme for the global tourism industry. Providing support in training, service, personal enrichment, industry advancement, and networking.

Attainment Status: The ICPD began in 1992. It operates and conducts seminars and training in cooperation with groups from Greece, Argentina, the republics of the Commonwealth of Independent States, Indonesia, Australia, Jamaica, the Bahamas Islands, and France.

Goal 12. Maintain Advisory Councils appropriate to the Center's mission and meet regularly with council members.

Outcome Measure: Council(s) are in place and serve the stated purpose.

Procedure: Three Advisory Councils have been established: International, Gold Coast, and Central Florida. Prospective council members are identified and extended an invitation to become a member of a Council. Members are contacted on a periodic basis for meetings, discussion, input, and surveys, and receive newsletters on the activities of the Center, students, alumni, and faculty.

Attainment Status: Councils are in place and functioning as planned. Lists are maintained and updated on a monthly basis.

Section IV

OVERVIEW AND USE OF FINDINGS TO IMPROVE INSTITUTIONAL PROGRAMS, SERVICES, AND OPERATIONS

Summary of the Status of Attainment of Goals

Three Center goals continue to be consistently demonstrated: Goal 1. "Blend industry relevant, practical learning with other areas of study to prepare graduates to understand and cope with the realities of their world at a micro and macro level;" Goal 2. "Monitor closely all classes to ensure maintenance of optimal standards," and Goal 10. "Involve alumni and students in an appropriate manner and communicate regularly with them." The Center is and always has been determined to maintain an industry relevant curriculum in combination with industry professionals as students and instructors. This concept is made a reality through the Center's admissions and faculty hiring process. The foundation and nucleus of the Center is built on communication with the students, alumni, and faculty members. Through evaluations, surveys, and direct communication this is achieved. Their input is a key factor in changes generated at the Center. In addition, the Society of Nova Hospitality Professionals alumni and student chapters generate and participate in newsletters, hotlines, updates, fundraisers, and activities that assist in developing a networking link that is vital in today's business world.

Significant strides have been made in strengthening the faculty at the Center. In addition to the original one full-time Marketing faculty member, the Center has been approved for four additional full-time faculty in the major areas of: Hospitality/Tourism Administrative Studies; Tourism Industry; Human Resources; and Food/Beverage Operations. The faculty in these major positions are individuals who are academically qualified and industry professionals enabling the Center to achieve serious progress in attaining Goal 5. "Establish full-time faculty positions assigned to coordinate each major teaching area to include Administrative Studies, Human Resources, Finance and Accounting, Food and Beverage Operations, Rooms Operations, Marketing, and Tourism Industry Management," and Goal 6. "Retain faculty who are academically qualified, who are well versed in current industry issues, and who have a commitment to students, teaching, and the University."

The International Center for Professional Development (ICPD) is the area which concerns Goal 11. "Maintain a global continuing education program that will enhance the Center's reputation." The ICPD enters the academic year with new revamped programs that focus on maintaining certification and interdisciplinary studies for professionals. This program continues to draw men and women worldwide who have recognized the importance of hospitality/tourism education. The ICPD provides on-site training programs in Greece, Argentina, the republics of the Commonwealth of Independent States, Indonesia, Australia, Argentina, Jamaica, the Bahamas, Italy, and France.

An increased effort in the attainment of Goal 3. "Continue to develop effective means to identify and recruit industry professionals as students," and Goal 4. "Pursue the recruitment of qualified international students," will be areas in which a major emphasis in marketing will take place. The current reorganization of the Center, which consists of personnel changes, a redefining of duties, and additional personnel, will assist in strengthening the efforts of the Center in attaining its goal of increased enrollment. In addition, a major effort in expanding the Center's international base on campus is underway along with pursuing the start of a cluster program in Orlando. These previously mentioned factors, along with the start of Hospitality/Tourism concentration for the MBA program, will prove to be the vehicles in which the Center enrollments increase and will ensure the attainment of Goal 7. "Maintain and strengthen fiscal stability."

Goal 8. "Develop sources of scholarship funds equivalent to 10% of the annual tuition revenue," and Goal 9. "Develop resources to provide an administration building and maintain this building" are on-going struggles in which the Center anticipates some advancement. This year's efforts in increasing the building and scholarship funds were disappointing; however, some interesting possibilities have recently been brought to the Center for consideration and may assist in a prompt change of status in these endeavors.

Impact of Findings on Improvements in Programs, Services, and Operations

Recently, Center faculty reviewed the curriculum. Based on input from students, alumni, faculty, and Advisory Council members a decision was made to strengthen the core courses required in the specialty areas of Hotel/Cruise, Food Industry, and Tourism/Events/Attractions Management. Each specialty area will require 18 credits concentrating on strengthening the curriculum, the development of the student, and industries needs.

SACS faculty issues have been addressed by the additional hiring of two full-time faculty persons in areas of Administrative Studies and Tourism. In addition, two visiting professors will be added to the Center during Fall 1994 in the areas of Human Resources and Food Beverage. All positions will be filled with persons holding or pursuing their Ph.D. or Ed.D.

Technology has been a weak spot of the Center. Currently, the Center operates with three 286 computers. A major effort has been made to meet the technological needs of the Center. New equipment has been approved that will allow the Center to create a networking system and to provide the tools needed to automate the administration and services of the Center. The new equipment will also permit the Center to serve faculty needs in training, presentation, and delivery techniques.

The Center has made an effort to increase collaboration with other center/departments. This also is an area to strengthen and foster growth. The joint efforts pursued with other centers will increase the visibility of Hospitality Management as a viable center within the University and will assist in strengthening the Center's financial position.

The marketing of the program is undergoing some reorganization efforts. These changes were made due to a flattening in enrollment numbers. A revised plan is being developed to aid in the success of the Center's marketing efforts in conjunction with a redefining of duties.

The addition of the joint effort in the MBA specialty of Hospitality/Tourism will also be addressed in the reorganization efforts.

CENTER FOR PSYCHOLOGICAL STUDIES

Section I

DESCRIPTION OF PROGRAMS AND SERVICES

The Center for Psychological Studies seeks to meet its tripartite mission of training, research, and service by advancing knowledge of psychology through applied research, offering graduate training programs, and training advanced professionals, and by providing service to the community through the Community Mental Health Center.

Graduate programs include two American Psychological Association (APA) accredited doctoral programs in clinical psychology. The Ph.D. program trains applied researchers and the Psy.D. program trains practitioners. The Center also has an APA approved pre-doctoral internship program. Master's Programs in Mental Health Counseling and School Guidance and Counseling also are offered. The professional community can access a variety of educational opportunities through continuing education programs, respecialization training for non-clinical psychologists, and postdoctoral training.

Critical to its mission, the Center operates the University's Community Mental Health Center, a nonprofit outpatient mental health facility. Over 3500 unduplicated clients are served annually through a wide variety of services and specialty programs. A geriatric residential and day treatment facility also is part of the Center. Services include, but are not limited to, psychological evaluation, individual, group, and family therapy, case management, crisis intervention, and medication management.

Section II

GOALS

- Goal 1.** Continue to enhance the quality of training and service programs within the Center.
- Goal 2.** Strengthen the fiscal stability of the Center and its programs.
- Goal 3.** Maintain American Psychological Association accreditation for doctoral degree programs and clinical internship program. Seek accreditation of the Community Mental Health Center by the Joint Commission on Accreditation of Hospitals.
- Goal 4.** Maintain faculty development, encourage productivity, and foster the development of new specialty services.
- Goal 5.** Continue to act affirmatively and address issues of diversity within the Center.
- Goal 6.** Continue to review doctoral and master's training programs.
- Goal 7.** Continue to integrate the academic, research, and service activities of the Center.
- Goal 8.** Strengthen the Center's position as a national leader in providing innovative models of mental health training and service delivery.
- Goal 9.** Strengthen internal evaluation methods.

Section III

OUTCOME MEASURES, PROCEDURES, AND ATTAINMENT STATUS

Goal 1. Continue to enhance the quality of training and service programs within the Center.

Outcome Measure A: Obtain additional faculty positions and maintain the overall number of students entering the doctoral programs.

Procedure: Submit a proposal for additional faculty. Appoint a committee to search for new faculty and replacements for three faculty vacancies. Seek funding for visiting and postdoctoral faculty. Maintain the number of doctoral students for the Fall 1994 class.

Attainment Status: Three new faculty positions were approved for the 1994-95 academic year. The search committee is currently interviewing candidates (for six openings). Two offers have been made to date, with other decisions pending. Two distinguished visiting professors spent the year on campus, along with three postdoctoral fellows. The previous year the number of incoming Ph.D. students was reduced by four. This year, approximately the same number of Ph.D. offers were made, but a substantial increase in the acceptance rate raised the total number of new students projected to enter Fall 1994. The Center also has formulated plans to expand postdoctoral training opportunities in the future and currently is exploring visiting professorships for next year.

Outcome Measure B: Maintain the quality of entering doctoral students by maintaining mean GRE scores of > 1000 and GPA scores of > 3.2.

Procedure: Increase the pool of candidates and make offers to those with the highest rankings.

Attainment Status: The pool of doctoral applicants increased as follows:

Program	1991-92	1992-93	1993-94	1994-95
Ph.D.	149	202	216	234
Psy.D.	263	319	343	426

Overall comparative mean GRE scores for the incoming Ph.D. students are:

1990-91: 1141 1991-92: 1145 1992-93: 1134 1993-94: 1196

Overall comparative mean GRE scores and subject area scores for Psy.D students are:

1990-91: 1102 1991-92: 1108 1992-93: 1123 1993-94: 1092

Undergraduate mean GPAs of entering students are:

Year	Ph.D.	Psy.D.
1990-91	3.57	3.41
1991-92	3.56	3.40
1992-93	3.57	3.41
1993-94	3.52	3.40
1994-95	3.42	3.41

Outcome Measure C: Develop and expand a diverse and balanced faculty.

Procedure: Gain approval for new faculty positions, and conduct a search to fill new positions. Criteria includes scholarly research, publications in refereed journals, grant submissions, program development, clinical skills, and teaching background. Ability to integrate training, research, and service remain priority criteria. Senior and junior rank positions will be filled and a search for potential visiting faculty and postdoctoral faculty will continue.

Attainment Status: Three new full-time faculty positions were approved. Three additional vacancies also need to be filled. The appointed search committee has been conducting interviews with two formal offers made to date. Dr. Silverman was a visiting faculty in such areas as mental health delivery systems, and health psychology. Drs. Segal, Sellers, and Lewis were postdoctoral fellows in the areas of behavioral intervention, applied statistics and research design, and cross cultural assessment.

Goal 2. Strengthen the fiscal stability of the Center and its programs.

Outcome Measure A: Balance the Community Mental Health Center budget.

Procedure: Increase billing Identify budget issues early and make appropriate interventions. Continue to hold program directors fiscally accountable. Press funding agencies for more accountability. Continue to develop computer billing and tracking systems. Market specialty programs. Look closely at staffing.

Attainment Status: The Community Mental Health Center deficit was eliminated through a variety of strategies. Census was increased. Billing to Medicare, Medicaid, and third party insurance was increased. Restructured fee schedules continue to be implemented. Two grants were received this year and several new contracts were obtained from the Florida Department of Health and Rehabilitative Services (HRS).

Outcome Measure B: Improve Center net revenue.

Procedure: Eliminate budget deficits; expand programs; refine ongoing tracking systems; continue to refine program specific budgets; and submit grants and develop other funding sources such as contracts.

Attainment Status: Center net revenue was increased by 40 percent.

Outcome Measure C: Expand the field-based master's program.

Procedure: Meet with key guidance personnel in Dade County and actively recruit students for the Miami school guidance program; continue to identify and respond to geographical areas with specific training needs; and meet with personnel and/ or survey school systems expressing a critical need.

Attainment Status: The first Miami school guidance site opened successfully in January 1994. Hillsborough County invited the Center to review their needs for training masters level counselors. A Tampa cluster in school guidance is planned for Winter Term, 1994.

Goal 3. Maintain American Psychological Association (APA) accreditation for the doctoral degree programs and clinical internship program. Seek accreditation of the Community Mental Health Center by the Joint Commission on Accreditation of Hospitals (JCAHO).

Outcome Measure A: Continue review and implementation of recommendations in APA accreditation reports.

Procedure: Implement revision of doctoral curricula which better differentiates between Ph.D. and Psy.D. doctoral programs; strengthen research area; generate more financial assistance for students; and encourage additional faculty to seek American Board of Professional Psychology (ABPP) Diplomate status.

Attainment Status: The revised doctoral curricula (Ph.D. and Psy.D.) was implemented in Fall 1993. The curricula better differentiates between the two degrees. Full-time faculty with stronger research backgrounds were integrated further into the faculty. A postdoctoral research fellow also joined the faculty in Fall 1993 and has provided full-time consultation to faculty and students conducting research. Drs. Hutchings and Hersen were awarded ABPP status.

Outcome Measure B: Generate more financial support for students.

Procedure: Continue to expand positions within the Center; provide scholarship funds; and continue joint efforts with the community to identify employment opportunities in the field.

Attainment Status: The following is a summary of financial assistance generated for students since the last APA review:

Student Employment				
	1990-91	1991-92	1992-93	1993-94
# Agency positions	10	15	23	16
# Graduate assistants	51	51	5	52
# Teaching assistants	33	36	32	16
# Research assistants	10	8	9	9
# Computer assistants	7	6	5	3
# Coordinators*				14
# Therapists*				13
# Therapist/Research*				4
# Mental Health Tech.*				7
# Pre Practicum*				12
# Student Government*				4

* New data categories delineated this year.

In-house funding opportunities increased significantly over the previous year. In addition, 11 students received Center scholarships. Approximately \$767,000 in financial support was generated this year.

Outcome Measure C: Continue the Community Mental Health self study for accreditation by the JCAHO.

Procedure: A Governing Board was appointed, along with hiring of a Director of Quality Improvement, Quality Improvement Coordinator, and Director of Resource Management and Health Information. Work continued in putting policies and procedures in place, formulating a Quality Improvement Plan, initiating the quality improvement function, and continuing the work of various committees.

Attainment Status: Progress continues and new JCAHO standards are being incorporated. The target for the formal application has been moved to November 1994 with a target of early 1995 for the site visit.

Outcome Measure C: Maintain or increase the percentage of doctoral students placed at APA approved internship sites.

Procedure: Continue to strengthen the reputation of the program through ongoing improvements in the quality of training and faculty.

Attainment Status: An improvement was noted in the percentage of APA placements over last year when 400-600 more applicants applied nationally than were slots available. Nova Southeastern University internship placements have been increased from three to six in response to national need.

	1990-91	1991-92	1992-93	1993-94	1994-95
Number of applicants	53	57	39	55	55
Number placed	50	54	39	53	53
APA sites	(88%)	50 (94%)	36 (92%)	36 (68%)	44 (83%)
APIC sites	6	4 (6%)	3 (8%)	12 (32%)	9 (17%)
Number declining placement	2	2	0	2	2

Goal 4. Maintain faculty development, encourage productivity, and foster the development of new specialty services.

Outcome Measure A: Conduct formal faculty development sessions and research colloquia.

Procedure: Increase professional presentations to faculty, including research colloquia and continuing education; and hold meetings with adjunct faculty.

Attainment Status: Numerous programs were made available to faculty in a variety of formats (e.g., continuing education, development meetings, and coursework). Areas included, among other, were student recruitment and admissions, HIV interventions, assessment of minorities, and psychopharmacology. Eight APA approved continuing education programs also were offered this year.

Outcome Measure B: Continue to enhance support for faculty research efforts.

Procedure: Develop a research consultation position; encourage top faculty researchers to consult on research and grant applications; refine the computer network; develop technology to make data from the Community Mental Health Center available for faculty research; and provide seed money and reduce the course load for active researchers.

Attainment Status: A postdoctoral research fellow was hired to provide consultation. The computer system for the clinic database was purchased. Faculty are available to provide consultation on grant and paper submissions. Equipment continues to be upgraded and in-house technical assistance is provided through Center resources.

Outcome Measure C: Increase productivity by the faculty, as evidenced by more professional accomplishments.

Procedure: Conduct goal planning, refine criteria for promotion and review, and provide additional faculty research support.

Attainment Status:

	1989-90	1990-91	1991-92	1992-93	1993-94*
Grant Submissions	2	3	6	12	3
Presentations	45	38	63	53	40
Published/Accepted	13	39	23	85	66
Submitted Papers	16	23	19	13	8

* Reflects three faculty vacancies during the year.

Goal 5. Continue to act affirmatively and address issues of diversity within the Center.

Outcome Measure A: Increase minority student applicants and students. Recruit faculty from diverse backgrounds.

Procedure: Continue to fund the Minority Affairs Office.

Attainment Status: The Minority Affairs group continued to recruit and screen minority applicants. The following are statistics on incoming minority students in the doctoral program:

	1991-92	1992-93	1993-94	1994-95
Ph.D.	1	4	2	3
Psy.D.	5	9	8	14

Information on Masters minority students is as follows:

	Winter 1991	Winter 1992	Winter 1993	Winter 1994
White	83%	84%	84%	81%
Black	9%	7%	6%	6%
Hispanic	6%	9%	8%	10%
Asian	1%	0%	1%	2%
Other	1%	0%	.5%	1%

Outcome Measure B: Continue development of Southeastern Institute on Cross-Cultural Counseling and Psychotherapy.

Procedure: Continue to fund the efforts of Dr. Samuda and Lewis in identifying the needs of community professionals and students and offering training in cross cultural counseling and assessment and placement of minority students. Encourage research in this area.

Attainment Status: Cross cultural coursework is now required in the doctoral curriculum. A variety of other course work options were offered to graduate students. Research was conducted on various topics.

Outcome Measure C: Improve student training in working with diverse clients.

Procedure: Include required coursework in the doctoral curriculum. Offer additional course work in area.

Attainment Status: The new doctoral curriculum now requires cross cultural coursework. The following courses were offered during this academic year:

- PSY 4652: Cross Cultural Counseling
- PST 4525: Assessment of Culturally Diverse Clients
- CGPY 630: Counseling Culturally Different Students.
- PSY 4526/Psy 573: Learning Potential Assessment Device and Instruction
- PSY 1608: Cross Cultural Counseling
- PSY 4659: Advanced Cross Cultural Counseling

Training was also offered on therapy, with biracial minors.

Goal 6. Continue to review doctoral and master's training programs.

Outcome Measure A: Institute revisions of the doctoral curriculum.

Procedure: Admit students to the new doctoral curriculum effective Fall 1993. Revise the institute Clinical Competency Examination.

Attainment Status: The new curriculum was implemented in Fall 1993. Revisions to the competency exam are in place.

Outcome Measure B: Conduct reviews of master's curricula and services.

Procedure: Hold faculty meetings on clinical training, including the practicum experience. Review data from current students and graduates. Further define parameters for evaluation of students. Develop recommendations.

Attainment Status: The Director of Clinical Training met with practicum supervisors to outline major issues. An Associate Director was appointed to give focus to Master's clinical training. A survey of practicum placements is underway. New sites also have been developed. Below is a partial listing of results from the master's mid-program evaluation presented on a ten-point scale:

Master's Mid Program Evaluation									
Format	Curriculum			Faculty			Advisement, etc.		
	91-92	92-93	93-94	91-92	92-93	93-94	91-92	92-93	93-94
Traditional	7.3	7.4	7.4	7.6	7.5	7.6	6.1	5.6	5.4
Field Based	8.2	8.1	8.1	8.1	8.0	7.9	6.8	6.9	6.7

Outcome Measure C: Survey alumni in all programs.

Procedure: Refine alumni database, develop survey, mail and tabulate results.

Attainment Status: Survey was mailed to alumni. Partial results are listed in the final section of this report.

Goal 7. Continue to integrate the academic, research, and service activities of the Center.

Outcome Measure A: Increase innovative, high-quality clinical services, conduct research in those areas, increase services to community, and identify potential opportunities.

Procedure: Expand faculty; obtain new contracts to provide services; establish three new specialty clinics; and look to new opportunities in the community.

Attainment Status: Approval to expand faculty was granted. Several new contracts were obtained including \$ 580,000 for children's services. A grant renewal for the Geriatric Residential and Day Treatment programs was obtained as well as a grant from the State to fund a project for a substance abuse and gang free environment. New services were offered as outlined earlier in this report. A psychiatrist position was added.

Outcome Measure B: Assess the current stability of reorganization and make appropriate refinements.

Procedure: Refocus clinic management; define areas in need of attention; develop policies and procedures; and gather more information on service delivery.

Attainment Status: The clinic management team was reorganized and a Director of Research and a Director of Training were appointed. Policies and procedures continue to be defined along with a quality improvement plan. Service delivery systems will be improved through the development of an access center.

Outcome Measure C: Enhance research services and supports.

Procedure: Develop consultation services; develop system for tracking clinic data; and address research opportunities in Community Mental Health Center.

Attainment Status: As indicated in other sections of this report, a post doctoral fellow is providing research consultation. Development continues on the database and equipment is now in-house.

Goal 8. Strengthen the Center's position as a national leader in providing innovative models of mental health training and service delivery.

Outcome Measure A: Continue to execute leadership positions and seek nominations to key roles in organizations.

Procedure: Identify opportunities in APA and other professional association/organizations; and continue work with accreditation bodies and grant review boards.

Attainment Status: Dr. DePiano was appointed to the APA Board of Educational Affairs and the postdoctoral training committee. Several faculty remain on accreditation and grant review boards. Other highlights of notable achievements include:

- **Dr. Nathan Azrin:** Awarded Edgar E. Doll Award by APA, Division 33 for outstanding contributions to developmental disabilities research. Elected as a James McKeen Cattell Fellow of the American Psychological Society for contribution to the application of scientific psychology.
- **Dr. Frank DePiano:** Appointed to APA Board of Educational Affairs and the Postdoctoral Training Conference. Editor, *Journal of Child and Adolescent Substance Abuse* and *Journal of Psychotherapy in Private Practice*. Recipient of 3.1 million dollar HUD grant renewal for Geriatric Residential and Day Treatment programs.
- **Dr. Jan Faust:** Guest Editor for *Clinical Psychology Review* on special topic - "Familial Impact on Child Adjustment and Psychopathology".
- **Dr. Michel Hersen:** Editor - *Journal of Clinical Geropsychology*, *Progress in Behavior Modification*, *Behavior Modification*, *Journal of Anxiety Disorders*, *Clinical Psychology Review*, *Journal of Family Violence*, *Journal of Developmental and Physical Disabilities*, and *Applied Clinical Psychology Series*.
- **Dr. Philinda Hutchings:** Diplomate in Clinical Psychology, American Board of Professional Psychology, February, 1994.
- **Dr. Robert C. Lane:** Editor - (Division 39) Psychoanalytic Abstracts. Editorial Board - *Clinical Psychology Review: Current Issues in Psychoanalytic Practice*; *Journal of Clinical Geropsychology*.
- **Dr. Cynthia G. Last:** Editor - *Journal of Anxiety Disorders*. Ad hoc grant reviewer and site visitor for NIMH. Scientific Advisory Board for the Anxiety Disorders Association of America. Consultant for DSM-IV.

- **Dr. Doil D. Montgomery:** Chair of the Board, Biofeedback Certification Institute of America Board of Directors.
- **Dr. Ronald J. Samuda:** Scientific Advisory Board of the International Center of the Hadassah-WZIO-Canada Research Institute in Jerusalem.
- **Dr. Eugene Shapiro:** American Psychological Association Board of Educational Affairs.
- **Dr. Vincent Van Hasselt:** Editor - *Journal of Family Violence, Journal of Developmental and Physical Disabilities, Journal of Child and Adolescent Substance Abuse, Journal of Clinical Geropsychology.*

Other accomplishments are on file.

Goal 9. Strengthen internal evaluation methods.

Outcome Measure A: Collect data on the progress of current students.

Procedure: Evaluate the results of the doctoral clinical competency exam, and the ratings of internship and practicum experience. Conduct formal mid-point evaluation in the Master's program.

Attainment Status: Doctoral clinical competency exam data are presented below.

Doctoral Clinical Competency Exam				
Year	# Taken	Passes	Failures	2nd Failures
1989/90	48	88%	13%	1
1990/91	58	93%	7%	0
1991/92	35	91%	9%	2
1992/93	52	86%	4%	0
1993/94*	59	86%	4%	0

*Examination now includes pass with revision category; 17% of students who sat for the exam passed with revisions.

Also regularly reviewed are doctoral students' evaluations of practicum sites. A sample is shown below [scale 1(excellent) - 5(poor)]:

Site: Mailman Center for Child Development

Year/Semester	Rating as a Learning Experience Mean	Rating of the Quality of Supervision Mean
91/09	1.0	1.0
92/01	1.0	1.0
93/01	2.0	2.3

Site: Florida Atlantic University Counseling Center

Year/Semester	Rating as a Learning Experience Mean	Rating of the Quality of Supervision Mean
91/09	1.0	1.2
92/01	1.7	1.5
93/01	1.3	1.7

Each year, advanced doctoral students on internship provide ratings of the extent that their graduate training prepared them for various professional activities. Partial survey results are as follows (1 = excellent - 5 = poor):

	1989-90 (n=33)	1990-91 (n=41)	1991-92 (n=50)	1992-93 (n=37)
Clinical	1.2	1.5	1.4	1.6
Supervision	2.0	2.6	2.2	2.6
Consultation	2.1	2.9	2.7	2.9
Research	2.7	2.7	2.8	2.9

Data are collected on how intern supervisors rate the intern's performance as it compares to other interns:

	90-91	91-92	92-93
Much less well-trained	1%	0%	0%
Somewhat less well-trained	2%	0%	5%
Similar to other	38%	52%	23%
Somewhat better trained	50%	38%	49%
Much better trained	9%	11%	23%

Outcome Measure B: Continue to measure equivalency of on- and off-campus formats.

Procedure: Assign a research consultant to analyze data on exams, including conducting an item analysis on all the comprehensive exam versions. Develop and administer new test versions which evenly distribute the test questions by degree of difficulty within test categories. Continue to compare performance of students in the two different formats. Develop a new test item pool.

Attainment Status: New test versions were constructed and the first administrations were held in March 1994. Results are as follows:

Program Format	Test Version	Mean Score
Traditional	1	72% (n=19)
Field Based I	1	76% (n=13)
Field Based II	1	74% (n=22)

Version II is being currently administered. New test questions are being currently administered and analyzed.

Outcome Measure C: Revise data collection on alumni in order to generate more data and to obtain average ratings of all alumni by degree program.

Procedure: Alumni Surveys were developed and administered to all Master's and doctoral alumni. An alumni database is in place in the department to facilitate communication with alumni.

Attainment Status: Partial overall ratings on the survey of graduates are listed below. The scale used was 1 (poor) - 7 (excellent). Additional information and explanatory comments are on file. Scores reported are mean scores/modal scores.

Doctoral (n=221)					
Program	Trng	Fac	Prof	RPrac	CPrac
Ph.D. (n=68)	5.6/6.0	5.2/6.0	4.7/5.0	5.4/6.7	5.0/6.0
Psy.D. (n=153)	5.6/6.0	5.2/6.0	5.0/6.0	n/a	5.4/6.0

Master's (n=339)						
Program	Trng	CSkil	CPrac	Thry	EthSk	Fac
Mental Health Counseling* (n=87)	5.2/6.0	5.5/5.0	5.1/6.0	5.3/6.0	5.2/5.0	5.4/6.0
Counseling Psychology (n=231)	5.1/6.0	4.8/5.0	4.8/5.0	5.6/5.0	4.6/5.0	5.4/6.0

* Program retitled with new curriculum instituted in 1989.

Section IV

OVERVIEW AND USE OF FINDINGS TO IMPROVE INSTITUTIONAL PROGRAMS, SERVICES, AND OPERATIONS

Summary of the Status of Attainment of Goals

Integrating training, research, and service, developing a strong and expanded faculty, improving and expanding services and programs, and continuing fiscal growth were the primary focus of the Center this year. In addition, the APA reaccreditation self-study process began Fall 1993, and the Community Mental Health Center continued preparations for its application to the Joint Commission on Accreditation of Health Care Organizations.

Overall, the Center was successful in achieving designated goals for the year. A steady increase in qualified applicants to its degree programs enabled the Center to maintain strong enrollment. Sought out by several school systems, the Center's School Guidance and Counseling program expanded. Increasingly, faculty with national reputations and distinguished backgrounds have sought regular or visiting appointments. Pre-doctoral internship slots were increased and postdoctoral opportunities increased from three to six. The Center, in efforts to increase its national reputation, secured appointments to the APA Board of Educational Affairs, along with many other significant editorships and faculty committee appointments.

The Center has worked for several years to improve its fiscal position. This year, the Community Mental Health Center deficit was eliminated. A three million dollar federal grant renewal was obtained for the geriatric residential and day treatment program. Contracts totalling \$580,000 also were secured for children's services, along with a \$45,000 County grant for a project for a substance abuse and gang free environment. Overall, the Center's net revenue improved substantially over the previous year.

Also of importance are improvements implemented in the doctoral curriculum which further delineates the two programs, meeting the recommendations from the last APA accreditation report, faculty, and students. Masters clinical training is under review following extensive meetings with practicum instructors and review of data from site supervisors and students. Postdoctoral and predoctoral internship opportunities are being expanded. The Center continues its work to implement cross cultural training into its curricula and provide community training opportunities.

Impact of Findings on Improvements in Programs, Services, and Operations

After observing the enrollment patterns in the Center (e.g., applications to the doctoral program again increased, master's program expanded), the Center obtained approval to add three new faculty positions, postdoctoral positions, and visiting faculty. This will strengthen the training and research opportunities in the Center.

The Center also instituted a revised doctoral curriculum in Fall 1993 that followed analysis of recommendations from the last APA reaccreditation report and review of data and evaluations by faculty, administration and alumni. The Ph.D. and Psy.D programs were differentiated further. Research and research supports, such as technology and consultation, were strengthened and the addition of faculty with

strong research backgrounds fostered further development in this area. More collaboration on research was noted this year. However, the development of a clinic database that will allow research to be conducted on the client population still is underway and remains important to strengthening research. To ensure proper interface between the academics and clinic data, a faculty was appointed Director of Research to bridge these areas.

As part-time faculty play a vital role in the Center, to ensure the continued participation of part time faculty with substantial involvement in training and the overall development of the Center, a special designation was developed. This status ensures the integration of key part-time faculty into the Center.

As the need for financial supports for students grows, another important accomplishment this year was the generation of student financial supports within the Center totalling \$780,000.

National data and students' experience in gaining APA approved internship placements led to an increase in pre-doctoral internship placements at the University by three slots. Students were more successful this year than last year in securing APA placements.

After review of gains and remaining problems from the previous year, further effort was devoted to the Community Mental Health Center's finances, organization, service delivery, and accreditation. As noted earlier, the renewal of the three million dollar federal Department of Housing and Urban Development (HUD) grant for geriatric services, the continuing research grants for "Behavioral Treatment of School Phobia" (\$502,000), and a new grant from the State of Florida for "Project for A Substance Abuse and Gang Free Environment" (\$45,000), added to the funding base. Significant funding is also being received from the HRS, Broward County, the Children's Services Board, and United Way totalling \$3,547,000. In preparation for managed health care and following examination of critical issues facing the clinics, several major steps were taken this year. The Center's deficit was eliminated due to a complement of factors, including new contracts and grants, greater fiscal monitoring and accountability, improved billing procedures, and higher census, among other factors. A new management team, designed for greater efficiency, was developed. The JCAHO accreditation process resulted in improved policies and procedures and greater quality control. During this self-study period, it was determined that clients need quicker and more efficient access to services. A new Access Center was designed to allow clients to be seen immediately for referral for appropriate services. Services notably expanded include Project Safe, the Nova Community Clinic Older Adults Fair Oaks Hospital, the pediatric clinic to include severely ill children, development of medication management services, and the initiation of the community treatment team. A new psychiatrist position was added to the clinics.

Review of the a variety of information on the Master's programs continues resulting in work to strengthen clinical training. Faculty reviews are underway, along with data gathering on the quality of practicum sites. Results of the alumni survey indicate overall satisfaction with training. Master's program alumni appear to be successful in finding positions and achieving licensure; however, additional work should be done to increase the responses to the survey. Various school systems have approached the Center about critical needs for counselors. After research, the guidance program expanded to Dade County, and a Tampa site is being considered. Further evaluation of master's programs are warranted due to enrollment demands and new issues facing the field. Due to a critical shortage of school psychologists in Florida, a school psychology program is also being considered.

The Center has identified an increasing need for students to be able to work with diverse populations. In addressing the needs of both students and community professionals, the doctoral program implemented required coursework, elective coursework was offered, continuing education and seminars were provided to the community, and cross cultural research was supported. In addition, a faculty member presented in Panama and Costa Rica to foster an exchange of information and research on intervention strategies in substance abuse treatment.

During the next two years, the Center will have two accreditation visits for which it has prepared for the past four years. In efforts to strengthen its programs, it will seek to attract additional faculty with national reputations and to expand its programs and services to the community. The Center, after raising funds towards a new building, hopes to alleviate it's space problems in the near future.

FAMILY AND SCHOOL CENTER

Section I

DESCRIPTION OF PROGRAMS AND SERVICES

The Mission of the Family and School Center (FASC) is to assume a leadership role in the development of programs and services that enhance the well-being of children and their families. The FASC recognizes the family as the most important institution in society and all FASC programs are designed to be family friendly and family supportive with an emphasis on family strengths. Through its school programs, family support programs and professional training programs, the FASC is committed to community service and to seeking out creative solutions to the problems society is facing.

The FASC is comprised of five programmatic units:

- The University School on the central campus and a branch school in Coral Springs
- The Family Center
- The Ralph J. Baudhuin Oral School
- The Psycho-Educational Institute
- The Program to Improve Training in Childcare in Hillsborough County (PITCH) Child and Family Center in Tampa

While each of the FASC units operates under its own director, with its own budget, strategic plan, and plan of operation, directors and co-directors of the five units meet on a weekly basis as the FASC Cabinet to assure collaboration, cooperation, and shared responsibility.

A brief overview of each programmatic unit follows:

- **The University School** This college preparatory private school, which has a population of 1500 students, includes an elementary, middle, and high school on the central campus and an elementary and middle school on the Coral Springs Campus. The University School is committed to involving all children in an enriched educational experience that includes a rigorous academic program, and a major focus on technology skills, performing arts, interscholastic activities, and community service.
- **The Family Center** This center includes The Family Institute, Early Learning Programs, and the Action Institute. The Family Institute provides a continuum of programs for parents and children beginning in the infancy period. Approximately 900 families with children from birth to four years old attend parent/child classes on weekly basis. The Early Learning programs, housed in the Family Center and the Family Center Cottage, provide preschool and prekindergarten programs for children two-and-a-half through five years old with a cooperative curriculum. The Parent Education and Support programs provide parents with programs to enhance their parenting skills.
- **The Ralph J. Baudhuin Oral School** This school provides individualized academic programs for children from birth through eighth grade with communication disorders, learning disabilities, and attention deficit disorders. Recognizing that all children benefit from a multifaceted approach to learning, the Baudhuin School provides each child with an individualized program that combines academics, physical education, social skills development, and opportunities for creative expression.
- **The Psycho-educational Services** This unit provides developmental and educational assessment and therapeutic programs to all units of the FASC and to the community at large. A special program offered in this unit is Super Marks, an after school and summer remediation program for children grades 1-8 having academic difficulties.
- **The PITCH Child and Family Center** This satellite Family Center program, which is located in Tampa, Florida, focuses on improving the quality of child care in Hillsborough County.

Section II

GOALS

- Goal 1.** Assure an ongoing commitment to the Center's mission while maintaining fiscal integrity.
- Goal 2.** Promote professional growth and leadership through an ongoing program of staff development.
- Goal 3.** Maintain and enhance quality in all FASC programs and activities.
- Goal 4.** Assume a leadership role in the training of child care professionals and paraprofessionals, and in the generation of model programs.
- Goal 5.** Maintain a commitment to community service in all FASC programs and activities.
- Goal 6.** Express a commitment to professional growth and leadership through active involvement in research and development, professional organizations, and policy making commitments.
- Goal 7.** Collaborate with other centers in the University in generating and implementing quality academic programs responsive to emerging needs.

Section III

OUTCOME MEASURES, PROCEDURES AND ATTAINMENT STATUS

Goal 1. Assure an ongoing commitment to the Center's mission while maintaining fiscal integrity.

Outcome Measure A: All FASC programs and units will maintain a balanced budget which takes into account real costs in terms of personnel, space, and resources.

Procedure: An internal audit system was used to monitor the fiscal health of every budget within the FASC and provide information that can serve as the basis for future fiscal planning.

Attainment Status: The FASC was successful in maintaining a balanced budget. The implementation of an internal audit system provided an effective system for monitoring individual budgets, and encouraged the realignment of personnel in order to keep individual budgets in balance.

Outcome Measure B: A comprehensive marketing plan will be implemented to maintain and/or increase enrollment, promote product distribution, and increase the visibility of the FASC..

Procedure: A marketing committee which included representatives from all FASC units was charged with the responsibility of developing a comprehensive marketing plan and tracking the response to all marketing initiatives.

Attainment Status: The following marketing strategies were implemented:

- Bi-monthly meetings of the marketing committee were convened to develop strategies and fulfill the marketing agenda.
- Marketing materials, including brochures, conference displays, and direct mail pieces, were designed by individual FASC units to target their specific markets, while at the same time describing the benefits of being a University center. This approach helped to create an awareness of the FASC as an integrated center and generated demand for all FASC programs.
- Marketing strategies for curriculum products focused on launching a new self-published title through book fairs and a direct mail campaign. The FASC also collaborated with one of its publishers to devise a marketing plan for a comprehensive curriculum that will be available in October 1994.
- FASC personnel actively promoted the Center as members of professional organizations, media experts, and conference presenters.

Outcome Measure C: Fund-raising efforts will be prioritized in the Family Center, the University School, and the Baudhuin School.

Procedure: The advisory committees, auxiliaries, and parent groups will sponsor fund raising activities on an ongoing basis. Special building committees will be selected for major building campaigns.

Attainment Status: The Baudhuin School raised \$232,650 for scholarships and operating funds from private donors; the University School raised \$191,000 for scholarships and special programs and \$1,717,000 in cash and pledges for capital funds; the Family Center raised \$69,000 for scholarships and special programs. Funds raised by the University School, excluding tuition, for the 1993-94 school year are summarized in the following table:

University School Non-Tuition Funds	
Annual Fund	72,990
Grandparents Fund	7,144
Monte Carlo (special event)	63,533
Performing Arts Campaign	
• cash and pledges	770,000
• special gifts	37,000
Gymnasium Capital Campaign	507,000
Plan for Social Excellence	27,000
Summer Program for Economically Disabled Students	
Booster Club - Athletic Sponsorship	
• toward gym project (approximate figure)	17,000
• Wiegly Scholarship (approximate figure)	10,000
Coral Springs Building Fund	930,000
National Honor Society	1,500
Jr. National Honor Society	1,000
Book store revenues to support Toni Lipworth	1,000
Senior Class Scholarship Award	1,000
Special Scholarship Account	6,000
Gifts in Kind	
	Baby Grand Piano
	Spinnet Piano

Goal 2. Promote professional growth and leadership through an ongoing program of staff development.

Outcome Measure A: The FASC faculty and staff will increase their technological proficiency.

Procedure: Nova Southeastern University technology specialists will be asked to provide inservice programs for faculty and staff.

Attainment Status: All teachers in the Baudhuin School and the University School received computer training from Jostens, as follows:

UNIVERSITY SCHOOL

- Training in technology

LOWER SCHOOL

- Updated training on Jostens Learning Systems for all faculty
- Administrative network program installed

MIDDLE SCHOOL AND HIGH SCHOOL

- Same as Lower School, but training on Educational Utility and FERN

CORAL SPRINGS

- Same as Lower School

Outcome Measure B: Inservice training will be provided for teachers and administrators.

Procedure: The FASC cabinet, in consultation with program directors, will develop an inservice plan that will utilize external consultants and internal resources with a focus on best practices.

Attainment Status: The Baudhuin School implemented a series of inservice days with nationally recognized authorities. Michael Powers, Psy.D., Ann Holmes, MSCC, and Marlene Coker, M.S. provided inservices and consultations to the preschool program on Behavioral Analysis and Training. Charles Mangrun, Ph.D. and Steven Strechhardt, Ph.D. provided inservice training to the Elementary-Middle School teachers on the use of strategies. The University School implemented a series of inservice training experiences including a seminar in Conflict Resolution provided by the School of Social and Systemic Studies.

Goal 3. Maintain and enhance quality in all FASC programs and activities.

Outcome Measure A: All units will maintain appropriate accreditations.

Procedure: The director of each unit will assume the responsibility for ensuring that its unit remains in compliance with all accreditation standards.

Attainment Status: The University School was accredited in 1993 by SACS, FCIS, AISF, and FKC; the Family Center worked on completing procedures for NAEYC re-accreditation; the Baudhuin School was recommended for 5-year re-accreditation by AISF and SACS. The SACS Visiting Committee made the following commendations:

"The faculty, staff and administration for implementing a variety of instructional programs and approaches to meet the individual needs of students."

"The continual attempts to include parents in all aspects of their child's program and for providing positive support systems of the parents across all tiers and levels."

Outcome Measure B: Each FASC unit will develop a system of evaluation to assure quality control.

Procedure: Evaluation forms will be distributed to participants in FASC programs and feedback will be used to maintain and enhance program quality.

Attainment Status: PITCH used a standard evaluation form for all training programs. The evaluations were analyzed after each training and were used as the basis of program improvement. The average rating for training sessions was 4.5 on a five point scale. PITCH also was monitored by the Children's Service Board.

