Self Study
Report
to the
Middle
States
Commission
on
Higher
Education
and the
Puerto
Rico
Council
of
Higher
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Executive Summary

The *University of Puerto Rico at Cayey* (UPRC), formerly known as *Cayey University College*, is located on a former military base with 167 acres of land nestled in the green hills of Puerto Rico's "Cordillera Central." It is the only liberal arts college on the island and offers quality undergraduate education to a population of 3,747 students, as of fall 2004. Established in 1967, UPRC is one of the eleven units of the UPR system and is licensed by the Council of Higher Education of Puerto Rico and accredited by the Middle States Commission on Higher Education (MSCHE).

The Mission and Goals statement, as approved in 1993, guides all UPRC academic programs, administrative activities, planning processes, and organizational structures characterized by clear lines of authority. A Board of Trustees oversees the general functioning of the UPR system without interfering in local governance matters. UPRC has a well-defined collegial and participative governance structure, which allows academic issues to prevail within the institutional agenda. Students, faculty, and the administrative staff have ample opportunity to participate in governance and decision making at UPRC. The Institution's assessment model is mission-driven and addresses all educational offerings, services, and restructuring and renovation processes, allowing for periodic evaluation of their effectiveness. Recent years have witnessed an improved use of assessment results for guiding decisions related to teaching and to overall institutional effectiveness.

The information included in this document results from many years of intense effort, hard work, and dedication to institutional initiatives in all areas. Most information is based on current data related to each of the standards defined by MSCHE.

UPRC offers 31 bachelors and one associate degree program. The student body is 99% Hispanic and 72% female; 75% are Pell Grant recipients. The average graduation time is approximately five years. In Fall 2004, 90% of the students matriculated full-time and were evenly distributed in the four academic areas: natural sciences/mathematics, business administration, social sciences/humanities, and education. The Honors Program, the Athletic Program, Student Support Services, Upward Bound, Research Initiative Scientific Enhancement Program (RISE), Research Infrastructure for Minority Institutions (RIMI), Howard Hughes, and MBRS SCORE, among others, are additional opportunities that UPRC offers its students and that reflect the institution's holistic commitment to student learning. The institution continues to emphasize interdisciplinary activities, research, and community service as means to strengthen teaching and learning.

The average student-faculty ratio (in FTE) is 23:1. The full time faculty teaching load is twelve (12) credit hours per semester. The average salary for teaching faculty is $ 41,535. About 75% of the entering student population comes from the public school system. The cost per student per annum at UPRC is $ 8,071.

The institution has 195 full-time faculty members, 108 males and 87 females, distributed in 3 areas: Arts, Natural Sciences, and Professional Schools. They are highly qualified (53% hold

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doctoral degrees) and maintain high standards in teaching, research, creative projects, and service. They are strongly committed to professional development and scholarly activities that complement the academic agenda and offer quality learning experiences to students. UPRC sponsors six *Professional Development Days* each academic year (three per semester) to promote the continued professional growth of its faculty and is the only higher education institution in Puerto Rico to establish this practice. In addition, the knowledge and experience of UPRC librarians play an important role in student development as well as other academic endeavors. These combined efforts have resulted in a well-prepared student body of adequate size and composition and with high achievement and retention rates (85%). The students' achievements and retention are not accidental, but are due to effective services provided by a team of qualified professionals, including 420 non-faculty personnel who help students attain their educational goals in a supportive and sensitive way.

Over the past four years, UPRC has dramatically increased its external funds and donations: by 242% (from $5.2 to $17.8 million), which includes a 1680% increase (from ~$0.2 to $3.1 million) in the area of research. Technological infrastructure has taken another quantum leap: from 0 to 33 courses that take advantage of online technologies such as Blackboard and Macromedia Breeze to improve student learning experiences. Last year, approximately $750,000 was spent to strengthen the institution's cutting-edge technological environments. As a result, 45 public schools will directly benefit in revamping their instructional technologies through a Digital School project. Such initiatives, efforts, and outcomes have led UPRC to declare teacher preparation and training as one of its niches. Another dramatic increase in the last year has occurred in the Early Admission Option for talented incoming students, which has seen an increase of 480% (from 20 to 116).

The UPRC administrative structure consists of a Chancellor, Deans and Associate Deans of Academic, Administrative, and Student Affairs, and a number of other key offices (Library, Guidance-Counseling, Student Exchange and International Studies Program, and the Division of Extension and Continuing Education, among others). The Institution's small, first-rate museum houses important collections and hosts special exhibitions that enrich the academic and cultural life of our students and the community at large.

UPRC is in the middle of a carefully planned and profound transformation of its general education component, which represents a responsible first-rate option for students. The General Education renovation process is well-entrenched and has developed a sound conceptual framework, including abilities, contents, and methodologies that have resulted from a consensus process in recent years. Course offerings at UPRC are aligned with the established academic agenda and incorporate research experiences, community service, interdisciplinary studies, and the use of technology. UPRC's catalog has current information and is available at the Institution's web site as well as in hard copies for the Puerto Rican community. The admission requirements and procedures, academic calendar, rules and regulations affecting students, and grievance procedures are readily available to the community..

The human, financial, and technical resources, as well as the physical facilities at UPRC show that priorities are aligned to the mission, goals, and objectives of the institution. Budget allocation in the past five years is evidence that the academic area is a priority; the institution

offers nearly 800 sections of courses per semester. UPRC adheres to ethical standards in the conduct of all programs and activities that involve the public and the constituencies it serves. Academic freedom, intellectual freedom, and freedom of expression are central to UPRC's academic enterprise.

This self-study process has been an effort of the whole university community and is available at the UPRC web site: **http://www.cayey.upr.edu**. After completing this important task, UPRC feels proud of its achievements and has a clear sense of what needs to be done to continue on this successful path. The recommendations drawn from this self study will form part of the institutional agenda for the next five years, so that UPRC can continue to improve the curriculum, assessment of learning, evaluation of student achievement, the quality and rigor of the academic offerings, and institutional research, as well as expand the breadth of knowledge and promote intellectual inquiry.

Introduction

UPRC Profile

The University of Puerto Rico at Cayey (UPRC) is located on one hundred sixty seven acres of subtropical land located in the central mountain region of Puerto Rico. Since the University opened in 1967, this natural setting has been ideal for developing the primary goal of the faculty, staff, and students: academic excellence.

As part of the eleven-campus University of Puerto Rico system, UPRC is just 35 minutes from San Juan, the cosmopolitan capital of Puerto Rico. Offering Bachelor's Degrees in the Arts, Natural Sciences, Education, and Business, as well as an Associate Degree in Office Administration and Technology, UPRC has earned the distinction of being the most important institution of higher education in the mountainous central region of the Island.

The University is the center of rich cultural activities in which the most distinguished intellectual and artistic minds can meet. The faculty is highly qualified, with many holding doctoral degrees from some of the most prestigious institutions in the world. It is both highly experienced and culturally diverse; professors have come from India, France, Germany, Spain, Chile, Colombia, Cuba, and the mainland United States, among other countries, as well as Puerto Rico.

The institution is committed to research and artistic creation, thus helping students qualify for graduate studies in prestigious universities in the United States and other countries, often with full scholarships. Many students take advantage of the institution's keen interest in the arts: they participate in the many workshops on experimental theater and literary creation offered on the campus, as well as in the exhibitions and activities frequently presented at the campus art musuem. The Pio López Art Museum houses important historic collections and provides students of all ages with opportunities to create and study art.

Students majoring in the sciences also have a variety of programs and research opportunities in which they can participate. UPRC is among the top 50 institutions in the United States that award science and engineering Bachelor's degrees to Hispanics, and it is also among the top 25 Hispanic-serving institutions whose B.S. graduates completed a Ph.D. in science from 1995 to 1999.

An Honors Program and an Athletic Program are also available to students. These reflect the institution's commitment to providing a well-rounded undergraduate experience at UPRC.

Finally, the University also sponsors student participation in international and exchange programs through which UPRC students can study at universities in Spain, Latin America, or the United States and students from other countries can spend their year abroad at Cayey. The "foreign" students who study at Cayey, and the UPRC students who return to campus from study abroad, enhance the cultural diversity of the institution, enriching the educational experience of the entire academic community.