The Family Center Parent-Child program distributed parent evaluation forms after every six-week session. These evaluations served as the basis for program revisions.

In addition to the evaluations performed by the accrediting agency and the Broward County monitoring team, the Baudhuin School invited Dr. Michael Powers of the Eden Institute to evaluate the preschool program. The evaluations were shared with faculty and administration and suggested changes were implemented.

Goal 4. Assume a leadership role in the training of child care professionals and paraprofessionals, and in the generation of model programs.

Outcome Measure A: The FASC will implement its CDA equivalent and CDA Plus training model in five Florida counties.

Procedure: Utilize local, state, and regional conferences to establish and maintain contacts that lead to training contracts.

Attainment Status: The Family and PITCH Centers developed and implemented a CDA Equivalent program that was recognized by the State. CDA training was implemented in Broward, Dade, Palm Beach, and Hillsborough Counties. A total of 39 CDAs were trained in Hillsborough and 44 CDAs were trained in Broward County. In addition, the Family Center provided training to the following agencies and programs:

- Metro Dade Head Start
- Broward Head Start Parent/Child Centers

- Seminole Head Start
- Work/Family Directions: Advanced Infant/Toddler Seminar; Corporate Seminars on Quality Child Care; Balancing Work/Family
- Peppi Head Start
- Palm Beach Children's Services Board
- University of Wisconsin at Milwaukee - Parent/Child
- Broward School Board Social Services - CDA
- Broward County Child Care Licensing Monitors
- Monroe County Children's Services Home Visitors

Outcome Measure B: The FASC will continue to serve as the state appointed training coordinator for the mandated child care inservice training in Broward County.

Procedure: The FASC will follow guidelines developed by HRS to maintain the child care training contract.

Attainment Status: The Family Center maintained its Child Care Training Contract according to HRS guidelines. Over 2,000 child care personnel were trained in the course of the year.

Outcome Measure C: The FASC will maintain the PITCH grant in the Tampa area that provides training and mentorship to 15 selected child care centers.

Procedure: The FASC will follow guidelines established by the Hillsborough Children's Service Board to maintain the PITCH training contract.

Attainment Status: PITCH has been successful in maintaining its Project PITCH grant to improve the quality of child care by targeting geographically and ethnically diverse child care centers for intensive training and mentoring. It has received a \$28,882 subcontract to staff a warmline for child care directors, a \$100,814 subcontract for family care provider training, a Child Care Resource and Referral grant, and a \$10,500 Work/Family grant for helping centers receive NAEYC accreditation.

Goal 5. Maintain a commitment to community service in all Family and School Center programs and activities.

Outcome Measure A: Students enrolled in the University School and the Baudhuin schools will participate in community service projects.

Procedure: All students within the FASC will be given the opportunity to participate in community service activities.

Attainment Status: The FASC faculty, staff, and students are engaged in a wide variety of activities that demonstrate community involvement and service. The FASC played an active role in advocating for improved services to families, and increased collaboration among community agencies. The FASC took a lead role in the PEW initiative in Broward County. Members of FASC have taken on leadership in the Florida State Coordinating Council for Early Childhood Services, in the local interagency, and in the Preschool Community

Council, on the Advisory Board on Disabilities for Broward County Commissioners, the Constituency Board for Autism and Related Disabilities, and on the Coalition of Essential Schools. The FASC provided free speakers to a variety of community groups on issues related to parenting and child development.

FASC programs and services attracted a wide cross section of community participants. Although many programs are tuition driven, the scholarship program allows many to participate at reduced fees. Additionally, the parent/child class for infants birth to three months and the Ring-A-Round program for special needs families are offered free of charge to everyone.

All faculty, staff, and students participated in a variety of community projects, both in a fund-raising and a service capacity. University School students donated 20,000 hours to community service in over 45 community programs. Projects the FASC has been involved in include, Muscular Dystrophy Walkathon, Thanksgiving food drive for Southern Ministries, food baskets for the Davie community, holiday parties for daycare centers, Toys For Tots, earthquake drive, blood drives, Walkathon for the American Cancer Society, MDA telethon, Shamrock fundraiser, pediatric AIDS, marathon for St. Judes, March of Dimes Walk America, Horses for Handicapped, and Kids in Distress.

The FASC sponsored the Family Festival which supports the Joe DiMaggio Children's Hospital Oncology Program and a 3-on-3 basketball tournament for pediatric AIDS.

Outcome Measure B: The FASC will be actively involved in community service programs.

Procedure: The FASC Cabinet will monitor community participation in all FASC units.

Attainment Status: The Baudhuin School Parent Professional Partnership Program provided technical assistance on mainstreaming special needs children to Broward County and private schools, and served as a resource center for families with special needs children throughout the county.

Staff from the Baudhuin School and the University School served on 12 different accreditation teams and have chaired one SACS and AISF accreditation team.

The Family Center initiated the Family Institute to provide parenting education and support to the University family and the community. The Family Center offered twenty Systematic Training for Effective Parenting (STEP) classes for parents with children ages birth-eight, three school-age classes, and one teenage class.

The Baudhuin School enhanced its programs for children, parents, and teachers. A four-tier innovative program has been implemented in the preschool. Parents participate in the Parent Professional Partnership Program, an educational and support system. Fathers attend the "Men's Club" bi-monthly, and parents attend day and evening support groups, parent education workshops, and behavior clinics.

The University School offered a series of programs to forge a closer link between parents and the school. These programs included a parents ambassador program, an evening parenting program, a series of parenting seminars, and a new parent reception.

The Family Center offered parent-child programs to over 900 participants. This represents a record enrollment. In addition, the Family Center operated a number of programs in the local community including training of child care licensing staff, Head Start directors and teachers, Seminole child care directors and staff, and infant/toddler caregiver directors.

Goal 6. Express a commitment to professional growth and leadership through active involvement in research and development, professional organizations, and policy-making commitments.

Outcome Measure A: Increase the number of faculty making presentations at major conferences.

Procedure: Records of conference participants will be maintained, and Nova Southeastern University's internal publications will be utilized to recognize presenters.

Procedure: The FASC will track conference participation in terms of attendance, presentation, and marketing.

Attainment Status: Twenty-seven staff members from the University School, Baudhuin School, PITCH, and Family Center made presentations at major conferences. A record was maintained of all conference presentations.

Outcome Measure B: Faculty will increase the number of publications published in refereed and/or high quality journals.

Procedure: An authors' bag lunch will be held on a regular basis to develop writing expertise and share ideas.

Attainment Status: Authors' bag lunches were held, but they were not well attended, and were discontinued. The FASC publication output included four articles in major journals, two newspaper columns, and a major curriculum accepted for publication by Addison-Wesley. Family Center personnel were interviewed by six feature writers for parenting magazines, and over 30 feature writers for newspapers and periodicals.

Outcome Measure C: The number and level of grants and contracts related to applied research and professional training will be increased.

Procedure: A contract and grant point person will be assigned the responsibility of monitoring requests for proposals and encouraging proposal submissions.

Attainment Status: A contract and grant point person, Sue Talpins, was assigned the responsibility of monitoring requests for proposals and encouraging proposal submissions. Two major grants were submitted to the Federal Department of Education. Status is pending on one grant. The second grant was approved for funding by the National Review Committee but did not make the final cutoff.

Outcome Measure D: The FASC will maintain and/or increase its participation in professional organizations and policy-making bodies.

Procedure: The FASC Cabinet will recognize participation in professional and policy making organizations or committees.

Attainment Status: The FASC members played an active role in national, state, and local professional organizations and policy making committees. Policy positions include Chairperson pro-tem of the Governor's Council for Children, Co-Chair of the Child Care Task Force of the State Coordinating Council for Early Childhood Services, and member of the State Steering Committee for the Pew Initiative.

Goal 7. Collaborate with other centers in the University in generating and implementing quality academic programs responsive to emerging needs.

Outcome Measure A: Cooperative academic programs will be initiated and/or maintained with at least six academic centers.

Procedure: Weekly cabinet meetings will be utilized to identify opportunities for maintaining and enhancing inter-center cooperative programs. A cabinet member will be assigned the role of point person for each projected or established inter-center program.

Attainment Status: With Marilyn Segal as point person, the FASC initiated a University-wide Family Friendly Committee. With Marilyn Segal as point person, the FASC collaborated with the Undergraduate programs and CAE in the initiation of new degree programs to meet revised certification requirements and prepare personnel for areas of critical need. Roni Leiderman was assigned as point person for working with CAE in the promotion of the Family Support Studies master's degree program.

Section IV

OVERVIEW AND USE OF FINDINGS TO IMPROVE INSTITUTIONAL PROGRAMS, SERVICES, AND OPERATIONS

Summary of the Status of Attainment of Goals

In its Strategic Plan, The FASC describes seven goals which are listed in Section II. A summary of the status of attainment relative to each goal is listed below.

- Goal 1. FASC was successful in maintaining a balanced budget without compromising its commitment to its mission.
- Goal 2. The faculty and staff increased their technological proficiency and implemented a center-wide inservice training program for teachers and administrators.
- Goal 3. All units maintained appropriate accreditation. Feedback from evaluations in PITCH, the Family Center, and the Baudhuin School was used to improve program quality.
- Goal 4. Paraprofessional training was expanded to include CDA, child care, the National Association for the Education of Young Children (NAEYC) accreditation, and Family Support Training.
- Goal 5. School and Family Center units of FASC increased their participation in community service.
- Goal 6. FASC faculty increased participation in professional conferences, professional writing, grant writing, and policy making organizations.
- Goal 7. FASC played a major role in the initiation of a University-wide Family Friendly committee, and in collaboration with the Farquhar Center, the exploration of a new early childhood education specialty.

Impact of Findings on Improvements in Programs, Services, and Operations

Improvements based on a review of goal attainment status for selected goals include the following.

- Goal 1. Recognizing the importance of maintaining tight budget control, the FASC reorganized its administrative structure so that program directors within each of the units were given specific responsibilities for monitoring individual budgets.
- Goal 2. Additional computers for FASC and the University School were prioritized in the 1995 budget.
- Goal 4. Although the Family Center was successful in expanding its training contracts, scheduling changes by grantees made it difficult to plan ahead and avoid last minute crises. In order to plan more effectively, the Family Center made the decision to seek out three or four major training contracts and minimize time and resources devoted to smaller contracts and workshops.

Goal 6. Feedback from the unfunded autism proposal will be used as the basis for resubmittal.

During the 1993-94 fiscal year, the FASC has been guided by the input of its National Advisory Committee and by the goals described in its Strategic Plan. At the urging of the National Advisory Committee at the January 1994 meeting, the FASC developed a litmus test to assess existing and projected programs. Before the FASC makes the decision to continue an existing program or initiate a new one, there must be assurance that the program supports the mission, that it meets an identified need, and that the FASC has the capacity to implement a quality program without diminishing its resources. As the FASC evaluated its programs at the end of the fiscal year and identified new initiatives for the coming year, it has applied this litmus test.

A major focus in 1993-94 supported by the Advisory Committee and written into the FASC Strategic Plan has been the development of programs and strategies that include parents as partners and decision makers. In addition to supporting the FASC mission, this focus on parent participation has had a positive fiscal and programmatic impact. The successful recruitment of a new Headmaster for the University School, the completion of the Performing Arts Center on the Davie campus, and the addition of a Middle School building on the Coral Springs campus can be attributed in large part to active parent involvement.

A second thrust of the 1993-94 year has been professional training. Through the PITCH program and ACTION, the Family Center Training Unit, the Center has extended its Family Support, Child Development Associate (CDA), and Early Education and Care training throughout and beyond the South Florida area. The FASC has worked with different ethnic groups including Haitian, Native American, African American, Hispanic, and Caucasian, and with different agencies including child care licensing boards, Head Start, school systems, Children's Service Board, Wheelock College, corporations, and independent child care centers. The Baudhuin School, with the largest population of Autistic children in a single site in the nation, has been host to visiting professionals from at least 10 different programs located throughout the country.

A third programmatic thrust of the FASC has been professional visibility. After three years of development and field testing, an early education curriculum for home visit and preschool classrooms was submitted to Addison Wesley and will be on the market by fall of 1995. In addition, faculty and staff from each of the five units have made presentations at major national conferences including the National Council for Exceptional Children, Zero to Three, Florida Language, Speech, and Hearing Association (FLASHA), Family Resource Coalition, Association of Independent Schools of Florida (AISF), Coalition of Essential Schools, and NAEYC Professional Conference.

The fourth major focus on the FASC in the 1993-94 fiscal year was community service. Each of the five units participated on an ongoing basis in a variety of community projects. The senior class of the University School provided over 20,000 hours of volunteer service to over fifty community agencies. Members of the Senior Class were the recipients of several community service awards including the Miami Herald Silver Knight Award in Social Science as well as the Silver Knight Honorable Mentions in Art, Business, Drama, Speech and Athletics, and the J.C. Penney Community Service Award.

A fifth focus of the FASC in 1993-94 was on intercenter collaboration. A close working relationship between Baudhuin and the CAE LaBonte Institute with sharing of programs and personnel had direct benefits for both centers.

The FASC has been cooperating with the undergraduate program in revamping the Early Childhood and Special Education major to meet newly published certification standards. The FASC played a lead role in developing a Nova Southeastern University site in Tampa that is shared by CAE, the undergraduate program, and the FASC's project PITCH. The FASC has cooperated with CAE in marketing the Family Support Masters program.

The FASC has played a lead role in developing the Family Friendly Committee. With input from the centers and central administration, this committee has identified ways of assuring a University commitment to the families of students, staff, and community.

HEALTH PROFESSIONS DIVISION

Section I

DESCRIPTION OF PROGRAMS AND SERVICES

Effective January 1, 1994, the former Nova University and Southeastern University of the Health Sciences merged to form Nova Southeastern University. The Health Professions Division (HPD)—formerly Southeastern University of the Health Sciences—consists of four Colleges: Osteopathic Medicine; Pharmacy; Optometry; and Allied Health, with respective full-time enrollment for 1993-94 of 514, 435, 288, and 121, for a total of 1,358 students. New buildings for the HPD have been scheduled for completion on the Davie campus by late 1996. Until the buildings are completed, the HPD will remain in its present location in North Miami Beach.

The HPD offers eleven degree programs which include the following: Doctor of Osteopathy; Master of Science in Medical Education; Bachelor of Science in Vision Science; Doctor of Optometry; Bachelor of Science in Pharmacy; Doctor of Pharmacy; Master of Occupational Therapy; Doctor of Occupational Therapy; Master of Physical Therapy; Doctor of Physical Therapy; and Physician Assistant Bachelor of Science.

The mission of the HPD is to train primary care health practitioners in a multi-disciplinary setting, with particular emphasis on increasing the availability of medical care in underserved areas. In order to achieve its mission, the Division has designed and implemented a unique approach to multi-disciplinary health sciences education. Students are trained in concert with other health profession students in order that the various disciplines learn to work together as a team for the good of the public health. During their didactic work, students share campus facilities and, in some cases, have combined classes. In their clinical experiences, students work together in most of the facilities operated by the Division. These include health centers that deliver service to medically underserved communities in Dade and Broward counties and in rural areas throughout the state. The Division's rural health program serves as a model for its success in promoting the recruitment and retention of health care professionals in communities which chronically lack them.

The HPD continues to perform community service, for example, through the delivery of educational programs in local schools and the filming of television programs regarding general health issues and concerns.

Section II

GOALS

- Goal 1.** Maintain and strengthen the quality of educational programs.
- Goal 2.** Maintain professional accreditation in the established academic programs and seek accreditation in new programs.
- Goal 3.** Enhance faculty development by providing opportunities for faculty members to maintain and upgrade competency and expertise in their chosen fields.
- Goal 4.** Explore ways to utilize distance learning in the delivery of education to clinical sites.
- Goal 5.** Maintain and enhance the financial health of the four HPD colleges.
- Goal 6.** Begin work on the relocation of the HPD from the North Miami Beach campus to the Davie campus.
- Goal 7.** Evaluate present clinical sites and expand clinical training centers within the state to increase availability of, and access to, quality clinical rotations.
- Goal 8.** Maintain and improve employment opportunities for graduates.
- Goal 9.** Maintain and develop scholarly activities and research.

Section III

OUTCOME MEASURES, PROCEDURES, AND ATTAINMENT STATUS

Goal 1. Maintain and strengthen the quality of educational programs.

COLLEGE OF OSTEOPATHIC MEDICINE

Outcome Measure A: Implement and enroll at least 10 percent of the freshman class in an innovative seven-year track for students interested in Family Medicine (SYFAM).

Procedure: Write and design a brochure to market the SYFAM program to potential applicants.

Attainment Status: Approximately 20 percent of eligible freshmen enrolled in the program after the SYFAM brochure was distributed.

Outcome Measure B: Expand the clinical curriculum from 17 to 22 months to include two additional months of internal medicine, one more month of pediatrics, and two added electives.

Procedure: Through a series of ongoing meetings with administrative and clinical affairs staff, the dean will implement the new clinical curriculum. The dean will also appoint staff to document the new requirements in the *College Catalog*, *Clinical Manual*, and other college publications. Clinical affairs will notify the clinical sites of the new requirements, and lengthen the student rotation schedules.

Attainment Status: As of August 1993, the new clinical curriculum is in place, and the Class of 1996 will be the first to enter this program in July 1994.

Outcome Measure C: Consolidate the classroom component from two-and-a-half years (five semesters) into two years (four semesters) without sacrificing important educational instruction.

Procedure: The dean, through the associate deans of Basic Sciences and Academic Affairs, will work with the curriculum committee to streamline the content of the basic science and clinical didactic courses so that course redundancies are eliminated.

Attainment Status: As of August 1993, the classroom instructional component of the curriculum was consolidated into two academic years (four semesters), from an initial two-and-a-half years (five semesters). This was accomplished by combining three separate Surgery courses into one comprehensive Surgery course; condensing three Psychiatry courses into two; eliminating an Allergy course; and shortening both the Medical Jurisprudence and Human Sexuality courses.

COLLEGE OF PHARMACY

Outcome Measure A: Complete a review and evaluation of the curriculum of all three pharmacy departments.

Procedure: The three pharmacy department heads will be responsible for completing the review and evaluation of the curriculum for their respective programs, which will include, specifically, a review and evaluation of course content, sequencing of courses, and the hours of the courses to ensure there is no unnecessary duplication. Additionally, the Pharmacy Practice Sub-committee for Curriculum Review will be responsible also for reviewing the minimum competencies for rotations, regardless of site.

Attainment Status: A review of the curriculum in all three departments, as well as a review of the rotations has been completed. The departments are now in the process of completing an evaluation of the curriculum and the rotations.

COLLEGE OF OPTOMETRY

Outcome Measure A: Provide quality optometric education with an emphasis on primary care optometry.

Procedure: Complete a review of the existing curriculum and modify it to include an emphasis on primary care.

Attainment Status: An analysis of the curriculum has been completed, and modifications to include an emphasis on primary care were made accordingly. Furthermore, such problems as too much material being presented in the first semester and the need for better sequencing of courses were identified and corrected. Emphasis on integrating basic science into the overall framework of a general optometric curriculum was accomplished. Continual monitoring, review, and revision of the curriculum to ensure, among other things, an emphasis on primary care, is the ongoing responsibility of the College's curriculum committee.

Outcome Measure B: Improve the students' skills in the area of primary care optometry.

Procedure: Ensure that students are placed in a primary clinical care environment.

Attainment Status: During the third year, students serve one-half day per week in a clinical setting where they are scheduled to examine one patient under the close supervision of a clinical instructor who assesses the student's performance on a Student Clinician Encounter Evaluation Form. Through constant feedback from the instructor there is further refinement and enhancement of technical and analytical clinical skills. Additional feedback is provided by the students who critique each other during examination observations. On average each student will examine 20 patients during this period.

COLLEGE OF ALLIED HEALTH

Outcome Measure A: Develop curriculum for the Doctorate in Physical Therapy, the Doctorate in Occupational Therapy, and the Master in Public Health programs.

Procedure: The dean of the College of Allied Health, working with the appropriate program directors, faculty, and/or consultants will develop the curriculum for the above-mentioned programs.

Attainment Status: The Doctor of Physical Therapy program curriculum has been developed. The degree will require 90 credits beyond the entry-level degree in physical therapy. Students may transfer up to 36 graduate credits. Requirements include satisfactory completion of all courses which include seminars, independent study, and a Project in Advanced Clinical Competency (PACE).

The Doctor of Occupational Therapy program curriculum has been developed. The degree will require a minimum of 90 credit hours of work beyond the baccalaureate including the dissertation (clinically based original research that addresses the practice of occupational therapy). A maximum of 36 credits may be transferred from other graduate programs with the approval of the Graduate Advisory Committee. Courses of study are tailored to reflect the individual needs of students to reflect their stated practice specialization and career goals. Actual courses of study will be planned by the student, major professor, and doctoral committee.

The Master of Public Health program curriculum is in the process of being developed and should be completed by fall 1994.

Goal 2. Maintain professional accreditation in the established academic programs and seek accreditation in new programs.

COLLEGE OF PHARMACY

Outcome Measure A: Maintain professional accreditation.

Procedure: The American Council on Pharmaceutical Education (ACPE) policy requires a site visit review upon "change of ownership or control".

Attainment Status: The site visit by the ACPE confirmed the continued accreditation of the College's degrees.

COLLEGE OF ALLIED HEALTH

Outcome Measure A: Initiate the professional accreditation process of the Physician Assistant and Physical, and Occupational Therapy programs .

Procedure: The dean, working with the directors of the Physician Assistant, Physical, and Occupational Therapy programs will complete all necessary accreditation requirements within the established timeframes.

Attainment Status: The Physician Assistant program submitted an application to the Accreditation Review Committee on Education for the Physician Assistant (ARCPA) and to the Council on Allied Health Education & Accreditation (CAHEA) on December 17, 1993. The site visit by ARCPA was completed on January 27 & 28, 1994. A favorable preliminary recommendation was given by the site team. The application, self-study, and the site team's formal written report was reviewed by the Physician Assistant Accreditation Review Committee, and the CAHEA acted favorably upon the recommendation in late May 1994.

The establishment of both the Physical and Occupational therapy programs was approved by the Board of Trustees of the former Southeastern University of the Health Sciences in December 1993. A Declaration of Intent for the establishment of the Physical Therapy program was submitted to the Commission on Accreditation for Physical Therapy Education (CAPTE) in February 1994 and is scheduled to be acted upon in fall 1994. A Letter of Intent for the establishment of the Occupational Therapy program was submitted to the Accreditation Council for Occupational Therapy education (ACOTE) in November 1993, and the program has been designated a developing program. The self-study report for that Council is due September 1994 for the initial accreditation and is in the process of being developed. The review team is scheduled to visit in May 1995.

Goal 3. Enhance faculty development by providing opportunities for faculty members to maintain and upgrade competency and expertise in their chosen fields.

ALL HPD COLLEGES

Outcome Measure A: Ensure that faculty attend at least one continuing education conference per year.

Procedure: Provide funds to support faculty participation in professional development activities.

Attainment Status: Funding of up to \$1,000 per year continues to be made available for each faculty member to participate in professional development activities and to attend continuing education conferences.

COLLEGE OF OSTEOPATHIC MEDICINE

Outcome Measure A: Conduct an annual, day-long faculty development seminar.

Procedure: Identify areas of interest to the faculty. Recruit speakers to address topics of interest, and assign responsibility for coordination of the program.

Attainment Status: A University-wide faculty development seminar on "Effective Classroom Instruction" was held in fall 1993. This day-long seminar, which had over 100 faculty members participating, covered a broad range of topics related to instructional techniques, including the advantages and disadvantages of different examination formats.

Outcome Measure B: Increase the level of resources available for faculty development activities.

Procedure: Work with the Grants Management Office to explore government extramural funding opportunities to support faculty development activities.

Attainment Status: A three-year, \$460,541 *Faculty Development in Family Medicine* grant proposal was completed and submitted to the Public Health Service's Health Resources and Services Administration. Specifically, the College proposed to design a 12-hour faculty development training program that would target the instructional skills of clinical preceptors at the affiliated area health centers, public health departments, and community hospitals, along with adjunct faculty associated with private practices. The program would address the teaching, clinical practice, research, and administrative skills that adjunct clinical preceptors need in order to maximize the quality of their clinical teaching interactions with students. The proposal was funded at the level requested. The program will be in place effective July 1994.

COLLEGE OF PHARMACY

Outcome Measure A: Conduct approximately six professionally-related seminars/ workshops for faculty throughout the year.

Procedure: Conduct a needs assessment for faculty development activities. Recruit speakers to address topics of interest, and assign responsibility for the coordination of the program.

Attainment Status: A needs assessment was completed. Topics such as educational effectiveness and evaluation, recent research findings, and communication skills (i.e., focusing on patient counseling) are some of the topics to be discussed at the College's faculty development seminar scheduled for the fall.

Outcome Measure B: Provide adjunct faculty at clinical sites with professional development, course competencies, and expectations.

Procedure: Each clinical specialty faculty member will develop programs for adjunct faculty in their specialty.

Attainment Status: Programs have been and will continue to be conducted for adjunct faculty in internal medicine, geriatrics, and drug information.

COLLEGE OF OPTOMETRY

Outcome Measure A: Provide faculty and other practitioners with continuing educational opportunities.

Procedure: A special committee will be responsible for the development/ implementation/ coordination of continuing education activities.

Attainment Status: The College's faculty have attended and/or presented, or will attend and/or present at continuing education workshops/seminars sponsored by the following: Florida Optometric Association; American Optometric Association; National Optometric Association; Jamaican Optometric Association; Contact Lens Anterior Segment Symposium; Jackson Hole Continuing Education Program; AAO and SECO Conventions; Southern California College of Optometry Continuing Education Program; and Dade and Broward County Association Meetings.

Goal 4. Explore ways to utilize distance learning in the delivery of education to clinical sites.

COLLEGE OF PHARMACY

Outcome Measure A: Develop educational programs to be delivered at existing clinical sites in Florida as well as nationally and internationally, utilizing distance learning.

Procedure: The dean, working with appropriate faculty and staff will complete a feasibility/needs assessment regarding the delivery of educational programs to the clinical sites as well as to practitioners in Florida, nationally, and internationally, utilizing distance learning.

Attainment Status: An assessment has been completed. The delivery of programs in advanced pharmaceutical education for all pharmacists in Florida is being explored. Furthermore, the College has agreed to develop educational programs for the University of Central Venezuela in Caracas. Programs for pharmacists in Trinidad-Tobago have been successfully implemented.

Goal 5. Maintain and enhance the financial health of the four HPD colleges.

Outcome Measure A: Transfer the budget authority and responsibility to include the development function and budget management to the deans of the respective Colleges.

Procedure: Each dean, working with appropriate staff, will develop planned, justified budgets for the 1994-95 academic year in accordance with overall University, Health Professions Division, and SACS guidelines.

Attainment Status: Each dean has developed a planned, justified budget and submitted it to the executive vice chancellor for review and approval. The deans now have full responsibility for the management and oversight of their respective budgets.

Goal 6. Begin work on the relocation of the HPD from the North Miami Beach campus to the Davie campus.

Outcome Measure A: Plan and build an HPD complex on the Davie campus.

Procedure: Select an architect responsible for the design and construction of the medical complex. Seek input from key administrators regarding space requirements for all segments of the HPD.

Attainment Status: The architect responsible for the design and construction of the HPD medical complex has been selected. The deans, in cooperation with the administration, have met with the architect to discuss space requirements for their respective Colleges. Once the final design is completed, it will be sent back to the deans for review.

Goal 7. Evaluate present clinical sites and expand clinical training centers within the state to increase availability of, and access to, quality clinical rotations.

COLLEGE OF OSTEOPATHIC MEDICINE

Outcome Measure A: Identify four sites within Florida that have sufficient facilities to meet the requirements of the College's clinical curriculum.

Procedure: Begin discussions with directors of medical education in areas within Florida that might serve as clinical centers. Investigate the four regions to ensure that there are an adequate number of hospitals.

Attainment Status: The following areas have been designated as clinical centers: Broward County, Dade County, the Orlando area, and the Tampa area. Relationships with hospitals in these areas have been strengthened, and affiliation agreements have been signed.

Outcome Measure B: Create four regional dean positions to coordinate the clinical program in each of the four clinical centers.

Procedure: Through the existing clinical network, contact and recruit deans with an excellent track record of serving as preceptors for students.

Attainment Status: One regional dean position has been filled. Additional qualified physicians who are committed to educating osteopathic medical students are being recruited for the remaining three positions.

COLLEGE OF PHARMACY

Outcome Measure A: Evaluate 63 clinical sites at a minimum of once a year.

Procedure: The department head of Pharmacy Practice is responsible for site assessment and evaluation of faculty and staff at the clinical sites in order to assess the level and adequacy of physical, personnel, and educational resources.

Attainment Status: Site visits of 10 existing and three new clinical sites have been completed. The evaluation of the remaining sites is on-going.

Goal 8. Maintain and improve employment opportunities for graduates.

COLLEGE OF OSTEOPATHIC MEDICINE

Outcome Measure A: Increase the number of elective rotations available to students after completion of their core curriculum in order to offer them an opportunity to explore a variety of career options.

Procedure: Expand by two the number of electives available in the clinical component of the curriculum.

Attainment Status: Students now have five electives in their senior year, instead of three.

COLLEGE OF PHARMACY

Outcome Measure A: Educate students about the number of employment opportunities and alternative settings which students have available to them.

Procedure: The dean and other appropriate faculty and staff will continue to identify mechanisms to reveal employment opportunities and alternatives for students.

Attainment Status: All graduates were employed during this report period. In order to increase employment alternatives and facilitate placement, the College sponsors an annual career fair, which this year included representatives from varied organizations such as hospitals, Eckerd and Walgreen Pharmacies, the military, managed care, and industry. The dean of the College, serves on the Dean's Advisory Council of Walgreens Drugs. This membership, among other activities, provides the dean with a networking vehicle, a way to learn of future employment opportunities for students, and participation in creating new and innovative roles for pharmacists.

Goal 9. Maintain and develop scholarly activities and research.

ALL HPD COLLEGES

Outcome Measure A: Ensure that all clinical or basic research proposals submitted for internal or external funding are prepared in accordance with HPD policies and procedures.

Procedure: Establish a University-wide research committee with responsibility for reviewing internal and external proposals for clinical and basic research.

Attainment Status: A University-wide Research Committee has been established. The Committee, which meets formally once a month, is chaired by the vice chancellor for research and planning for the Health Professions Division. All proposals for clinical or basic research are reviewed by this Committee and approval obtained prior to the implementation of internal research or submission of a research proposal to an external funding source. Written policies governing the development, review and approval, and submission of research proposals are being developed. (Discussed below are specific research proposals which have been approved for internal funding.)

COLLEGE OF OSTEOPATHIC MEDICINE

Outcome Measure A: The faculty of the College will contribute to the body of knowledge and demonstrate contemporary knowledge in their area through publications of original research and/or scholarly research.

Procedure: The dean, working with other appropriate staff will encourage and assist faculty in the pursuit of internal and external grant opportunities, in conducting scholarly research, and in submitting the results of their research for publication.

Attainment Status: A research grant on HIV testing and counseling of minority populations was submitted to the Agency for Health Care Policy and Research; a funding decision is pending. The HPD awarded an internal grant to support a longitudinal study of the students who elected to go into family medicine. Additionally, the College submitted a proposal to the American Association of Colleges of Osteopathic Medicine to engage in a pilot surrogate patient training program that will enhance the ability of medical students to manage effectively the socially difficult or culturally different patient; a funding decision is pending.

COLLEGE OF PHARMACY

Outcome Measure A: The faculty of the College will contribute to the body of knowledge and demonstrate contemporary knowledge in their area through publications of original research and/or scholarly activity.

Procedure: The dean, working with other appropriate staff will encourage and assist faculty in the pursuit of internal and external grant opportunities, in conducting scholarly research, and in submitting the results of their research for publication.

Attainment Status: Two starter grants have been awarded by the HPD to pharmacy faculty for scientific research, including the following:

- \$4,795 grant for the development of an electrochemical detection HPLC assay for quantitation of plasma prazosin, and levels in infants and children
- \$2,870 grant for calcium channel blocker research
- \$3,800 grant for the development of controlled Release Gradient Matrix Systems for Diltiazem HCL
- \$4,430 for effect of vitamin A on P4502E1 activity on H4IIE, HEPl, and HEPG2 cells.

A \$21,945 grant from the American Association of Colleges of Pharmacy was awarded to develop and evaluate multi-media based computer-assisted instruction (CAI) as a supplement to didactic therapeutic lectures.

Ten research articles have been published in referred journals during the past year, together with two poster presentations, and approximately 15 presentations at professional meetings.

COLLEGE OF OPTOMETRY

Outcome Measure A: The faculty of the College will contribute to the body of knowledge and demonstrate contemporary knowledge in their area through publications of original research and/or scholarly research.

Procedure: The dean, working with other appropriate staff, will encourage and assist faculty in the pursuit of internal and external grant opportunities, in conducting scholarly research, and in submitting the results of their research for publication.

Attainment Status: The following research proposals currently are under investigation:

- Fungi associated with contact lens and lens cases
- Large scale production of monoclonal antibodies DDRL/1 for use in in-vitro assays: Corneal ulceration
- The clinical acceptance of the Ultracare system
- The role of the "prism sphere" design in the management of contact lens related dry eye syndrome

The following proposed research has been presented for approval:

- The effect of Vit-A-Drops as a lubricant in hydrogel contact lens wearers
- HIV studies
- Modification of BIO design to produce an upright, non-reversed image
- Evaluation of treatment of strabismus by osteopathic cranial manipulation
- Electrodiagnostic investigation of the effects of Irlen filters on cortical neural stimulation

Over the past four years the optometric faculty have published more than 80 articles; they continue to present at professional meetings, conferences, and other forums.

COLLEGE OF ALLIED HEALTH

Outcome Measure A: The faculty of the College will contribute to the body of knowledge and demonstrate contemporary knowledge in their area through publications of original research and/or scholarly research.

Procedure: The dean, working with other appropriate staff will encourage and assist faculty in the pursuit of internal and external grant opportunities, in conducting scholarly research, and in submitting the results of their research for publication.

Attainment Status: The director of the Physical Therapy program will present two papers at the Second Joint APTA/CPA Congress in June 1994 in Toronto, Canada, entitled *Upward Career Mobility for physical Therapist Assistants* and *A Practice-Setting Curriculum Design for Physical Therapy Education*.

The Physician Assistant program submitted a grant proposal to the Health Resources and Services Administration, which requested funding to support faculty and curriculum development activities; however, the proposal was not recommended for funding.

Section IV

OVERVIEW AND USE OF FINDINGS TO IMPROVE INSTITUTIONAL PROGRAMS, SERVICES, AND OPERATIONS

Summary of the Status of Attainment of Goals

This past year has been marked by major innovative strides and positive changes on many fronts for all of the Colleges within the Division.

COLLEGE OF OSTEOPATHIC MEDICINE

The College began a new Seven-Year Family Medicine (SYFAM) program that includes required three-month rural medicine rotations. The establishment of the SYFAM program was prompted by a 20 percent decline in those students indicating an intention to enter family practice (from approximately 80 percent to 60 percent). Such initiatives were created to help meet the need for more primary care physicians and to provide the College's medical students with real experiences in today's changing healthcare environment.

Significantly, the College of Osteopathic Medicine recently completed a major reorganization of its administrative structure to better reflect its focus on primary care. Housed within six major departments, including a new Department of Behavioral Medicine, are 24 separate divisions encompassing all medical disciplines.

Applications to the College of Osteopathic Medicine were up 60 percent over last year—making acceptance to the school highly competitive, and enrollment was up 8 percent. Freshman class admissions are expected to increase to 140 in the 1994-95 academic year. The average GPA and MCAT scores of candidates accepted have risen over the last few years.

COLLEGE OF PHARMACY

The College of Pharmacy will offer the Pharm.D. degree as the sole professional degree beginning with the 1995 entering class, in order to achieve competencies for pharmaceutical care and future pharmacy practice. This decision is consistent with the American Association of Colleges of Pharmacy's (AACCP) Commissions to Implement Change in Education, the American Pharmaceutical Association (APhA) White Paper, and the College's internal objectives. Accordingly, the curriculum will undergo thorough analysis in 1994-95 to modify courses and accommodate elective courses in pharmacy practice.

The College of Pharmacy continues to admit 100 students each academic year from a qualified applicant pool of approximately 420. GPA and Pharmacy College Admission Test averages have risen to 3.20 and 60% composite, respectively. The College's Postbaccalaureate Pharm. D. program is among the top five such programs in the country based on number of enrollees with 83 enrolled as of August 1994.

COLLEGE OF OPTOMETRY

The College of Optometry adopted the new American Optometric Association definition of an optometrist and, within that context, has designed a program to develop a primary care health practitioner who is capable of rendering broad-based care to his/her patient population.

The College of Optometry received its accreditation in June 1993; however, the College continues to improve and expand its educational program and refine its policies and procedures in preparation for its professional reaccreditation in 1995.

The College of Optometry's applicant pool has increased steadily over the past four years from 56 in 1989 to 342 in 1993. While the quality of the entering class also has risen steadily over the years, the entering class GPAs still are below those of other institutions.

COLLEGE OF ALLIED HEALTH

The College of Allied Health this year obtained preliminary accreditation of its Physician Assistant program and established its Physical and Occupational Therapy programs. The Occupational Therapy program will begin with an enrollment of 50 students in June 1994, and the Physical Therapy program will begin in September 1994, also with 50 students. The Physician Assistant program will expand from its first class size of 16 to 56 students in the 1994-95 academic year. The Masters in Public Health program is scheduled to be in place by January 1995.

The HPD continues to maintain a sound financial base. It is projected that the Division will continue to be self-supporting, operating without a deficit.

Impact of Findings on Improvements in Programs, Services, and Operations

■ Curriculum

This past year, as previously noted, the SYFAM program was begun. This innovative program allows those students with a special commitment to Family Medicine to enroll in a seven year program (four years of medical and three years of postgraduate education) that ensures uninterrupted medical training by guaranteeing them internship and residency positions in college-affiliated institutions. The SYFAM program currently has 42 out of 130 eligible freshmen enrolled.

Additionally, the College of Osteopathic Medicine implemented a new "Two Plus Two" curriculum in order to provide students with more experiential clinical training. The clinical curriculum was increased from 17 to 22 months, and the classroom instructional component was consolidated into two academic years (four semesters) as opposed to the previous two and one-half years (five semesters).

The College of Pharmacy's curriculum will undergo a thorough evaluation in 1994-95 in order to modify courses and accommodate elective courses in pharmacy practice. Furthermore, the College's Department of Pharmacy Administration has begun its task of development of curriculum and evaluation.

The College of Optometry completed an analysis of its curriculum and made modifications accordingly; for example, such problems as too much material being presented in the first semester and the need for better sequencing of courses were identified and corrected. Continual monitoring, review, and revision of the curriculum to ensure that, among other things, an emphasis on primary care is the ongoing responsibility of the College's curriculum committee.

The development of the curricula for both the College of Allied Health's Physical and Occupational Therapy programs was completed. Work has commenced on the development of the Master of Public Health program, which is to be in place by January 1995, as previously noted.

■ Program Delivery

To keep abreast of current needs for clinical sites and pave the way for future growth, the College of Osteopathic Medicine developed four regional academic clinical centers within Florida to increase the availability of, and access to, quality clinical rotations. The College also launched a new 10 year affiliation with the North Broward Hospital District, which is comprised of four hospitals with 1800 beds. This affiliation will consist of clinical rotations for junior and senior students, an internship program, and a Family Medicine residency program.

The College of Pharmacy is in the process of developing educational programs for the University of Venezuela in Caracas, and is evaluating the feasibility of delivering the Postbaccalaureate Pharm.D. degree to remote sites in Florida. The College continues to evaluate its 63 clinical sites in south Florida.

Traditionally, the Basic Sciences Department has not been affiliated with any of the Colleges and primarily provided course instruction for the College of Osteopathic Medicine; however, as other programs have been added to the Health Profession Division, it was decided the Basic Sciences Department will continue to remain a separate department, but its faculty will provide Basic Science courses as needed for all of the Colleges within the Division.

■ Teaching Modalities

The Division increased its audio-visual instructional holdings which are now available in the HPD library to students. Through a grant from the American Association of Colleges of Pharmacy, the College of Pharmacy is developing and evaluating multi-media computer-assisted instruction as a supplement to didactic therapeutic lectures.

■ Learning Assessment Procedures

The Basic Science faculty analyzed and compared medical students' scores in the Basic Sciences on Osteopathic National Board Examinations to determine whether the content of the College's Basic Sciences courses was in line with what students are expected to know for licensure examinations. The results reflect that approximately 90 percent of Nova Southeastern medical students pass the Basic Science sections of the Osteopathic National Board Examination.

All four Colleges have established admissions criteria and continually monitor students' performance throughout their enrollment. All graduates of the four Colleges must take national licensing examinations. The College of Osteopathic Medicine student's pass rate for the Osteopathic National Board Examination, Part I—Basic Sciences and Part II—Clinical Sciences was 88.98 percent and 96.08 percent, respectively, in 1993. Graduates continue to be successful on the National Association Board of Pharmacy Licensing Examination (NABPLEX), with a passing rate of 94.3 percent compared to the national average of 90.4 percent. One hundred percent of the College of Optometry students pass Part I and II of the National Board Examination. The first Physician Assistant graduates will take their boards in October 1995, so no data for that group currently are available.

■ Faculty/Staff Recruitment

Physicians were recruited by the College of Osteopathic Medicine to fill three departmental chairs—Family Medicine, Surgery, and Behavioral Medicine, and four new full-time faculty members also were hired.