How the Self Study Process was Conducted

The Self-Study Steering Committee was selected and assembled in January 2003. In consultation with administrators and members of the university community, the Committee decided to use a *comprehensive* approach since UPRC is a liberal arts college with strengths in the arts and the sciences as well as professional studies. Guided by MSCHE's *"Characteristics of Excellence,"* the Self Study Design placed strong emphasis on fundamental elements of each of the fourteen standards. It was elaborated throughout the spring semester, when the Steering Committee met weekly or more often, as needed. After various revisions, the design was sent to MSCHE in June. In August, nine subcommittees were formed to deal with the questions contained in the design, with some committees working on more than one standard.

Under the guidance of the Steering Committee, the subcommittees set out to answer the questions assigned to them, using the clearly specified guidelines described in the Self-Study Design. Over the course of the following year, they met, designed questionnaires, formed focus groups, conducted interviews, and pursued a series of other strategies to prepare for the writing of their reports. By August 2004, as scheduled, the subcommittees had submitted all their information and the Steering Committee set out to prepare its first draft of the final report. An admittedly incomplete draft was submitted to Dr. Dolores Fernández, Chair of the Visiting Committee, during the first week of September, in preparation for her visit on September 14. Dr. Fernández understood that the draft needed major revisions and asked the Steering Committee to submit a new one by December 1, 2004. The Committee's composition was modified in order to add new members. After an intense period of drafting a report that responded to Dr. Fernandez's recommendations, the Committee delivered a more complete document on December 1, as agreed. During the following weeks, the Committee continued to work intensely on the document, which underwent further revisions and modifications. All drafts were available to the community at large through UPRC's web page; presentations were also made to different university constituencies in order to solicit their input.

How the Self Study Report is Organized

This report has been organized into fourteen chapters; each corresponds with one of the fourteen standards described in *Characteristics of Excellence*. Within each chapter, sections are also numbered after the standard. The corresponding exhibits, to be available on campus for the Visiting Committee, are numbered accordingly. A series of addenda submitted with this final report offer additional information that supports the findings within each standard and identify the members of the Steering Committee as well as the Coordinators and Members Each chapter concludes with a section on Findings and Recommendations.

Due to the scope and depth that any assessment enterprise entails, the self study has represented a major challenge. But it has given the institution, its governing body, and all its constituencies a clearer picture of where they stand, what their major strengths are, and what improvements they can make to continue providing the most effective education possible to our students.

Chapter 1

Mission, Goals, and Objectives

The current *Mission, Goals, and Objectives* of the University of Puerto Rico at Cayey (UPRC) resulted from ample and serious discussion and they envision its particular role as an institution of higher education in Puerto Rico. Coordinated by a Steering Committee representative of all campus constituencies, the statement was elaborated through ample and serious discussion, with full participation of faculty, students, non-faculty personnel, and the external community. Public hearings were conducted and broadcast to the central and southern part of the Island through a local radio station. Several months of intense discussion resulted in a consensus statement, which the Academic Senate approved unanimously on March 5, 1993. The statement was subsequently endorsed, with eulogistic comments, by the UPR University Board in February 1994 and, through Certification 94-002,[1] by the Puerto Rico Council on Higher Education, the governing body of the UPR system at that time.

Copies of the mission statement are placed in all academic buildings, deanships, and the library, as well as other places commonly visited by students. Most significantly, the mission statement is the point of reference for articulating both the daily endeavors of the institution and its most ambitious projects. Since it is fundamental to all decisions regarding teaching, research, and the services offered to support student learning, the Administrative Board, the Academic Senate, the Faculty at large, and all Academic Departments are required to refer to the statement in all deliberations. For example, all strategic and operational plans to allocate and make efficient use of human, physical and fiscal resources are now designed in light of the mission statement. Attesting to its ultimate importance, a section of this statement was recently formed into a work of art that adorns one of the main entrances to the Chancellor's building.

1.1 MISSION AND GOALS

The mission statement reads as follows:

The University of Puerto Rico at Cayey is an institution committed to a well-rounded education of excellence through undergraduate programs in the preparation of teachers and in the disciplines of the natural and social sciences, the humanities, and business administration. We view general and specialized studies as totally complementary experiences in human development, and believe in offering an innovative and interdisciplinary education, which integrates topics and experiences from different fields of knowledge without losing the benefit of the particular virtues of each discipline. We attempt to achieve the goal of thinking globally and acting locally in our educational endeavor, blending an awareness of history with a vision of the future.