The College of Pharmacy selected a departmental chair of Pharmacy Administration and is recruiting currently for a director of clinical education. This position will be responsible for teaching, research, development of adjunct faculty, and service, with the latter particularly directed toward geriatrics, minority health care, and site evaluation. In addition, The College of Pharmacy has 11 faculty openings available; it is anticipated these will be filled by the end of the fiscal year.

The College of Optometry has filled the position of assistant dean for student affairs, which, in particular, has allowed student issues to be dealt with in a more timely manner. Six new faculty—with strong vision science and computer backgrounds—have been recruited; two faculty positions remain to be filled.

The College of Allied Health has appointed directors of both its Physical and Occupational Therapy programs. The College has recruited six full-time faculty for each of these new programs and is recruiting two full-time and one half-time faculty positions for the Physician Assistant program. The acting medical director will be appointed to the medical director position for this program, as well. Finally, a vice provost for continuing education was employed to develop new and expand existing continuing education initiatives for the Division.

■ Faculty/Staff Assessment

Faculty and course evaluations have been developed and implemented in all four Colleges. Feedback is provided to the instructors as well as the deans of the respective Colleges. Additionally, the Colleges of Osteopathic Medicine and Optometry developed clinical site evaluations and are in the process of analyzing students' evaluations of their experiences at the clinical sites. The College of Pharmacy has employed a well-developed evaluation document for site, preceptor, and student evaluation.

Furthermore, Faculty Credentials Committees were established in all of the Colleges, with the primary purpose to evaluate faculty credentials and performance, and to recommend faculty appointments, reappointments, and promotions to the respective deans.

■ Marketing of Programs

Staff from the Admissions Office, as well as faculty from the four Colleges, continue recruitment efforts at the two- and four-year colleges, hold educational fairs, conduct phonathons, speak at medical societies and clubs throughout Florida, and send direct mailings to potential students. In October 1993, the HPD admissions staff along with staff from the Occupational and Physical Therapy programs conducted an open house focused on these programs. An annual on-campus open house for potential students in all programs also was conducted. Furthermore, the Division was represented at the national meeting of pre-med advisors. The College of Optometry invited pre-professional health advisors from throughout Florida to the campus for an all day visit to learn about the profession and the College, in particular. Finally, this year was the first time the Division advertised in the newspapers of all Florida institutions of higher education, with the exception of Barry University and Florida International University.

■ Use of Technology

Subsequent to the merger, discussions regarding ways to access existing technology in place at the Davie campus began. The HPD's current library holdings are being computerized and linkage to Nova Southeastern's library system will be completed. New means of delivering instruction through the use

of technology, with particular emphasis on the rural sites, are being investigated. Specifically, the College of Pharmacy is exploring the delivery of the Postbaccalaureate Pharm.D. degree to selected sites throughout Florida. The Division has available a state-of-the-art cardiovascular simulator called "Harvey," which allows students to hear and diagnose every heart sound found in humans; it also correlates auscultatory findings, physical findings, and blood pressure recordings of the major diseases found by physicians in daily practice. Expanded and enhanced computer availability for students and faculty of all the Colleges is provided in the HPD computer laboratory.

■ **Collaboration with Other Centers/Departments or Outside Entities**

The merger of Nova and Southeastern Universities has increased opportunities for collaborative efforts between colleges/centers/departments, such as the awarding of combined degrees, shared faculty and resources, and joint grant initiatives. Such collaborative endeavors currently are in the discussion and development phases. The College of Osteopathic Medicine has worked to strengthen its collaborative relationship with Florida's three other medical schools, and together the schools developed a *White Paper on Generalist Careers in Medicine*, which was delivered to the Governor and the Florida Legislature. The executive vice chancellor and provost, along with the dean, will visit in Washington with the Florida Congressional Delegation to discuss education and health reform. The College is also working on the national level with the American College of Osteopathic Family Physicians (ACOFP) to investigate the potential for an accelerated six-year Family Medicine curriculum.

The College of Pharmacy continues to collaborate with the University of Central Venezuela in Caracas and with pharmacists in Trinidad-Tobago in the development and implementation of educational programs. Pharmacy faculty lecture on therapeutics in the Physician Assistant program and on pharmaceutical care in the elderly to the medical students. Finally, the College has jointly supervised two residents with the Miami Veterans Administration hospital this year.

HEALTH PROFESSIONS DIVISION

APPENDIX A

COLLEGE OF OPTOMETRY

MICHAEL O. FENDICK, O.D., PH.D.

PUBLICATIONS:

Zuvcov, A.A., Fendick, M.G., Gottlob, I., Wizov, S.S., Reinecke, R.D. (1991). Visual-evoked cortical potentials in dissociated vertical deviation, American Journal of Ophthalmology **112** (6): 714-722.

Goldstein, H.P., Gottlob, I., Fendick, M.G. (1992). Visual remapping in infantile nystagmus, Vision Research **32** (6), 1115-1124.

Fendick, M.G. and Swindale, N.V. (in press). Vernier acuity for edges defined by flicker, Vision Research.

PRESENTATIONS:

Refereed

Odom, J.V., Chao, G.M., Li, P.J., Fendick, M.G. (1992). Direction of perceived motion-in-depth in ambiguous dynamic random element stereograms, Proceedings of the 14th Annual International Conference of the IEEE Engineering in Medicine and Biology Society. Piscataway, NJ: IEEE, 1568-1569. (meeting in Paris, France. Oct 29 - Nov 1, 1992).

Fendick, M.G., Chao, G.M., Odom, J.V. (1992). Visually evoked potentials elicited by lateral displacement and stereo motion, Proceedings of the 14th Annual International Conference of the IEEE Engineering in Medicine and Biology Society. Piscataway, NJ: IEEE, 1582-1583. (meeting in Paris, France. Oct 29 - Nov 1, 1992).

Non-Refereed

"Evaluating Visual Function in Infantile Nystagmus" Univ. of British Columbia, Vancouver, B.C., Canada. Ophthalmology Ward Rounds, January 31, 1992

BOB GILMAN, O.D., M.S., F.A.A.O.

PRESENTATIONS

"Magic of Optics" at Florida Optometric Association Convention, June 6, 1992, Miami Beach, Florida.

"Interpretation of OATS Scores" at Optometric Admissions Workshop October 25, 1993, Southeastern University.

"Basic Optics Principles Laboratory" at AHEC Camp at Nova Southeastern University for past three years. Most recent date June 21, 1994.

"Optical Reviews for National Board of Optometry Examinations" at Nova Southeastern University for the past four years. Most recent date June 28, 1994.

PUBLICATIONS

Curriculum section entitled "Radiation and the Eye" for American Optometric Association Curriculum Conference, July 30, 1992, Denver, Colorado.

Technical proposal entitled "Advanced Electrodiagnostic Procedures" which was presented to Chatlos Foundation August 1992.

PAUL FARKAS, M.S., O.D., F.A.A.O.

LECTURE PRESENTATIONS

Association of Practice Management Educators,,St. Louis, MO, January 1992.

Vision Expo New York, New York, March 1992.

American Academy of Optometry, European Seminar, Stratford Upon Avon, England, May 1992.

Florida Optometric Association, Miami Beach, Florida, June 1992.

Florida Optometric Association, Ft. Lauderdale, Florida, October 1992.

American Academy of Optometry, Orlando, Florida, December 1992.

Association of Practice Management Educators, St. Louis, MO, January 1993.

Contact Lens Association of Ophthalmologists, Las Vegas, NV, January 1993.

Southeastern Council of Optometrists, Atlanta, GA, February 1993.

Vision Expo, New York, New York, March 1993.

Connecticut Optometric Association, Meriden, Connecticut, September 1993.

Ohio Optometric Association, Huron, Ohio, October 1993.

Ohio Optometric Association, Huron, Ohio, October 1993.

Oklahoma Optometric Association, Oklahoma City, Oklahoma, November 1993.

American Academy of Optometry, Boston, Massachusetts, December 1993.

Association of Practice Management Educators, St. Louis, MO, January 1994.

Kansas Optometric Association, Kansas City, MO, May 1994.

Interlens International Contact Lens Conference, Lucerne, Switzerland, May 1994.

Interlens International Contact Lens Conference, Baltimore, MD, October 1994.

Southeastern Council of Optometrists, Atlanta, GA, February 1995.

Southwestern Council of Optometrists, Dallas, TX, March 1995.

PUBLICATIONS

Farkas, Paul (May 1992). Building Skills in the New O.D., Optometric Economics, 2 (5).

Farkas, Paul (1992). Rational Refund Policy, The Contact Lens Journal (An English Journal) 20 (2).

Farkas, Paul, Kassalow, J., McGlone, V. (June 1992). Senior-Junior Patient Transfer, Optometric Economics 2 (6).

Farkas, Paul in conjunction with Paul Erikson, M.S., O.D. (1992 Fall Publication). Monovision: A Presbyopic Problem Solver, Behavioral Optometry 31, (5).

Farkas, Paul (September 1992). Choosing an Associate, Optometric Economics 2 (9).

Farkas, Paul (September 1992). Shed Those Golden Handcuffs, Vision Monday.

Farkas, Paul (1993). Developing a Contact Lens Practice, The Contact Lens Journal (An English Journal) 20 (8), 20 (9).

Farkas, Paul (February 1993). Setting Ground Rules, Optometric Economics, 3 (2).

Farkas, Paul (July 1994). Contact Lens Update--Disposable and Planned Replacement Lenses, Optometry Clinic 4, (2).

To Be Published

A New Definitive Practice Management Text.

Lead author of the chapter "Contact Lens Practice Management"

Contributing author of the chapter "Interprofessional Relations"

Contributing author of the chapter "Designing Financial Statements"

This practice management text has a target date for publication in the fall of 1995. It will be the definitive academic textbook on practice management and optometric economics that will be used by all of the colleges of optometry in the United States and Canada.

HOWARD PURCELL, O.D., F.A.A.O.

PRESENTATIONS - 1992-1993

Dade Cnty Optometric Association, "Bifocal Contact lens Update"

Miami Lighthouse for the Blind, "Low Vision, There are Alternatives"

Professional Opticians of Florida, Low Vision, There are Alternatives"

Jamaican Optometric Association, "HIV Disease and the Eye," "Contact lens Update," "The Precision Management of Astigmatism"

Florida Paraoptometric Association, "The Role of the Optometric Assistant"

Contact Lens Anterior Segment Symposium (C.L.A.S.S.), "Rigid Gas Permeable Lens Update"

PRESENTATIONS - 1993-1994

Dade County Optometric Association, "Tinted and Opaque Contact Lenses," "Bifocal Rigid Contact Lenses"

Opticians of Florida, "Fresh Approaches to Old and New Contact Lens Dilemmas," "The Precision Management of Astigmatism," "Advanced Keratometry," "Evaluating RGP Contact Lenses"

Jamaican Optometric Association, "Contact Lens Update,"

Contact Lens Anterior Segment Symposium (C.L.A.S.S.), "Fresh Approaches to Old and New Contact Lens Dilemmas"

Broward County Optometric Association, "A Bifocal Contact Lens Update"

Palm Beach County Optometric Association, "A Bifocal Contact Lens Update"

Florida Optometric Association, "Fresh Approaches to Old and New Contact Lens Dilemmas"

American Academy of Optometry, "Fresh Approaches to Old and New Contact Lens Dilemmas"

Southeastern Council of Optometry (SECO), "The Precision Management of Astigmatism"

Puerto Rico Optometric Association, "Ocular Surface Disease," "Contact Lenses and the Post-OP Cornea"

Ohio Optometric Association, "The Implementation of Therapeutic Drugs in Optometric Practice"

Academy of Sports Vision, "The Precision management of Astigmatism"

PUBLICATIONS 1992-1993

Contact Lens Spectrum, "Soft Toric Roundtable" Part 1, "Soft Toric Roundtable" Part 2

Walmart Interactive TV Network, "Current Clinical Corneal Concerns"

American Academy of Optometry, "The Precision Management of Astigmatism"

Southeastern Council of Optometry, "The Precision management of Astigmatism," "Case Presentations"

University of Houston College of Optometry, "Fresh Approaches to Old and New Contact lens Dilemma"

1994-1995

Opticians of Florida, "The Art and Science of Presbyopic Contact Lens Fittings"

Florida Paraoptometric Association, "Tonometry Workshop"

Nova Southeastern University Faculty Presentations, "Corneal Topography Lecture and Demonstration"

Contact Lens Anterior Segment Symposium (C.L.A.S.S.), "The Practical Use of Contrast Sensitivity Testing"

PUBLICATIONS

"Fresh Approaches to Old and New Contact Lens Dilemmas," Practical Optometry.

"The Prism Sphere," Optometry Today.

MORTON W. SILVERMAN, O.D. F.A.A.O

Articles and Presentations 1992-1994

(August 1992). Assisted in a research project by Cinthia R. Morris, MPH which resulted in her MPH thesis "Standardization Patient Education: A Model For An Eye Care Clinic," California State University, Northridge.

(May 15, 1992). Posting The Results of Aids Testing, Letters to the Editor, AOA New

(April 1993). Optometric Loyalty, Duty, and Self Interest, The American Public Health Association, Guest Editorial, Journal of the AOA.

(April 1993). Optometry and Its Expanding Role in the American Public Health Association, The Vision Care Section, Journal of The New York State Optometric Association.

(February 1994). The History of the American Public Health Association and the Vision Care Section, Journal of The AOA.

"Reforming The Health Care System, Single Payer V/S Competitive Managed Care," Block lectures, Southern California College of Optometry, June 1993.

"Reforming The Health Care System, Single Payer V/S Competitive Managed Care," The Exchange Club of Miami, Florida, February 15, 1994.

COLLEGE OF ALLIED HEALTH

CUADRADO, RAUL R., DR. P.H., DEAN, COLLEGE OF ALLIED HEALTH

Cuadrado, R.R. (1993, February 25). Fund Raising for AIDS/HIV Amongst 936-Corporations in Puerto Rico. 1992-1993, Presidential Commission on AIDS, Caribe Hilton Hotel, San Juan, Puerto Rico.

RAMOS, MARYANN FERRARA, PA-C, M.P.H.

Ramos, Maryann F. (1994, May 22). Occupational Medicine Curriculum for Physician Assistant Programs. 1994 AAPA Conference, San Antonio, TX.

Ramos, Maryann, F., (1993, May 26). Wellness in the Workplace. 1992 Annual AAPA Conference, Nashville, TN.

DUDLEY, SUZE, MS, OTR, FAOTA, DIRECTOR

Dudley, S. and A. Melnick, (1994, March) Living Life to Your Fullest. 30-minute Public Service Interview for Health Focus, Cable Television, Miami, FL.

Miller, C. and S. Dudley (1993, June). Accessing Computers without a Keyboard. Technology Lab, American Occupational Therapy Association, Seattle, WA.

Dudley, Suze (1993, June). Application of FileMaker Pro™ for Coordination of Clinical Sites. Florida International University.

Dudley, Suze (1993, June). Application of FileMaker Pro™ for Tracking Students. Florida International University.

Dudley, Suze (1993, February). Legal Implications of Public School Therapy Practice. State of Florida, Department of Education, Orlando, FL.

Dudley, Suze (1993, January). Clinical Education Packet. Florida International University.

Komblau, B. and S. Dudley (1993, August). Student Training Issues and the ADA. American Occupational Therapy Education Special Interest Newsletter.

FOCUS, Florida Occupational Therapy Association Newsletter, publisher, 1994, 1993; editor, 12 issues each year 1993, 1992.

Abstracts, The GREAT Southern Occupational Therapy Conference, 1994, 1993, 1992.
Conference Programs.

Preliminary Program, The GREAT Southern Occupational Therapy Conference, 1994, 1993, 1992.

Dudley, Suze (1992, January). Physical Demands Job Analysis of a Nursery Worker. Florida International University.

Dudley, Suze (1992, January). Haptic Visual Discrimination Test. Florida International University.

Dudley, Suze (1992, January). McCarron Assessment of Neuromuscular Development. Florida International University.

ANDERSON, LORI T., MS, OTR/L, CLINICAL COORDINATOR & ASSISTANT PROFESSOR

PRESENTATIONS

Andersen, Lori T. (1994, April 18). Regulation of Occupational Therapy. Florida International University.

Andersen, Lori T. (1994, Marcy 13). Home Health Occupational Therapy. Barry University, Miami, FL.

Andersen, Lori T. (1994, February 26). Regulation of Occupational Therapy. Barry University, Miami, FL.

Andersen, Lori T. (1993, February 21). Regulation of Occupational Therapy and Home Health Occupational Therapy, Barry University, Miami, FL..

Andersen, Lori T. (1992, July 11). Home Health Occupational Therapy. Barry University, Miami, FL.

Andersen, Lori T. (1992, May 3). Regulation of Occupational Therapy. Barry University, Miami, FL.

Andersen, Lori T. (1992, April 14, 15, 28). The Role of Occupational Therapy in Home Health, Gold Coast South Home Health Agency

NASHIRO, NANCY O., PH.D, OTR, PROFESSOR

Nashiro, Nancy (1994, October 29). -Holism in Health and Well-being: A Japanese Perspective. The Great Southern Occupational Therapy Conference. Lexington, Kentucky.

Nashiro, Nancy (1993, September 30). The Making of an Occupational Therapist: The Art and Craft of Therapy. The Great Southern Occupational Therapy Conference. Charleston, West Virginia.

Nashiro, Nancy (1993, August 15). Arts and Crafts: Tradition-bound? Or Future Bound? Nancy Nashiro, Ph.D., OTR (convener), Kerry Klemm, MOT,OTR, Felecia Moore, MOT, Suzanne de Chazal. Mountain Central Occupational Therapy Conference. El Paso, Texas.

Nashiro, Nancy (1992, July 1). Therapeutic Use of Arts and Crafts: Historical Perspective. Joint Annual Conference CAOT & OT Atlantic. St. John's, Newfoundland.

KORNBLAU, BARBARA L., JD, OTR, CIRS, DAAPM, PROFESSOR

Wyrick, Joane, Kornblau, Barbara L., Ellexson, Melanie (1993, June). Perceptions of Essential Functions in the Occupational Therapy Profession Among Occupational Therapy Practitioners. Preliminary results presented at a workshop at the American Occupational Therapy Association Annual conference.

Ellexson, Melanie E., and Kornblau, Barbara L. (1993). Chapter "Reasonable Accommodations: The Process". In Susan Isernhagen (Ed.), Work Injury, The Full Spectrum of Management, accepted for publication, Aspen Publishers, Inc.

Kornblau, Barbara, and Bailey, L. Chapter 4, "Section 504 and the ADA and Student Issues." In Diana Schwartzenbach (Ed.), Ethical and Legal Dilemmas in Occupational Therapy, accepted for publication, F.A., Davis.

Jaffe, Evelyn G., Kornblau, Barbara, and Mosby, L. (1992). Chapter 38, "Legal Issues in Occupational Therapy Consultation." In Cynthia F. Epstein (Ed.) Occupational Therapy Consultation: Theory Principles and Practice.

Kornblau, Barbara L., & Soll, Martin. (1992, June). Breaking Down the Barriers: Access and Employment Rights Under the New Disability Law. The Hiring Process Under the Americans With Disabilities Act, Florida Bar, Tallahassee, FL.

Kornblau, Barbara L. (1992, Winter). Preparing Adolescents to Work Under The Americans with Disabilities Act, Work: A Journal of Prevention, Assessment, & Rehabilitation 2:2 Andover Medical Publishers, Andover, MA.

Kornblau, Barbara L, Ellexson, Melanie, & Soll, Martin A. (1992, January). Implementing the Americans With Disabilities Act - A Practical Approach, Florida Bar Journal. Tallahassee, FL.

Kornblau, Barbara L., & Ellexson, Melanie (1991, November). Employment Practices Under the Americans With Disabilities Act, Risk Management. Risk and Insurance Management Society, NY.

Kornblau, Barbara, L. (1993, June). Occupational Therapy and the Americans with Disabilities Act (ADA), for the American Occupational Therapy Association, commission on Practice, approved by the Executive Board of the American Occupational Therapy Association. Official White Paper of the organization, prepared October 1991, published in the American Journal of Occupational Therapy, April 1992, AOTA, Rockville, MD, and to be submitted to the Representative Assembly June, 1993 for the approval as the official Position Paper of AOTA.

- Komblau, Barbara L, and Dudley, Suze (1993, August). Student Training Issues and the ADA, Education Special Interest Section Newsletter, American Occupational Therapy Association, Rockville, MD.
- Komblau, Barbara, L. (1993, March) ADA Update: Are Employers Taking a Wait & See Approach? Visions. National Association Occupational Health Professionals, Santa Barbara, CA.
- Komblau, Barbara L. (1993, Winter). Employee and Employer Issues Related to the ADA, Florida Association of Rehabilitation Professionals in the Private Sector, (FARPPS), Southeast District Newsletter, Winter, 1993, Miami, FL.
- Komblau, Barbara L. (1992, December). Direct Threat, Undue Hardship: A Closer Look, Physical Disabilities Special Interest Section Newsletter, American Occupational Therapy Association, Rockville, MD.
- Komblau, Barbara L. and Ellexson, Melanie (speakers). (1992, December). Understanding Americans With Disabilities Act, [a series of three training videotapes on the ADA]. Performing Accessibility Audits, Job Analysis, and Pre-placement Screenings. Tucson, AZ: Therapy Skill Builders.
- Komblau, Barbara L., and Ellexson, Melanie (Directors and Producers). (1992, July). The Path to ADA Compliance: The Job Interview [seventeen-minute training video]. Miami, FL: ADA Consultants, Inc.
- Komblau, Barbara L. (American Occupational Therapy Association's representative). (1992). Trialliance of Rehabilitation Professions, "Making the ADA Work for You." [Video tape] Rockville, MD: AOTA.
- Komblau, Barbara L. (Recurring Columns) The ADA and You and Legallines, Advance for Occupational Therapists, King of Prussia, PA.
- Komblau, Barbara L. Job Interviews Under the ADA: Training Employers. Proceedings of the Sixth National Vocational Issues Forum. Materials Development Center, University of Wisconsin - Stout, Menomonie, WI.
- Komblau, Barbara L., and Ellexson, Melanie. (1992, Winter). What Every Rehab Professional in the U.S.A. Should Know About the ADA. [161 page manual of material that accompanies workshops by the same name] Miami, FL: ADA Consultants, Inc.
- Komblau, Barbara L., Ellexson, Melanie, and Wyrick, Joane. (1993, June). ADA Update: Providing Services to Business and Industry One Year Later. An institute presented at the American Occupational Therapy Association Annual Conference, Seattle, WA.
- Komblau, Barbara L., Ellexson, Melanie, and Wyrick, Joane. (1992, March 27). Bring Yourself Up to Speed With ADA. An institute presented at the American Occupational Therapy Association Annual Conference, Houston, TX.

- Komblau, Barbara, L., and Ellexson, Melanie, (1993, April 25-30). To Do or Not To Do - Pre-Placement Screenings Under the ADA. Presented at the Risk and Insurance Management Society's 31st Annual Conference, Orlando, FL.
- Komblau, Barbara L. (1993, March 5). Job Interviews Under the ADA: Training Employers. Sixth National Vocational Issues Forum, Virginia Beach, VA.
- Komblau, Barbara L. (1992, October 30). An ADA Primer for the Beginner Occupational Therapy Consultant. Presented at the Great Southern Occupational Therapy Conference, Destin, FL.
- Komblau, Barbara L. (1993, March 26). Sensitivity to the Needs of the Disabled. Presented as part of Training Forum 1, 1993, Americans With Disabilities Act, Dade County Chapter of the Florida Rehabilitation Association, Miami, FL.
- Komblau, Barbara L. (1993, March 10-14). ADA Provisions and Definitions, Implications for Initial Hires and Return to Work and Job Placement Issues, Functional Job Descriptions-Essential and Non-Essential Tasks. Presented as part of Applied Ergonomics: Controlling Overexertion Injuries at Work, Meeting Planners, Orlando, FL.
- Komblau, Barbara, L. (1992, November 10). Workers' Compensation and Return to Work Issues. Presented to the Hospitality Human Resource Association, Miami, FL.
- Komblau, Barbara L., & Ellexson, Melanie. (1992, October 27). Providing Employers with a Comprehensive A.D.A. Compliance Service. Presented at the Sixth Annual National Conference on Providing Health Care Services to Employers, Washington, DC.
- Komblau, Barbara L. (1992, October 22). OBRA the ADA and Issues in Design of Facilities for Older Persons. Paper presented at Design & Renovation of Innovative Environments for Older Persons, University of Wisconsin-Milwaukee, Milwaukee, WI.
- Komblau, Barbara L. (1992, October 13). What Every One of Us Must Know About the ADA. Presented to the Society of Manufacturing Engineers, South Florida Chapter, Hollywood, FL.
- Komblau, Barbara L. (1992, October 12). Your Legal Rights Under the ADA. Presented to the Young Adults Support Group of the Arthritis Foundation, South Miami, FL.
- Komblau, Barbara L. (1992, August 22). What About the ADA? A panel/paper presentation at the Florida League of Cities 1992 Annual Convention, Miami, FL.
- Komblau, Barbara L. and Ellexson, Melanie. What Every Rehab Professional In the USA Should Know About the ADA. A one-and-one-half day workshop presented at over fifteen locations around the country.
- Komblau, Barbara L. (1992, December 4). What Every Employer Should Know About the Americans With Disabilities Act (ADA). A training workshop for employers, Creative Work Center, Pensacola, FL.

- Komblau, Barbara L. (1992, November 6). The Americans With Disabilities Act. A one-day training workshop presented at the 1992 Tennessee Occupational Conference, Knoxville, TN.
- Komblau, Barbara L. (1992, October 2). The ADA: You are Here. A training workshop for employers sponsored by The Occupational Medicine Center at Cardinal Hill Rehabilitation Hospital, Lexington, KY.
- Komblau, Barbara L., Ellexson, Melanie. What Every Occupational Therapist in the USA Should Know About the ADA. A one-day workshop sponsored by the Illinois Occupational Therapy Association (March 6, 1992), Chicago, IL and the Florida Occupational Therapy Association (June 13, 1992) in Orlando, FL.
- Komblau, Barbara L., and Wyrick, Joane. (1992 - present). "Order in the Court: Learning to Testify," a one day training workshop at various medical centers across the country including Meriter Hospital in Madison, WI, Mercy Hospital in Chicago, IL, DeKalb Medical Center, Decatur, GA, and Roosevelt Warm Springs Institute of Rehabilitation, Warm Springs, GA.
- Komblau, Barbara L. "The Path to ADA Compliance." Presented at the Freedom Fair & Expo's Workshops for Understanding January 15, 1993, Miami Beach, FL, and Business Coalition For Americans With Disabilities Annual Meeting, Miami, FL February 19, 1993.
- Komblau, Barbara L. "Legal Issues: The Americans With Disabilities Act." Presented as part of Employment Issues in '92: Empowering Your Workforce, sponsored by Career Planning & Placement, Florida International University, Miami, FL.
- Komblau, Barbara L. (1992, March 26). "The ADA Made Simple for the Business Owner," Hialeah Chamber of Commerce, Hialeah, FL.
- Komblau, Barbara L. (1992, March). "The Do's and Don'ts of Job Interviews." Presented to the Business Coalition for Americans with Disabilities, Coconut Grove, FL.
- ANDERSON, REBA L., PH.D., OTR, FAOTA, DOCTORAL STUDIES COORDINATOR**
- Anderson, Reba L. (1992). Level II Fieldwork ban /Academic or Profession responsibility. Education Interest Newsletter, No 3.
- Anderson, Reba L. (1994). Level II Fieldwork: New Alternatives. Panel presentation, Florida Occupational Therapy Association, Tampa, FL.
- Anderson, Reba L. (1993). Does Continuing Education Promote Practitioner Competence? Presented at American Occupational Therapy Association's Annual Meeting, Seattle, WA.
- Anderson, Reba L. (1993). Moving Toward Community Based Practice. Presented at Canadian Association of Occupational Therapy Atlantic Joint Conference. St. John's Newfoundland.
- Anderson, Reba L., and Suze Dudley, Eds. (1992-94). Abstracts of Annual Great Southern Occupational Therapy Association, Miami, FL.

PAGE, CATHERINE G., PH.D., PT, DIRECTOR

Page, Catherine G. (1994, May 19). Practice Parameters for the Profession of Physical Therapy. Presented at SW District, FPTA, Ft. Myers, FL.

Page, Catherine G. (1994, June). Upward Career Mobility for Physical Therapist Assistants. Presented at combined Canadian Physiotherapy Association/American Physical Therapy Association meeting, Toronto, Canada.

Page, Catherine G. (1994, June) A Practice Setting Curriculum - Design for Physical Therapy Education, Presented at combined Canadian Physiotherapy Association/American Physical Therapy Association meeting, Toronto, Canada.

Co-authored a document on Chart Audit for use by PT's and third party payors Quality Improvement Committee of FPTA 1991 and 1992

"The P.A.D." The Practical Approach to Documentation, book, co-authored, 1994

Chart Audit Instruction for Physical Therapists - FPTA 1992

The Write Stuff - Risk Management-Documentation

Ft. Lauderdale - 1993

Hollywood - 1993

Risk Management - APTA

Tampa - 1992

Orlando - 1993

REVELJ, ELIZABETH O., ED.D., PT

Supplement, 1992. Model For Combining Undergraduate and Graduate Courses, Physical Therapy, 72, (6) (abs) (first author).

(1992) Prevention and identification of Physical Abuse: The Physical Therapist's Role, American Physical Therapy Association Annual Conference Proceedings, (abs) (first author)

(November 23, 1992) PTs' Observation Skills Useful in Identifying Cases of Abuse, Advance for Physical Therapists.

(November 23, 1992) And After Special Olympics?????, Newsletter On Aging and Adult Developmental Disabilities.

Where to Turn, Manual for new therapists in Florida school systems, co-authored by 5 members of Florida Alliance of School Therapists, in progress

(1992) Prevention and Identification of Physical Abuse: The Physical Therapist's Role American Physical Therapy Association Conference, Denver, CO.

(1992) Therapy Service Delivery Alternatives For Educational Environments. Workshop Presented to Therapy Staff at Easter Seal Society of Dade County, Miami, FL

STERN, DEBRA F., M.S.M., P.T., ASSISTANT PROFESSOR

Co-authored a document on Chart Audit for use by PT's and third party payors

Quality Improvement Committee of FPTA 1991 and 1992

"The P.A.D." The Practical Approach to Documentation, book, co-authored, 1994

Chart Audit Instruction for Physical Therapists - FPTA 1992

Documentation - University of Miami Physical Therapy - 1992, 1993, 1994
Florida International University Physical Therapy - 1992, 1993, 1994

Ultrasound for Occupational Therapists - 1992, 1993, 1994, Certification

The Write Stuff - risk Management-Documentation N. Carolina - 1992
Ft. Lauderdale - 1993
Hollywood - 1993

Risk Management - APTA Tampa - 1992
N. Carolina - 1993
Orlando - 1993

COLLEGE OF PHARMACY

ABSTRACTS AND POSTERS

Chattaraj, S.C., Pal, A.K., Das, S.K., Ghosal, S.K. And Gupta, B.K., Evaluation of Polysiloxane Resin Derivative as Micropelleting Material, Symposium on Polymer Delivery Systems

Pavlakovic, G., Rathinavelu, A. and Isom, G.E. (1992). Differential induction of c-fos protein in the CNS following acute exposure to KCN, Toxicologist, 12.

Pavlakovic, G., Rathinavelu, A., Sun, P-W. and Isom, G.E. (1992). Cyanide Induces Changes in the Fos Protein Levels in the CNS, Pharmacologist, 34, 241.

Sun, P-W., Rathinavelu, A., Pavlakovic, G. and Isom, G.E. (1992). Cyanide Inhibits Nitric Oxide Mediated Increases in cGMP in Rat Cerebellar Slices, Pharmacologist, 34, 240.

Yang, C-W., Rathinavelu, A. and Isom, G.E. (1992). Activation of Phospholipase A2 by KCN in PC12 cells, Pharmacologist, 34, 239.

Rathinavelu, A., Pavlakovic, G., Sun, P-W. and Isom, G.E. (1992). Induction of PKC by ANP Receptor Activation and Involvement of G Proteins in Rat Brain Slices, Society for Neuroscience Abstracts, 18, 609.3.

- Oh, T., Ben-Joseph, R., Segal, R. and Russell (1992, December 6-10). Evaluation of a Drug-Use Evaluation Data Collection Instrument, 27th Annual ASHP Midyear Clinical Meeting, Orlando, FL.
- Sipes, I.G., Hooser, S.B., Rosengren, R.J., Hill, D.A. and Earnest, D.E. (1992). Interactions between vitamin A and hepatotoxic chemicals., *Proceed. IV European ISSX, Meeting.*
- Rosengren, R.J., Wang, X., Kochevar, J. and Safe, S. (1992). Characterization of the aryl hydrocarbon (Ah) receptor in human breast cancer primary tumors and transformed cell lines., *Toxicologist*, **12**, 32.
- Arrellano, L., Morrison, V., Rosengren, R.J., and Safe, S. (1992). Induction of CYP1A1 gene transcription by TCDD in MDA-MB-231 human breast cancer cells., *Toxicologist*, **12**, 137.
- Harper, N., Rosengren, R.J. and Safe, S. (1992). Effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin on estrogen induced progesterone receptor levels in MCF-7 human breast cancer cells., *Toxicologist*, **12**, 138.
- Bender, A.S., Rivera, I.V. and Norenberg, M.D. (1992). Tumor necrosis factor- α induces astrocyte swelling., *Trans. Amer. Soc. Neurochem.*, **23**, 113.
- Isaaks, R.E., Bender, A.S. And Norenberg, M.d. (1992). Mo-Inositol uptake and cell volume regulation in astrocytes., *Trans. Amer. Soc. Neurochem.*, **23**, 108.
- Bender, a.s. And Norenberg, M.d. (1992). Involvement of protein phosphatase in astrocyte volume regulation., *Soc. Neurosci. Abstr.*, **18**, 786.
- Isaaks, R.e., Bender, a.s., Bruce, J.h. And Norenberg, M.d. (1992). Myo-Inositol levels during cell volume in cultured astrocytes., *Soc. Neurosci. Abstr.*, **18**, 786.
- Dombro, R.s., Bender, a.s., Padron, a., Hutson, D.g. And Norenberg, M.d. (1992). The effect of glutamate receptor antagonists and an uptake blocker on glycogen content and cell volume in cultured astrocytes., *Soc. Neurosci. Abstr.*, **18**, 784.
- Malave, a. And Isom, G.e. (1992). Confocal Microscopy Imaging of Cyanide-induced Mobilization of Intracellular Calcium., *Pharmacologist*, **34** (3), 178.
- Rosengren, R.j., Zheny, W., Sipes, I.g. (1993). Characterication of retinol's protection against CCl₄-induced hepatotoxicity in the male swiss webster mouse., *Proceedings of the 5th North American ISSX meeting*, **4**, 121.
- Badger, D., 0. Rosengren, R.j., Sipes, I.g. (Oct. 16, 1993). One day of vitamin A pretreatment potentiates carbon tetrachloride-induced hepatotoxicity in the rat., *Mountain West Sot Meeting.*
- Oh, T. (1993 Editorial). Professionalism and Chiropractic., *J. Clinical Chiropractic.*, **2**, 8.
- Oh, T. (1993 Editorial). How to become a better writer., *J. Clinical Chiropractic*, **3**, 9.

- Das, S.K. (1993) Effect of Formulation Variables on Drug Loading and Surface Chemistry of Poly (isobutylcyanoacrylate) Nanoparticles, 8th Annual Meeting of American Association of Pharmaceutical Scientists. Pharma.Research, 10, S-188.
- Das, S.K. (1993). Characterization of Nanoparticles for Ocular Drug Delivery, Proceed. 1st Int. Conf. on Pharm. Sci. and Tech. Chicago.
- Bender, A.S. and Norenberg M.D. (1993). Ca²⁺ dependence of hypoosmotically-stimulated K⁺ eefflux in astrocytes., Trans. Amer. Soc. Neurochem., 24, 122.
- Isaaks, R.E. Bender, A.S. and Norenberg, M.D. (1993). Growth factors stimulate uptake of myo-inositol in astrocytes., Trans. Amer. Soc. Neurochem., 24, 201.
- Isaaks, R.E., Bender, A.S. Bruce, J.H. and Norenberg, M.D. (1993). Intraction of ammonia-induced toxicity and MSO on myo-inositol uptake in astrocytes. Soc. Neurosci. Abstr., 19, 689.
- Bender, A.S. and Norenberg, M.D. (1993). Effects of ammonia and L-methionine-DL-sulfoximine (MSO) on K⁺ and Cl⁻ fluxes in cultured astrocytes, Soc. Neurosci. Abstr., 19., 688.
- Norenberg, M.D. and Bender, A.S. (1993). Astrocyte swelling in liver failure: role of glutamine and benzodiazepines. , Brain Edema 1993. Abstract Book, 21.
- Bender, A.S. and Norenberg, M.D. (1993). Effect of temperature on swelling in astrocytes in primary culture, Brain Edema 1993. Abstract Book, 26.
- Bender, A.S. and Norenberg, M.D. (1993). Lactic acidosis inhibits L-glutamate transport in cultured astrocytes. , Abstr. J Neurochem., 61, S47C.
- Norenberg, M.D., Isaaks, R.E., Dombro, R.S. and Bender, A.S. (1993). Prevention of ammonia-induced toxicity in astrocytes by L-methionine-DL-sulfoximine, Hepato-Gastroenterology, 40, 67.
- Bender, A.S. and Norenberg, M.D. (1993). MK-801 prevents glutamate induced astrocyte swelling through inhibition of K⁺ fluxes, Eleventh Anual Neurotrauma Symposium. Poster Abstracts., 10.
- Aceves-Blumenthal, C., Polo, I., Triplett, J. (1994). Integrated Clinical Geriatric Pharmacy Clerkship in Long Term, Acute and Ambulatory Care, APhA Annual Meeting Poster Presentation.
- Rey, J. (May 31-June 3, 1994). An Observational Evaluation of Paroxetine in a VA Population, 34th Annual Meeting of the National Institute of Mental Health Presentation.
- Deziel-Evans, L., Swigart, S. (1994, July). Multimedia-Based Computer-Assisted Instruction: Development and Evaluation of Therapeutics Case Studies , 95th Annual AACP Meeting Presentation.

- Ameson, D.L. (1994, July). Postgraduate Doctor of Pharmacy Program , 95th Annual AACP Meeting in Albuquerque Poster Presentation.
- Rosengren, R.J., Sipes, I.G. (1994). Retinol pretreatment results in protection against CCl₄-induced hepatotoxicity in the male swiss webster mouse , Toxicologist, 14, 374.
- Rathinavelu, A., Hafner, R.J. and Malave, A. (1994, May). Potassium Cyanide (KCN) induced changes in the cytosolic and Mitochondrial Matrix Ca²⁺ Levels, ASBMB, LB 63, 18.
- Rathinavelu, P., Rathinavelu, A., Malave, A., Hurst, J., and Roberson, C. (1994, May). Expression of MDM2 Protein (P90) in Mammary Xenograft line GI-101, and in the Metastatic sites of an athymic nude mice carrying the Xenograft, ASBMB, LB 17, 10.
- Das, S.K. (1994). Delivery Systems for Single-Step Immunization, Proceedings of the Second International Conference on Pharmacological Science and Technology, East Brunswick, NJ.
- Isaacks, R.E., Bender, A.S., Rathinavelu, A. and Norenberg, M.D. (1994). Interaction of Glutamate, Lactate and Potassium on myo-Inositol uptake in Astrocytes, Twenty-fourth Annual Meeting of the Society for Neuroscience, Miami, Florida.
- Isaacks, R.E., Bender, A.S., and Norenberg, M.D. (1994). Myo-Inositol transport in rat astrocyte primary cultures. , Trans. Amer. Soc. Neurochem., 25, 239.
- Bender, A.S. and Norenberg, M.D. (1994). Effect of ammonia on sodium transport in cultured astrocytes. , Trans. Amer. Soc. Neurochem., 25, 238.
- Norenberg, M.D., Itzhak, Y. and Bender, A.S. (1994). Astrocytic-neuronal interactions in hepatic encephalopathy, Physiological & Pathological Aspects of Neuron-Glia Interaction Satellite Symposium to 17th ENA Meeting, Prague.
- Isaaks, R.E., Bender, A.S., Rathinavelu, A. and Norenberg, M.D. (1994). Interaction of glutamate, lactate, and potassium on myoinositol uptake in astrocytes, Soc. Neurosci. Abstr. 20, 1994 (In Press).
- Dombro, R.S., Bender, A.S. and Norenberg, M.D., Effects of ammonia and benzodiazepines on adenosine uptake in astrocytes, Soc. Neurosci. Abstr. 20, 1994 (In Press).
- Bender, A.S. and Norenberg, M.D., Ammonia enhances inhibitory effects of benzodiazepines and neurosteroids on K⁺ influx in astrocytes, Soc. Neurosci. Abstr. 20, 1994 (In Press).

PUBLICATIONS

- Hardigan, W.D. (1992, January). Pharmacy is Alive and Well in South Florida, Florida Pharmacy Today.