We are committed to the development of human beings who are whole, autonomous, critical, and sensitive, who believe in excellence as a standard for life, and who are prepared to take their

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[1] Exhibit 1

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creative place in society and the world of work. Our students should discover in themselves the resources and motivation for learning and find their way to seek and create knowledge that gives a full life, keeping a lifelong commitment to learning.

We strive for a college united in its components, sustained by its commitment to education not as a task but as a way of life. We recognize that all members of the university community are, in an essential sense, students, and that all may be teachers.

As we learned from Eugenio María de Hostos, living well means doing well. Thus we affirm the responsibility to make our words become deeds. The responsibility of an academic institution requires that UPRC be a university alert to the great themes of its time such as the preservation of the environment and the promotion of world peace, the conquest of prejudice by reason, and respect for differences of opinion. We seek to educate for life.

The UPRC goals are:
1. *To provide an undergraduate education of excellence.*
2. *To cultivate in all sectors of the university community the commitment to a common goal of superior attainment of institutional purpose.*
3. *To make the University of Puerto Rico at Cayey one of the chief centers of academic and cultural activity in Puerto Rico.*
4. *To foster the development of a sense of social responsibility based on respect for humanity and our natural environment.*

There are several general objectives associated with each of the four institutional goals, as described in the following section.

1.2 CONSISTENCY AND RELEVANCE TO STUDENT LEARNING AND INSTITUTIONAL IMPROVEMENT

This section describes the consistency of each goal and its related objectives with the mission statement as well as their relevance in promoting student learning, curriculum development, planning, and decisions on resource allocation. The first two goals consider the internal contexts of a four-year liberal arts college that pursues academic excellence with planned and articulated efforts. *In Puerto Rico, UPRC is the only Liberal Arts College, as defined by the Carnegie Foundation.* The third and fourth goals emphasize the social relevance of the mission and stress our commitment to contribute to the well being of the constituencies that UPRC aims to serve. The detailed content of the four goals and related objectives follow.

- Goal 1. To provide an undergraduate education of excellence

The first goal defines the high academic standards of the institution. All scholarly activities that can be derived from its related objectives reveal the particular character of UPRC's educational endeavor. In congruence with the mission statement, these objectives postulate that graduates be well-rounded human beings, who promote peaceful strategies of peace and respect dissidence, and who are alert to current changes, committed to their natural environment, and most of all

interested in learning. It favors interdisciplinary and innovative approaches in both social and natural settings.

General Objectives for Goal 1:

1. *Maintain varied and up-to date programs, which include the Natural and Social Sciences, Humanities, Education, and Business Administration.*
2. *Offer a diverse, innovative curriculum incorporating technological advances, social relevance, and international and interdisciplinary perspectives, which will provide students a solid foundation of knowledge and skills from which they may expand their education in any field of knowledge or professional endeavor.*
3. *Develop relevant and innovative co-curricular programs, activities, and experiences for study research, exchange, creative work, training, professional practice, and service.*
4. *Foster synthesis and continuity in the organization of knowledge and in learning experiences.*
5. *Provide students with a vision of the interrelationship between general education, knowledge in their major areas, and their life experiences.*
6. *Educate teachers with a broad, integrated, dynamic, and innovative vision of knowledge, human beings, and the teaching-learning process.*
7. *Strengthen the development of complex thought, which fosters independent learning, critical discernment, the generation of new knowledge, and creativity.*
8. *Expand students' ability to communicate.*
9. *Train students to use diverse sources of information and research.*
10. *Introduce students to the creative use of technology as tools in their general education and area of expertise.*
11. *Foster sensibility in the students to diverse forms of artistic and physical expression via educational and participatory experiences both inside and outside the classroom.*
12. *Develop in students: self-esteem and self-confidence, initiative and leadership, independent judgment, and prudence in decision-making; and thereby foster each individual's integral and balanced development, so that students may make ethical judgments, anticipate problems, perceive opportunities, and propose constructive change.*

Focus On Student Learning and Institutional Improvement

This goal and its corresponding objectives reflect a commitment to general education without underestimating the importance of major fields, and they define the emphasis of the campus as an undergraduate liberal arts institution. The ongoing curriculum renovation process has clarified the vision of a general education component that is characterized by interdisciplinary approaches, undergraduate research, and service learning activities. These characteristics also pervade current revisions of the specialized components of the curriculum. Two main documents approved in recent years by the Academic Senate, the *Abilities and Contents of the General Education Component* and the *Profile of the Ideal Graduate*, were designed within the context of and in commitment with the principles contained in this goal. These fundamental documents are described in Chapters 12 and 14.