- Das, S.K., Tucker, I.G., and Davies, N.M. (1992). A Gamma Scintigraphic Evaluation of the Effect of Molecular Weight of Poly(isobutylcyanoacrylate) Nanoparticles on the Precorneal Residence in Rabbit, Proceed. Intern. Symp. Control. Rel. Bioact. Mater., 19, 395-396.
- Chattaraj, S.C., Das, S.K., Ghosal, S.K., and Gupta, B.K. (1992). Drug Release for Fish Egg Cells, Proceed. Intern. Symp. Control. Rel. Bioact. Mater., 19, 299-300.
- Jaisri, G., Rathinavelu, A. and Isom, G.E. (1992). Interaction of Cadmium with Atrial Natriuretic Peptide Receptors: Implications for Toxicity, Toxicology, 75, 133-143.
- Triplett, J. Oh, T. and Aceves-Blumenthal, C. (1992). A Modular Pharmacy Practice Laboratory Course Integrating Role-Playing Scenerios with community and hospital practice, American Journal of Pharmacy Education, 56, 124-131.
- Oh, T., Ajileye, I., Hitchen, K., Macintyre, S. and Jarrell, C. (1992). Criteria for Perioperative Antimicrobial Prophylaxis, Newsletter Exchange P & T, 17, p. 513
- Oh, T., Ajileye, I., Hitchen, K., Macintyre, S. and Jarrell, C. (1992). Antibiotic Questions and Answers, Newsletter Exchange P & T, 17, p. 517.
- Rosengren, R.J., Safe, S. and Bunce, N. (1992). Kinetics of the association of several polychlorinated dibenzofuran and dibenzo-p-dioxin congeners with the cytosolic Ah receptor of the Wistar rat, Chemical Research in Toxicology, 5, 376-382.
- Wang, X., Rosengren, R.J., Morrison, V. and Safe, S. (1992). Characterization of the human Ah receptor, Chemosphere, 25, 997-1000.
- Wang, X., Rosengren, R.J., Morrison, V., Santostefano, M. and Safe, S. (1992). Characterization of the aryl hydrocarbon receptor in the human C-4II cervical squamous carcinoma cell line, Biochemical Pharmacology, 43, 1635-1642.
- Merchant, M., Wang, X., Kamps, C., Rosengren, R.J, Morrison, V., and Safe, S. (1992). Mechanism of Benzo[a]pyrene-induced CYP1A1 gene expression in mouse Hepa 1c1c7 cells: Role of the nuclear 6S and 4S proteins., Arch. Biochem. Bioph., 292, 250-257.
- Bender, A.S., Neary, J.T., Blicharska, J., Norenberg, L.O.B. and Norenberg, M.D. (1992). Role of calmodulin and protein kinase C in astrocytic cell volume regulation, J. Neurochem., 58, 1874-1882.
- Bender, A.S., Neary, J.T. and Norenberg, M.D. (1992). Involvement of second messengers and protein phosphorylation in astrocyte swelling, Can. J. Physiol. Pharmacol., 70, S362-S366.
- Malave, A. and Yim, G.K.W. (1992). Effects of Chronic Morphine on Biliary Tract Responses to Cholecystokinin-Octapeptide in Male Guinea Pigs, Life Science, 51, 513-517.
- Ghaly, E.S., Hernandez, Jli., Malave, A. and Marti, A. (1992). Ethylcellulose as a Carrier for Controlled-Release Acetaminophen Tablets, PRHSJ, 11(3), 159-162.

- Aceves-Blumenthal, C. (1992). Barriers to a Career in Pharmacy: An Hispanic Perspective, Journal of Pharmaceutical Teaching, Submitted for publication: Feb. 1992.
- Aceves-Blumenthal, C. (1993, Winter). Factors Contributing to Volunteer Practitioner-Faculty Vitality, American Journal Pharmaceutical Education, 57.
- Colosimo, R. (1993, January). HMG-CoA Reductase Inhibitors, PNT Journal.
- Barclay, P., Kummerle, D.R., Nestor, A., Rey, J.A. (1993, September). Pharmaceutical services, at a medical site after Hurricane Andrew, American Journal of Hospital Pharmacy, 50, 1896-1898.
- Segal, R. Russell, W., Oh, T., Ben-Joseph, R. (1993, September). Use of i.v. cimetidine, ranitidine, and famotidine in 40 hospitals, American Journal of Hospital Pharmacy, 50, 1896-1898.
- Malave, A., Kuta, C. and Yim, G.K.W. (1993). Enhanced Lithogenicity of Bile Following Chronic Morphine Administration to Female Guinea Pigs , Life Science, 52, 701-707.
- Malave, A. and Yim, G.K.W. (1993). Effects of Chronic Morphine on Biliary Tract Responses to Cholecystokinin-Octapeptide in Female Guinea Pigs , Life Science, 52, 695-700.
- Rathinavelu, A. and Isom, G.E. (1993). Lysosomal Delivery of ANP Receptors Following Internalization in PC12 Cells , Life Science, 53, 1007-1014.
- Bender, A.S., Neary, J.T. and Norenberg, M.D. (1993). Role of phosphoinositide hydrolysis in astrocyte volume regulation , Journal of Neurochemistry, 61, 1506-1514.
- Beckwith, C., Flaharty, K.K., Cheung, A.K., Beatty, P.G. (1993). Fanconi's Syndrome Due to Ifosfamide , Bone Marrow Transplantation, 11, 71-73.
- Neary, J.T., Fu, Q., Bender, A.S. and Norenberg, M.D. (1993). Effect of external acidosis on basal and ATP-evoked calcium influx in cultured astrocytes, Brain Res., 604, 211-216.
- Ghaly, E.S., Hernandez, J.I., Malave, A. and Marti, A. (1993). Physicochemical Characterization of Acetaminophen-Ethylcellulose Solid Dispersion, PRHSL, 12, (4), 273-276.
- Clavijo, I.V. (1994, May). Update on Childhood Immunizations, Annals of Pharmacotherapy, 28, 633-635.
- Colosimo, R. (1994, June). ICU Drugs, Ventrator Synergy.
- Palmgren, M.C. (1994, June). The International Student Exchange Program Needs Help, Florida Pharmacy Today, 58, (6), 21.
- Aceves-Blumenthal, C., Polo, I., Triplett, J.W. (1994, Summer). Integrated Clinical Geriatric Pharmacy Clerkship in Long Term Acute and Ambulatory Care, American Journal of Pharmaceutical Education, 58.

- Graham, K.K. (1994). Pharmacologic Evaluation of Megestrol Acetate Oral Suspension in Cachectic AIDS Patients. Journal of Acquired Immune Deficiency Syndrome, **7**, 580-586.
- Rangaiah, K.V., Chattaraj, S.C. and Das, S.K. (1994). Effect of Process Variables and Excipients on Tableting Parameters of Norfloxacin tablets, Drug Dev. Ind. Pharm., **20**, (13), 2175-2182.
- Segal, R., Oh, T., Ben-Joseph, R., Russell, W.L. (1994). A pharmaco-economic analysis of IV H₂-receptor antagonist use in 40 hospitals, Hosp Formul, **29**, 379-91.
- Hernandez, J.I., Ghaly, E.S., Malave, A. and Marti, A. (1994). Controlled-Release Matrix of Acetaminophen-Ethylcellulose solid dispersion, Drug Dev. Ind. Pharm., **20**, (7), 1253-1265.
- Yang, C-W, Rathinavelu, A., Borowitz, J.L. and Isom, G.E. (1994). Activation of Calcium and pH dependent Phospholipase A₂ by Cyanide in Neuronal Model, Toxicol. Appl. Pharmacol., **124**, 262-267.
- Rathinavelu, A. Pavlakovic, G., Sun, P-W. and Isom, G.E., Potassium Cyanide Induces Translocation of PKC to the plasma membrane through NMDA Receptors in Rat Brain Slices, Toxicol. Appl. Pharmacol. (In Press)
- Paklokovic, G., Rathinavelu, A. and Isom, G.E., (In Press). MK-801 Prevents Cyanide-Induced Changes of FOS Levels in Rat Brain, Toxicol. Appl. Pharmacol.
- Borowitz, J.L., Rathinavelu, A., Kanthasamy, A. and Isom, G.E., (In Press) Accumulation of Labeled Cyanide in Neuronal Tissue, Toxicol. Appl. Pharmacol.
- Flaharty, K.K., Flamenbaum, W., Caro, J., Bennett, D., Whalen, J.J., Vlasses, P.H. (In Press). Hematopoietic Effects of Recombinant Human Erythropoietin in Healthy Subjects Undergoing Phlebotomy, Pharmacotherapy
- Rosengren, R.J., Sauer, J-M., Hooser, S.B. and Sipes, I.G. (In Press). Interactions between retinol and various hepatotoxicants in the Swiss Webster mouse, Fundamental and Applied Toxicology.
- Hooser, S.B., Rosengren, R.J., Hill, D.A., Mobley, S. and Sipes, I.G. (In Press). Vitamin A modulation of xenobiotic induced liver injury in rodents, Environ. Health Perspectives.
- Issaaks, R.E., Bender, A.S., Kim, C.Y., Prieto, N.M. and Norenberg, M.D. (1994). Osmotic regulation of myo-inositol uptake in primary astrocyte cultures, Neurochem. Res., **19**, 331-338.
- Itzhak, Y., Bender, A.S. and Norenberg, M.D. (1994). Effect of hypoosmotic stress on peripheral-type benzodiazepine receptors in cultured astrocytes, Brain Res., **644**, 221-225.
- Bender, A.S., Mantelle, L. and Norenberg, M.D. (1994). Stimulation of calcium uptake in cultured astrocytes by hypoosmotic stress. Effect of cyclic AMP, Brain Res., **645**, 27-35.
- Bender, A.S., and Norenberg, M.D. (1994). Calcium dependence of hypoosmotically induced potassium release in cultured astrocytes, J. Neurosci., **14**, 4237-4243.

Bender, A.S., Woodbury, D.M. and White, H.S. (In Press). Ionic dependence of adenosine uptake into cultured astrocytes. , Brain Res.

Albrecht, J., Bender, A.S. and Norenberg, M.D. (In Press). Ammonia stimulates the release of taurine from astrocytes in primary culture, Brain Res.

PUBLISHED PAPERS

Hardigan, W.D. (1992, January). Pharmacy is Alive and Well in South Florida, Florida Pharmacy Today.

Aceves-Blumenthal, C. (1992, February). Barriers to a Career in Pharmacy: An Hispanic Perspective, J Pharm Teaching.

Aceves-Blumenthal, C. (1993, Winter). Factors Contributing to Volunteer Practitioner-Faculty Vitality, Am J Pharmaceutical Education, 57.

Barclay, L.P., Kummerle, D.R., Nestor, A., Rey, J.A. (1993, September). Pharmaceutical services at a medical site after Hurricane Andrew, Am J Hospital Pharmacy, 50, 1896-1898.

Clavijo, G.A., Clavijo, I.V. (1994, January 1) Amlodipine: A New Calcium Antagonist, Am J Hospital Pharmacy, 51, 59-68.

Swigart, S.A. (1994, January). Development of Secondary Sex Characteristics in Male Rats after Fetal and Perinatal Cimetidine Exposure, Journal of Pharmaceutical Sciences, 83, (1).

Clajivo, I.V. (1994, May). Update on Childhood Immunizations, Annals of Pharmacotherapy, 28, 633-635.

Aceves-Blumenthal, C., Polo, I., Triplett, J.W. (1994, Summer). Integrated Clinical Geriatric Pharmacy Clerkship in Long Term Acute and Ambulatory Care, American Journal of Pharmaceutical Education, 58.

Graham, K.K. (1994). Pharmacologic Evaluation of Megestrol Acetate Oral Suspension in Cachectic AIDS Patients, Journal of Acquired Immune Deficiency Syndrome, 7, 580-586.

ABSTRACTS & POSTERS

Aceves-Blumenthal, C., Polo, I., Triplett, J. (1994). Integrated Clinical Geriatric Pharmacy Clerkship in Long Term, Acute and Ambulatory Care. Poster Presentation at A.Ph.A. Annual Meeting.

Rey, J. (1994, May31-June3). An Observational Evaluation of Paroxetine in a VA Population. Paper presented at the 34th Annual Meeting of the National Institute of Mental Health Presentation.

Deziel-Evans, L., Swigart, S. (1994, July). Multimedia-Based Computer-Assisted Instruction: Development and Evaluation of Therapeutics Case Studies. Paper presented at the 95th Annual AACP Meeting Presentation.

Arenson, D.L. (1994, July). Postgraduate Doctor of Pharmacy Program. Poster presented at the 95th Annual AACP Meeting in Albuquerque.

RODOWSKAS, CHRISTOPHER A., JR., PH.D.

PUBLISHED PAPERS 1992 TO DATE

Rodowskas, C.A., Jr., Whitney, S.N. (1992). Introspection: Let Your Voice Be Heard! Employee Views on Pharmacy Issues, Journal Michigan Pharmacist Association, 30, (1).

Rodowskas, C.A., Jr., Whitney, S.N. (1992). The Significance of Consumer Confidence, Pharmacy Business, 3, (1)

(1992). Introspection: What Are Pharmacist Salary Expectations, Journal Michigan Pharmacist, 30, (5).

(1992). The Economics of High Cost/High Tech Drugs, Pharmacy Business, 3, (4)

(1993). Health Reform: Patients and Politics, Pharmacy Business, 4, (2).

(1993). Health Reform: The Greatest Concerns, Pharmacy Business, 4, (4).

(1993). Health Reform Simplified, Pharmacy Business, 4, (4).

Merck-MEDCO: The Model for the Future?, Rodowskas, C.A., Jr.; Pharmacy Business, 5, 1, 1994.

The Reprofessionalization of Pharmacy, The Restructuring of the Pharmaceutical Industry ; Pharmacy Business, 5, 1, 1994.

(Scheduled for September 1994). Maintaining Independence in the Era of Alliances, Pharmacy Times.

Health Reform May Mean Retrain of Retire, Drug Store News, invited article.

CONTINUING SERIES

Pharmacy Business, a monthly article, Pharmacy Times, beginning September 1994.

Pharmacy in a New Age (tentative title), a quarterly feature section (8-12 pages), in American Pharmacy, The Official Publication of the American Pharmaceutical Association. Beginning January, 1995.

**JAMES M. FARQUHAR CENTER FOR
UNDERGRADUATE STUDIES**

Section I

DESCRIPTION OF PROGRAMS AND SERVICES

The James M. Farquhar Center for Undergraduate Studies offers twenty majors in undergraduate degree programs and one graduate degree program. These programs are clustered in five academic departments: behavioral sciences; business and administrative studies; education; liberal arts; and mathematics, science and technology. These majors are offered on- and off-campus, day and evening and to traditional and non-traditional students; though not all programs are offered to all constituencies. The format of degree offerings varies from a full B.S. or B.A. program, heavily emphasizing a general education core and related studies primarily designed for recent high school graduates, to degree completion programs for working adults who have up to 90 transferrable credits from another institution.

The Farquhar Center works very closely with the Center for Computer and Information Sciences to offer five of these majors. These majors, jointly administered and taught, are offered to day and evening populations. The Farquhar Center and the Oceanographic Center sponsor a joint science program offering undergraduate majors in the sciences and oceanography. This relationship has been extended to include the Health Professions Division in order to prepare students who wish to enter health-related careers. Articulation agreements for automatic acceptance of qualified undergraduates exist between the Farquhar Center and graduate programs in education, business, computer science, and speech and language pathology. More limited agreements exist in psychology, osteopathy, and optometry.

The Center offers many specialty programs including legal assistant studies, substance abuse studies, women's studies, Latin American and Caribbean studies, and a number of options in the business curriculum. The legal assistant and substance abuse programs may be taken on a non-credit basis. Over 200 senior citizens are enrolled in the Center's Institute for Retired Professionals. This popular program celebrated its seventeenth anniversary in 1994.

Section II

GOALS

- Goal 1.** Maintain a clear statement of mission, and provide the resources and an effective organizational structure to support it.
- Goal 2.** Make education accessible to all populations.
- Goal 3.** Develop and maintain a cooperative community and an environment which support self-esteem and mutual respect.
- Goal 4.** Provide meaningful college-level curricula so that graduates have a fulfilling education and the skills and competencies necessary for a successful and meaningful professional, public and private life.
- Goal 5.** Select and develop faculty and staff who have a commitment to students, teaching, and the University.
- Goal 6.** Be responsive to student needs and goals through appropriate administration.
- Goal 7.** Enrich administration, teaching, and learning resources through increased use of technology.
- Goal 8.** Develop new educational designs.
- Goal 9.** Recognize and provide valid experiential learning.

Section III

OUTCOME MEASURES, PROCEDURES, AND ATTAINMENT STATUS

Goal 1. Maintain a clear statement of mission, and provide the resources and an effective organizational structure to support it.

Outcome Measure A: Construct an evaluation system using a variety of sources and methods that will provide routinely scheduled and formatted information about the successes, failures, and benefits of current programs, students, faculty, and administrators in order to satisfy external certification purposes, achieve improvement of faculty, curriculum, and administration, and will identify problems, discriminate between choices, and reallocate resources to solve those problems.

Procedure: Continue the involvement of both administration and faculty in the planning and evaluation process.

Attainment Status: The Faculty of the Business and Administrative Studies Division has reviewed the curriculum requirements for all specialty certificates. In addition, one faculty member will serve as the curriculum coordinator in the department to ensure that faculty review all curriculum on a regular basis.

The Math Science and Technology Department has participated with the Education Department in its recertification of their programs. The director and faculty have an ongoing dialog with the administration of the Center for Advancement of Education to articulate programs between the two centers.

This year faculty representing each department in the Farquhar Center are participating in the work of the Institutional Effectiveness Committee.

In the Education Department, results from the various types of evaluation measures (performance of students on FTCE, success rate of Nova Southeastern University graduates in the Professional Orientation Program, and results of the University's Teacher Education Program Graduate surveys) are reviewed/discussed in meetings of the standing Curriculum Committee, at departmental meetings, and at the annual conferences of the Teacher Education Program (TEP). The Curriculum Committee, along with the help of departmental meetings, develops a plan of action for any programmatic weaknesses which the data from the various sources may suggest. Once a plan of action is developed, it is implemented by the TEP and presented at the annual conference for discussion and recommendations. Results of the College Course Evaluation Form are reviewed by the Director of the TEP to determine if the performance of the course instructor is adequate and the results are utilized in making recommendations to the University Faculty Rank/Promotions Committee, or for continued employment.

Outcome Measure B: To obtain state of Florida program approval for the education program.

Procedure: The Education Department will complete a self study and submit all required materials to the Florida Department of Education in preparation for program approval visitation in April 1994.

Attainment Status: The Education Department completed a self-study and submitted all required materials to the Florida Department of Education for program approval in April 1994. Nova Southeastern University met all State Standards, and all programs in education have full approval.

Outcome Measure C: Allocate and reallocate resources where needed and desired.

Procedure: Continual administrative review of assessment measures.

Attainment Status: This year, for the first time, the undergraduate center allocated \$10,000 to the Faculty Development Committee to fund development needs of the faculty. Additional funds were allocated to support the rapid expansion of the Education Program in the Bahamas. Further, as a result of a review of personnel needs in the marketing area, a decision was made to hire two marketing people rather than an assistant dean. Additional funds were allocated to support the SCORE Program monthly educational sessions.

Goal 2. Make education accessible to all populations.

Outcome Measure A: To reach out to specific populations including minorities, community college graduates, foreign students, paraprofessionals, and other career ladder seekers.

Procedure: Offer different programs of study targeted to different populations.

Attainment Status: The Business and Administrative Studies Division has begun a new Skills Program designed to provide students with introductory college level skills. Ten clusters of students, at six different corporate locations, have begun this program. Students who successfully complete this program are eligible to apply for admission into the BPM program.

This year the Liberal Arts Department (hereafter, the LAD) offered the Legal Studies major in the Career Division, thus opening that major to the working adult student population. The LAD continues to offer the Master of Arts in Liberal Studies (M.A.L.S.) Degree Program on-campus. The LAD also developed and is in the process of marketing the M.A.L.S. OnLine Program. This program, which uses the humanities and various on-line methods (e.g., Internet) to investigate the impact of information-based technologies on human life, is open to qualified students nationwide on-line and includes mandatory on-campus institutes. The LAD continued to offer specialties in Women's Studies and Latin American and Caribbean Studies, the latter with a field study component. These programs have attracted students to Nova Southeastern University who have interests in these areas.

Procedure: Develop off-campus Bachelor of Professional Management (BPM) and education sites in cooperation with community colleges.

Attainment Status: The Business and Administrative Studies Division has developed articulation agreements with private community colleges throughout the state of Florida. Following these agreements, three new BPM clusters have been developed.

Procedure: Continue the practice of making education accessible to paraprofessionals in the public school systems throughout Florida.

Attainment Status: The Education Department continues to recruit in the public school systems throughout the State. A new education site is being developed in Bonita Springs.

Procedure: Offer the BPM program to employees of corporations located throughout Florida. Expand the BPM program to service other countries.

Attainment Status: The Business and Administrative Studies Division has started BPM clusters at eleven different corporate sites. In addition, new clusters have begun in Nassau, Bahamas; Freeport, Bahamas; and Ochos Rios, Jamaica.

Procedure: Develop a program to reach potential Career Development students through the work place.

Attainment Status: Nine major employers were visited by admission staff members to discuss their present and future training needs and to review the educational needs of their employees. A joint program between the College Board and Nova Southeastern University that encourages employers to educate their employees about CLEP testing opportunities was also presented. Since the University is the only testing center in Broward County which allows non-students to test, it is another means of bringing people to the University campus to explore their educational options. In addition to visiting the companies to provide this information, a half-day workshop was held on-campus with six major employers to present additional information on CLEP as well as programs and services provided to adult working students at the University.

A database of over 330 human resource and personnel offices for employers in the tri-county areas was developed and put into a useable format to do mail merges to market career development and BS/MBA programs. Three separate mailings have been completed this year to disseminate new career development posters, letters, and information brochures. This puts Nova Southeastern University's name and information into the hands of thousands of potential students employed in corporations, small businesses, and government. Some employers are placing notices on e-mail for their employees in response to information sent to them concerning upcoming programs.

Goal 3. Develop and maintain a cooperative community and an environment which support self-esteem and mutual respect.

Outcome Measure A: To provide opportunities for students to participate in community activities, both academic and co-curricular.

Procedure: The Student Life Program will include opportunities for community service, intellectual development, and professional growth.

Attainment Status: The Student Life program includes 31 student organizations, a traditional Greek system of six social fraternities and sororities, and a recreational sports program consisting of sixteen intramural sports. Eighty-six percent of all undergraduate day students participated in at least one Student Life sponsored program during the 1993-94 academic year. An increased emphasis has been placed in meeting the needs of international students with the hiring of a Coordinator of International Student Affairs for the 1994-95 academic year. Additional emphasis was placed on student volunteer activities under the guidance of a Coordinator of Volunteer Services.

Outcome Measure B: Design new strategies to educate the public about Nova Southeastern University and its programs, and to develop opportunities to extend the resources of the University into the local community through collaborative projects.

Procedure: Host conferences for Broward and Dade County students, teachers, and guidance counselors.

Attainment Status: During 1993-94, over 1500 Broward, Dade and Palm Beach County high school students attended 15 conferences on the University campus. These conferences included:

- Five Campus visitation days
- Two Open houses (Saturdays)
- Four Career Exploration days
- Ambassador's Enterprise Program
- Broward County Academy of Finance
- Broward Leader's Youth Division
- Broward Leader's Conference

In addition, over 100 guidance counselors and guidance directors attended workshops on-campus.

Goal 4. Provide meaningful college-level curricula so that graduates have a fulfilling education and the skills and competencies necessary for a successful and meaningful professional, public, and private life.

Outcome Measure A: Provide developmental support for students who are academically deficient.

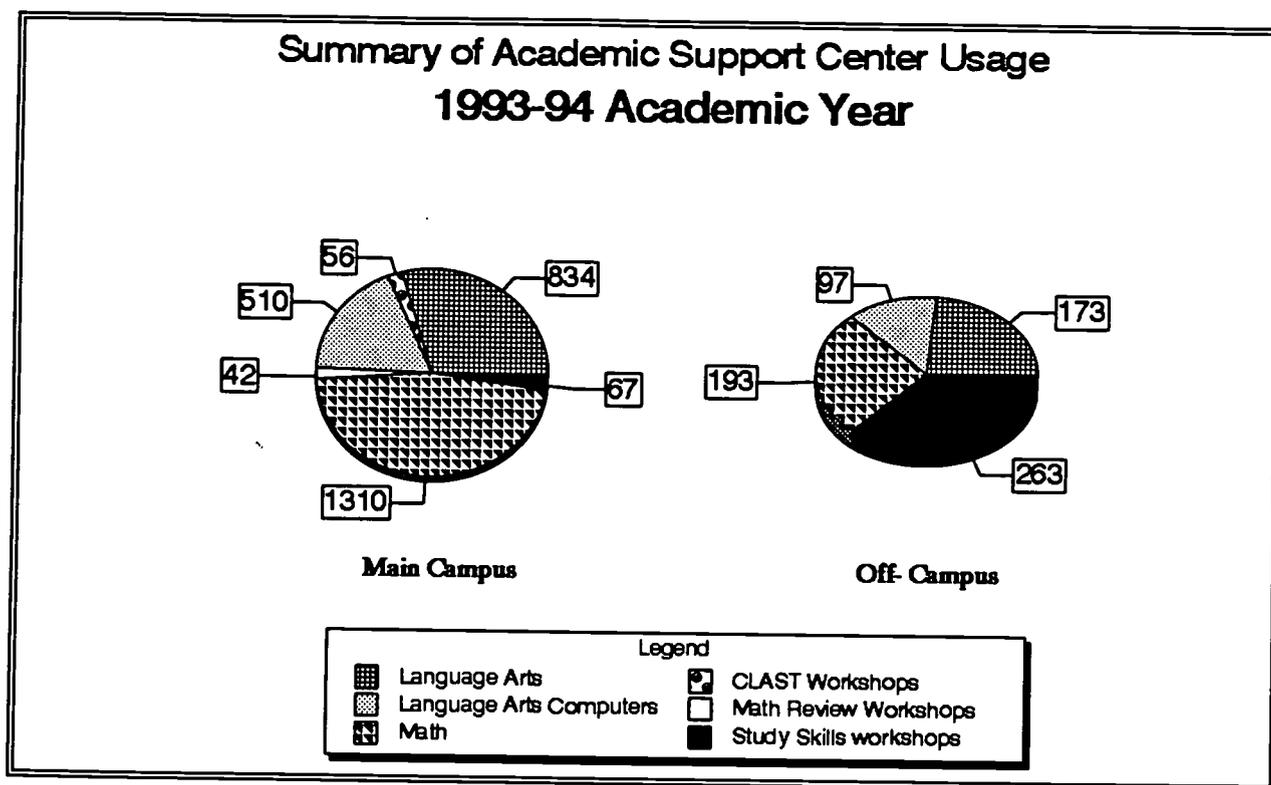
Procedure: Provide tutoring services to all students.

Attainment Status: The Academic Support Centers, located on the main campus and at the Dade, Orlando, and Tampa education sites, offered tutorial sessions to Nova Southeastern University undergraduate and graduate students in the following areas: reading, English skills, writing, English pronunciation, study skills, mathematics, accounting, economics, business,

quantitative methods, computer literacy, and CLAST, SAT/ACT preparation. Tutorial sessions included individual student and tutor sessions, as well as hour-long workshops. Additionally, resource materials such as videos, computer assisted instructional programs, books, and Center-prepared booklets and pamphlets were available for student use in the Centers and as check-out materials.

Language Arts and mathematics tutors were also available at education sites in Ft. Pierce, Ocala, Tallahassee, and West Palm Beach. These tutors worked primarily with students preparing for the CLAST and SAT/ACT examinations. Additionally, mathematics tutors held tutorial sessions at the six BPM sites throughout Dade County.

Student usage of Center services was tabulated by individual student contacts. Tutor/ student contacts were recorded each semester for every half-hour math/business session and hour-long language arts tutoring sessions. A summary of student usage of the Academic Support Centers is shown in the following chart:



Outcome Measure B: To maintain a well-rounded, integrated curriculum that produces professionals equipped to contribute to the society of the 21st Century.

Procedure: Review curriculum and make revisions when necessary.

Attainment Status: The Business and Administrative Studies Division has developed new courses in Total Quality Management and Managing Cultural Diversity.

The general education mathematics sequence has been revised to include an additional course for underprepared students and additional courses at the upper level for science majors.

Joint program agreements have been developed with the Health Professions Division. A new major in Mathematical Sciences will be offered in the fall of 1994.

A course in Critical Thinking, which develops skills that enhance students' performance on the LSAT exam and in law school, is now being offered in both the Liberal and Professional Studies and Career Development Programs. LAD faculty offered exciting courses of general interest to attract students to the University campus and to allow alternative coursework in history, legal studies, literature, and other areas. These courses include Irish Studies; Arthurian Legends; Contemporary Latin American Fiction; Images of the City; American Literature; World Literature; African-American Literature; America: Dawn of the Atomic Age; Down and Out in the Promised Land: America in the Thirties; Vietnam: Historical and Cultural Perspectives; and Law and Federalism: Studies in the Judicial Process.

Recently a review of the curriculum dictated that the teacher preparation program consist of an additional technology course. While computer training already comprises a necessary component in undergraduate education study, the faculty and administration made a decision to require an additional course: EDU 351 Instructional Technology for the Classroom Teacher. Additionally, the classroom management requirements were increased from eight weeks to a 16-week training course.

Goal 5. Select and develop faculty and staff who have a commitment to students, teaching, and the University.

Outcome Measure A: To develop full-time faculty and staff who are sensitive to the differing educational needs of changing college populations.

Procedure: Continue a faculty evaluation system that distributes equitably the responsibility for evaluation between faculty and administrators with the intention of shifting the emphasis to peer assessment.

Attainment Status: The Farquhar Center has continued faculty evaluation using the peer team evaluation system designed by the Farquhar Center Faculty Council.

This process has been used since it was developed in 1990-91. Faculty have expressed satisfaction with the process. Twenty-two faculty members were evaluated through the peer assessment evaluation system. Evaluations of the faculty and course content are conducted for each course offered. The process for the evaluation of instruction and of faculty is facilitated through two primary methods. One method involves the evaluation of instruction and faculty by the students. This method is documented through the use of the College Course Evaluation Form. The second method involves the formal evaluation of the faculty member through a Formal Evaluation Review.

Procedure: Provide faculty and staff with opportunities for professional development.

Attainment Status: The Farquhar Center has continued to fund faculty attendance at conferences.

Faculty development was fostered this year by the work of the Faculty Development Committee, which was formed by the Faculty Council. This committee has a budget of \$10,000 to fund faculty development activities. This year fifteen faculty members and two committees in the Farquhar Center were awarded funds for the following activities: research grant for work in Haiti, Writing Across the Curriculum Workshop, Irish musicians' concert and lecture, research grants, refreshments for lecture on health care reform, department study group, continuation of the North Florida Project, a Postscript printer, oak display case for faculty publications, research books, curriculum development computer program, phone bills for research and research assistants, research journal, and faculty exchange.

In consultation with the Vice President for Academic Affairs, the Farquhar Center joined the Faculty Exchange Center. Faculty may make themselves eligible for exchange opportunities by listing themselves with that organization.

The University realizes that major works of scholarship often require longer periods of uninterrupted concentration that cannot be achieved during the academic year when faculty time and attention must be focused on instruction. The current sabbatical leave policy permits qualified faculty to apply for extended leave to engage in research or professional service with the goal to increase their knowledge base in their academic area or their capacity for teaching or service to the University. One member of the Liberal Arts Department has been approved for a sabbatical during 1994-95. During this year faculty members attended 55 conferences.

Procedure: Use timely and sophisticated hiring procedures.

Attainment Status: The screening process used by search committees has been revised. Extensive interviewing is conducted with the strongest candidates for each position via the phone. As a result of the telephone interviews, the top one or two candidates are selected for on-campus interviews. The process has proven to be much more efficient and cost effective than the old process of automatically bringing three to five candidates on-campus.

Procedure: Provide faculty and staff with computers and training in the use of software and on-line applications.

Attainment Status: The Farquhar Center has continued to evaluate the use of and need for computers and training. Where necessary, hardware has been updated and reassigned. Faculty and staff are encouraged to participate in University-wide training.

An extensive menu system has been developed on Polaris which allows faculty efficient access to the information highway.

All faculty members have computers in their offices with links to a mainframe computer, Internet, the other office computers, and the library. All were offered numerous mini-courses in using various software systems such as wordprocessing and graphics.

Goal 6. Be responsive to student needs and goals through appropriate administration.

Outcome Measure A: To provide educational support services especially appropriate to adult and traditional-age students.

Procedure: Conduct a series of evaluations to determine the areas in which student needs are and are not being met.

Attainment Status: The College utilized a variety of evaluation instruments, as follows, to determine the areas in which student needs are not being met.

Evaluation Instruments	
Instrument	Population
Accepted/Declined Nova Southeastern	Students accepted into Liberal & Professional
PEPC Survey	Career students who are in their second term of
Student Opinion Survey	Liberal & Professional Studies students (173 surveys
Survey to Evaluate the Non-Academic	Career students 10 percent sampling (174 surveys

Outcome Measure B: To provide intensive academic advising and tutoring services to all students.

Procedure: Expand Academic Support Services to students at off-campus locations.

Attainment Status: The Behavioral Sciences Department continued to provide students with advisement through two annual newsletters and three group advisement meetings covering topics of widespread interest, such as careers and graduate training in psychology.

Academic support centers are in place in Miami, Orlando and Tampa. The coordinators of these centers oversee the tutoring and academic support (957 student contacts) which is provided to students at other off-campus locations throughout the state.

Outcome Measure C: To increase retention.

Procedure: Collect necessary information from students, graduates, and other University retention programs; and review and change programs, student services, and administrative services where necessary.

Attainment Status: The Farquhar faculty telephoned new undergraduate evening students during the fall semester to offer guidance and encourage registration for the winter semester. The Business and Administrative Studies Division contacted inactive students who were nearing graduation to encourage registration.

Information pertaining to student satisfaction with programs and services was gathered through a variety of surveys inside the college and from other areas within the University.

The PEPC survey indicated that students were not satisfied with the information they were receiving about University procedures and services available to students. In response to this need, student handbooks have been written and are distributed to all career students.

The retention rate in University housing has increased in the last two years from 42 percent to 76 percent. As a result, a new policy has been put in place effective fall 1994 requiring that sophomores, in addition to freshmen, live on-campus.

Academic advisors play an important role in the retention process. At registration, concerns with course selection and scheduling are addressed, as well as reviewing the previous term's grades. The advisors contact students experiencing difficulties so that a cooperative plan for academic improvement can be devised. If grade point averages are low, the advisors may suggest courses to repeat in order to improve the grade point average. Students are encouraged to contact their advisor when either academic or personal concerns adversely affect their progress.

Outcome Measure D: To enlist the support of administrative units outside of the college to respond to student needs.

Procedure: Schedule financial aid and accounts receivable visits to off-campus sites.

Attainment Status: The Business and Administrative Studies Division held information meetings for all prospective BPM clusters, and in four cases a Financial Aid advisor was in attendance. In addition, a Financial Aid advisor held meetings with two current BPM clusters off-campus when corporate reimbursement programs were reduced. Financial Aid advisors visit off-campus education sites twice a year. Additional visits were made to assist in recruiting at new locations, resulting in a total of 26 visits this year.

Procedure: Have annual meetings with student support service directors to review and implement service strategies.

Attainment Status: Staff members in the Accounts Receivable and Financial Aid departments have worked extensively with the college to make the registration process more efficient. Meetings have been held throughout the year with the directors and/or selected staff members of Financial Aid, Accounts Receivable, Registrar's Office, and the Computer Center. The outcomes of this collaborative work include the implementation of a new plan whereby students with outstanding balances of \$500 or less are allowed to register for the current term.

Goal 7. Enrich administration, teaching, and learning resources through increased use of technology.

Outcome Measure A: To utilize technology as a tool to increase effectiveness and efficiency of learning.

Procedure: Investigate and provide available (and affordable) learning technologies, and encourage and plan for their use within the curriculum.

Attainment Status: All 23 students who completed the Psychology Research Practicum in the past year used a computer statistical package, either SPSSX or Minitab, to analyze their data. Without these packages many of the students could not have conducted the studies they wanted.

Interactive software and laser disks are used extensively in the science courses. Forty-two courses offered in all academic disciplines incorporate the use of PC and/or mainframe technology into their design.

Outcome Measure B: To increase administrative efficiency and productivity through technology.

Procedure: Develop an administrative database.

Attainment Status: A PC dBase IV Academic Department Database was designed this year. Each academic office is using it to produce faculty contracts, book lists, schedules, and faculty load reports.

Procedure: Introduce a full-page editor software system to mainframe computer users.

Attainment Status: The University installed Pico, a full-page editor, which substantially decreases the time needed to use computer software. The Farquhar Center faculty has continued its use of electronic communication. Agendas are distributed through e-mail and minutes are posted under faculty menus.

Goal 8. Develop new educational designs.

Outcome Measure: Research current learning theory and practice in education, and apply that research to Nova Southeastern University programs when appropriate.

Procedure: Develop new programs to respond to the needs of students.

Attainment Status: A major in mathematical sciences has been developed. A major in Legal Assistant Studies is currently in the development stage.

The Business and Administrative Studies Division has begun a new Skills Program designed to provide students with introductory college level skills. Ten clusters of students, at six different corporate locations, have begun this program. Students who successfully complete this program are eligible to apply for admission into the BPM program.

Procedure: Collaborate with other centers to enhance students' educational experiences.

Attainment Status: The Farquhar Center is collaborating with the Health Professions Division to develop joint programs.

The Behavioral Sciences Department has maintained its (a) Honors Admissions Program which allows the Department to nominate up to five students a year for Honors admission into the School of Psychology's doctoral programs, and (b) its Early Admissions Program in which psychology majors who are no more than two courses short of graduation may be allowed to begin master's courses at the University.

In cooperation with the School of Business and Entrepreneurship, the Business and Administrative Studies Division has begun a new three year BS/MBA program. A number of courses carry dual credit for both programs.

The Education Department continues the joint venture with the GEM Program on the management of existing sites in Tampa, Orlando, and Jacksonville. The arrangement enables both programs to use a single administrative structure, a single facility, and an opportunity to share faculty. On the main campus, undergraduate education faculty routinely teach graduate level courses. The Education Department also utilizes the expertise of Liberal Arts faculty in teaching courses.

Members of the Shepard Broad Law Center faculty teach courses in the Legal Studies major; Liberal Arts faculty offered workshops at the Law Center and taught in the GEM program.

Goal 9. Recognize and provide valid experiential learning.

Outcome Measure A: To expand the availability of experiential learning assessment to all Nova Southeastern College students—Day, Career Development, and BPM.

Procedure: Make CLEP and DAN TES testing available to all students.

Attainment Status: A total of 518 CLEP tests were administered between August 1993 and May 1994. Two-hundred thirty (44 percent) of those students achieved the required passing score to be awarded course credits. One-hundred thirty DAN TES were administered between August 1993 and May 1994 with a passing rate of 53 percent.

Procedure: Continue the pre-service training program in education.

Outcome Measure B: To supplement classroom learning with experiential learning.

Procedure: Develop the SCORE program.

Attainment Status: The SCORE program links liberal arts education to the development of social responsibility, community awareness, and leadership ability. Sixty-six students, all Florida residents, participated in a cooperative arrangement with the state of Florida to enhance their regular curriculum through community service. Students attended eight monthly meetings which resulted in such events as a campus cleanup to highlight the need to recycle, panel discussions on the role of the University in the local community, and forums on volunteerism and racism in the University community. Each student has completed a minimum of 72 hours of community service work for agencies such as Big Brothers, Big Sisters, Kids in Distress, Ronald McDonald's Children's Charities, and VITAS.

Procedure: Provide students majoring in the sciences with the opportunity to participate in field experiences and research.

Attainment Status: In conjunction with a research course, Ocean Studies students participate in a full year of individual research in ocean related studies. All Ocean Studies students have an opportunity to participate in field experiences in the Keys. Life Science students have an opportunity to do research at the Goodwin Institute.

Procedure: Provide students majoring in psychology with the opportunity to participate in community and research practicums.

Attainment Status: In the past year, 35 students completed the Community Practicum, for which they spent 90 hours working in a community agency that provides human services. Ten more students are completing the Community Practicum this summer. In the past year twenty-three students completed the Psychology Research Practicum, which entails completing a research project from hypothesis generation to data collection to data analysis to final report. Nine students completed the Psychology Advanced Practicum, for which they assisted professors from outside the undergraduate program in completing clinical research.

Procedure: Continue to encourage instructors to include field experiences in their courses.

Attainment Status: The Latin American Caribbean Studies Specialty program includes a field trip to Latin America each spring where students travel through archeological zones and participate in an intensive study of Spanish in residence.

Journey I students took a field trip to the Everglades in conjunction with Science Eye. Science Eye provided a hands-on interdisciplinary approach including lectures on the Everglades' ecological history, analysis of specimens collected in the field, air boat rides, and walks through Everglades wetlands.

As a component of LGS 430: Legal Research and Writing, students competed in a mock trial held at the Shepard Broad Law Center.

Procedure: Continue the pre-service training program in education.

Attainment Status: In order to comply with the state of Florida program approval requirements, the Education Department has revised all of its methods courses. Each course requires that students spend ten hours observing in a public or private school classroom.

Section IV

OVERVIEW AND USE OF FINDINGS TO IMPROVE INSTITUTIONAL PROGRAMS, SERVICES, AND OPERATIONS

Summary of the Status of Attainment of Goals

Two Center goals continue to be consistently demonstrated: Goal 2, "Make education accessible to all populations;" and Goal 5, "Select and develop faculty and staff who have commitment to students, teaching, and the University." The diversity of offerings and the variety of populations served are self-evident. No matter what the measure is—ethnicity, geography, age, socioeconomic background, or gender—the Farquhar Center's programs are truly accessible to most, if not all, populations. Likewise, on every survey and interview, formal and informal, the care and commitment of the Farquhar faculty and staff are noted enthusiastically. In a similar way, Goal 3, "Develop and maintain a cooperative community and an environment which support self-esteem and mutual respect" is realized, though more intangibly. Accessibility of students to faculty and administrators, formation of support groups particularly in off-campus cluster programs, interracial groupings on-campus, and lack of campus tensions and violence are implicit expressions of a functional learning community. These three goals summarize the strength of the undergraduate programs.