Guidance for Making Decisions Related to Planning

The Academic Senate is considering a revision of the UPRC mission and goals in response to changes in both internal and external contexts influencing higher education over the past decade. However, it has assured the central role that a sound general education component should always have in undergraduate education. The Senate has insisted on having strong general education requirements, aligned with the objectives of this goal, in the three new academic programs that have been approved in the past four years. This particular goal is also the primary reference for the assessment of student learning as stated in the Institutional Assessment Plan (see Chapter 7).

- **Goal 2. To cultivate in all sectors of the university community the commitment to a common goal of superior attainment of institutional purpose**

The second goal makes direct reference to the part of the mission which envisions education as a way of life and all university constituencies as learners. Goal two promotes the professional development of all constituencies; and the sense of fostering a community of learners which is implied in this goal is central to the attainment of the educational aspirations stated in the first goal. This goal aims to create an environment that is suitable for modeling innovative methods of learning to students.

General Objectives for Goal 2:

1. *Foster the ongoing retraining of all members of the university community: alumni/ae, professors, and support personnel.*
2. *Provide support services to students in order to facilitate their integration into the university life.*
3. *Support the faculty in enriching a broad cultural education, remaining up-to-date in the knowledge associated with their specialty, and improving their teaching abilities.*
4. *Recognize merit in university activities and performance.*
5. *Promote the evaluation and revision of academic and administrative systems so that they may respond flexibly and quickly to the academic project that gives meaning to our lives.*
6. *Ensure that the distribution of the budget recognizes institutional priorities.*

Focus on Student Learning and Institutional Improvement

The ongoing improvement of the institution is directly related to the professional development of its faculty and non-faculty personnel (see Chapter 10) and to the quality of services that support student learning (see Chapters 9, 11, 13). All these efforts occur within a context of community that is directly related to UPRC's educational goals. Students benefit from these actions as they relate to the critical pedagogy that is promoted both in general education and in their majors.

Guidance for Making Decisions Related to Planning

Professional development plans, budget distribution, and assessment practices are developed in response to these objectives (see Chapters 3 and 7). Student needs assessment is central to the allocation of resources such as course offerings, classrooms, lab spaces, and teaching materials. Faculty needs assessment is used to guide decisions on sabbatical leaves and other professional development activities.

Goal 3. To make the University of Puerto Rico at Cayey one of the chief centers of academic and cultural activity in Puerto Rico

Goal 4. To foster the development of a sense of social responsibility based on respect for humanity and our natural environment

Taken together, the focus on excellence in education and the commitment to the preservation of the environment and the promotion of world peace that the mission statement proposes, will allow UPRC to become one of the chief centers of academic and cultural activity in the central region of Puerto Rico, as indicated in goals three and four.

General Objectives for Goal 3:
1. *Offer continuing education to persons who aspire to improve professionally, change careers, or enrich their lives.*
2. *Maintain a broad program of artistic, scientific, professional, and athletic programs that complement academic programs and serve the community.*
3. *Foster a climate of encounter and exchange among scholars, researchers, and creative persons in Puerto Rico and the world, and foster communication among academic disciplines and diverse sectors of the community.*
4. *Strengthen ties with academic and cultural institutions inside and outside Puerto Rico.*
5. *Disseminate advances in the sciences and arts to the community.*
6. *Enrich and disseminate the values of Puerto Rican culture.*

General Objectives for Goal 4
1. *Give students the knowledge and skills they need to understand social, cultural, economic, political, and environmental phenomena in Puerto Rico and the world.*
2. *Promote attitudes that lead to respect, diversity, and the overcoming of prejudices that threaten human dignity.*
3. *Foster a commitment to justice and the search for peaceful solutions to common problems.*
4. *Promote an interest in the conservation and improvement of the environment.*
5. *Maintain an atmosphere on Campus that guarantees respect for dissident opinions and the rights of one's fellow being.*
6. *Affirm university autonomy.*

Focus on Student Learning and Institutional Improvement
Service learning experiences are being developed in several academic departments, such as Education, Business, English, and the Social and Natural Sciences (see Chapter 11). These service-learning student experiences are based on a variety of sustainability projects, including active environmental conservation practices that are being further developed as UPRC seeks to become a "green campus."