Goal 4, "Provide meaningful college-level curricula so that graduates have a fulfilling education and the skills and competencies necessary for a successful and meaningful professional, public and private life," although lofty, is much too complex to measure. It is known that well over ninety percent of the education graduates pass the Beginning Teacher Test and actually secure teaching jobs. However, it is not known whether these individuals are good teachers and other than by anecdote, whether they have "a meaningful public and private life." Even less may be said about other graduates. This ambiguity paired with Goal 1, "Maintain a clear statement of mission and provide the resources and an effective organizational structure to support it" points out that the Center fails to do just that. The Center does not project a clear statement of mission or offer a structure of assessment to support it. That is not to mean that programs or students are unsuccessful, but rather that the Farquhar Center has no clearly defined direction. In the search for an admissions director this year, the candidates all commented that they had difficulty understanding what the Center is. Perhaps in an effort to be all-reaching and all-caring (Goals 2 and 5) the Center has become all-confusing. Thus, the major goal for this coming year will be to review goals, particularly #1 and #4, and establish a much clearer picture and more specific measures of achievement. Major impact has been made in several goals. These highlights are summarized below and more fully described in the remaining report.

Impact of Findings on Improvements in Programs, Services, and Operations

By June 30, 1994, the Farquhar Center completed a two-year reorganization of its marketing efforts. The Center has established three related marketing groups, each with significant personnel changes. These changes were necessitated by noticeable enrollment disappointments. The first two-thirds of the change involved off-campus marketing in education and professional management. In education, enrollment in 1992-93 experienced a 15 percent decrease following a 33 percent increase the preceding year. In 1993-94 the decrease continued until the fall term. Then with additional personnel and more intensive effort, a turn-around began, and by the end of the year the decline trend was reversed. In the Bachelor of Science in Professional Management Program (BPM), the decline was even more precipitous—over 20 percent in

December, following three years of gradual decline. Again, with new personnel and new leadership, the downward trend was ended and by June not only overcame the 20 percent decline, but showed a significant eight percent increase over the previous year.

In April 1994 a new director of admissions was hired in an effort to shore up declines in the on-campus enrollment. Although this change will probably have no noticeable effect until fall 1995, the Farquhar Center enrollment ended the 1993-94 academic year with a slight increase over the previous year. Part of this increase was due to collaborative efforts by BPM and Education to open programs in Freeport, Nassau, and Jamaica. These organizational steps are responses to Goals 1 and 2 referred to previously.

Two accreditation efforts were successful. The first involved the Legal Assistant Certificate Program which again was suffering enrollment problems. After application to and visitation from the American Bar Association (ABA), this program was approved by the ABA. The ABA visiting team unexpectedly recommended that the Center expand its certificate program to a bachelor's degree in Legal Assistant Studies. The Center is currently proceeding with this proposal. It is expected that these changes will open new markets for this area of study.

The second and far more substantial proceeding involved the undergraduate and master's degree education programs. State program approval is an elaborate and work-intensive effort. It required the commitment of not only the education faculty and staff, but of many other faculty in the Farquhar Center. The unexpected exit announcement by the visiting team that "all criteria, programs and standards had been met," was acknowledgement of careful preparation and program quality. This enormous victory for a controversial program was significant evidence of achieving Goal 4.

With respect to Goal 6, "Be responsive to student needs and goals through appropriate administration," the success of the Center's marketing efforts referred to earlier was due partially to increased assistance from the Financial Aid Department and Accounts Receivable. In addition to changing some procedures that made registration more convenient for some students, representatives from these two departments traveled with recruiters to off-campus sites to facilitate student applications and registration. Students have been critical of what they perceive as unresponsive administration particularly in the registration process. The cooperation of these two offices has done much to counter this criticism. As a further effort to be more responsive, the University established a task force of various administrative departments to use the Farquhar Center as a model to deliver world-class service to its students. This will be a major collaborative strategic endeavor for 1994-95.

In Goal 7, the Farquhar Center seeks to enrich administration, teaching, and learning resources through increased use of technology. Through the work of several college committees, and particularly the commitment of several individuals, technology assumed prominence in the Farquhar Center. Administrative information systems were designed to make several processes much more efficient. These systems addressed faculty hiring and contracts, financial records, enrollment reports, expense accounts, book ordering, teacher intern tracking, course scheduling, and marketing. Faculty and students were taught to use electronic mail which became a source of memos, class assignments, minutes of meetings, announcements, discussion groups, and many informal conversations. New systems and menus to access information were created. Use of the Internet was required by some faculty. Electronic software was used in many courses. Faculty, students, and staff have become heavily involved with, and dependent upon, computers to help them do their work.

With respect to Goal 8, which addresses the development of new education designs, several initiatives have been pursued. As a result of the blossoming interest in technology, the liberal arts department has designed a unique on-line program at the master's level. This electronic version of the already existing master's degree in liberal studies will become a prototype for the development of other technologically enhanced programs in the Farquhar Center. Another new educational design has been the BPM/MBA program. This is a three-year course of studies for community college graduates leading to an MBA. Another very successful innovation in the BPM program was the initiation of a 48 credit Skills Program. Designed with individual corporations, this flexible program offers employees courses to develop basic and professional skills. As of June, 1994, ten clusters of students taking the Skills Program were formed.

The Farquhar Center seeks in Goal 9 to recognize and provide valid experiential learning. In the Center's continuing effort to work with corporations and adult students, the Farquhar Center has assessed training programs in several companies and organizations including American Express, American Transtech, AT&T Universal Card, GTE, Walt Disney World, and state law enforcement courses. This assessment grants Nova Southeastern University credit, where designated, to employees who have completed training courses. The student and company have the benefit of weaving their own training into the University's degree program, thus promoting company training and saving the student and the company tuition for a part of their degree programs.

Additionally, representatives of the Farquhar Center have traveled to non-regionally accredited higher education institutions and have assessed their programs. In some cases this assessment has resulted in articulation agreements that assure associate degree holders junior class status at Nova Southeastern University. Newly recommended SACS criteria that restrict this kind of credit transfer will be watched carefully. Work with the College Board and their College Level Examination Program has earned the Farquhar Center special recognition for experiential learning. Only one of three universities in the country so recognized, Nova Southeastern University was presented a silver dish award and congratulated for "excellence in the assessment and recognition of learning to motivate students in their pursuit of higher education."

Finally, although the SCORE program has been referred to in previous reports and is described in greater length in this report, it is worth noting that this program continues to receive state support (a 50 percent increase for 1994-95) for its innovative design. Central to its mission, the program stresses the relationship of a college education to social responsibility and leadership. Each student relates his or her classroom learning to experience in or with the community. During each year of study SCORE students will examine community issues and work directly with community people and problems. The aim of the program is to have every SCORE student understand that the quality of his or her education is directly related to the degree of contribution he or she is prepared to make to improving the learning community, the local community, the work community, and the global community.

OCEANOGRAPHIC CENTER

Section I

DESCRIPTION OF PROGRAMS AND SERVICES

The mission of the Oceanographic Center is to perform high quality scientific research and to provide the highest caliber possible for doctoral, master's, and undergraduate level students. The Oceanographic Center's mission is consistent with that of the University in terms of education of providing quality education to students across a broad age spectrum. The Center's mission embraces that of the University and adds to it by stressing the conduct of basic research for increasing knowledge, enhancing education, and acquiring grant funding.

Scientific research activities focus on problems with local to global implications and are split roughly into two subdisciplines: biological and physical oceanography. Biological studies include: Gulf Stream front interactions and implications for marine food chain dynamics, ichthyology and chronobiology, coral reef ecology and assessment, ecology of the deep shelf environment, phytoplankton, marine microbes, and wetlands ecology. Physical studies include: modeling of major ocean currents, the origin of El Nino occurrences, and the dynamics of wind/wave interactions.

Education at the doctoral level is conducted in a tutorial format, primarily with the major professor. The Master's of Science program has two specialities: Marine Biology and Coastal Zone Management. Students take 30-36 credits of formal class work and finish with completion of a research thesis or a non-thesis option paper. The Oceanographic Center and the James M. Farquhar Center for Undergraduate Studies provide the undergraduate science programs through the Joint Science Program. Center faculty are the faculty for this program. Ocean Studies and Life Sciences (Pre-Med) are the major offerings. Non-science major courses are also taught through the Joint Program. The Joint Program contributes to the undergraduate programs in science education.

Section II

GOALS

- Goal 1.** Conduct innovative and productive research on aspects of ocean science.
- Goal 2.** Provide high quality graduate academic programs in the ocean sciences.
- Goal 3.** Accomplish full vertical integration in the academic programs for physical, ocean, and life sciences.
- Goal 4.** Provide high quality undergraduate academic programs in the ocean, physical, and life sciences.
- Goal 5.** Enhance the fiscal and physical health of the Oceanographic Center (endowment, renovation and construction of facilities, scholarships, library).
- Goal 6.** Initiate appropriate new programs (research and academics) in the realm of ocean sciences.
- Goal 7.** Improve the Oceanographic Center programs through monitoring and evaluation.
- Goal 8.** Ensure that graduates will achieve success at securing jobs and will experience growth in their professions.

Section III

OUTCOME MEASURES, PROCEDURES, AND ATTAINMENT STATUS

Goal 1. Conduct innovative and productive research on aspects of ocean science.

Outcome Measure A: Achieve grant/contract funding levels per principal investigator at least equivalent to last year.

Procedure: Monitor progress and productivity of faculty/staff members.

Attainment Status: Figure 1, on the following page, presents contract and grant total funding and contract and grant salary funding levels over the last six years. Contract and grant total funding levels have increased slightly in FY1993-94 compared to the FY1992-93 and FY1991-92 levels, all of which are depressed from the FY1990-91 high. Contract and grant salaries are at the lowest level of the last six years. Part of this decrease is to be defrayed by meeting Objective 1 in Goal 3 (increasing faculty's participation in teaching activities). Appendix A provides a listing of external contract and grant awards as of Spring 1992, 1993, and 1994.

Outcome Measure B: Assess the level of faculty and staff retention.

Procedure: Obtain faculty contracts with the University.

Attainment Status: One faculty member left the Center during fiscal year 1994 for employment elsewhere. Another faculty member passed away.

The faculty of the Oceanographic Center are now within the University system of evaluation, review, and contracts. All faculty were evaluated in FY1991-92. Many long-time faculty members received continuing contracts. Newer faculty received formal one-year contract extensions. Some faculty were denied continuing contracts. In FY1992-93, three faculty were evaluated for continuing contracts; one was given a one-year contract; the remaining were given continuing contracts. In FY1993-94, one faculty member was reviewed informally after the end of his first year. He was given another one-year contract.

Outcome Measure C: Time commitments of faculty, reflecting decreased dependence of faculty on grants and contracts from 100 percent to 50 percent over the long term.

Procedure: Assess faculty funding.

Attainment Status: On average, this goal has been attained with mixed results for FY1993-94. It is clear that, historically, faculty dependence on contracts and grants has decreased, and teaching has increased. The variance is high, however, and some faculty teach much more than others. Figures 2 & 3 on the following pages provide details.

Outcome Measure D: Assess the degree of internal University support for researchers.

Procedure: Through the Science Task Force a recommendation was made that the University contribute a portion of science researchers' salaries. This will place the Center on a par with other institutions where typically a considerable portion of a researcher's salary is supported.

Attainment Status: In FY1993-94 the Science Task Force met regularly and recommended that science researchers be supported in the form that the University would contribute an additional 50% of the percentage of their salary that was funded on contracts or grants. The proposal was partially funded by the University and will be implemented in part in FY1994-95.

Outcome Measure E: Assess the degree and quality of new faculty that are hired relative to the level of competence in research and teaching.

Procedure: Hire new faculty and staff with excellent credentials in teaching who have interest in fulfilling teaching obligations in both the graduate and undergraduate programs. In addition, hire new faculty/staff who have competence and interest in conducting quality funded research.

Attainment Status: Two new faculty members were sought and hired in FY1993-94 to begin work in FY1994-95. The primary duties of these faculty will be research in physical oceanography. Some graduate and undergraduate teaching will be required.

Outcome Measure F: Assess the degree of secretarial assistance added.

Procedure: Add additional secretarial assistance personnel.

Attainment Status: An informal assessment was conducted. Although a new secretary was considered useful, funds were not available for hiring. Student assistance was increased.

Goal 2. Provide high quality graduate academic programs in the ocean sciences.

Outcome Measure A: Include, as practical, at least one member of a student's M.S. thesis committee from outside the University in the Marine Biology and CZM programs.

Outcome Measure B: Utilize Adjunct Professors, especially in the CZM speciality, who are excellent practitioners.

Outcome Measure C: Have faculty members review all student applicants.

Outcome Measure D: Encourage student attendance at guest faculty seminar series. Encourage student publications with professors in journals and presentations/abstracts at scientific meetings.

Outcome Measure E: Require that graduate applicants submit a letter of career intent.

Outcome Measure F: Improve library resources.

Procedure: Suggest outside faculty be on student committees; utilize Adjunct Professors, especially in the CZM program to teach; request faculty review all student applications; encourage student participation in seminars; encourage students to attend meetings and write papers; require applicants to submit letters of interest.

Attainment Status: The above outcome measures have generally been met. At least one outside faculty is required to be on student committees. Adjunct Professors, especially in the CZM program, are utilized for teaching. Faculty review of all student applications is expected. Student participation in seminars is encouraged. Letters regarding career goals are required from student applicants. Students are encouraged to attend meetings and write papers. Appendix B provides a listing of faculty papers and presentations for the last four years. Student collaborations are marked with an asterisk.

Procedure: Maintain, or increase, enrollment in M.S. programs; continue marketing efforts; and modify programs appropriately to maintain relevancy.

Attainment Status: Figure 4 on the following page depicts the annual average M.S. enrollment since 1983 by the two specialities (CZM, Marine Biology). The data for FY1993-94 include all four terms (Summer, Fall, Winter, and Spring).

Procedure: Add to library holdings and improve library resources.

Attainment Status: The Center has been unable to add substantially to its library holdings due to fiscal constraints. An additional CD-ROM reader was added to perform searches.

Outcome Measure G: Records of enrollment in the Ph.D. program.

Outcome Measure H: At least one of a student's Ph.D. thesis committee members to be from outside the University.

Outcome Measure I: Student publications with professors in journals and presentations /abstracts at scientific meetings.

Procedure: Maintain enrollment in the Ph.D. program at four to seven students; require at least one of a student's Ph.D. committee members to be from outside the University; encourage student publications with professors in journals and presentations/abstracts at scientific meetings.

Attainment Status: Ph.D. enrollment has been in the target range during FY1992-93 (Figure 5). Ph.D. policy requires outside faculty members to sit on student's committees. Student publications with professors are encouraged (See Appendix B).

Goal 3. Continue vertical integration in the sciences with other academic centers.

Outcome Measure A: Vertical integration with the Farquhar Center continues under its agreed-upon form—formal budget for the Joint Science Program (JSP) which goes through the University budget process and which lists income and expenses.

Procedure: Maintain cooperation and coordination with the Farquhar Center, including administration, Oceanographic Center curricula development, Center teaching, and shared budgetary responsibility (of undergraduate Ocean, Life, Physical Sciences, and non-major science programs and courses). Develop a policy document for vertical integration. Formalize budget procedures.

Attainment Status: The form of vertical integration of the graduate and undergraduate programs that was established in FY1990-91 has been continued throughout FY1991-92, FY1992-93, and FY1993-94. A policy document has been agreed upon among the two deans. This involves recognition of the administrative and faculty duties and the monetary arrangements. A separate budget was formulated for the JSP, under the control of both the Dean of the Oceanographic Center and the Dean of the Farquhar Center. Procedures to apportion net revenue (gross revenue minus expenses) to the Oceanographic Center are still only partially agreed upon. Implementation of monetary transfer in a timely manner has yet to occur. Posting of monthly expenses and monthly income is not automatically accomplished on periodic computer runs.

Outcome Measure B: Oceanographic Center faculty teach within the JSP.

Procedure: Maintain faculty teaching within the JSP, including providing Oceanographic Center faculty to teach physics courses.

Attainment Status: In FY1993-94, Center personnel taught undergraduate physics for several courses.

Outcome Measure C: A Science Task Force has been established to examine all aspects of science at the University, including administration and organization.

Procedure: Implement a Science Task Force to devise strategies and mechanisms.

Attainment Status: A Task Force was established consisting of Oceanographic Center and Farquhar Center members. Meetings were held in FY1993-94. Meetings will continue in FY1994-95.

Goal 4. Provide high quality undergraduate academic programs in the ocean, physical, and life sciences.

Outcome Measure A: Establish facilities for undergraduate non-major sciences education at the Oceanographic Center.

Procedure: Establish classrooms and laboratories at the Oceanographic Center for use by the undergraduate science program. These are to be within faculty laboratories or under faculty supervision.

Procedure: Involve Oceanographic Center faculty (through vertical integration) as the primary focus for curricula development and implementation.

Attainment Status: A grant proposal to the NSF was written in FY1991-92 and was funded in FY1992-93 for \$130,000. In the budget building process for FY1992-93, an additional \$130,000 in University physical plant funds were designated to improve facilities at the Oceanographic Center. Funds were entirely expended in FY1993-94. In FY1993-94 Center restricted funds were used to continue renovations to an outside laboratory area and to purchase equipment needed for a running seawater system.

Outcome Measure B: Ensure that vertical integration is occurring as planned to enhance the curricula for undergraduate science majors.

Procedure: Utilize facilities (classrooms, laboratories) of the Oceanographic Center for undergraduate science education.

Attainment Status: Faculty of the Oceanographic Center are responsible for the curriculum of undergraduate sciences at the University. A formal curriculum committee has been established that will report to Center faculty at regularly scheduled meetings.

Outcome Measure C: Provide sufficient faculty for undergraduate science education.

Procedure: Hire Oceanographic Center faculty as needed to fulfill the undergraduate science education mission.

Attainment Status: In FY1993-94 one new faculty member was hired whose job duties include significant undergraduate level teaching. Two visiting faculty were hired for FY1994-95.

Outcome Measure D: A separate JSP budget for the undergraduate science program is completed and published by the University and made available to the deans of the Oceanographic Center and the Farquhar Center.

Procedure: Implement the budget through the University budgetary process; publish income and expenses monthly according to University procedures.

Attainment Status: A budget was completed and submitted through the University budget process. While expenses are being published on a monthly basis and are available to both Center deans, income is not. This makes tracking fiscal matters very difficult.

Goal 5. Enhance the fiscal and physical health of the Oceanographic Center (endowment, renovation, and construction of facilities, scholarships, and library).

Outcome Measure A: Hire a full-time Director of Development tied with the University's Development Office; use a Board of Governors for the Oceanographic Center as a base for enhanced donations.

Procedure: Obtain financial support for a full-time development director; work to encourage the Board of Governors to be more active.

Attainment Status: The Center had a part-time development officer funded by the Development Office for FY1993-94. The Board of Governors has been cultivated at quarterly meetings and social events during FY1993-94.

Outcome Measure B: Explore traditional and alternative funding sources; provide requisite office space and support services for development; add funding to the Center budget for development personnel and activities.

Procedure: Provide greater resources (financial, physical, and personnel); explore and develop alternative funding sources.

Attainment Status: Greater resources for development did not survive in the FY1993-94 budget. The Development office has been active in its support for Oceanographic Center activities, including Board of Governor's administration and the Marine Industries of South Florida party. The Center continues to receive a \$10,000 donation from the Rinker company which has been used for facilities enhancement. It also received \$4,000 from the South Florida Fishing Classic.

Goal 6. Initiate appropriate new programs (research and academics) in the ocean sciences.

Outcome Measure: The presence of new programs at the Center.

Procedure: Investigate the feasibility of increasing marine courses, facilities, and programs within the Institute of Marine and Coastal Studies; investigate external funding and development possibilities (procedures will include: formally investigate potential, decide on faculty feasibility, and investigate funding; the degree of potential conflict and cooperation with FAU will be investigated).

Attainment Status: One new course in marine management was added for FY1993-94; a new adjunct was employed; other considerations in the procedure are being evaluated. An agreement was signed by the Presidents of Nova Southeastern University and FAU that there would be no competition between existing programs for 15 years when FAU moves into the Dania Sea Fair facility.

Procedure: Investigate the feasibility of establishing Center activities in secondary education.

Attainment Status: An NSF proposal was submitted through Nova College for secondary education at the Center.

Goal 7. Improve the Oceanographic Center programs through monitoring and evaluation.

Outcome Measure: Faculty effectiveness.

Procedure: Have students complete evaluation forms for each course completed.

Procedure: Examine the evaluation forms and assess the effectiveness of faculty. Conduct formal faculty evaluation as specified in the approved Continuing Contract procedures.

Attainment Status: Evaluation forms for faculty are completed at the end of each class. In addition, faculty are formally reviewed for contract status in the next year.

Goal 8. Ensure that graduates will achieve success at securing jobs and will experience growth in their professions.

Outcome Measure: Assess degree of and success of graduates in obtaining jobs and achieving growth in their professions..

Procedure: A survey of graduates.

Attainment Status: A survey was conducted of M.S. and Ph.D. graduates in late FY1991-92. Questions asked attempted to gauge satisfaction levels with Center academics, facilities, and graduate job success. Results are summarized below:

In May, 1992 a survey of 30 questions was mailed to 34 M.S. and Ph.D. graduates of the Oceanographic Center. The purpose of the survey was to conform with SACS guidelines concerning assessment of educational outcomes. In short, the Oceanographic Center wished to learn the opinions of graduates about the facilities available to them when they were students and the perceived quality and utility of the degree they received from us. Thirty-four surveys were issued, but only 25 reached their destination (nine were returned for a different address). Of the 25 that were received, 9 were returned. This is a 36 percent rate of return. Of the nine that were returned, seven were from men and two were from women. eight were M.S. graduates and one was an M.S./Ph.D. graduate.

The students had a choice of five responses for each question: Very Dissatisfied, Dissatisfied, Adequate, Satisfied, and Very Satisfied. A statistical summary of the results was performed (Table 1). Each response was given a numerical value, as follows: Very Dissatisfied 1; Dissatisfied 2; Adequate 3; Satisfied 4; Very Satisfied 5. A mean result for each question was calculated based on these values. Questions were ranked by mean values. Within each question, the number responses for a particular category were calculated as a percent of total responses, reflecting the distribution of responses within the question.

Results are highlighted below:

Highest Ranking Questions by Mean Value:

<u>Rank</u>	<u>Question</u>	<u>Mean</u>
1	#16 Evening Nature of Classes	4.22
2	#20 Advising on Non-Thesis	4.17
3	#24 Nova Staff	4.11
4	#30 Usefulness of Questionnaire	4.11
5	#5 Degree obtained at NOC	4.11
6	#17 Advising on Thesis	4.00
7	#21 Nova Professors	4.00
8	#8 Nova Adjunct Professors	4.00

Lowest Ranking Questions by Mean Value:

<u>Rank</u>	<u>Question</u>	<u>Mean</u>
30	#25 Library Resources	2.33
29	#2 Job Opportunities at Grad.	2.43
28	#4 Grad.School Opportunities	2.60
27	#11 Materials & Supplies	2.89
26	#26 Financial Aid	3.00
25	#27 Student Office Space	3.00
24	#18 Resources for Thesis	3.00
23	#10 Course Diversity	3.11
22	#9 Course Availability	3.11

It is interesting that satisfaction with the evening nature of the program is high. Clearly, the non-traditional time-frame for classes is not a problem with graduates. Graduates also approved of the Non-thesis option advising. Thesis advising ranked at a close sixth with a mean of 4.00. Graduates approved of this questionnaire, the utility of their degree, and the Nova staff. (The questionnaire mistakenly listed Nova Staff, not Oceanographic Center staff and so it is not possible to separate the relative approval for each). Nova Center and Adjunct professors also ranked high. The graduates were most dissatisfied with the library resources. They felt there were few or poor job opportunities or graduate school opportunities upon graduation. (Some comments accompanied these responses which indicated they already knew this before they took our program.) Materials and supplies for student work was rated low as was Financial Aid and office space. The graduates would have liked more courses. This survey provided valuable information to be used for instituting program change to enhance student satisfaction and program quality.

Section IV

OVERVIEW AND USE OF FINDINGS TO IMPROVE INSTITUTIONAL PROGRAMS, SERVICES, AND OPERATIONS

Summary of the Status of Attainment of Goals

Goal 1. The Center has attempted to achieve funding levels per faculty principal investigator at least equivalent to last year. The progress and productivity of faculty/staff members have been monitored. Trends are towards increasing teaching funding and less reliance on external contracts and grants. The Center lost two faculty members in FY1993-94. Two individuals will join the faculty in September 1995. One faculty member has ended his first year and was evaluated in FY1992-93. He was given a second year contract.

The Center desired to hire faculty and staff with a high level of competence in research and teaching. Two new faculty with excellent credentials in research were hired in FY1993-94 for FY1994-95. These faculty, who will conduct scholarly and funded research in the area of physical oceanography, will begin work September 1994.

A University Science Task Force recommended that additional internal support be provided for researchers. This recommendation was partially funded by the University.

Goal 2. As a major objective of this goal, the Center desired to maintain and enhance its M.S. graduate academic programs in Marine Biology (MB) and in Coastal Zone Management (CZM). Various procedures were used.

A statement of career goals was required with a student's application. At least one member of a student's M.S. thesis committee was required to be from outside the University. This enhanced objectivity and broader acceptance of the degree product. Adjunct Professors, especially in CZM program, were utilized to teach courses. This brought in needed expertise to the program and provided practical experience for the students. Faculty were requested to review all student applications and invited to attend thesis defenses. This broadened faculty ownership of the program. Student were encouraged to participate in seminars and to attend meetings and write papers. The Center also desired to maintain, or increase, enrollment in the M.S. programs. Marketing efforts were continued. Enrollment appeared to be stable or slightly increasing.

As a corollary to the above, the Center desired to maintain and enhance Ph.D. graduate academic programs. Procedures included evaluating records of enrollment, requiring at least one of a student's Ph.D. thesis committee members to be from outside the University, and encouraging student publications with professors in journals and presentations/abstracts at scientific meetings.

- Goal 3.** A major part of this goal involved continuing vertical integration with the undergraduate component of the University (the Farquhar Center) including administration, Oceanographic Center curricula development, Center teaching, and shared budgetary responsibility (of undergraduate Ocean, Life, Physical Sciences, and non-major science programs and courses). Procedures involved maintaining cooperation and coordination with Nova College and formalizing budget procedures. In addition, a Science Task Force was formed and chaired by the Oceanographic Center Dean. The purpose of the Task Force is to enhance all science activities at the University.
- Goal 4.** As part of this goal the Center desired to enhance standards and quality of undergraduate non-major sciences. Procedures involved determining that vertical integration occurred as desired, as well as planning for facilities for undergraduate education at the Oceanographic Center. For facilities enhancement, a funded NSF grant proposal was completed in FY 1993-94 for a total of \$260,000 (including 50 percent matching funds from the University) to improve facilities at the Oceanographic Center.

Through vertical integration, Oceanographic Center faculty serve as the primary focus for undergraduate science curricula development and implementation. Faculty of the Oceanographic Center were responsible for the curriculum of undergraduate sciences at the University. A formal curriculum committee was established which reports to the Center faculty and the Oceanographic Center Dean at regularly scheduled meetings.

- Goal 5.** Achieving this goal was attempted by continuing development efforts and activities. Procedures involved retaining a part-time development officer funded by the Development Office. The Board of Governors was cultivated at quarterly meetings and frequent social events. A \$10,000 donation was received from the Rinker Corporation. A \$4,000 gift was received from the South Florida Fishing Classic. These were used for facilities enhancement. The Board of Governors' by-laws have been reorganized for more efficient operation.
- Goal 6.** A variety of objectives were investigated including the feasibility of increasing courses, facilities, and programs. The attainment of this goal has been mixed. A new course in Fish and Wildlife Management was added to the MS curriculum. The feasibility of implementing distance education environmental courses within the Institute of Marine and Coastal Studies was considered.
- Goal 7.** Procedures involved having students evaluate Center courses each quarter (term) and also having faculty and students evaluate faculty effectiveness. Student evaluation forms for faculty were completed at the end of each class. Additionally, faculty were reviewed formally by peers for contract status in the next year. Reviews were submitted to administration for action.

Goal 8. Procedures to determine the Center's success at achieving this goal included a survey of graduates. A survey was conducted of M.S. and Ph.D. graduates in late FY1991-92. Questions attempted to gauge satisfaction levels with Center academics, facilities, and graduate job success.

Impact of Findings on Improvements in Programs, Services, and Operations

A variety of specific changes have been made, or are underway, based upon outcome measures and the attainment of goals, as detailed above. Changes to enhance research (Goal 1) have included adding two new, primarily research, faculty for FY1994-95. In addition, the University has partially implemented a Science Task Force recommendation for internal University funding of researchers. In order to provide quality graduate programs (Goal 2), changes to enhance the programs have included requiring goal statements from students and faculty review of applications. Full vertical integration between graduate and undergraduate (Nova College) programs (Goal 3) has partially been obtained through maintenance of cooperation and coordination. Quality undergraduate academics (Goal 4) have been achieved through obtaining grants for facilities enhancement and through Oceanographic faculty developing undergraduate science curricula. Enhancement of the fiscal and physical health of the Oceanographic Center (Goal 5) has partially been obtained by activities of the Center's Board of Governors and donations from Corporate giving. New programs (Goal 6) have been investigated and evaluated through a conservative approach. Improvements of programs through evaluation (Goal 7) have involved quarterly student evaluations and faculty peer-review. Finally, the degree to which graduates have been successful (Goal 8) has been determined through a survey instrument.

APPENDIX A: OCEANOGRAPHIC CENTER GRANTS AND CONTRACTS (1992-94)

AWARD UPDATE AS OF SPRING 1992

- C. Burney/C. Mattison:** "Sea Turtle Monitoring Project," Broward County (4/4/92-4/3/93). \$45,485
- C. Burney/G. Kleppel:** "Tilapia Wastewater," private funds (11/1/90-open). \$34,201
- R. Dodge:** "Effects of Beach Restoration on the Stony Corals of Southeast Florida," Florida Sea Grant (9/15/90-9/14/92). \$37,433
- R. Dodge/C. Messing:** "Port Everglades Macroinvertebrate Study," Port Everglades Authority (8/1/91-7/30/92). \$29,000
- R. Dodge/B. Baca:** "Tilapia Stocking," private funds (3/15/91-open). \$12,054
- G. Kleppel:** "Carotenoid Pigments in Microzooplankton: Characterization and Relation to Biomass," National Science Foundation (8/15/91-1/31/94). \$90,689
- G. Kleppel:** "Copepod Feeding Measurement Research," Dept. of Natural Resources (4/15/91-open). \$12,500
- G. Kleppel:** "The Gulf Stream Front, Its Role in Larval Fish Survival and Recruitment in Florida," Florida Sea Grant (4/1/91-3/31/92, yr. 2). \$38,866
- P. Kundu:** "A Study of Coastal Richardson Numbers, and How They Are Affected by Wind-generated Waves," National Science Foundation (5/1/91-10/31/93, yr. 1) \$165,000
- J. McCreary:** "Mixed Layer Parameterizations in Models of the Indian Ocean," Office of Naval Research (7/1/91-6/30/92) \$21,800
- J. McCreary:** "Dynamics of Equatorial and Coastal Oceanographic Circulation," National Science Foundation (8/1/91-1/31/93, yr. 3) \$185,000
- J. McCreary/J. Proehl:** "Dynamics of Ocean Circulation: Coastal Instabilities and Mid-latitude Subduction," Office of Naval Research (10/1/91-9/30/92, yr. 3) \$145,771
- J. McCreary/J. Witte:** "Publication of a TOGA Quarterly Bulletin," NOAA (3/1/92-2/28/93, yr. 3) \$47,629
- J. McCreary/J. Witte:** "Journal of Geophysical Research Office," American Geophysical Union (10/1/91-9/30/92, yr. 3) \$35,537
- J. McCreary/P. Kundu:** "Modeling Tropical Western Boundary Circulation," National Science Foundation (1/1/91-6/30/92, yr. 3) \$124,000
- J. McCreary/J. Proehl:** "Dynamics of Equatorial, Coastal and Subtropical Ocean Circulations," National Science Foundation (7/1/92-12/31/93, yr. 1) \$300,000
- J. Proehl:** "Modeling the Tropical Instability Waves," National Science Foundation (6/15/91-11/30/92, yr. 1) \$90,000
- R. Spieler/B. Baca:** "Bass Study: Rinker," EAS Engineering, Inc. (4/7/92-4/6/93) \$39,799

AWARD UPDATE AS OF SPRING 1993

- C. Burney/C. Mattison:** "Sea Turtle Monitoring F.Y. 93," Broward County Commissioners (4/4/93-4/3/94). \$56,758.

- R. Dodge:** "The Physiology of Sclerochronology: Mechanism and Variation in Formation of High Density Bands in the Massive Coral *Montastrea Annularis*," National Science Foundation (NSF) (1/1/93-6/30/96). \$101,299.
- R. Dodge:** "Materials and Services to Provide Data for Corrosion Testing and Provide Technical Support at the Fort Lauderdale Marine Corrosion Test Site," Naval Surface Warfare Center (10/1/92-9/30/93). \$17,900.
- R. Dodge:** "Assessment of Climate through Coral Growth Band Analysis," U.S. Geological Survey (8/1/89-7/31/94, extension). \$12,992.
- R. Dodge/G. Webb:** "Renovation of Research and Research Training Facilities at the Nova University Oceanographic Center," NSF (9/15/92-3/31/94). \$130,000.
- G. Kleppel:** "Copepod Feeding Research," Dept. of Natural Resources (DNR) (5/1/92-open). \$10,000.
- G. Kleppel:** "SEFcar Program," University of Miami (4/1/93-5/31/93). \$11,109.
- G. Kleppel:** "U.S.-U.K. Joint Workshop: Environmental Regulation of Biological Production in the Irish Sea," NSF (8/1/92-7/31/93). \$9,750.
- G. Kleppel:** "The Antarctic Ice Edge Bloom: Its Importance to Intermediate Trophic Levels," NSF (6/1/93-11/30/94, year 1). \$79,865.
- G. Kleppel:** "Conservation of Carotenoid Pigments during Passage through the Guts of Calenoid Copepods; Specificity and Physiological Induction," NSF (7/1/93-12/31/94, year 1). \$93,763.
- P. Kundu:** "A Study of Coastal Richardson Numbers, and How They Are Affected by Wind-generated Waves," NSF (5/1/93-10/31/94, year 3). \$75,000.
- J. McCreary/J. Proehl:** "Dynamics of Equatorial Coastal and Subtropical Ocean Circulation," NSF (7/1/92-12/31/93, year 1). \$300,000.
- J. McCreary/J. Proehl:** "Dynamics of Ocean Circulation: Coastal Instabilities and Mid-latitude Subduction," Office of Naval Research (4/15/93-4/14/94; year 4). \$95,000.
- J. McCreary/J. Witte:** "Publication of TOGA Quarterly Bulletin (*TOGA Notes*)," National Oceanic and Atmospheric Administration (NOAA) (3/1/93-2/28/94, year 4). \$48,984.
- J. McCreary/J. Witte:** "Journal of Geophysical Research Editorial Office," American Geophysical Union (10/1/92-9/30/93, year 4). \$37,329.
- C. Messing:** "Growth, Distributional Controls and Taphonomy of Recent Isocrindae (Echinodermata: Crinoidea)," NSF (1/15/93-6/30/95). \$63,166.
- J. Proehl:** "Modelling the Tropical Instability Waves," NSF (6/15/92-11/30/93, year 2). \$60,000.
- R. Spieler:** "The Establishment and Monitoring of an Artificial Reef Constructed of Waste Tire Material and Concrete," DNR (3/9/93-8/15/93). \$42,708.

AWARD UPDATE AS OF SPRING 1994

- B. Baca/R. Dodge:** "Oil Spill Contingency Plans and Scenarios," Univ. of Miami (8/1/93-10/31/94). \$50,000.
- C. Burney:** "Sea Turtle Monitoring FY94," Broward County Commissioners (4/4/94-4/3/95). \$57,000.

- R. Dodge:** "Algal Blooms in Coastal Waters: Using Corals to Differentiate Nutrients from Pollution or Natural Sources," Florida Sea Grant (4/1/93-3/30/94). \$23,952.
- R. Dodge:** "Site Visit to the 'Tropic' Oil Experiment Site in Panama to Assess the Feasibility of Follow-on Research," Marine Spill Response Corp. (10/7/93-2/6/94). \$12,100.
- R. Dodge:** "Materials and Services to Provide Data for Corrosion Testing and Provide Technical Support at the Ft. Lauderdale Marine Corrosion Test Site," Naval Surface Warfare Center (continuation: 10/1/93-9/30/94). \$19,690.
- R. Dodge/B. Baca:** "Fish Study," Forman (9/7/93-open). \$1,000.
- R. Dodge/C. Messing:** "Port Everglades Macroinvertebrate Study," Port Everglades Authority (Year 3: 8/1/93-7/31/94). \$32,584.
- G. Kleppel:** "Copepod Feeding Research," Dept. of Natural Resources (Year 3: 4/13/93-open). \$15,000.
- J. McCreary/J. Proehl:** "Dynamics of Ocean Circulation: Coastal Instabilities and Mid-latitude Subduction," Office of Naval Research (Year 2: 4/15/94-4/14/95). \$130,000.
- J. McCreary/J. Proehl:** "Dynamics of Equatorial Coastal and Subtropical Ocean Circulation," National Science Foundation (Year 2: 7/1/93-12/31/94). \$270,000.
- J. McCreary/J. Witte:** "Publication of TOGA Quarterly Bulletin (*TOGA Notes*)," National Oceanic and Atmospheric Admin. (NOAA) (Year 5: 3/1/94-2/28/95). \$52,000.
- J. McCreary/J. Witte:** "Journal of Geophysical Research Editorial Office," American Geophysical Union (Year 5: 10/1/93-9/30/94). \$41,000.

APPENDIX B: FACULTY PUBLICATIONS (1991-94)

* indicates those publications with students.

BLACKWELDER, PATRICIA L., PH.D., ASSOCIATE PROFESSOR

- Walsh, P.J., P.L. Blackwelder, K.A. Gill, E. Danulat and T.P. Mommsen, 1991. Carbonate production in the intestine of marine fish: a new source of carbonate sediment. *Limnology and Oceanography*, 36(6):1227-1232.
- Takahashi, K. and P.L. Blackwelder, 1992. Silicoflagellate distribution in the NW Atlantic and warm core rings. *Deep Sea Research*, 39:327-346.
- Robbins, L. and P.L. Blackwelder, 1992. Biochemical and ultrastructural evidence of the origin of whittings: a biologically induced calcium carbonate precipitation mechanism. *Geology*, 20:464-468.
- Nelsen, T.N., P.L. Blackwelder, J. Trefry, and B. Erdie, 1993. Retrospective analysis of sediments from the NECOP study area in the Gulf of Mexico. Proceedings of the NECOP Workshop, LUMCON, LA.
- Blackwelder, P.L., B. Eadie, B. McKee, S. Metz, T. Nelsen, and J. Trefry, 1992. "Retrospective analysis of Mississippi Delta area sediments. Proc. NECOP Workshop, Oct. 2-4, 1992, 1994 Nelsen, T.N., P.L. Blackwelder, T. Hood, B. McKee, N. Romer, C. Zarikian and S. Metz. Time-based correlations of biogenic and terrestrial components in the Gulf of Mexico NECOP study area sediments: I. Retrospective analysis of seasonal and decadal time scales. *Estuaries*, 17, No. 4. (In press.)
- *Kleppel, G.S., C.A. Burkart, P. Blackwelder, and E.J. Lessard, 1994. Photoprotection in a transparent, heterotrophic dinoflagellate. (In preparation.)
- Nemoto, Yasuyuki, Patricia Blackwelder, and Akira Mitsui, 1994. Ultrastructural changes during the synchronous growth of the aerobic nitrogen-fixing marine unicellular cyanobacterium *Synechococcus* sp. strain Miami BG 043511. *Journal of Marine Biotechnology*. (In press.)
- Blackwelder, P.L., T. Hood, C.A. Zarikian, 1994. NECOP retrospective studies: I. Benthic foraminifera distribution in sediment on spatial and temporal scales. Abstract: ASLO and PSA Joint Meeting, Univ. of Miami, June 12-16, 1994.
- Nelsen, T.A., P. Blackwelder, T. Hood, C. Zarikian, J.H. Trefry, S. Metz, B. Eadie, and B. McKee, 1994. Retrospective analysis of NECOP area sediments, biogenic, inorganic and organic indicators of anthropogenic influences since the turn of the century. NECOP Annual Report.
- Blackwelder, P.L., T. Hood, T.A. Nelsen, and C. Zarikian, 1994. Time-based correlations of biogenic and terrestrial components in the Gulf of Mexico NECOP study area sediments. II: Benthic foraminifera distribution. *Marine Micropaleontology*. (In preparation.)

BURNEY, CURTIS M., PH.D., ASSOCIATE PROFESSOR

- Burney, C.M., 1990. Seasonal and diel changes in dissolved and particulate organic matter. Chapter 5, p. 83-116, In: *The Biology of Particles in Aquatic Systems*, R. Wotton, ed., CRC Press.
- *Burney, C.M. and Mattison, C., 1989. Sea Turtle Conservation Project, Broward Co. Florida. 1989 Report. Broward County Erosion Prevention District, Environmental Quality Control Board. Fort Lauderdale, Florida. 58 pp.
- *Mattison, C., C.M. Burney and L. Fisher, 1991. Sea turtle nesting and hatching success in Broward County, Florida, 1989. *Proceedings of the Tenth Annual Workshop on Sea Turtle Conservation and Biology*, Hilton Head, SC, Feb. 20-24, 1990, p.165-168.
- *Burney, C.M., C. Mattison and L. Fisher, 1991. The relationship of loggerhead nesting patterns and moon phase in Broward County, Florida. *Proceedings of the Tenth Annual Workshop on Sea Turtle Conservation and Biology*, Hilton Head SC, Feb. 20-24, 1990, p.161-164.
- *Burney, C.M. and C. Mattison, 1990. Sea Turtle Conservation Project, Broward Co. Florida. 1990 Report. Broward County Erosion Prevention District, Environmental Quality Control Board. Fort Lauderdale, FL. 46 pp.
- *Burney, C.M. and C. Mattison, 1991. Sea Turtle Conservation Project, Broward Co. Florida. 1991 Report. Broward County Erosion Prevention District, Environmental Quality Control Board. Fort Lauderdale, FL. 47 pp.
- *Burney, C.M. and C. Mattison, 1992. The effects of egg relocation and beach renourishment on the nesting and hatching success of *Caretta caretta* p. 395-407, in: *Broward County Florida, 1991. Proceedings of the 5th Annual National Conference on Beach Preservation Technology*. St. Petersburg, Florida. February 12-14, 1992.
- Burney, C.M., 1993. Seasonal and diel changes in dissolved and particulate organic matter. Chapter 5, In: *The Biology of Dissolved and Particulate Organic Matter in Aquatic Systems*, R. Wotton, ed., Lewis Press.
- *Burney, C.M. and C. Mattison, 1992. Sea Turtle Conservation Project, Broward Co. Florida. 1992 Report. Broward County Erosion Prevention District, Office of Natural Resource Protection. Fort Lauderdale, FL. 45 pp.
- *Burney, C.M. W.E. Margolis, and C. Mattison, 1993. Simulation of seasonal and fortnightly emergence trends of loggerhead sea turtles in Broward County, Florida from Tide Data and a normal curve.
- *Margolis, W.E. and C.M. Burney, 1994. Emergence periodicity of *Caretta caretta* in Broward County, Florida. *Proceedings of the Thirteenth Annual Sea Turtle Symposium*, 22-26 Feb. 1993, Jekyll Island Georgia, p 98-101.
- *Mattison, C., C.M. Burney and L. Fisher, 1994. Trends in the spatial distribution of sea turtle activity on an urban beach (1981-1992). *Proceedings of the Thirteenth Annual Sea Turtle Symposium*, 22-26 Feb. 1993, Jekyll Island Georgia, p 102-104.
- *Burney, C.M., W.E. Margolis and C. Mattison, 1994. Simulation of seasonal and fortnightly emergence trends of loggerhead sea turtles in Broward County, Florida. *Herpetologica*. (In preparation).

COLE, CHARLES ANDREW, PH.D., ASSISTANT PROFESSOR (LEFT FY1992-93)

REFEREED ARTICLES

- Cole, C.A., and S. Bratton, 1993. Freshwater wetlands of the Cape Hatteras National: Water quality in a resort setting. In review - *Wetlands*
- Cole, C.A., 1993. Water quality of the freshwater wetlands in Buxton Woods, a North Carolina maritime forest. In review - *ASB Bulletin*
- Cole, C.A., 1992. Hidden door to the ivory tower: An academic job search. *Bulletin of the Ecological Society of America* 73(4): 227-230.
- Cole, C.A., 1992. Wetland vegetation ecology on a reclaimed coal surface mine in southern Illinois, USA. *Wetlands Ecology and Management* 2(3):135-142.
- Cole, C.A., 1991. The seed bank of a young surface mine wetland. *Wetlands Ecology and Management* 1(3):173-184.
- Cole, C.A., and E.A. LeFebvre, 1991. Soil and water characteristics of a young surface mine wetland. *Environmental Management* 15(3):403-410.
- Cole, C.A. and E.A. LeFebvre, 1990. Perceptions and attitudes of wildlife professionals towards the Habitat Evaluation Procedures (HEP). *Trans. Ill. Acad. Sci.* 82(3/4): 151-158.

SYMPOSIA ARTICLES

- Cole, C.A., and F.K. Turner, eds., 1993. *Barrier Island Ecology of the Mid-Atlantic Coast: A Symposium*. Tech. Rep. NPS/SERCAHA/NRTR-93/04. National Park Service, Southeast Regional Office, Atlanta, GA. 208 pp.
- Cole, C.A., and F.K. Turner, 1993. The waterfowl hunt at the Cape Hatteras National Seashore: 958-1989. pp. 145-159. IN: C.A. Cole and F.K. Turner (eds.), *Barrier Island Ecology of the Coast: A Symposium*. Tech. Rep. NPS/SERCAHA/NRTR-93/04. National Park Service, Southeast Regional Office, Atlanta, GA.
- Cole, C.A., 1992. Conflict at Cape Hatteras: Coastal wetland water quality in a resort environment. *Proc. 13th Ann. Soc. Wetland Sci. Meeting*. In press.
- Cole, C.A., 1991. Live and let die: The Outer Banks of North Carolina. pp. 643-661 in J.A. Kusler (compiler). *Conf. Ecotourism and resource conservation*. Soc. Wetlands Managers, Berne, NY.
- Cole, C.A., 1991. The Outer Banks of North Carolina, natural resources and growth: Big plans for some little islands. pp. 286-291. IN: M.L. Miller and J. Auyong (eds.), *Proc. 1990 Cong. Coastal Marine Tourism*. Vol. I. National Coastal Resources Res. Devel. Inst., Newport, OR.

POPULAR ARTICLES

- Cole, C.A., 1992. Marine debris on NPS beaches: A plastic, glass, metal nightmare. *Park Science* 12(4):22-23.

TECHNICAL REPORTS

- Cole, C.A., W.P. Gregg, and D.A. Manski, 1993. Annual report of the National Park Marine Debris Monitoring Program: 1192 marine debris surveys. Tech. Rep. NPS/NRWV/NRTR-92/**, U.S. Department of the Interior, National Park Service, Washington, DC.
- Cole, C.A., W.P. Gregg, D.V. Richards, and D.A. Manski, 1992. Annual report of the National Park Marine Debris Monitoring Program: 1991 marine debris surveys. Tech. Rep. NPS / NRWV / NRTR-91/07, U.S. Department of the Interior, National Park Service. Washington, DC. 56 pp.
- Manski, D.A., W.P. Gregg, C.A. Cole, and D.V. Richards, 1991. Annual report of the national Park Marine Debris Monitoring Program: 1990 marine debris surveys. Tech. Rep. NPS/NRWV/NRTR-91/07, U.S. Department of the Interior, National Park Service. Washington, DC. 40 pp.
- Cole, C.A., 1991. Surface water quality, Cape Hatteras National Seashore, North Carolina, 1988-1991. Final report to the Cape Hatteras National Seashore, Manteo, NC. 44 pp.
- Cole, C.A., J. Kumer, D. Manski, and D. Richards, 1990. Annual report of the National Park marine debris monitoring program: 1989 marine debris survey. Tech. Rep. NPS/NRWV/NRTR-90/04, U.S. Department of the Interior, National Park Service, Washington, DC. 31 pp.

DODGE, RICHARD E., PH.D., PROFESSOR

- *Fisher, L.E., Dodge, R.E., C.S. Messing, S. Hess, and G. Kelley, 1990. Preliminary biological monitoring results of the first renourishment at John U. Lloyd Beach State Recreation Area, abstract and talk to be presented Feb., 1990, National Conference on Beach Preservation Technology, St. Petersburg, FL.
- Dodge, R.E. and L.E. Fisher, 1990. Aspects of sclerochronology and relationships with climate. Abst. and talk presented Jan., 1990, Global Indicators of Climate from the Marine Environment, U.S.G.S., St. Petersburg, FL.
- Dodge, R.E., S. Hess, and C. Messing, 1991. Final Report: Biological monitoring of the John U. Lloyd Beach Renourishment: 1989. Broward County Board of County Commissioners Erosion Prevention District of the Office of Natural Resource Protection. 62pp.
- Dodge, R.E., C. Messing, W. Goldberg, S. Hess, 1991. First Post Construction Report of Biological Monitoring: Hollywood-Hallandale 1991 Project.
- Fisher, L.E., R.E. Dodge, C. Messing, W.M. Goldberg, and S. Hess, 1992. The First Renourishment at Hollywood and Hallandale (Florida) Beaches: Monitoring of sediment fallout, coral communities, and microinfauna: preliminary results. Talk and paper presented at Florida Shore and Beach Preservation Association, Tampa, Feb., 1992.
- *Szmant, A.M., R.E. Dodge, P.K. Swart, A. Forrester, J.J. Leder. 1992. The relationships between polyp orientation, light, photosynthesis, calcification and colony shape in the reef coral *Montastrea annularis*. EOS 72:72. (abstract).
- *Dodge, R.E., R. Garcia, A.M. Szmant, P.K. Swart, A. Forrester, and J.J. Leder, 1992. Skeletal structural basis of density banding in the reef coral *Montastrea annularis*. Abstract and paper presented at Proc. 7th Int. Coral Reef Symp. Guam. June. 1992. (In press).

- Halley, R.B., P.K. Swart, R.E. Dodge, and J.H. Hudson, 1992. Stable oxygen isotopic variations in *Montastrea annularis* from Hen & Chickens Reef, Florida Keys - A record of increasing salinity and decreasing precipitation. 1992 Symposium on Florida Keys Regional Ecosystem. Nov., 1992, Miami. (abstract).
- Hardy, J.T., F.E. Hoge, J.K. Yungel, and R.E. Dodge, 1992. Remote detection of coral 'bleaching' using pulsed-laser fluorescence spectroscopy. *Mar. Ecol. Prog. Series.* 88: 274-255.
- Dodge, R.E. and A. Knap, 1993. Long-term effects of short-term exposure of oil and dispersed oil to reef building corals. Colloquium on Case Histories of Coral Reefs. University of Miami. June 1993. invited participant.
- Dodge, R.E. and K. Kohler, 1994. Calibration and variability of x-radiographs of coral skeletons using computer image processing densitometry. Abstract (p.14) and talk, ASLO & PSA 1994 Joint meeting. June 12-16, 1994.

KLEPPEL, GARY S., PH.D., ASSOCIATE PROFESSOR

ARTICLES IN JOURNALS AND BOOKS

- *Roberts, K.A., G.S. Kleppel, C.A. Burkart and K. Carter. In press. Egg production of the copepod *Calanoides acutus* in the Weddell Sea during spring. *Antarctic Journal.*
- *Kleppel, G.S., C. Davis III and K. Carter. In press. Temperature and copepod growth in the sea: A comment on the temperature-dependent model. *Am. Nat.*
- *Burkart, C.A., G.S. Kleppel, K. Brander, D.V. Holliday and R.E. Pieper. In press. Microzooplankton distributions in the Irish Sea: Relation to springtime hydrographic variability. *J. Plankton Res.*
- Kleppel, G.S. 1993. On the diets of calanoid copepods. *Mar. Ecol. Prog. Ser.* 99: 183-195 (Invited Review).
- Kleppel, G.S. and E.J. Lessard. 1992. Carotenoid pigments of microzooplankton. *Mar. Ecol. Prog. Ser.* 84:211-218.
- Kleppel, G.S. 1992. Environmental regulation of feeding and egg production by *Acartia tonsa* off southern California. *Mar. Biol.* 112:57-65.
- Kleppel, G.S., D.V. Holliday and R.E. Pieper. 1991. Trophic interactions between copepods and microplankton: a question about the role of diatoms. *Limnol. Oceanogr.* 36:172-178.

MANUSCRIPTS IN PREPARATION

- *Kleppel, G.S., C.A. Burkart and K. Carter. Diets of copepods on the west Florida continental shelf: Responses to gradients in the food environment. *Mar. Biol.*

REPORTS

- *Roberts, K. and G.S. Kleppel. 1993. The distribution of gelatinous zooplankton feeding on the west Florida continental shelf, August 1993. Nova Univ. Oceanogr. Center Tech. Rep. Nova 93-03, 16 pp.
- *Carter, K.S., G.S. Kleppel and C.A. Burkart. 1993. Food environment, feeding and egg production of zooplankton on the west Florida continental shelf during 1992. Nova Univ. Oceanogr. Center Tech. Rep. Nova 93-01, 6 pp.

- Frazel, D.W., M.E. Clarke, G.S. Kleppel and P.B. Ortner. 1992. The Gulf Stream front, its role in larval fish survival and recruitment in Florida: Hydrographic station and plankton data. Nova Univ. Oceanogr. Center Tech. Rep. NOVA 92-01, 177 pp.
- *Burkart, C.A., G.S. Kleppel and J. Braker. 1991. Springtime phytoplankton pigment biomass in a lime rock-pit in Davie, Florida. Nova Univ. Oceanogr. Center Tech. Rep. NOVA 91-01, 34 pp.

ABSTRACTS AND PRESENTATIONS (1990-1994)

- Kleppel, G.S. 1994. Invited. Feeding strategies, the nutritional environment and zooplankton production: some definitions. ICES Symp. Zooplankton Production. Aug. 15-19, Plymouth.
- *Kleppel, G.S., C. Burkart, K. Carter. 1994. Invited. Individual responses to environmental forcing: impacts on copepod population ecology. Am. Soc. Limnol. Oceanogr. Jun. 12-16, Miami.
- *Carter, K., G.S. Kleppel, C.A. Burkart and C. Tomas. 1994. Influence of the nutritional environment on egg production by calanoid copepods off the Florida east and west coasts. Amer. Soc. Limnol. Oceanogr. Jun. 12-16, Miami.
- *Kleppel, G.S., C. Burkart, K. Carter and C. Tomas. 1994. Copepod diets in the eastern Gulf of Mexico, responses to gradients in the food environment. Eos 75:186.
- *Roberts, K. and G.S. Kleppel. 1994. The distribution of gelatinous zooplankton feeding on the west Florida continental shelf. Eos 75:90.
- *Kleppel, G.S., C.A. Burkart, P. Blackwelder and E.J. Lessard. 1993. Pigments in zooplankton: implications to feeding and photoprotection. Amer. Soc. Limnol. Oceanogr. May 30-Jun. 3, Edmonton, Canada.
- *Burkart, C.A. and G.S. Kleppel. 1993. Microzooplankton in the Irish Sea: Spatial distributions, relation to environment and possible significance in pelagic food webs. Intl. Workshop Environmental Regulation of Biological Production in the Irish Sea. Mar. 30-Apr. 1, Bangor, Wales.
- Kleppel, G.S. and L.S. Quackenbush. 1992. Dynamics of egg production by the copepod *Acartia tonsa*. Aquatic Sciences Meeting, Amer. Soc. Limnol. Oceanogr., Feb. 9-14, Santa Fe.
- Frazel, D., G. Kleppel, M. Clarke and P. Ortner. 1992. Variability of plankton abundance at the Gulf Stream front. Aquatic Sciences Meeting, Amer. Soc. Limnol. Oceanogr., Feb. 9-14, Santa Fe.
- Kleppel, G.S. 1991. Carotenoids and copepods: Feasibility of in situ measurement of the diet. Symp. on Zooplankton Ecology, August 24-29, Appleton, Wisconsin.
- Kleppel, G.S. and E.J. Lessard. 1991. Carotenoid pigments of microzooplankton from cultures and field samples. Amer. Soc. Limnol. Oceanogr. Annual Meeting, June 10-14, Halifax.
- *Stone, G.L. and G.S. Kleppel. 1991. Copepod density, container volume and egg production of *Acartia tonsa*. Amer. Soc. Limnol. Oceanogr. Annual Meeting, June 10-14, Halifax.
- *Kleppel, G.S., D.W. Frazel, M.E. Clarke, P.B. Ortner, J. Braker, C. Burkart, and G. Stone. 1991. Physical/biological characterization of the Gulf Stream front and adjacent waters off southeast Florida: Trophic implications. Oceanography Soc. 2nd Scientific Meeting, March 24-28, St. Petersburg.

- *Kleppel, G.S., M.E. Clarke, D.W. Frazel, P.B. Ortner, J. Braker, C. Burkart and G. Stone. 1991. Microplankton pigment distributions within and adjacent to the Gulf Stream front off southeast Florida: Trophic implications and relation to feeding by larval fishes. Amer. Fish. Soc., Florida Chapter Meeting, Feb 26-28, Brooksville.

RECENT INVITED LECTURES AND SEMINARS

- 1991 Department of Marine Science, University of South Florida, St. Petersburg 1992 Rosenstiel School of Marine and Atmospheric Sciences, University of Miami, Miami, Florida, Horn Point Environmental Laboratory, University of Maryland, Cambridge
- 1993 Institute of Fisheries and Marine Research. Charlottenlund, Denmark Institute of Marine and Coastal Sciences, Rutgers University, New Brunswick, New Jersey Department of Marine Sciences, University of Georgia, Athens Skidaway Institute of Oceanography, Savannah, Georgia Department of Biology, Florida International University Miami, Florida 1994 ICES Symposium on Zooplankton Production. Keynote talk on zooplankton feeding strategies. Plymouth, United Kingdom. Port Erin Marine Laboratory, University of Liverpool, Port Erin, Isle of Man.

*Indicates student co-author

KUNDU, PIJUSH K., PH.D., PROFESSOR (DECEASED 1994)

BOOK

Kundu, P.K., 1990. *Fluid Mechanics*. Academic Press, New York. 638 pages.

JOURNAL ARTICLES

- Kundu, P.K., R.C. Beardsley and A. Huyer, 1990. Observed interaction between low and high frequency motions off the coasts of Peru and California. *J. Phys. Oceanogr.*, 20:1333-1348.
- *McCreary, J.P., Y. Fukamachi, and P.K. Kundu, 1991. A numerical investigation of jets and eddies near an eastern boundary. *J. Geophys. Res.*, 2521-2534.
- Kundu, P.K., and R.C. Beardsley, 1991. Evidence of a critical Richardson number in moored measurements during the upwelling season off northern California. *J. Geophys. Res.* 96, 4855-4868.
- McCreary, J.P., P.K. Kundu, and R.L. Molinari, 1993. Some aspects of the dynamics and thermodynamics of the Indian Ocean. *Prog. Oceanogr.*, 31, 181-244.
- Kundu, P.K., 1993. On internal waves generated by propagating wind stress. *J. Fluid Mech.*, 254, 529-559.

MCCREARY, JULIAN P., PH.D., PROFESSOR

- Moore, D.W., and J.P. McCreary, 1990. Excitation of intermediate-frequency equatorial waves at a western boundary: with application to observations from the western Indian Ocean. *J. Geophys. Res.*, 95, 5219-5231.
- *McCreary, J.P., Y. Fukamachi, and P.K. Kundu, 1991. A numerical investigation of jets and eddies near an eastern boundary. *J. Geophys. Res.*, 96, 2521-2534.
- McCreary, J.P., and D.L.T. Anderson, 1991. An overview of coupled models of El Niño and the Southern Oscillation. *J. Geophys. Res.*, 96, 3125-3150.
- *McCreary, J.P., and Z. Yu, 1992. Equatorial dynamics in a 2-1/2 layer model. *Progr. Oceanogr.*, 28, 61-132.
- *McCreary, J.P., Y. Fukamachi, and P. Lu, 1992. A nonlinear mechanism for maintaining coastally trapped eastern boundary currents. *J. Geophys. Res.*, 97, 5677-5692.
- McCreary, J.P., P.K. Kundu, and R.L. Molinari, 1993. Some aspects of the dynamics and thermodynamics of the Indian Ocean. *Prog. Oceanogr.* 31, 181-244.
- *McCreary, J.P. and P. Lu. 1993: On the interaction between the subtropical and equatorial ocean circulation: the subtropical cell. *Journal of Physical Oceanography*, 24, 466-497.
- *Fukamachi, Y., J.P. McCreary, and J.A. Proehl, 1994. Instability of density fronts in layered and continuously stratified models. *J. Geophys. Res.* (Submitted.)

MESSING, CHARLES G., PH.D., ASSOCIATE PROFESSOR

- Messing, C.G., A.C. Neumann and J.C. Lang, 1990. Biozonation of deep-water lithoherms and associated hardgrounds in the northeastern Straits of Florida. *Palaios* 5(1):15-33.
- Messing, C.G. and J. Dearborn, 1990. Marine Flora and Fauna of the northeastern United States. Echinodermata: Crinoidea. NOAA Technical Report, National Marine Fisheries Service No. 91, 33 pp.
- *Fisher, L.E., R.E. Dodge, C.G. Messing, S. Hess and G. Kelley, 1990. Preliminary biological monitoring results of the first renourishment at John U. Lloyd Sate Recreation Area. National Conference on Beach Preservation Technology, St. Petersburg, FL, Feb., 1990.
- *Messing, C.G. and G. Llewellyn, 1991. Variations in posture, morphology and distribution relative to current flow and topography in an assemblage of living stalked crinoids. *Geol. Soc. Amer. Abstr.* 23(5):A343-344.
- *Llewellyn G. and C.G. Messing, 1991. Variations in modern crinoid-rich carbonate bank-margin sediments. *Geol. Soc. Amer. Abstr.* 23(5):A344.
- Dodge, R.E., S. Hess, and C. Messing, 1991. Final Report: Biological monitoring of the John U. Lloyd Beach Renourishment: 1989. Broward County Board of County Commissioners, Erosion Prevention District of the Office of Natural Resource Protection, 609b S.W. 1st Ave., Ft. Lauderdale, FL 33301. iii + 62 pp + Figures and Appendices.
- *Llewellyn, G. and C.G. Messing, 1993. Compositional and taphonomic variations in modern be crinoid-rich sediments from the deep-water margin of a carbonate bank. *Palaios*, 8(6), 554-573.

- C.G. Messing, 1992. Diversity and ecology of comatulid crinoids (Echinodermata) at Madang, Papua New Guinea. 7th Internatl. Coral Reef Sympos., Guam, 22-26 June, Abstracts, p. 68.
- *Messing, C.G. and G. Llewellyn, 1992. Variations in post-mortem disarticulation and sediment production in two species of Recent stalked crinoids. *Geol. Soc. Amer. Abstr.* 24(7):A344.
- Dodge, R.E., W. Goldberg, S. Hess and C.G. Messing, 1992. First post-construction report: biological monitoring of the Hollywood-Hallandale beach renourishment: 1991. Prepared for: Broward County Board of County Commissioners, Erosion Prevention District of the Office of Natural Resource Protection, 609b S.W. 1st Ave., Ft. Lauderdale, FL 33301. iii + 11 pp + figures + tables.
- Messing, C.G. and R.E. Dodge, 1993. Monitoring of benthic macroinvertebrate assemblages at the Southport Turning Basin and adjacent areas of John U. Lloyd State Recreation Area: August 1992 (with a summary of the August 1991 and January 1992 surveys). Prepared for: Port Everglades Authority, Ft. Lauderdale, FL. i + 23 pp + 14 tables.
- Dodge, R.E., W. Goldberg, S. Hess, and C.G. Messing, 1993. Second post-construction report: 1992 biological monitoring of the Hollywood-Hallandale Beach Renourishment. Rept. for Broward Cty Bd. of County Commissioners, Erosion Prevention Dist. of Office of Natural Resource Protection, Ft. Lauderdale, FL.
- Messing, C.G., 1993. Crinoid meadows of the West Indies: Distribution, responses to flow, disarticulation, sediment production and taphonomy. Paper pres. at 8th Internat. Echinoderm Conf., Dijon, France, Sept. 1993.
- Messing, C.G., 1993. Depth, current flow and morphological variations among living crinoids. *Geol. Soc. Amer. Abstr.*, 25(6), A104.
- Messing, C.G., and R.E. Dodge, 1993. Port Everglades macroinvertebrate monitoring: Monitoring of benthic macroinvertebrate assemblages at the Southport Turning Basin and adjacent areas of John U. Lloyd State Recreation Area: Jan. 1993. 14 pp.
- Messing, C.G., and R.E. Dodge, 1994. Port Everglades macroinvertebrate monitoring: Monitoring of benthic macroinvertebrate assemblages at the Southport Turning Basin and adjacent areas of John U. Lloyd State Recreation Area: August 1993. 17 pp.
- Messing, C.G., 1994. Comatulid crinoids of Madang, Papua Ne Guinea and Environs: Diversity and ecology, Proceedings, 8th Int. Echinoderm Conf. Dijon, France, Sept, 1993 (in press.)
- *Baumiller, T.K., G. Llewellyn, C.G. Messing, and W.I. Ausich, 1994. Taphonomy of isocrinid stalks: influence of decay and autonomy. *Palaios*. (In press.)

PROEHL, JEFFREY A., PH.D., ASSISTANT PROFESSOR (LEFT FY1993-94)

- Proehl, J.A., 1991, Tropical Instability waves in the Gent-Cane Upper ocean model, Equatorial Theoretical Panel, W. Alton Jones Campus, University of Rhode Island, Kingston, RI.
- Proehl, J.A. and P.R. Gent, 1991, Tropical Instability waves in a numerical ocean model, Eighth Conf. on Atmospheric and Oceanic Waves and Stability, Amer. Meteor. Soc., Denver, CO.
- Proehl, J.A., 1991: On the numerical dispersion relation of equatorial waves. *J. Geophys. Res.*, 96, (C9), 16,929-16,934.

Fukamachi, Y., J.P. McCreary, and J.A. Proehl, 1994. Instability of density fronts in layered and continuously stratified models. *J. Geophys. Res.* (Submitted.)

SNYDER, RUSSELL L., PH.D., PROFESSOR

Snyder, R.L., W.L. Neu, R.B. Long and W.J.P. De Voogt, 1990. A Long-Range Program to Parameterize the Evolution of the Surface-Gravity-Wave Field. Nova University technical report.

Snyder, R.L., L.M. Lawson and R.B. Long, 1992. Inverse modelling of the Action-Balance Equation. Part I: Source Expansion and Adjoint-Model Equations. *J. Phys. Oceanogr.*, 22, 1540-1555.

Snyder, R.L., W.C. Thacker, K. and S. Hasselmann and G. Barzel, 1993. Implementation of an Efficient Scheme for Calculating Nonlinear Transfer from Wave-Wave Interactions. *J. Geophys. Res.*, 98, 14507-14525.

Snyder, R.L., W.L. Neu, R.B. Long and W.J.P. De Voogt, 1993. A Long-Range Program to Parameterize the Evolution of the Surface-Gravity-Wave Field. *Oceanography*. (In press.)

SHIVJI, MAHMOOD, PH.D., ASSISTANT PROFESSOR

Shivji, M., S.O. Rogers, and M. Stanhope, 1992. Rapid isolation of high molecular weight DNA from marine microalgae. *Marine Ecology Progress Series*. 84, 197-203.

M. Stanhope, D. Tagle, M. Shivji, M. Hattori, Y. Sakaki, J. Slightom and M. Goodman, 1993. Multiple L1 progenitors in prosimian primates: phylogenetic evidence from ORF1 sequences. *J. Molecular Evolution*, 37:179-189

M. Shivji, S. Rogers and M. Stanhope, 1992. Rapid isolation of high-molecular weight DNA from marine macroalgae. *Marine Ecology Progress Series*, 84, 197-203.

M. Shivji, N. Li and R. Cattolico, 1992. Structure and organization of rhodophyte and chromophyte plastid genomes: Implications for the ancestry of plastids. *Molecular and General Genetics*, 232, 65-73.

M. Shivji, 1991. Organization of the chloroplast genome in the red alga *Porphyra yezoensis*. *Current Genetics*, 19, 49-54.

M. Shivji, 1991. Understanding the Sources, Fates, and Effects of Toxic Materials Entering the Marine Environment as a Result of Human Activities. IN: Federal Plan for Ocean Pollution Research, Development, and Monitoring. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, 9-24.

SELECTED TECHNICAL REPORTS

M. Shivji, 1992. Willamette River Basin Water Quality Study: Review and Summary of Bacterial Conditions in the Willamette River and Major Tributaries. Tetra Tech, Inc. Prepared for the Oregon Department of Environmental Quality.

M. Shivji, 1992. Willamette River Basin Water Quality Study: Bacteria Monitoring Recommendations. Tetra Tech, Inc. Prepared for the Oregon Department of Environmental Quality.

- M. Shivji (with C. DeGasperi and S. Ellis), 1992. Willamette River Basin Water Quality Study: Water Quality Survey Data. Tetra Tech, Inc. Prepared for the Oregon Department of Environmental Quality.
- M. Shivji (with S. Ellis, T. Turk, C. DeGasperi and N. Musgrove), 1992. Reconnaissance Survey of the Lower Columbia River: Reconnaissance Report. Tetra Tech, Inc. Prepared for the Lower Columbia Bi-State (WA & OR) Program. (Report describes water and sediment quality, benthic invertebrate community composition/distribution and fish and invertebrate pollutant bioaccumulation).
- M. Shivji (with S. Ellis, C. DeGasperi, T. Deshler & G. St. Amant), 1992. Reconnaissance Survey of the Lower Columbia River: Inventory and Characterization of Pollutants. Tetra Tech, Inc. Prepared for the Lower Columbia River Bi-State (WA & OR) Program.
- M. Shivji (with S. Ellis, G. Braun & T. Deshler), 1992. Sediment Quality Characterization along Northwest Pipeline Corporation's Proposed Construction Path across the Columbia River. Tetra Tech, Inc. Prepared for PIC Technologies, Inc.
- M. Shivji and T. Pettillo, 1991. Puget Sound Sediment Reconnaissance Survey 1991. Tetra Tech, Inc. Prepared for the Washington State Department of Natural Resources.
- M. Shivji, 1990. Design of Biological Monitoring Programs for New York and New Jersey 403(c) Discharges. Tetra Tech, Inc. Prepared for the U.S. Environmental Protection Agency.

SPIELER, RICHARD E., PH.D., ASSOCIATE PROFESSOR

- *Petering, D.H., M.S. Goodrich, W. Hodgeman, S. Krezoski, D. Weber, C.F. Shaw III, R.E. Spieler, and L.D. Zettergren, 1990. Metal-binding proteins and peptides for the detection of heavy metals in aquatic environments. IN: Biomarkers for Environmental Contamination. McCarthy, J. and Schugart, L. (Eds.) Lewis Publishers, Inc., Boca Raton, FL pp. 239-254.
- *Weber, D.N., A.Russo, D.B. Seale and R.E. Spieler, 1991. Waterborne lead affects feeding abilities and neurotransmitter levels of juvenile fathead minnows (*Pimephales promelas*). *Aquatic Toxicology*, 21, 71-80.
- *Spieler, R.E. and D.N. Weber, 1991. Effects of waterborne lead on circulating thyroid hormones and cortisol in rainbow trout. *Med. Sci. Res.*, 19, 477.
- *Weber, D.N., S. Eisch, R.E. Spieler, and D.H. Petering, 1992. Metal redistribution in largemouth bass (*Micropterus salmoides*) in response to restraint stress and dietary cadmium: role of metallothionein and other metal-binding proteins. *Comp. Biochem. Physiol.*, 101C(2), 255-262.
- Spieler, R.E., 1992. Feeding entrained circadian rhythms in fishes. IN: *Rhythms in Fishes*. Ali, M.A. (Ed.). Plenum. New York, NY, 137-147.
- Spieler, R.E., 1992. Circadian rhythms in fishes and their implications for research. IN: *The Care and Use of Amphibians, Reptiles and Fish in Research*. Schaeffer, D.O., Kleinow, K.M. and Krulisch, L., Eds., Scientists Center for Animal Welfare. Bethesda, MD, 161-166.
- *Weber, D.N. and R.E. Spieler, 1994. Behavioral mechanisms of metal toxicity in fishes. In *Molecular Biological Approaches to Aquatic Toxicology*. D.C. Malins and G.M. Ostrander, Eds. Lewis Publishers, Inc. Boca Raton, FL, 421-467/
- *Banks, K., D. Gilliam, B. Mostkoff, and R. Spieler, 1994. Evaluation of a novel material for recycling tires into artificial reefs: A work in progress. Florida Artificial Reef Summit. (In press.)
- *Spieler, R.E., A.C. Russo, and D.N. Weber, 1994. Effects of waterborne lead on circadian variations of brain neurotransmitters in fathead minnows. (Submitted.)