Guidance for Making Decisions Related to Planning
Many recent decisions related to these goals have resulted in improved community service experiences within the academic offerings (see Chapter 11). The current administration has

given priority to these areas in order to better articulate coherent curriculum reforms with strong links to the surrounding social and natural communities.

The following chapters explain how the mission, goals, and objectives have guided specific efforts in curriculum revision, faculty development, allocation of resources, and student support services. They also explain how assessment results are used for planning and renovation in these areas.

FINDINGS

1. As required by adoption of the UPRC mission statement, the Mission, Goals, and Objectives guide all institutional decision making processes. This is especially true with regard to the processes that relate to teaching, learning, and research. Areas such as annual budgeting, teaching, student recruitment, and the assessment of services offered to students, as well as the revision and creation of new academic programs are all mission-driven.
2. The Mission, Goals, and Objectives are well known to the university community since they govern not only the planning processes, but also daily administrative and academic decisions.
3. The Academic Senate has stated the need to update the mission, in order to focus it more on recent developments in educational principles that respond to changes occurring in higher education as well as society in general. The self study synergy should be used to catalyze the ongoing revision process.

RECOMMENDATIONS

1. Revise the Mission, Goals, and Objectives to integrate educational principles and practices that have recently been emphasized at UPRC, especially in connection with interdisciplinary activities, research, and community service.
2. Continue to develop institutional-level assessment practices campus-wide, as stated in the Institutional Assessment Plan, in order to provide useful data for revising the mission.

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Chapter 2

Planning, Resource Allocation, and Institutional Renewal

As discussed in the previous chapter, the mission statement provides a sense of purpose and direction for UPRC's planning and decision-making. Strategic planning is a dynamic process that implies the participation of key individuals and structures as well as specific implementation plans that are continuously revised as a result of both formal and informal assessment practices. The Chancellor's operational plans have been a driving force behind current institutional planning and the allocation of resources. Specific academic and administrative decisions made every semester are guided by these plans and are embedded within the critical issues of the Strategic Plan.

2.1. PARTICIPATION IN PLANNING AND IMPROVEMENT PROCESSES

The *Strategic Plan* for UPRC[2] was approved by the Academic Senate in 1997, following the principles of the UPRC Mission, Goals, and Objectives. As with the approval process for the mission statement, the university community actively participated in the development and approval of the Strategic Plan through public hearings, focal groups, and departmental and office meetings. UPRC's Strategic Plan is also aligned with the *Systemic Strategic Plan*[3] prepared in 1996-97 under the direction of the Office of the President and with input from all eleven campuses. It should be mentioned that, since the fall of 2002, an *Agenda for Planning at the UPR*[4] has been prepared to update the Systemic Strategic Plan.

The UPRC Chancellor has been developing operational plans[5] in order to allow for the fulfillment of the Strategic Plan through the articulation of specific objectives and activities. He has being using the results from the operational plans as a mechanism to assess and make accountable each deanship. Following the model of the Chancellor's Operational Plan, each Dean (Academic, Administrative, and Student) develops an internal planning document to guide resource allocation every semester. The process itself serves as a way to assess how each deanship operates and manages its assigned resources. Accountability is further promoted through deans' weekly meetings with the Chancellor.

A principal strategy in this process is evaluating the results of the activities that respond to the Operational Plan for each semester and use of that evaluation for updating the next semester's plan. The Chancellor has made sure that the operational plans are disseminated and discussed in the most important decision-making settings, such as the Academic Senate and faculty, department, office, and project meetings. An examination of the most recent operational plans demonstrates the significant number of institutional initiatives that address key areas of the Strategic Plan, as illustrated in Table 1.