Figure 1

Nova Oceanographic Center Average Faculty Funding Distribution

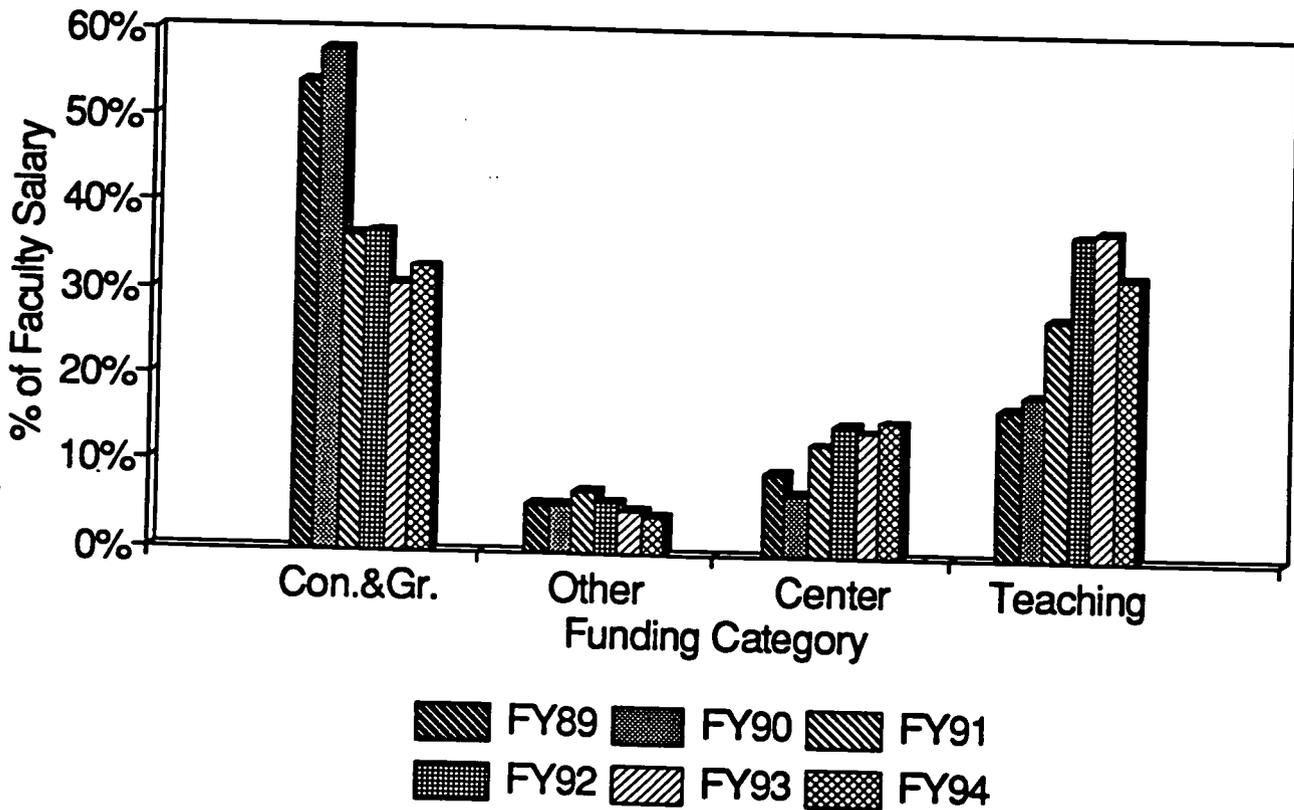


Figure 2

Nova Oceanographic Center AVERAGE Faculty Funding Distribution

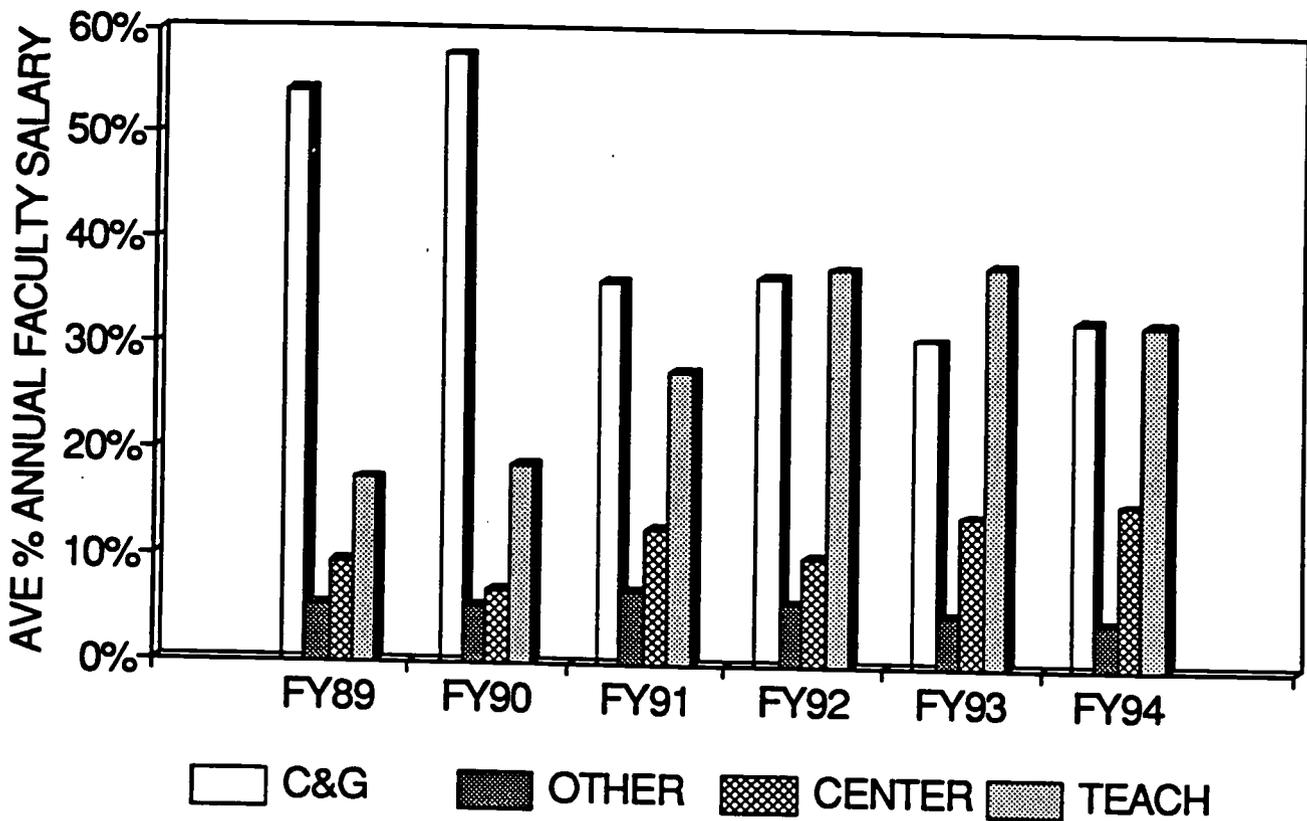


Figure 3

Oceanographic Center GRANT AND CONTRACT FUNDING

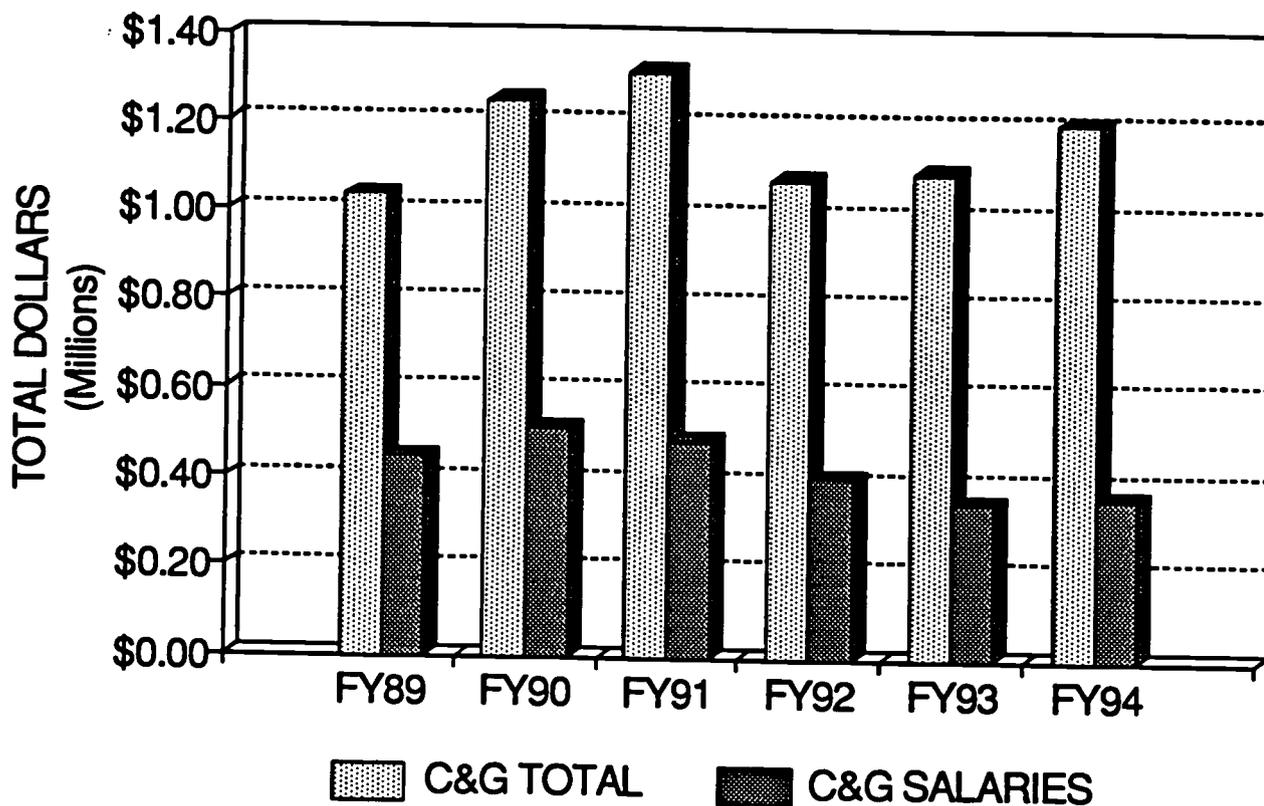


Figure 4
M.S. COURSE (3 cr.) ENROLLMENTS
 AVERAGE PER TERM

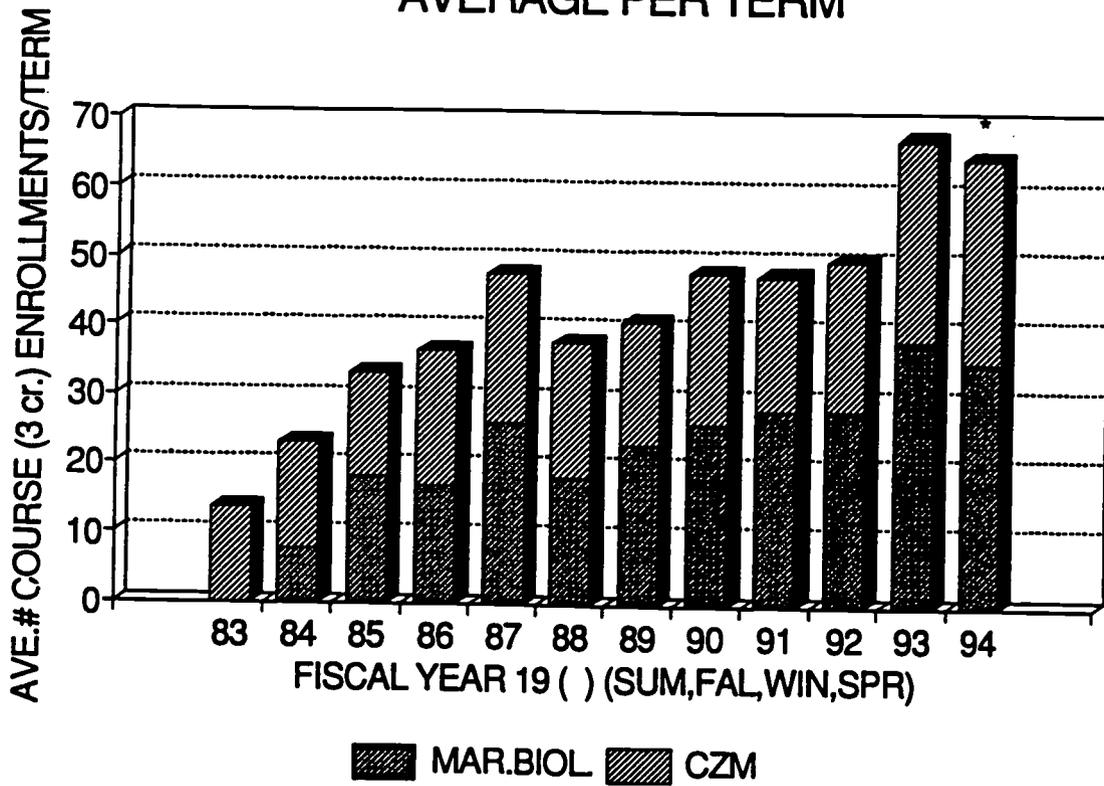
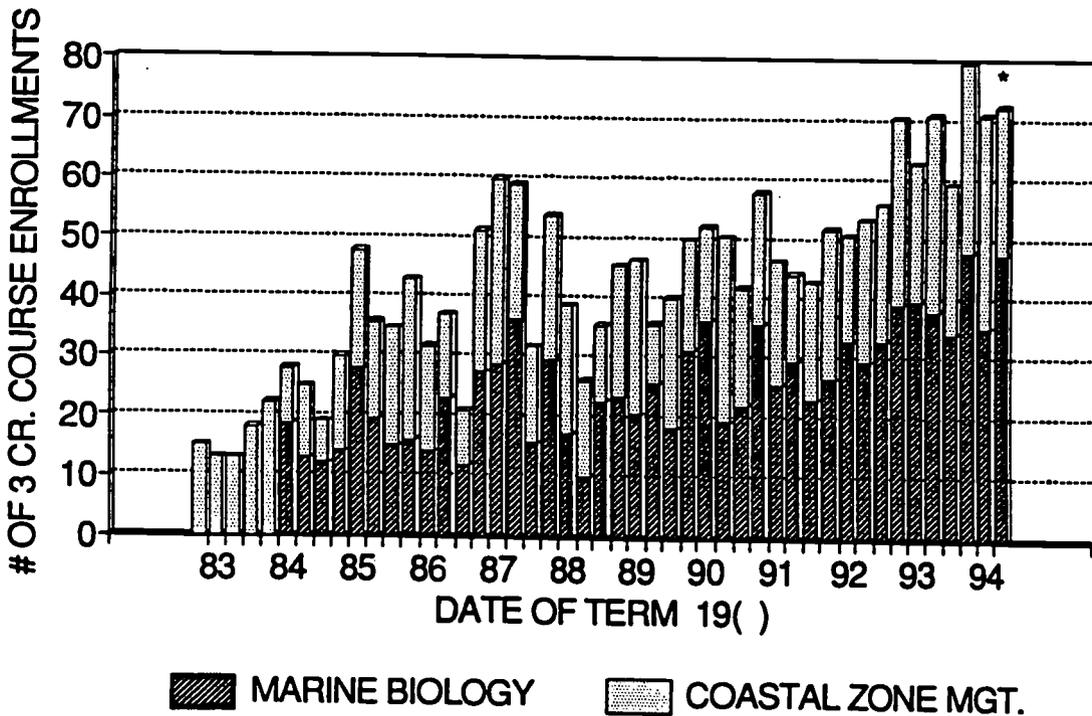


Figure 5

Master's Program Enrollments
 by Term & Speciality



SCHOOL OF BUSINESS AND ENTREPRENEURSHIP

Section I

DESCRIPTION OF PROGRAMS AND SERVICES

The School of Business and Entrepreneurship (SBE) offers graduate degree programs (Masters and Doctoral) that serve to expand fundamental principles of the free enterprise system and the advancement of the public service sector in America and international communities. The SBE places a strong emphasis on developing strategies that emphasize the creativity, innovation, and human productivity of business professionals.

The SBE has ten full-time faculty members. Of these ten faculty members, three joined the SBE since July 1, 1993. A search is currently underway to add three additional full-time faculty to the SBE. Additional full-time faculty enhances the School's ability to offer quality services to students while decreasing dependence on adjunct faculty.

PROGRAMS

The SBE is vertically integrated along its two distinct programs and associated specializations:

- **Business and Public Administration (Masters and Doctoral)**
 - Accounting
 - Business Administration
 - Finance
 - Financial Services Management
 - Gerontology
 - Health Services Management
 - Human Resources Management
 - Human Services
 - Management
 - Marketing
 - Public Administration
 - Quality Management
 - Real Estate Development
- **International Business (Masters and Doctoral)**
 - International Business
 - International Economics and Finance
 - International Management

SERVICES

- Center for Entrepreneurship
- Enterprise Ambassador Program
- Entrepreneur Hall of Fame

Section II

GOALS

- Goal 1.** Provide options for professionals in both generalist and specialist positions in business, government, and industry.
- Goal 2.** Provide competency-based curriculum to prepare students for management and leadership positions within their professions.
- Goal 3.** Enhance faculty development by providing opportunities for maintaining and upgrading competency and currency within their teaching and research fields.
- Goal 4.** Achieve innovation in educational delivery while maintaining academic quality.
- Goal 5.** Expand the delivery of programs to constituencies outside existing campus and cluster locations.
- Goal 6.** Raise capital funds to enhance the SBE buildings on the East Campus.
- Goal 7.** Develop and maintain community outreach and community linkage programs.
- Goal 8.** Meet the academic standards for professional business school and program accreditation.

Section III

OUTCOME MEASURES, PROCEDURES, AND ATTAINMENT STATUS

Goal 1. Provide options for professionals in both generalist and specialist positions in business, government, and industry.

Outcome Measure A: Enhance the professional development of managers and other mid-career professionals in business, government, and industry.

Procedure: Hold academic advisory board meetings to elicit input concerning the current needs of professionals in the fields of study offered by the School.

Attainment Status: The SBE continues to hold quarterly advisory board meetings. These meetings serve a valuable role, as entrepreneurial leaders offer expert guidance on issues central to SBE programs and curricula.

Outcome Measure B: Ensure that programs are operating at high levels of efficiency and effectiveness.

Procedure: Analyze the budget performance of programs as an indicator of whether or not they are meeting target clientele objectives.

Attainment Status: The SBE currently is experiencing in excess of a 7.5 percent annual growth rate (e.g., credit hours). Enrollment statistics comparing 1994 to 1993 follow. (Note: these and subsequent statistics relating to enrollment are accurate as of June 5, 1994).

Enrollment Trends in the SBE Unduplicated, Cumulative Head-Count		
Masters	July 1, 1992 to June 5, 1993	N = 2270
	July 1, 1993 to June 5, 1994	N = 2567
Doctoral	July 1, 1992 to June 5, 1993	N = 593
	July 1, 1993 to June 5, 1994	N = 656

Goal 2. Provide competency-based curriculum preparing students for management and leadership positions within their professions.

Outcome Measure: Programs and courses offered by the SBE will enhance students' skills and abilities.

Procedure 1: Survey students and graduates on a regular basis to assess their educational growth and competencies as a result of the curriculum.

Attainment Status: A comprehensive survey of SBE students is in draft form and will be distributed in September 1994. The survey will examine process and curricular issues that affect student success in the SBE.

Procedure 2: Survey students and graduates on a regular basis to elicit their perceptions of program benefit.

Attainment Status: A comprehensive survey of SBE graduates is in draft form and will be distributed in September 1994. The survey will examine phenomena associated with graduate outcomes that may be attributed to the SBE.

Procedure 3: Monitor the jobs held by graduates.

Attainment Status: The graduate outcomes survey will provide detailed information on jobs held by SBE graduates. This information will supplement the current assessment process, whereby graduates are asked to provide the SBE with their current business cards.

Goal 3. Enhance faculty development by providing opportunities for maintaining and upgrading competency and currency within their teaching and research fields.

Outcome Measure A: Faculty members will participate in professional conferences, seminars, and workshops.

Procedure: Send faculty to national and regional professional meetings.

Attainment Status: Faculty members in the SBE participated in the following professional meetings:

**SBE Faculty Participation and Attendance at Professional Conferences
FY 1993-1994**

Academy of Management
Academy of Business Administration
American College of Health Care Executives
American Society for Healthcare Education and Training
American Society for Training and Development
American Production and Inventory Control Society
American Chemical Society
American Society of Public Administration
Association of International Business
Association of Collegiate Business Schools and Programs
Caribbean Insurance Conference
Financial Management Association
Florida Shore & Beach Preservation Association
Group Health Association of America
National Association of Credit Management

Outcome Measure B: Faculty members will be evaluated on a regular basis to determine their teaching effectiveness.

Procedure: Faculty members will be evaluated by students, peers, and administration.

Attainment Status: All faculty members, both full-time and part-time, are evaluated by students each term. Student questionnaires include a series of quantitative and qualitative statements. These evaluations are used by Program directors, with results communicated to the faculty after student grades have been processed. The SBE has modified its peer review process and now uses a peer review process that better reflects AAUP guidelines on faculty review (*Policy Documents and Reports*, (1984). Washington, D.C.: American Association of University Professors, pp.154-157).

Outcome Measure C: Effective teaching is enhanced through currency in the teaching material.

Procedure: Update course syllabi, reading material, and course activities on a regular basis.

Attainment Status: Course syllabi, reading lists, and related course activities have been reviewed at least once during the year. In addition, the Dean of the SBE has directed that Program Directors appoint a lead instructor in each subject area, in keeping with the accreditation criteria established by the Southern Association of Colleges and Schools, as follows:

In each curricular area in which the institution offers a major in a degree program, there is at least one full-time faculty member with responsibility for oversight and coordination of that area (Southern Association of Colleges and Schools, *Criteria for Accreditation*, 1992-1993 edition, page 9).

Goal 4. Achieve innovation in educational delivery while maintaining academic quality.

Outcome Measure A: Use alternative delivery modes in the delivery of programs and courses.

Procedure: Program directors and faculty evaluate the use of different teaching methods and technology.

Attainment Status: The SBE recently entered into an affiliation with the CCIS. Among many planned outcomes, this affiliation will greatly enhance the SBE's use of computing and telecommunications for instructional purposes.

At the early stages of this affiliation, the SBE has established two program specializations that will utilize telecommunications as the dominant form of communication and instruction: Management Information Systems and Medical Management.

Outcome Measure B: Provide support for program directors and faculty in the design and implementation of innovative teaching methods and technology.

Procedure: Devote personnel and training to matters of pedagogy.

Attainment Status: The School conducted educational training sessions for full-time and part-time doctoral faculty at the annual faculty inservice training session. A similar activity will be repeated for faculty and staff affiliated with the masters program.

Goal 5. Expand the delivery of programs to constituencies outside existing campus and cluster locations.

Outcome Measure: Increase the number of clusters.

Procedure: Recruit students in new areas, both domestically and internationally.

Attainment Status: The SBE continues to develop new clusters and maintain existing clusters.

- For the first time at the University, doctoral clusters were opened in Europe (United Kingdom and Germany). Students include American expatriates as well as Europeans.
- New clusters were also opened in the United States in Los Angeles, California (Doctoral) and Atlanta, Georgia (Master's).

A complete listing of all SBE clusters follows:

Clusters in the SBE DURING FY 1993-94		
Master's		
American Express	Miami, Florida: Northwest, Kendall, So. Bell	
Atlanta, Georgia	Nassau	
Boca Raton, Florida	Orlando, Florida: Hardcourt, Radisson	
Cedar Rapids, Iowa	Pasco/Tri-Cities, Florida	
Cocoa, Florida	Pompano, Florida: Southern Bell	
Coral Springs, Florida	Sarasota, Florida	
Daytona Beach, Florida	SmithKline Beecham	
Fort Myers, Florida	Tallahassee, Florida	
Fort Wayne, Indiana	Tampa, Florida: GTED	
Gainesville, Florida	West Palm Beach, Florida	
Jacksonville, Florida:	Jackson Memorial	
AT&T & Southern Bell	Kendall, Florida	
Jamaica	Port Saint Lucie, Florida	
Juno Beach & Miami, Florida: FP&L		
Largo, Florida		
Doctoral		
Annandale, VA	Fort Lauderdale, FL	Phoenix, AZ
Austin, TX	FortWalton Beach, FL	Roanoke, VA
Birmingham, AL	Heidelberg, Germany	Seattle, WA
Brattleboro, VT	Hot Springs, AR	Spartanburg, SC
Davenport, IA	London, England	Whiting, IN
El Segundo, CA	Orlando, FL	

Goal 6. Raise capital funds to enhance the SBE buildings on the East Campus.

Outcome Measure: Obtain pledges and contributions sufficient to renovate and enhance the SBE buildings.

Procedure: Identify and solicit prominent individuals in the Greater Fort Lauderdale community.

Attainment Status: The School continues to make progress in soliciting funds for the SBE, as reflected in the following summary of pledges and contributions.

Pledges and Contributions to the SBE During FY 1993-94		
ACTIVITY	PLEGGED	PAYMENT
Building Enhancement	\$450,000	\$103,094
Alumni Annual Fund		\$172,180
Enterprise Ambassador Program		\$91,800
Entrepreneur Hall of Fame		\$41,000
General Support	\$15,000	\$2,000
Total	\$465,000	\$410,074

Goal 7. Develop and maintain community outreach and community linkage programs.

Outcome Measure A: Expand the delivery of continuing education and other professional development programs in the community.

Procedure: Actively pursue contracts for the delivery of continuing education and professional development programs with area businesses.

Attainment Status: The SBE is examining how the School should approach its role with respect to continuing education and professional development with area businesses. The SBE's Center for Entrepreneurship will soon become more entrepreneurial itself, with faculty directly involved in services to the local business community.

Outcome Measure B: Hold major public relations events in various fields to showcase the School and its programs.

Procedure: Organize thematic events that will attract the attention of various publics in the community.

Attainment Status: The largest event held was the fourth annual Entrepreneur Hall of Fame induction ceremony in May 1994. Three entrepreneurs well known in South Florida were honored: Joseph Amaturro, Michael Egan, Phillip Frost. This activity brings high visibility by South Florida business leaders to the University and the SBE. Indeed, Michael Egan (May 1994 Entrepreneur Hall of Fame Inductee) made the comment during the awards ceremony that, due to its innovative approach toward education for the adult professional, "Nova Southeastern University has become The University of the United States."

Outcome Measure C: Create new activities to enhance school programs, as well as community public relations.

Procedure: Produce educational products for a diversity of clientele.

Attainment Status: The SBE continues to offer a diversity of programs and specializations in areas related to business, entrepreneurship, and the public sector. As a result of the School's recent affiliation with the CCIS, the SBE is now initiating new master's and doctoral specializations with emphasis on computing and the management of information. Courses for these new specializations will be offered in cluster format and also in an online format. As such, the School is expanding its use of telecommunications as a means of reaching a diverse population.

Goal 8. Meet the academic standards for professional business school and program accreditation.

Outcome Measure: Increase the attributes of the School in accordance with the standards of professional accrediting bodies.

Procedure: Enhance the resources of the SBE in accordance with the standards of professional accrediting bodies.

Attainment Status: The School is an active member in the Association of Collegiate Schools of Business and Programs (ACBSP). The ACBSP has developed standards for accreditation which are used by the SBE as a guide for further development of faculty and other essential resources.

Section IV

OVERVIEW AND USE OF FINDINGS TO IMPROVE INSTITUTIONAL PROGRAMS, SERVICES, AND OPERATIONS

Summary of the Status of Attainment of Goals

A major activity in the SBE was the initial reorganization of support services in February 1994, with the appointment of Dr. Edward Lieblein as Dean. A unique aspect of this appointment is the affiliation between the SBE and the University's Center for Computer and Information Sciences (CCIS), since Dr. Lieblein serves as Dean of both centers. The affiliation between the SBE and CCIS puts the University in a position to offer new programs that build on the strength of both centers:

- The CCIS is a leader in the use of technology-based distance education.
- The SBE is a leader in the use of cluster development for practitioners in the business professions.

A general trend in the SBE is the significant growth in student enrollment, with 7.73 percent growth (e.g., credit hours) from 1993.

Faculty in the SBE made many contributions to the profession during FY1993-94, including those highlighted below.

- Books were published by two members of the SBE faculty.
- Faculty offered presentations at national conferences.
- Three faculty were appointed to state and national committees.
- The strength of the SBE was enhanced by the addition of three full-time faculty.
- SBE faculty serve as sponsors of the Journal of Applied Management and Entrepreneurship, with first publication anticipated Spring 1994.

The SBE curriculum also received considerable attention, with numerous actions put into place for program expansion and enhancement:

- The SBE continues to offer instruction in a cluster-based format at the University's East Campus to Master's and Doctoral students from Pacific Rim nations: Malaysia, Taiwan, and Thailand.
- The SBE collaborated with the University's undergraduate center to offer an articulated three-year BPM/MBA program.
- As an outcome of the formal affiliation between the CCIS and the SBE, the SBE has developed specialized curricular areas that reflect emerging business interests in information technologies. These include the MBA, with a specialization in Information Systems, and the DBA, with a specialization in Information Systems; and a Master of Science in Health Services Administration with an emphasis on Medical Records and Information Management

These areas have a curricular core in business and management, but they use new technologies that offer strategic opportunities in the acquisition and use of information.

- A Summer Institute model for instruction was introduced at the doctoral level. Doctoral students subsequently will increase their on-campus residency at the University.

Specific attention to the research process also received attention in the SBE during the 1993-94 academic year. Specific activities included the following:

- A comprehensive program review of the SBE was completed in Spring 1994. This review offered explicit examination of the SBE, its organizational structure, curriculum, faculty, library facilities, and support services.
- Plans are underway for the SBE to initiate in the near future a series of internal studies to determine better the efficacy of its programs and specializations and the outcomes of its curriculum on students. The studies then will become embedded into the regular operating procedures of the SBE.

The SBE also gave close attention to its internal operations and the effect of marketing, cluster development, and fiscal accountability on students. The following outcomes stand out among the many achievements for the SBE during FY 1993-94:

- As indicated previously, the SBE entered into an affiliation with the CCIS. Consolidation of personnel and services was put into effect in two departments, Instructional Technology and Marketing and Enrollment Management.
- For the first time at Nova Southeastern University, doctoral clusters were opened in Europe at sites in the United Kingdom and Germany. These clusters offer the School a strategic advantage for future growth in curricular areas related to internal management.
- New clusters were also opened in the United States in Los Angeles, California (Doctoral) and Atlanta, Georgia (Master's).
- The SBE continued to sponsor the Entrepreneur Hall of Fame, with three major entrepreneurs from South Florida formally recognized for their contributions to business and society.
- The SBE continued to receive support for its educational activities from local donors.

Impact of Findings on Improvements in Programs, Services, and Operations

The SBE is developing a strong commitment to the practice of using internal research and evaluation as the basis for decision-making and subsequent changes to curricula and administration. Evaluation is becoming a regularly-scheduled activity that is pervasive throughout the School. As such, attention to outcomes relevant to the School's eight goals served as the basis for the following activities, which had an impact on programs, services, and operations.

FACULTY

It became evident that more resources were needed if the School were to expand opportunities for faculty development. Thus, the SBE has initiated many actions to improve the professionalism of its faculty:

- SBE faculty regularly attend and participate in professional conferences.
- SBE faculty are now evaluated along a model that closely parallels guidelines established by the American Association of University Professors (AAUP).
- SBE faculty were among the first to benefit by improvements to the SBE's computing infrastructure.

CURRICULUM

The SBE curriculum is closely monitored so that it remains relevant to the needs of today's practitioners in business and public service. Internal and external scanning of the curriculum was evident by the manner in which the following actions were put into place:

- The SBE's advisory board offers valuable insight to the School, which helps faculty and administration maintain a curriculum that meets the needs of practitioners. Enrollments have exceeded projected numbers, with nearly eight percent growth over 1993.
- Full-time SBE faculty have been charged with greater accountability for specializations within the curriculum.
- The SBE continues to move into telecommunications as an alternate delivery mode for course delivery. Immediate action relative to this change has been the development of specializations in Management Information Systems and Medical Management.
- The SBE continues with annual meetings for faculty development during which full-time faculty and adjunct faculty meet over a long weekend, with attention focused on issues of critical importance to the curriculum.

RESEARCH

Research and evaluation will focus more attention on internal operations in the SBE. A general plan for research activities throughout the School is underway, with significant results expected by Fall 1994.

DEVELOPMENT

The SBE continues with its long history of program development, whereby marketing and community outreach are used to meet the needs of the School's national and international constituencies:

- New clusters have been formed in Florida and other states.
- In response to external scanning, the SBE also has established two European clusters.
- The SBE received \$465,000 in pledges for FY 1993-94.
- Greater attention to internal policies and procedures has enhanced significantly the operating activities of the School and, subsequently, its ability to offer services to students in a cost effective manner.

SCHOOL OF SOCIAL AND SYSTEMIC STUDIES

Section I

DESCRIPTION OF PROGRAMS AND SERVICES

The School of Social and Systemic Studies focuses on academic excellence and leadership in the education of professionals who provide effective intervention in difficult and problematic human relationships. The School offers innovative and creative programs in professional training, clinical and community service, and applied research.

The School develops curriculum and teaching methods for undergraduate, graduate, post-graduate, and continuing education. The cornerstone of academic education in the School is the teaching and learning of professional ethics and social responsibility. Students and faculty together integrate theory and practice through the free exchange of ideas in class and seminar discussion, applied research projects, and community service activities.

Graduate programs include an M.S. in Family Therapy Program with candidacy status through the Commission on Accreditation for Marriage and Family Therapy Training and Education of the American Association for Marriage and Family Therapy (AAMFT), an M.S. in Dispute Resolution Program, a Ph.D. in Family Therapy Program, a Ph.D. in Dispute Resolution, and a C.S. (Clinical Specialist) in Family Systems Health Care Program. The School also offers State of Florida Supreme Court Certified Training in County, Family, and Circuit/Civil Mediation.

The School also operates the Family Therapy Associates (FTA), a community-based clinical facility serving all families in Broward County. Funded by grants through the Broward County Board of Commissioners' Children's Services Board and the State of Florida Department of Health and Rehabilitative Services, FTA offers both in-clinic and in-home family therapy throughout the county. The School also provides mediation services through the Seventeenth Circuit Court of Broward County for dependency cases.

Section II

GOALS

- Goal 1.** Enable graduates to achieve their full potential as individuals, scholars, and professionals.
- Goal 2.** Educate graduates who will successfully apply their learning to the understanding and resolution of critical problems facing individuals, families, and communities.
- Goal 3.** Hire and retain faculty who offer the highest quality education utilizing the most effective instructional techniques.
- Goal 4.** Provide training and support in audio-video, computing, and telecommunication technology for all faculty, staff, and students.
- Goal 5.** Maintain and enhance fiscal stability.
- Goal 6.** Develop financial resources for capital improvements, buildings, and endowments.
- Goal 7.** Continue to build mutually satisfying and productive relationships with other academic centers at Nova Southeastern University through joint programs, faculty exchanges, and collaborative research and community service projects.
- Goal 8.** Provide clinical and consulting services to the community where these stem from the School's academic and research strengths.

Section III

OUTCOME MEASURES, PROCEDURES, AND ATTAINMENT STATUS

- Goal 1.** Enable graduates to achieve their full potential as individuals, scholars, and professionals.
- Goal 2.** Educate graduates who will successfully apply their learning to the understanding and resolution of critical problems facing individuals, families, and communities.

Outcome Measure: Survey graduates on their post-degree accomplishments

Over 75 percent of graduates will develop successful careers in occupations which allow and encourage their full productivity as individuals, scholars, and professionals. Their careers will be marked by contributions to the resolution of problems for individual, families, and communities.

Procedure: A file on the productivity and contributions of each graduate will be maintained. Each file will include information on the following:

- A graduate's statement of career goals and objectives.
- Descriptions of employment and volunteer work.
- Documentation of presentations, publications, and service to scholarly and professional groups.
- Documentation of completion of professional milestones (e.g., acceptance into a doctoral program, postgraduate internship, employment, promotions, memberships in scholarly and professional organizations, passage of licensing examinations, and awards).

Post-Graduation Positions											
Program*	Total # Grads	Graduate School		Private Practice		Agency/School		Business	Medical	University Teaching	Unknown
M.S. FT	35	8	22%	5	14%	18	51%	0	0	0	5 13%
Ph.D. FT	35	0		15	43%	10	29%	0	3 8%	7 20%	0
M.S. DR	11	8	73%	4	36%	0		3 27%	0	0	0

* FT=Family Therapy; DR=Dispute Resolution

Figure 1: Results of graduate student surveys

Attainment Status: Figure 1 summarizes the results of the survey of graduates. Of 35 doctoral graduates, virtually all are either licensed or are in internships preparing for licensure. Most of the graduates work in private practice, hospitals, agencies, or health maintenance organizations. Most of the master's graduates in family therapy work either in private practice or agency settings, or continue on to doctoral programs in family therapy or related fields. The first class of master's graduates in dispute resolution fall into three groups: those who work in private practice, those who perform conflict resolution

in business or education settings, and those continuing on to doctoral programs in conflict resolution or related fields such as J.D. programs. Of the eleven graduates, seven have gone on to graduate school, five are in private practice, and three are working in business or educational settings. In all, 81 percent of the graduates are either working in the field and/or are pursuing relevant post-master degree study. The results of the survey demonstrated that the graduates of the family therapy and conflict resolution training programs are achieving professional success and are making contributions to their communities. Faculty and administrators have used the results to refine the objectives for each program.

Goal 3. Hire and retain faculty who offer the highest quality education utilizing the most effective instructional techniques.

Outcome Measure A: Evaluate faculty teaching

Over 80 percent of student course evaluations will be positive.

Procedure: Conduct student course evaluations for each course taught in the School. Course evaluations will assess student understanding of course objectives, teaching style, assigned texts, student complaints, and suggestions for future courses.

Student Evaluations		
Academic Program*	% Positive	% Negative
M.S. FT	96	4
Ph.D. FT	94	6
M.S. DR	95	5
C.S. FSHC	94	6

*FT-Family Therapy, DR-Dispute Resolution, FSHC-Family Systems Health Care

Figure 2: Student evaluations of faculty instruction

Attainment Status: Figure 2 illustrates the students' evaluations of their courses, averaged by program. Over 94 percent of students in all programs reported that they learned useful, interesting, and significant ideas in their courses. Some students in each program stated that they had some concerns about their classes.

The most repeated positive comments were:

- Teachers' respect for students; willingness to work with students.
- Teaching students to think clearly by asking thought provoking questions.
- Provided clear examples of how to conduct therapy and supervision.

The most repeated concerns were:

- Too much to do in too little time.
- The need for more examples and practical techniques.

Outcome Measure B: Review faculty syllabi.

Over 90 percent of peer reviews of syllabi will be positive.

Procedure: Send syllabi for all courses to selected groups of recognized teachers in the field in which the courses are taught. Invite examination, critique, and suggestions for the syllabi.

Attainment Status: Reviews of the syllabi have been positive. Reviewers believe that students are receiving quality educational experiences. Reviewers suggestions included:

- Reducing the amount of grade achieved through class participation.
- Documenting expectations of students more clearly.
- Pacing the course so that students are not overwhelmed with material.

Outcome Measure C: Evaluate faculty productivity

All faculty members will pursue research programs and writing projects which result in at least two publications or presentations each year.

Procedure: A file will be kept for scholarly productivity of each faculty member which includes presentations and publications to professional groups as well as awards and recognition given faculty members for their achievements.

Attainment: The eight faculty members of the School have published or presented over twenty-five papers and articles. Dr. Ron Chenail co-edited a book with G. H. Morris of Texas Tech University on clinical discourse. Faculty published papers in The Journal of Systemic Therapies, The Journal of Family Psychotherapy, Family Systems Medicine, Family Business Review, Journal of Family Psychology, The Fourth R, The Qualitative Report, and Connessioni. Papers and workshops were presented at annual meetings of the American Association for Marriage and Family Therapy, the Florida Association for Marriage and Family Therapy, the Society of Teachers of Family Medicine, the American Society for Cybernetics, the Qualitative Research Conference in Education, the Qualitative Health Research Conference, the Academy of Family Mediators, the National Association for Mediation in Education, the Society of Professionals in Dispute Resolution, the Openness in Research: Qualitative Research, Philosophy of Life and the Other Conference, the Constructed Realities: Therapy, Theory and Research Conference, the Partnerships in Health Care: The Means to Effective Reform Conference, and the Speech Communication Association Convention.

- Goal 4.** Provide training and support in audio-video, computing, and telecommunication technology for all faculty, staff, and students.

Outcome Measure: Evaluate faculty and student use of technology

Over 75 percent of teachers and students will routinely use effective educational technology.

Procedure: Keep a file on in-service training for faculty and staff on personal and classroom use of audio-visual equipment, computers, electronic mail, Internet, library resources, and electronic database searches. Keep a file on classroom rosters of students who received training and orientation to similar equipment and resources.

Attainment Status: School records reflect that 100 percent of all faculty and staff received in-service training on the use of CD-ROM technology, using email, and accessing basic Internet tools and resources. School records also show that 100 percent of all incoming students received instruction and orientation to the micro computer lab and the CD-ROM system in the library, and access to Internet tools and resources. All family therapy students and faculty in clinical practicum use audio/video equipment for the taping of therapy sessions and research interviews. Many faculty began to use PCs with crystal display devices as a way to enhance classroom demonstrations. The School's Internet projects, such as the development of "MMSSSS," a listserv on campus mediation, and the availability of The Qualitative Report on the WorldWideWeb all were accomplished during this academic year.

Goal 5. Maintain and enhance fiscal stability.

Outcome Measure A: Evaluate income stability and diversification.

The School will meet its income expectations and not exceed its expense allocations for the 1993-94 budget year. The School will have diverse sources of income, including tuition, grants, and gifts.

Procedure: Evaluate whether or not the School has maintained a balanced budget. Evaluate sources and amounts of income for diversity.

Attainment Status: The School kept a balanced budget through the fiscal year, showing excellent growth over the previous year's figures and meeting revenue projects for the year. The M.S. in Family Therapy Program showed a strong increase in the number of admitted students, partially due to the candidacy status it received this year. The School as a whole trimmed its budget to ensure that expenses never exceeded revenue. The School also received two gifts this year: one from the Fischler Foundation for videotaping equipment for the clinic and one sizable life gift towards the development of post-doctoral scholarships.

Outcome Measure B: Evaluate application numbers

Each program of the School will increase its number of applicants by 20 percent over the 1993-94 figures.

Procedure: Evaluate whether each program has achieved a twenty percent increase in applicants.

Attainment Status: The doctoral and master's in family therapy programs both increased their applications in 1993-94 over 1992-93 (see Figure 3). The M.S. in Family Therapy Program had a tremendous increase in the number of applications. At the same time, the Family Systems Health Care Program experienced a drop. This decline represents the fact that almost all students currently enrolled in the Ph.D. or M.S. programs who were interested in the health care specialization have already enrolled.

Applicants			
Academic Program*	1992-93	1993-94	1994-95
M.S. FT	30	40	60
Ph.D. FT	15	25	25
M.S. DR	n/a	35	45
C.S. FSHC	10	8	12
Ph.D. DR	n/a	n/a	20

* FT=Family Therapy, DR=Dispute Resolution, FSHC=Family Systems Health Care

Figure 3: Number of applications by graduate programs

Goal 6. Develop financial resources for capital improvements, buildings, and endowments.

Outcome Measure A: In 1993-94, the School will have a functioning advisory board of community, business, and professional leaders who can both attract significant funds to the School and advise the School on the successful solicitation of donations.

Procedure: Determine whether or not an advisory board is functioning. If it is, document the effectiveness of board member suggestions for seeking revenue as well as the total amount of donations received due to the personal efforts of board members.

Attainment Status: The Dean, Dr. Ron Chenail, has solicited names of potential board members and has consulted with University specialists in development. He met with the Vice-President for Development who advised Dr. Chenail to delay the start of a School-wide board and concentrate on other development activities.

Outcome Measure B: Measure grant productivity

In 1993-94, faculty and students will complete at least six applications for new research and/or service grants.

Procedure: Determine whether the expected number of grant applications have been completed.

Attainment Status: Three applications for research grants or contracts have been written. Two of these were funded through the Broward County Board of Commissioners' Children's Services Board.

- Goal 7.** Continue to build mutually satisfying and productive relationships with other academic centers at Nova Southeastern University through joint programs, faculty exchanges, and collaborative research and community service projects.

Outcome Measure A: Evaluate collaboration

In 1993-94, the School will collaborate with other centers at the University in the design of interdisciplinary academic programs.

Procedure: Document whether or not programs are in place and students have been admitted.

Attainment Status: Preliminary work was completed on designing a joint M.S. in School Psychology Program with the Center for Psychological Studies. Also, the two centers made plans to work on a joint Psy.D. program with a family therapy specialization.

Outcome Measure B: Evaluate cooperative research and service efforts

In 1993-94, the School will cooperate with other centers to establish research initiatives, standing research work groups, and service projects.

Procedure: Document whether or not initiatives have occurred and whether committees have been established.

Attainment Status: Plans were begun between Nova Southeastern University and Florida Atlantic University to coordinate an annual qualitative research conference in 1994-95. A joint institute on family business was started between the School and the School for Business and Entrepreneurship. William Warters organized the University's first campus-wide mediation project, bringing together representatives from a number of academic centers and service departments in creating this program.

- Goal 8.** Provide clinical and consulting services to the community where these stem from the School's academic and research strengths.

Outcome Measure: Evaluate clinical outcome

In 1992-93, Family Therapy Associates (FTA) will continue to provide quality family therapy services to clients throughout the Broward County area. FTA will maintain the current level of grant and public funding of the clinical services.

Procedure: Obtain statistics on numbers and types of clients served at FTA. Track client satisfaction through follow up contacts. Document results of granting agency audits, as well as renewal of the service grants.

Attainment Status: FTA staff contacted over 400 clients several months after the end of therapy. As Figure 4 below shows, most therapy at FTA is successful. Therapy was rated as successful only when both the therapist and the client stated that therapy had achieved the goals which the client had sought. Eight percent of the therapy was rated as unsuccessful by either the client or the therapist. Eighteen percent (single sessions) of the clients only attended one session and either claimed they had immediate improvement in their situation or said they simply did not want to continue. Seven percent (other) said they did not want to participate in the survey and eight percent (unknown) could not be reached for comment.

The survey also analyzed some of the demographics of FTA clients. An analysis of the zip codes of clients show that they come equally from all parts of Broward County. Clients also represent diverse ethnic groups: 30 percent are African American, 53 percent are white, 15 percent are Hispanic, and two percent Haitian or other Caribbean.

FTA Outcome Survey				
Successful	Unsuccessful	Singles	Other	Unknown
59%	8%	18%	7%	8%

Figure 4: Outcome survey of Family Therapy Associates' clients

Section IV

OVERVIEW AND USE OF FINDINGS TO IMPROVE INSTITUTIONAL PROGRAMS, SERVICES, AND OPERATIONS

Summary of the Status of Attainment of Goals

In the past year, the School accomplished most of its major objectives and engaged in several studies to measure outcomes, using the results of those studies to modify curricula and policies. In this year, the School added a new degree program, the Ph.D. in Dispute Resolution. Three new faculty members were hired, including Drs. Christopher Burnett, William Warters, and Patricia Cole, which brings the total to ten teaching faculty, eight administrators and staff, nearly 175 students, and over 70 graduates. The School also served almost a thousand families in the public family therapy clinic. By the end of next year, the School will have 12 teaching faculty, approximately 237 students, and over 90 graduates. The expansion of the School points to the importance of the School's mission and the success of its efforts.

In the Department of Family Therapy, the M.S. in Family Therapy Program was granted candidacy status for specialty accreditation with the Commission on Accreditation for Marriage and Family Therapy Training and Education of the AAMFT. In a subsequent review, the Commission found that the program continued to be of high educational quality, that students receive good clinical experience, and that student records were maintained in improved order. The graduates of the M.S. in Family Therapy Program have been surveyed, and results indicate that graduates who sought employment had found work and several had entered doctoral programs. The graduates of the Ph.D. in Family Therapy Program reported that they have been employed in clinical practice, teaching, and supervision. Several doctoral graduates have published articles or chapters, or presented at professional meetings. The first graduating class of the M.S. in Dispute Resolution Program also reported great success in finding post-graduation employment and graduate school acceptances.

The family therapy faculty have published a number of articles, been invited for national and international presentations, and written new texts on clinical practice and research. Several faculty have joined ongoing international Internet conferences on research. In addition, William Warters helped to launch a Listserv Discussion group on campus mediation. The faculty have continued a tradition of scholarship and professional connectivity which enhances the quality of the family therapy and dispute resolution programs.

The Department of Dispute Resolution has continued its successful path. Response to the academic programs has remained very strong. Curriculum was reviewed and advances were made in developing clinical practicum in the community. The M.S. in Dispute Resolution Program graduated its first class of students. In the Fall 1994 semester, the Department will begin its first year of operating a Ph.D. in Dispute Resolution, the second program of its kind in the United States.

The School's clinical unit, Family Therapy Associates (FTA), was closely audited by the Broward County Children Services Board and the Florida Department of Health and Rehabilitative Services. FTA passed the audits and was cited for exemplary service to the almost 1000 families served. FTA also undertook an internal review of the demographics of clients and the clients experience in therapy. Close to 400 clients were contacted. The survey showed that clients came from all local ethnic groups in all sectors of Broward County. And, the majority of clients reported that they achieved a successful resolution of their difficulties through their service at FTA. FTA leadership and staff have used the results of the

review to increase the clarity of written case notes, conduct more thorough follow-up of closed cases, and to ensure that therapy addresses the needs of clients.

Impact of Findings on Improvements in Programs, Services, and Operations

Satisfaction with the structural changes made in the Department of Family Therapy, led the Dean to model the Department of Dispute Resolution administration after that of the Department of Family Therapy. Continuity between the two Departments has been achieved, and changes within the two administrative entities have been based upon research findings derived from on-going evaluation. Curriculum development for the new Ph.D. in Dispute Resolution was also developed based upon means which originally proved successful in the creation of the family therapy programs.

The need for more information on teaching effectiveness led to the creation of a School-wide committee on teacher evaluation. A three-tier system consisting student evaluations, administrative review, and self-review was proposed. Plans were made to test and implement that process in 1994-95. Also, policies for faculty promotion were reviewed, and changes were made to clarify procedures in the process.

From the results of last year's assessment of institutional effectiveness, a major commitment was made to upgrade the School's technology training efforts. Orientations were held for all faculty, staff, and administrators to introduce them to e-mail, CD-ROM's, Internet, and local area networks (LANs). Budget requests were made for the School to add a LAN with a CD-ROM drive. In addition, curriculum was developed to orient students to technology. Every in-coming student in the School receives orientation to the micro computer lab and the CD-ROM's in the library, and training in the use and application of Internet tools and resources.

Based on some short falls in student recruitment experienced in some programs in past years, improved accounting procedures were developed to assess future enrollment projections. More effort was put into coordinating recruitment efforts. A series of open houses and a community speaker series proved successful in attracting new students to the School's programs. Marketing efforts were evaluated closer this last year. The School's print advertisements became more diversified, and Internet marketing initiatives were introduced through specialized advertising in services such as ConflictNet.

The School improved its recruiting efforts in three faculty searches for the year. Through these efforts the School hired its first minority faculty person, Dr. Gonzalo Bachigalupe from the University of Massachusetts. The School also experienced its best overall pool of applicants for the Dispute Resolution faculty searches and hired two well-trained and respected faculty, Drs. Cathie Witty and Brian Polkinghorn. Special effort was made with all three searches to advertise in publications that regularly reached diverse audiences.

The Ph.D. in Family Therapy program continued to focus more sharply on the training of students in critical thinking and writing skills. A new writing course was developed and was taught in the first summer session. Also, a committee was formed, and new guidelines for writing the dissertation were drafted.

The FTA clinical director, Assistant Dean Sharon Boesl, has used evaluation results to encourage FTA staff to improve the clarity of case notes, to follow-up carefully on closed cases, and to make sure that therapy is addressing the needs of families by periodically evaluating with clients whether the goals for which they came to therapy are being met. Also, information collected on FTA's level of service helped the School's administration to prepare grant proposals during the year.

SHEPARD BROAD LAW CENTER

Section I

DESCRIPTION OF PROGRAMS AND SERVICES

The Shepard Broad Law Center awards the J.D. degree. Most students earn that degree as full-time day students in six semesters. Other students accelerate their graduation one semester by attending two summer terms. Approximately five percent of the Center's students enter as part-time day students and complete their degrees in eight to ten semesters.

The Law Center participates in three joint degree programs. Two of these programs—the J.D./M.B.A. and the J.D./M.S. (Psychology)—are offered in conjunction with other Nova Southeastern University Centers. The third program—the J.D./M.U.R.P.—is offered in conjunction with Florida Atlantic University's Department of Urban and Regional Planning.

Although Law Center students are encouraged to undertake a broad range of coursework, a limited number of Fall 1994 entrants will be able to elect a track of courses in the family/children's law area. If this program is successful, the faculty will consider other "specialization" tracks.

The Law Center provides Continuing Legal Education (CLE) by co-sponsoring programs offered by other organizations.

The Law Center provides numerous services to the community. These include programs for which students receive academic credit, programs for which students participate as paid assistants, and research institutes.

The major program for which students receive academic credit is the Civil Clinic. The inhouse clinic represents indigent individuals referred by Legal Aid; it has a general component, an AIDS project, and a children's project. The Center is adding an environmental component during 1994-95. Clinic extern students are placed with a variety of governmental agencies and Legal Aid Offices. Several externs participate in a juvenile Mediation Project.

Students receive credit for serving as Guardians Ad Litem, teaching in the public schools in the Street Law Program, and providing research services in the Judicial Administration Program or the Legislative Internship.

Students participate in the Disability Rights Projects by working as interns in various agencies providing services to persons with disabilities. In addition, both students and faculty participate in projects sponsored by the King Disability Law Institute and the Center for the Study of Youth Policy.

Section II

GOALS

- Goal 1.** Improve the reputation of the Law Center among lawyers, legal academics, and potential law students, and communicate to a national audience the Law Center's distinctive approach to local education and the success of its efforts in training quality lawyers.
- Goal 2.** Expand the focus of the Law Center faculty and students to include an appreciation of international as well as national legal practice.
- Goal 3.** Engage in curricular revision that focuses on prerequisites, coverage in related courses, limited enrollment in upper class courses, alternative dispute resolution, and specializations.
- Goal 4.** Create an excellent Academic Resource Program.
- Goal 5.** Revise the student handbook and honor code to increase students' understanding of their rights and responsibilities.
- Goal 6.** Encourage student participation in existing activities (such as Law Review, Moot Court, Mock Trial, and legal fraternities), and expand other opportunities for students.
- Goal 7.** Encourage faculty and staff to work with Bar and community groups on projects where the Center's expertise will be helpful.
- Goal 8.** Encourage student interest and participation in public interest work.

Section III

OUTCOME MEASURES, PROCEDURES, AND ATTAINMENT STATUS

- Goal 1. Improve the reputation of the Law Center among lawyers, legal academics, and potential law students, and communicate to a national audience the Law Center's distinctive approach to legal education and the success of its efforts in training quality lawyers.**

Outcome Measure: Increase the prestige associated with being a student, alumnus, or employee of the Shepard Broad Law Center, particularly as reflected in external news reports, ratings, and other media and ratings vehicles.

Procedure: Encourage students, alumni/ae, and employees to submit noteworthy accomplishments for press releases and for inclusion in the *Nova Southeastern Lawyer*; to include their Law Center affiliation when they write articles, give speeches, or are interviewed; to help recruit students; and to network with Law Center alumni/ae.

Attainment Status: Two faculty members were invited to serve on ABA/AALS site evaluation teams, a sign of recognition by accrediting agencies. The Law Center's ranking among academics improved in the most recent *U.S. News Survey*, but its ranking among practitioners declined. Additional resources must be devoted to the attainment of this goal.

- Goal 2. Expand the focus of the Law Center faculty and students to include an appreciation of international as well as national legal practice.**

Outcome Measure A: The Law Center hosted visitors from the Dominican Republic, Belgium, Russia, and England. Four Law Center faculty lectured in Russia, visiting three cities. One law student spent a semester studying at a law school in the Netherlands, and another spent the summer working for human rights in Latin America.

Outcome Measure B: Increase the number of Law Center opportunities involving aspects of International Law.

Procedure: Include additional International Law courses in the curriculum and support participation in groups such as the International Law Society.

Attainment Status: The Law Center offered courses in Comparative Law—Russia, International Law, International Business Transactions, and International Human Rights. An additional Comparative Law course was developed for 1995, and International Litigation was developed for fall 1994. Students organized a Jessup Moot Court Team and hosted the regional rounds of that international competition. Students became active in the International Law Students Association. In 1994-95, the Law Center will add the *Journal of International and Comparative Law* as a second law review offering.

- Goal 3. Engage in curricular revision that focuses on prerequisites, coverage in related courses, limited enrollment in upper class courses, alternative dispute resolution, and specialization.**

Outcome Measure A: Increase the relevance of course prerequisites and clarify the waiver rules.

Procedure: Review existing courses, invite faculty teaching courses to agree on a common set of prerequisites, and adopt common waiver rules.

Attainment Status: The faculty adopted rules providing that prior coursework prerequisites were not subject to waiver; faculty adopted a new set of course prerequisites that eliminated excessive prerequisites for several courses.

Outcome Measure B: Offer additional coursework involving skills training, including alternative dispute resolution.

Procedure: Prepare additional course syllabi for faculty approval and interview additional faculty able to teach skills courses.

Attainment Status: The faculty authorized a new course in Alternative Dispute Resolution. Several new part-time faculty were engaged to teach additional sections of Trial Advocacy, PreTrial Practice, and Workshops.

Outcome Measure C: Initiate a specialization program.

Procedure: Reassign faculty to teach in a previously-approved but never initiated program for family/children's law practitioners.

Attainment Status: The program was announced at the end of 1993-94 and will begin operation in fall 1994.

Outcome Measure D: Increase graduation requirements, particularly in critical skills.

Procedure: Invite Curriculum Committee and faculty consideration of additional coursework and writing components.

Attainment Status: The overall graduation requirements were increased by three credit hours; a required third semester of Legal Writing was approved, and a writing component was added to all courses.

Goal 4. Create an excellent Academic Resource Program.

Outcome Measure: Decrease attrition caused by academic deficiencies.

Procedure: Engage a program director to develop and implement a program for at-risk students.

Attainment Status: A program director began work in 1993-94 but resigned to return to his home law school before completing the project. A second director began work in June 1994 and will continue these efforts.

Goal 5. Revise the student handbook and honor code to increase students' understanding of their rights and responsibilities.

Outcome Measure: Reduce the number of petitions from students who fail to understand Law Center rules and regulations.

Procedure: Charge a committee with drafting and presenting a better constructed set of Codes for faculty approval.

Attainment Status: A new Honor Code has been approved. A new Code of Academic Regulations is being completed.

- Goal 6. Encourage student participation in existing activities (such as Law Review, Moot Court, Mock Trial, and legal fraternities), and expand other opportunities for students.**

Outcome Measure: Increase the number of student groups and the number of students participating in such groups.

Procedure: Increase funding for student activities, and affiliate with outside groups offering important cocurricular opportunities.

Attainment Status: The Law Center initiated several activities, such as Pro Bono Students Florida and a competitive soccer team (to face a law school team from England). There was increased student participation in faculty committees, and student efforts in a variety of other activities. By year-end, the number of students participating in activities, and the number of sanctioned activities, had increased to fill the available building space.

- Goal 7. Encourage faculty and staff to work with Bar and community groups on projects where the Center's expertise will be helpful.**

Outcome Measure: To support faculty/staff participation with various Bar and community groups.

Procedure: Increase financial incentives for such activity and promote public recognition of participants.

Attainment Status: Virtually every member of the faculty participated in at least one public service activity outside the Law Center. Several faculty assumed leadership roles in a variety of ABA, AALS, Florida Bar, and local organizations.

- Goal 8. Encourage student interest and participation in public interest work.**

Outcome Measure: To increase student response to various pro bono opportunities.

Procedure: Expand the number of pro bono opportunities sponsored or funded by the Law Center.

Attainment Status: Students initiated a chapter of the National Association for Public Interest Law and expanded the Public Interest Law Project. Students volunteered to aid Hurricane Andrew victims in the Law Center's FEMA project. Students volunteered for placement with pro bono organizations through the Pro Bono Students Florida (part of PBS America) director, who is housed at the Law Center.

Procedure: Provide recognition, either at graduation or at a separate ceremony, for students who have completed a certain number of pro bono hours.

Attainment Status: An awards ceremony was discussed late in 1993-94, but no final plans were made. Further planning will occur in 1994-95.

Section IV

OVERVIEW AND USE OF FINDINGS TO IMPROVE INSTITUTIONAL PROGRAMS, SERVICES, AND OPERATIONS

Summary of the Status of Attainment of Goals

Although the Law Center made strides in accomplishing its goals, it did not fully attain its objectives in several areas. The Center was distracted by its Dean search and by building problems; in addition, the Center may have been too ambitious in the number of new projects undertaken. Nevertheless, the Law Center emerged from the year with some degree of success in accomplishing goals.

The Center's greatest success came with regard to Goal 3. Curricular changes made during 1994-95 will enhance graduates' skills and should ultimately increase their marketability. Further success in that arena awaits better results from Goal 1. Although *U.S. News and World Report* rankings showed an increase in the Center's prestige among law school rankers, its ranking by practitioners declined. Even though the law community accords these rankings little credence because of perceived shortcomings in ranking methodology, they do affect students' application and enrollment decisions. It is clear that publicity efforts were inadequate, a shortcoming that will be addressed in 1994-95.

Faculty and staff participation in the legal community continued at its high level. In addition, by affiliating with Pro Bono Students American, the Center enhances opportunities for students to participate in pro bono activities. As a result, the Center continues to make progress in Goal 7 and Goal 8. Likewise, several relationships were established with law schools or faculty outside the United States, so that the Center has begun the process contemplated by Goal 2.

Three other goals (along with Goal 3) relate to the student academic experience. Efforts are designed to enhance students' success during law school and their preparation for the practice of law. Student participation in extracurricular activities was extraordinary last year. A new law review was proposed, several new student groups were formed, and students were involved in hosting several major moot court and trial competitions. The Center is pleased with its progress on Goal 6. The Center did not do quite as well with Goal 4. Although the Academic Resource Program now exists, it was hampered by administrative turnover. In addition, with respect to Goal 5, efforts were not completed. That project will continue during 1994-95.

Impact of Findings on Improvements in Programs, Services, and Operations

The impact of findings relative to each goal is addressed below:

- Goal 1. The Center took several steps to increase its reputation among target audiences. Although the Center believes that it offers an excellent program, that belief is irrelevant if it is not shared by potential applicants, donors, and members of the community. One area in which substantial efforts were made involved upgrading publications. These included a viewbook designed to show of important attributes of the Center's programs, and the *Nova Southeastern Lawyer*, a Center alumni/donor journal. A Gallery of Achievement, highlighting alumni accomplishments, was initiated, and several alumni were formally inducted. The next step to be addressed in 1994-95 is a significant increase in press releases and other communications with nonalumni.

- Goal 2.** The American Bar Association sponsors CEELI and Sister Law School programs designed to build relationships between United States law schools and those in Central and Eastern Europe and in Latin America. In addition to hosting deans who visited under those programs' auspices, the Law Center sponsored an International Law Moot Court (Jessup) team and served as a regional site for the Jessup Moot Court Competition; bid for an International and Comparative Law Review sponsored by the International Law Students Association; sent a team of faculty to Russia to lecture in three Russian law schools; and hosted a soccer team from an English law school, a Russian professor, and a Belgian professor.
- Goal 3.** Responding to perceptions that parts of the curriculum were over- or under-inclusive, the Curriculum Committee began the first major curricular revision since 1987. By year end, faculty interest groups had met and made recommendations as to prerequisite changes as well as to a prerequisite waiver policy. The faculty added a course in Alternative Dispute Resolution, to be offered for Fall 1994, and the family/children's law specialization program was announced to applicants for Fall 1994 admission. Recognizing the importance of communication skills, the faculty added a writing component to all courses and added a third, required semester of Legal Writing. Finally, the faculty increased the graduation requirement by three credits to increase the likelihood of students taking sufficient courses needed for the effective practice of law.
- Goal 4.** Attrition, particularly of minority students, has presented many problems in recent years. If the Law Center is to make its education available to a diverse student body, it must take risks in the admissions process. However, risk-taking is unfair to the students admitted in the absence of an effective academic resource program. Such a program was inaugurated in 1993-94. Unfortunately, the first director opted to return to his home law school before fully implementing the program's structure. A new director was engaged with a mandate to establish a program that is responsive to the needs of students.
- Goal 5.** For several years, the faculty has been troubled by a number of petitions it received from students whose ability to continue, or whose timely graduation, was jeopardized because they failed to follow Law Center rules. Dealing with these petitions involved excessive faculty/administration time and led to student morale problems. A code revision/handbook revision project was inaugurated. By year-end the Honor Code had been rewritten, and the Code of Academic Regulations revision was in draft form. When the project is completed, rules and regulations will be rewritten and rearranged in a more accessible manner. The Center anticipates a significant drop in the number of petitions and improved student morale.
- Goal 6.** The student body has increased vastly in size during the past five years without a concomitant increase in the number of activities available for students. This year, the Law Center initiated several activities, increased student participation in faculty committees, and encouraged student efforts in a variety of other activities. By year-end, the number of students participating in activities and the number of sanctioned activities had increased. Space constraints are a major limitation on significant further improvement in responding to this goal.
- Goal 7.** The faculty has always understood the value of community service. Unfortunately, many faculty members limited their activities in this area because of concerns about cost and concerns that their efforts were not "valued." Two changes were made for 1994-95. First, the Law Center made Bar participation less costly for faculty by subsidizing a larger portion of

faculty dues. Second, the administration published an in-house newsletter highlighting faculty service activities as well as faculty scholarship.

- Goal 8.** A problem many lawyers and physicians share is their perceived lack of empathy with their clients' problems. Although the classroom experience is rigorous, it should not produce a cadre of uncaring practitioners. To be an attorney and counselor at law, a graduate must be able to relate to clients as human beings. In addition to coursework such as Interviewing, Counseling, Negotiating, and participating in Civil Clinic, which are designed to introduce the human element, the Law Center invested resources in affiliated programs designed to introduce students to pro bono opportunities. During 1994-95, these efforts included affiliation with Pro Bono Students America, continuation of the Hurricane Andrew FEMA project, expansion of the Public Interest Law Project, and the addition of a chapter of the National Association for Public Interest Law.

STUDENT SERVICES

Section I

OVERVIEW OF PROGRAMS AND SERVICES

Student Services is responsible for the learning support services essential to the achievements of overall institutional goals in a continually changing educational environment. These services include Financial Aid, Student Life, Residential Life, University Registrar, Student Wellness Center, and the Career Resource Center.

- **The Office of Student Financial Aid** administers the University's financial aid program of grants, loans, scholarships, and student employment. In addition, professional financial planning counselors can help students plan for the most efficient use of their financial resources for education.
- **Student Life** encompasses over 300 events per semester and 16 intramural sport leagues competing annually. Student Life provides a variety of programming and services to the entire University community. The office enhances the academic development of students with active participation in a variety of co-curricular opportunities. Student Life is committed to the ideal of student leadership and development, which serves as the basis for all its endeavors.

The University Student Organizations provide services to the entire University community. Student organizations are partially funded by undergraduate student activity fees. These organizations include: Accent, the public relations arm of Student Life; C.A.B., *The Campus Activities Board*, which coordinates the campus activities calendar and hosts a wide variety of original events on- and off-campus; Campus Volunteerism; Commuter Student Services; International Student Services; NSU Players; Speech and Debate; The Knight, the official newspaper of NSU; and WNSU, NSU's radio station. The Nova College Student Government Association is the official governing body for undergraduates, representing needs and interests on a university, state, and national level. Fifteen Student Clubs are supported through student activity fees and are open to all undergraduate activity-fee-paying NSU students.

- **Residential Life** offers students seeking on-campus housing several different housing options dependent on academic year and space availability. Undergraduate students are housed in the newest residence hall, which offers double accommodations for two students, including a private bath. Facility rooms in this complex include a computer lab, T.V. lounge, classroom, kitchen, and laundry room. Graduate students may choose between single or double accommodations in one- or two-bedroom apartments. All housing is furnished.
- **The University Registrar** handles student registration for all graduate and undergraduate courses offered by the University. In addition, loan deferments, enrollment certifications, transcript requests, international student visa implementation, and VA benefit certifications are handled through the office.
- **The Student Wellness Center** is staffed by a full-time Health Educator, promotes wellness, and advocates healthy lifestyle choices for the Nova southeastern University (NSU) community. The Wellness Center offers ongoing health education programs; student counseling services free of charge to NSU students; a dynamic peer education program known as SHAPE (Student Health Advocates of Peer Education); free aerobics classes on-campus; a local physician referral network; student health insurance and a dental plan; free literature to students dealing with a variety of health-related topics; basic first aid and free over-the-counter medications; and a library of health information resources.

- **The Career Resource Center (CRC)** provides career counseling and job placement services to undergraduate students, graduate students, and alumni. The Center helps individuals identify their unique abilities, interests, and skills, and to creatively combine these into a desirable career. A variety of companies, organizations, educational institutions, and government agencies post full-time and part-time positions at the CRC. Workshops and seminars are offered throughout the academic year, including Resume Writing, Interviewing Techniques, Career Planning, Summer Employment, Studying Abroad, and Applying to Graduate School. Tools used to identify students' interests include the Strong Campbell Interest Inventory and SIGI-Plus. SIGI-Plus is a computerized career guidance program that aids in assessing and evaluating an individual's career and educational goals. Special events sponsored by the CRC include Career Expo, an annual job fair, guest speakers, and an on-campus recruiting program.

For Student Services the major event of 1993-94 was the merger with Southeastern University of the Health Sciences. This was particularly so for the Office of the Registrar and the Office of Student Financial Aid. Well before the actual date of merger, these offices were working with their counterparts at Southeastern to achieve an early and trouble-free transition to Nova's Student Information System (SIS) and Financial Aid Module (FAM). In addition to the installation of appropriate hardware and software at the North Miami Campus, considerable staff training was required. In January the Office of Student Financial Aid began processing student loans for students of the new Health Professions Division, and the Office of the Registrar successfully transferred student registration to the University's Student Information System (SIS).

Section II

GOALS

- Goal 1.** Provide a secure and supportive environment that is conducive to the academic and personal growth of students.
- Goal 2.** Support and enhance the academic experience.
- Goal 3.** Provide assistance to students in achieving the goals and objectives of a postsecondary education.
- Goal 4.** Provide a residence hall and campus environment with which students are satisfied.
- Goal 5.** Integrate students' academic experience with their participation in society.
- Goal 6.** Recognize and meet the needs of special populations.
- Goal 7.** Demonstrate responsiveness to student needs through timely and accurate information.
- Goal 8.** Demonstrate a proactive knowledge of issues as they relate to students' needs by staying abreast of current developments in the profession.

Section III

OUTCOME MEASURES, PROCEDURES, AND ATTAINMENT STATUS

Goal 1. Provide a secure and supportive environment that is conducive to the academic and personal growth of students.

Outcome Measure A: Decrease the number of behavior problems and increase the number of quality programs.

Procedure: Provide students with night security, regularly scheduled Residential Life Staff duty, quiet hours, and the consistent enforcement of Residential Life regulations. Train Resident Advisors in planning programs based on the Wellness model. Conduct joint training with Residential Life and Public Safety to stay abreast of safety issues.

Attainment Status: The statistics for Resident Advisor programming and incident reports (behavior problems) are as follows:

	1990-91	1991-92	1992-93	1993-94
Programs	85	487	250	354
Incident Reports	166	147	53	68

While on duty, Resident Advisors complete three sets of building rounds, which consist of enforcing residence hall policies, maintaining a safe and secure environment, being available to residents, staff, and other University departments, and responding to emergency situations.

Outcome Measure B: Increase in Student Leadership opportunities through development of club officer/chairperson positions and Greek organizations.

Procedure: Expand the number of club and Greek officers for 1993-94.

Attainment Status:

	1991-92	1992-93	1993-94
Clubs - Officers	22 - 71	31 - 109	32 - 114
Greek Organizations - Officers			4 - 18

Outcome Measure C: Increase utilization of the Wellness Center and its services.

Procedure: Increased publicity of the Wellness Center by phone, the Wellness Center Healthletter, The NOVA Knights Newspaper, literature racks, and bulletin boards, has increased awareness of its services, programs, and events.

Attainment Status: The following is a breakdown of Wellness Center usage and attendance at programs.

Wellness Center Usage and Attendance	
Wellness Center Services	No. of Students Using Service
Physician Referrals	1,027
Student Counseling	85
Basic First Aid	2,124
Free Condoms	4,700
HEALTH SEMINARS	
Nutrition	82
Sex in the 90's	95
PEER EDUCATION PROGRAMS	
Stress Management	96
Nutrition	43
Fitness	12
SUPPORT GROUPS	
Alcohol and Drug Support Group	16
Eating Disorder Support Group	7
STEP Aerobics & Bodysculpting	720

Procedure: Provide individuals with career counseling to assist in matching their interests with professions and helping to identify their educational pursuits.

Attainment Status: The number of students and alumni receiving career counselling over the last four academic years is reflected below. The University has succeeded in maintaining a high level of use of these services.

1990-91	1991-92	1992-93	1993-94
203*	275*	227*	213**

* Approximations based on student and alumni sign-in records.

**Recorded through April 1, 1994.

Outcome Measure E: The completion of functional specifications for the development of a room scheduling program to reserve and schedule instructional and special event space effectively.

Procedure: An initial project team was formed, specifications were developed, and computer programming is in process.

Attainment Status: The expected completion date is January 1995.

Goal 2. Support and enhance the academic experience.

Outcome Measure A: Increase the number of quality programs presented by Resident Advisors, faculty, and staff, and the Resident Student Association.

Procedure: Train the Resident Advisor, Senior Staff, Professional Staff, and the Resident Student Association, in student development issues in order to promote a residence hall environment which involves interaction, programming, education, and responsibility. Initiate a faculty/staff fellow program, to increase an academic presence in the residence halls.

Attainment Status: Area Directors meet biweekly with their Resident Advisors to discuss programming efforts and resident discipline concerns. Residential Life continues to improve the resource library with the addition of educational videotapes and games. The Resident Advisors and Senior Staff had a two-week training session in late July and early August to educate and train them on their job responsibilities and working together as a team, as well as to provide ongoing in-service training sessions each semester to assist staff members in performing their jobs and continue their personal development. Resident Student Association has a training period in September and participation in weekly meetings with the Assistant Director who serves as an advisor.

Outcome Measure B: Provide learning opportunities for all students outside the classroom.

Procedure: Establish a series of workshops/programs that target non-academic growth and development of Nova Students.

Attainment Status: Student Life sponsored 16 different intramural sports and various social activities to bring students and faculty together. The annual student leadership conference provided leadership training to over sixty undergraduates.

Outcome Measure C: Provide learning opportunities for student peer educators outside the classroom in health and wellness.

Procedure: Create a student peer education organization to provide health awareness outreach programs to the University students.

Attainment Status: In August of 1993, the organization known as Student Health Advocates of Peer Education (SHAPE), was first introduced. SHAPE members, are students who promote wellness and advocate healthy lifestyle choices for the University students. SHAPE students received specialized training in nutrition, fitness, substance abuse, stress management, sexually transmitted diseases, AIDS, and other health related topics. SHAPE members provide educational programs and events to the University students to help them maintain optimal health now and in the future.

Outcome Measure D: Provide a series of seminars and events for career counseling.

Procedures: Program monthly career planning, job placement, and career oriented events.

Attainment Status: Student Services is recommending that graduating seniors be required to attend career oriented workshops and is attempting to gain the support of University staff and faculty to encourage all students to participate in their own career plan.

Goal 3: Provide assistance to students in achieving the goals and objectives of a postsecondary education.

Outcome Measure A. Students evaluate Resident Advisors on the Resident Advisors' facilitation of student development issues, programming, and knowledge of the University.

Procedure: Develop a Resident Advisor staff that is responsible and well educated in higher education and student development issues, in conjunction with a professional staff that has a continued vision for the long-term success of Residential Life.

Attainment Status: A total of 303 floor evaluations of Resident Advisors was completed by residents, yielding a 66% return rate. These evaluations, combined with observations made by Senior Staff and Resident Advisor self-evaluations, were used in a comprehensive Resident Advisor evaluation process. The Resident Advisor selection process includes three different interviews, including an individual interview, a group process interview, and an administrative interview.

Outcome Measure B: Provide learning opportunities for Psychology seniors to gain experience in their specialized area of interest.

Procedure: Provide students with the opportunity to fulfill their Community Psychology Practicums as supervised by the Wellness Center.

Attainment Status: In Fall 1993 two students performed their Practicums in Community Psychology as supervised by the Wellness Center. The first student provided a weekly alcohol and drug addiction support group and an eating disorder support group for 23 people. The second student provided weekly stress management workshops to over 96 residents.

Outcome Measure C: Offer students and alumni job leads and career contacts with reputable companies and organizations.

Procedure: Prepare Nova Southeastern University graduates for what qualities employers seek in prospective employees.

Attainment Status: A random survey was sent to state and national companies to determine qualifications they look for in prospective employees. This information will be communicated to students when they begin a career search.

Outcome Measure D: Provide counseling to existing and prospective students, recognizing that higher education financing is a continuous process that begins with early planning and concludes with the final loan payment.

Procedure: Provide counselors with the opportunity to participate in training workshops provided by the State and National financial aid associations.

Attainment Status: In 1993, Financial Aid counselors attended at least two workshops to enhance their counseling skills.

Goal 4: Provide a residence hall and campus environment with which students are satisfied.

Outcome Measure A: Monitor students' levels of satisfaction related to their physical and social environment in the residence halls as measured in the Quality of Student Life survey.

Procedure: Survey residential students using the Quality of Student Life survey in November.

Attainment Status: The physical environment of the residence halls underwent renovations in the summer of 1992, 1993 and 1994, based on the results of the Quality of Student Life survey. As a result, the retention rate increased from 44 percent in 1991 to 70 percent in 1994.

Outcome Measure B: Promote wellness and advocate healthy lifestyle choices in the University community.

Procedure: Continue to develop and monitor health and wellness programs for the University students.

Attainment Status: The Wellness Center and SHAPE have implemented programs and events to include the following: nutrition and healthy eating classes, fitness workshops, stress management, AIDS awareness, alcohol and drug support groups, eating disorder support groups, Health and Wellness Exposition, National Alcohol Awareness Week, Walk-a-thon, Red Ribbon Day, National Condom Week, Wellness Day, Safe Spring Break Promo, STEP Aerobics, and Bodysculpting.

Outcome Measure C: Promote summer work programs, part-time work, cooperative education, and internships to students.

Procedure: Maintain a resourceful guide to various work experience opportunities.

Attainment Status: Summer employment opportunities have been posted in the Career Resource Center. Some of the companies include: Florida Game and Fresh Water Fish Commission, Federal Job List with Atlanta GA OPM Office, Lake Bryn Mar Camp, Sea Critters Inc., Harbordale Elementary School, YMCA's, American Camping Association, City of Plantation, Institute of International Education, Yellowstone Park Services Rocky Mountain Parks, Concordia Language Villages, Academic Study Associates, The Center for English Studies. Other opportunities are available through study, work or travel abroad programs.

Goal 5. Integrate students' academic experience with their participation in society.

Outcome Measure A: Increase involvement in community service programs, and increase social awareness and responsibility.

Procedure: Provide students with the opportunity to participate in community service activities through Residential Life and Student Life. Provide a sound judicial process

which focuses on education. Give students the opportunity to live with people of varying lifestyles.

Attainment Status: Residential Life and Student Life have presented the following community service programs to residents: trip to Covenant house, National "Make-A-Difference Day" for abused children, recycling drives, walk-a-thon, blood drives, clothing drive for sexual assault treatment division, food drives, Christmas cards for a charity, women in distress supply drive, building clean-ups, "Trick or Treat" off the streets, valentines for children, and lollipop drive for the Broward Mental Health Association. The judicial process improved in 1993 due to the addition of an undergraduate honor court which interacts and compliments the Residential Life judicial process.

Outcome Measure B: Encourage students to participate in community, social and professional activities.

Procedure: Provide students with the opportunity to attend various conferences, educational seminars, and participate in community events which allows them to interact with professionals and students.

Attainment Status: In November 1993, SHAPE members, attended the annual BACCHUS Conference in Orlando, Florida. SHAPE members participated in several educational sessions, while they had the opportunity to network with other peer educators and professionals nationwide. Later in the month, the SHAPE members coordinated a 5K Walk-a-thon to benefit Big Brothers/Big Sisters of Broward County. All proceeds were donated to purchase gifts for children awaiting assignment to a Big Brother or Sister. In March 1994 SHAPE members volunteered at the "Taste of Ft. Lauderdale" - once again to benefit Big Brothers/Big Sisters of Broward County. Several members also participated in a 24-hour softball tournament for AIDS research. In April Intercollegiate Substance Prevention/Campuses Addressing Substance Abuse Conference in Miami, Florida. The conference theme, titled "Wellness: Natural Highs," was highlighted by keynote speaker - Sandy Queen, a dynamic lecturer in the areas of self-esteem, stress management, wellness and humor.

Outcome Measure C: Encourage students to participate in informative career related activities.

Procedure: Implement an annual speakers bureau in which students could interact with professionals regarding career planning and job search strategies.

Attainment Status: Approximately 100 students attended the First Annual Career Speakers Bureau Series presented by David Swanson, an internationally known speaker. Subject areas that were discussed included how student leaders can use their leadership skills in their future, and how to get the job you want. Additional speakers will be scheduled for the Spring of 1995.

Goal 6: Recognize and meet the needs of special populations.

Outcome Measure A: Enhance awareness of and response to needs of special populations.

Procedure: Train Resident Advisors to identify and understand special needs of students. Adapt office operations, facilities, and procedures to accommodate student needs. Continue to meet with various student organizations and special interest groups for any input.

Attainment Status: Resident Advisors participate in training that specifically deals with multiculturalism, homophobia, sexism, racism, non-traditional students, and physically challenged students. This past year, an apartment was adapted to meet the needs of a physically challenged student.

Outcome Measure B: The Career Resource Center will continue to support the needs of special populations.

Procedure: Emphasis will be placed on ensuring that employers who interview students will adhere to equal employment opportunities and address the needs of special populations.

Attainment Status: Require on campus recruiters and companies which attend the Career Expo to sign an Equal Employment Agreement, and provide career related resources to reach special populations including: People With Disabilities, Job Strategies For People With Disabilities, The Black Collegian, Journal of The National Technical Association, Career Opportunities For Minority Graduates and Exito Success.

Outcome Measure C: The Wellness Center will continue to support special populations.

Procedure: Network with various student organizations and serve as an advocate for individual concerns or suggestions.

Attainment Status: Develop and implement various health educational seminars and events based on recognition of the needs of special populations which include, but are not limited to, women, athletes, student leaders, non-traditional, and international students.

Goal 7: Demonstrate responsiveness to student needs through timely and accurate information.

Outcome Measure A: Decrease the number of complaints regarding accurate information. Evaluate levels of student satisfaction as stated in the Quality of Student Life survey, Resident Advisor floor evaluations, and Resident Student Association feedback.

Procedure: Continue to provide accuracy in communication and dissemination of information. Train all members of the Residential Life team to be knowledgeable regarding other University resources. Design and establish monthly calendars, meetings and updated bulletin boards, and disseminate more timely information to the University community.

Attainment Status: Residential Life information is disseminated to all graduate centers, the new Health Professions Division, and the Farquhar Center for Undergraduate Studies.

Information is also disseminated through monthly reports at Student Life and Central Services meetings and weekly staff meetings.

Outcome Measure B: Increase awareness of the Career Resource Center and its services.

Procedure: Continue to utilize University media to promote Career Resource Center services.

Attainment Status: Through the use of the following media, the Career Resource Center hopes to increase student awareness: The Nova Knight, The Alumni Network, E-Mail, The Career Resource Center Bulletin Board, Residential Life Bulletin Board, Close Circuit Title Maker, The Career Network, and bi-monthly job announcements sent to academic departments.

Outcome Measure C: To maintain the timely distribution of grades, transcripts and other reports to the office constituency.

Procedure: Review the dates and time necessary to process grades and distribute grades to students; continue to review transcript processing procedure to maintain and improve processing time and to review the procedure utilized in producing other reports.

Attainment Status: Grades are processed and distributed in the mail within four days from date of receipt. Most transcript requests are processed immediately with only those few taking more than two hours. New student computerized application records are data-verified by the supervisor. All in-person registrations are verified via hard copy output by the student. Transcript requests can also be FAXED and sent via FAX to accommodate student needs. A telephone attendant has been assigned to respond to general requests and to direct students to proper functional areas.

Outcome Measure D: Establish administrative procedures that are responsive to the financial aid needs of students as well as to the needs of the University.

Procedure: Notify students of financial aid decisions as early as possible in order to serve the student's best interest, and when possible, coordinate these notifications with those of Admissions decisions. Coordinate the administration of financial aid through a central office to ensure consistency in making awards to students and the most efficient use of available funds.

Attainment Status: Up-to-date training for the counselors is provided through various workshops provided by the Department of Education. All financial aid students receive a financial aid packet containing current information on financial aid.

Outcome Measure E: Satisfactory program audits conducted by various external agencies and audit firms for Financial Aid and for the Registrar's office by the Veterans' Administration.

Procedure: - Review audit results to determine areas of deficiency and take corrective action.

Attainment Status: Financial aid audit reports have been "clean" for the last four years indicating improvement in record keeping and record retention. VA compliance surveys have resulted in outstanding evaluations.

Outcome Measure F: Increase awareness of the Wellness Center and its services.

Procedure: Post and distribute information regarding current events, health educational information, and other important health related information throughout campus in order to reach the various campus populations: residents, undergraduates, graduates, non-traditional students, etc.

Attainment Status: The Wellness Center publishes a monthly healthletter to keep students informed of current events and health related information. Other advertising is provided by the NOVA Knights Newspaper, the Update, and student phone service. Bulletin boards and literature display racks are strategically located throughout campus to keep University students informed of Wellness Center services and events.

Goal 8: Demonstrate a proactive knowledge of issues as they relate to student's needs by staying abreast of current developments in the profession.

Outcome Measure A: Increase involvement by 1995 in professional organizations, and increase knowledge of resources.

Procedure: Continue to develop as professionals and increase knowledge in Residential Life and health related issues through networking, periodicals, journals, research, staff training, conference participation, current subscriptions, and maintaining professional development through membership/associations with Professional Organizations.

Attainment Status: The Director of Residential Life has served as State Editor, State Representative, Exhibit Chair for the host committee and has been appointed to the 1994-95 Governing council for SEAHO. Residential Life professionals are also involved in the following organizations: NASPA, ACPA, SEAHO, Florida Housing Officers Association, Association of Student Judicial Administrators, SACSA, FARH, and FRAS. The Wellness Center will remain involved with Campuses Addressing Substance Abuse (CASA), the BACCHUS Peer Education Network, National Wellness Association, American College Health Association, and the Southern College Health Association. It will continue to obtain Continuing Education Units in health related courses. Continue to network with local peer educator groups and leaders. Keep current health resources and subscriptions in the Wellness Center.

Section IV

OVERVIEW AND USE OF FINDINGS TO IMPROVE INSTITUTIONAL PROGRAMS, SERVICES, AND OPERATIONS

Summary of the Status of Attainment of Goals

A summary of the status of attainment relative to each Student Services goal is presented below.

In Goal 1 Student Services strives to provide a secure and supportive environment that is conducive to the academic and personal growth of students. Several findings reflect the level of attainment of this goal: the number of incident reports for 1993-94 was up slightly over 1992-93, although it remains well below that for 1990-91 and 1991-92; the number of student clubs is up over 1992-93; utilization of the Wellness Center is up significantly; the University has maintained a consistent level of use by students of its career counselling services; and, finally, by January 1995, the University anticipates completion of a room scheduling program which will enable more effective use of rooms for instructional and special event purposes.

Goal 2 reflects a focus on supporting and enhancing the academic experience. In support of this goal, Student Services has pursued the following: training is scheduled for Residential Life staff; the resource library was enhanced with educational videotapes and games; Student Life sponsored 16 different intramural sports and various social activities for students and faculty; Student Health Advocates for Peer Education was introduced to students; and a recommendation has been put forth that graduating seniors will be required to attend career oriented workshops.

In Goal 3, Student Services seeks to provide assistance to students in achieving goals and objectives of postsecondary education. To this end, Student Services has: conducted a number of Resident Advisor evaluations and maintains a comprehensive Resident Advisor Selection process; enabled Psychology majors to perform supervised practicums through the Wellness Center; conducted an employer survey, the results of which will be provided to students to assist them in their career search; and provided opportunities for Financial Aid counselors to further their professional development.

With respect to Goal 4, which focuses on enhancing student satisfaction with the residence halls and campus environment, the residence halls have undergone renovations each of the last three years, which has boosted the retention rate from 44% in 1991 to 70% in 1994; Student Services has initiated programs in the Wellness Center and SHAPE which address health and wellness; and work experience opportunities have been posted and promoted.

Goal 5 seeks to integrate student's academic experience with their participation in society. In meeting this goal, Student Services has: presented a variety of community service programs to residents and has refined the Residential Life judicial process with respect to the honor court; enabled students to attend various conferences and seminars and to participate in numerous community events; and a speaker's bureau has been established during 1993-94.

In Goal 6 Student Services strives to recognize and meet the needs of special populations. To accomplish this goal, Student Services has: enabled Resident Advisors to participate in specialized training; adapted an apartment to the special needs of a disabled student; taken steps to ensure that campus recruiters adhere to equal employment guidelines; and developed and implemented various seminars and events focused on the needs of special populations.

Student Services seeks in Goal 7 to demonstrate responsiveness to student needs for timely and accurate information. Accordingly, it has disseminated information regarding Residential Life to the academic centers; used various University-based media to disseminate information regarding the Career Resource Center; and streamlined the administration and distribution procedures and processes relating to grades, transcripts, and financial aid.

In Goal 8 Student Services seeks to demonstrate a proactive knowledge of issues as they relate to students' needs by staying abreast of current developments in the profession. In pursuit of this goal, Student Services staff have maintained a high level of involvement in networking, publishing, training, and professional associations.

Impact of Findings on Improvements in Programs, Services, and Operations

During 1993-94 a new telephone voice attendant service was introduced. This technology provides faster and more comprehensive service to both on-campus and field-based students. The Office of Student Financial Aid continues to expand its outreach initiative by increasing off-campus visits and presentations to better serve field-based populations.

In Fall 1994, the Title III Strengthening Institutions Grant from the U. S. Department of Education will have concluded. However, the Farquhar Center for Undergraduate Studies has committed to continuing the comprehensive academic support and student services at Nova Southeastern's fifteen off-campus baccalaureate sites located throughout the state of Florida. The services, which include advising, tutoring, workshops in study skills and preparation for standardized test-taking, have filled a critical void in services to field-based students.

During 1993-94 the on-campus focus of student services was on student retention through increased programming. In response to the Quality of Student Life Survey findings, new and expanded activities by Student Life, Residential Life, and the Wellness Center have been implemented. The result has been a dramatic 11% increase in the rate of housing retention. Programs in leadership, community service, personal development, and career planning have been enormously successful.

In spite of successes, much remains to be done. The Student Services target is constantly moving as student characteristics, expectations, values and needs change. Particularly, the University must continually reevaluate emerging populations—minorities, physically challenged, veterans, international students, field-based students, and retiring adult learners to make certain that its student service programs and activities fully enable these populations to attain their educational objectives.

Nova Southeastern University will continue to improve, develop, modify, and expand the learning support services and programs essential to the achievement of overall institutional goals in a continually changing educational environment.



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