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[2] Exhibit 2.1
[3] Exhibit 2.1A
[4] Exhibit 2.1B
[5] Exhibit 2.1C

Key areas of the Strategic Plan	Operational Plan's activities
1. Students	Visits by the Chancellor to target schools in the area; creation of a centralized Tutoring-mentoring center; renovation of the student's Counseling Office; first year experience initiatives and retention policies.
2. Ethos	Active Alumni Office; closed circuit TV; periodic meetings with all staff, faculty and non- faculty.
3. Curriculum, teaching, and learning	Curricular renovation; faculty development activities; research seed money; Office of Sponsored Research; MBRS SCORE; Research Infrastructure for Minority Institutions grant (NIH).
4. Planning and assessment	Attention to Strategic Plan and operational plans: revision of the former and ongoing use of assessment results for renovation of the latter.
5. Educational and information technology	Title III and various Title V grants; creation of "Technology Enhancement for School Teachers" project; improvement of IT infrastructure for academic and administrative areas.
6. Human resources	Professional development workshops for both faculty and non-faculty personnel every semester.
7. Administrative services	On-line documents for specific administrative tasks.
8. Community services	Art Museum opens 7 days a week; Pro-Mujeres (Women's) Project; "Campus Compact" and other community service initiatives; Vieques Project; Interdisciplinary Research Institute; UPRC Alumni; Chancellor's Friends Council; and Chancellor's Business Council.

Table 1. Relation between Operational Plan's Activities and Strategic Plan Key Areas.

It should also be noted that the current Faculty Committee on Planning and Budgeting, one of the permanent committees at UPRC, carried out a summative evaluation of the Strategic Plan during the academic 2003-04 year; among other things, this evaluation recommended that UPRC update its mission statement and some of the critical issues of the Strategic Plan.[6]

2.2 THE PLANNING -DECISION MAKING –ASSESSMENT CYCLE

Planning can function as an important instrument for promoting institutional improvement only if it is embedded within a Planning-Decision Making-Assessment Cycle (see Diagram 1).
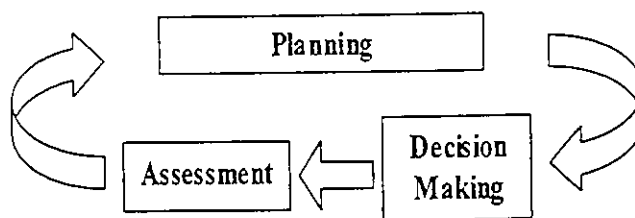
Diagram #1. The Planning-Decision making-Assessment Cycle

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[6] Exhibit 2.1D

In previous self-study processes, UPRC has recognized that decision-making was not always based on feedback from planning and that these decisions had seldom been submitted to the formal scrutiny of periodic assessment. The Institutional Assessment Plan approved three years ago, however, has provided the conceptual framework for organizing assessment activities at all levels and for guiding the planning and decision-making processes on campus. This plan is in its early stages of implementation (see Chapter 7 for further discussion), but the initial synergy caused by its presence in the institutional setting has already produced ongoing activities to improve and maintain institutional quality, as illustrated by the following two examples.

- ## The annual student carrying capacity decision-making process

In January 2003, the Academic Senate approved a three-stage process to analyze the annual student carrying capacity for the Institution.[7] This has greatly improved a decision-making process that was often informal and at times lacked adequate supporting data. Assessment data are now collected during each stage to determine: the desired size of the total student body, the size of the incoming freshmen class for the next fall, and, finally, the carrying capacity for each of the academic programs. The first stage analyzes results of teaching faculty FTE's as well as physical and fiscal constraint variables. The second stage is analyzed with an input-output model that assesses the student population distribution pattern for that particular year. Finally, the third stage assesses the student distribution in each academic program and its relation to key academic variables such as: selectivity index, demand for the program, curriculum renovation plans, and retention statistics.

Since the implementation of this process, academic departments have become more receptive to formalized planning schemes that aim to ensure an adequate size and composition of their student populations. As a result, over the past two years UPRC has lowered its total student population by approximately 500 students and the general admission indexes have increased as much as 40% in several programs. Moreover, the allocation of resources (faculty personnel, materials, lab spaces, etc.) has been decided in direct relation to the projected number of students. Last semester, for example, the Academic Senate decided not to admit freshmen in one of the Social Science programs for the following year and asked the Social Sciences department to prepare an assessment plan for making future admission decisions. The process described here has allowed the institution to better allocate resources in order to maintain high quality learning environments.

- ## The annual budget re-distribution process

An adequate amount of faculty personnel, materials, and spaces are essential for promoting effective learning experiences. In order to deal with recent annual budget cuts, UPRC established a mechanism to redistribute budget assignments in relation to priorities established in its academic development plans. Under the assumption that no extra money would be added in the following fiscal year, a redistribution account is filled with money leftover from allotments of both faculty and non-faculty personnel who retire that year. Whenever an academic department deems it necessary, it can retain the minimum amount of money needed to hire adequately prepared personnel at the entry level. The money in the redistribution account is then

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[7] Exhibit 2.2

transferred to specific development projects that are part of the Academic Deanship's development plan (which is aligned with the institution's Operational Plan). Each year, priorities among these projects are discussed and endorsed by all department chairs and faculty are informed. This process has allowed the institution to increase assignments for library materials, to improve contract terms of faculty personnel, and to increase, to some extent, teaching-related operational expenses, even under global budget cut scenarios.

UPRC needs to further develop other areas in which decisions on resource allocation must be made in relation to planning and assessment. These include: professional development of faculty and non-faculty personnel, student retention initiatives, and distribution of technological resources. It is expected that the ongoing implementation of the Institutional Assessment Plan will provide the necessary mechanisms for accomplishing this task.

2.3 ACCOUNTABILITY FOR INSTITUTIONAL RENEWAL

All offices and departments within each deanship prepare an annual report on accomplishments related to that year's work plan. These reports are summarized in an institutional report that is used as input for designing new plans and as justification for budget requests. For the most part, however, these reports are highly descriptive. A clearer picture of institutional renewal would require a new format for reporting annual accomplishments based on sound assessment practices.

With the recent acquisition of software licensing, UPRC is in a position to start gathering opinions from all its constituencies on their level of satisfaction with the results of planned activities. This assessment task, implemented in effective on-line formats, will make each department chair accountable for adjusting future actions or decisions. Teaching and learning activities will also benefit from student and faculty input, and curriculum committee members will be accountable for implementing the necessary changes.

In addition, a coherent set of databases will be designed to better organize institutional research data that are useful for assessment tasks. One of these databases is already being prepared to assess student learning through the four-stage model described in the Institutional Assessment Plan. For the first stage, a comprehensive database for incoming freshmen *(New Students 2003-2004: Baseline for the Student Tracking System)*[8] is almost finished and reports from it have already been discussed and analyzed. Instruments to collect data for sophomores and seniors (for the second and third stages) have been created or revised; and graduation rate statistics are readily available as part of the fourth stage variables. Completing this complex database is essential for making faculty and administrators accountable for the implementation of effective retention activities. Moreover, it will provide a mechanism for making each academic department accountable for productivity measures associated with curriculum implementation.

Finally, formal representative groups such as the Academic Senate, permanent faculty committees, and the Student Council are accountable for specific issues related to their duties. To assess their accomplishments, however, mechanisms such as the previously described on-line opinion polls must be available.

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[8] Exhibit 2.3

Chapter 4 includes a discussion of the way some assessment practices have already prompted a reconceptualization of committee structures to better distribute institutional-level assessment responsibilities.

FINDINGS

1. Strategic planning at UPRC arises from the mission document and is embodied in the operational plans that are prepared and disseminated in the institution every six months.
2. Decision-making processes at UPRC have improved with the use of assessment results in specific critical areas.
3. Initial implementation of the Institutional Assessment Plan is providing information for planning and decision-making on campus.

RECOMMENDATIONS

1. Complete the database structure that will articulate the institutional research activities that are needed to fully implement the Institutional Assessment Plan.
2. Initiate a process that updates the Strategic Plan with all the assessment results that have been gathered through the implementation of the operational plans.

Chapter 3

Institutional Resources

As mentioned in the previous chapter, the Strategic Plan and the operational plans guide the effective use of institutional resources in the context of the institution's mission and goals. The ongoing implementation of the Institutional Assessment Plan contributes to identification of institutional priorities for promoting student learning.

3.1 EFICIENT USE OF RESOURCES: ALLOCATION AND ASSESSMENT

Human Resources
Adequate management of human resources is fundamental for achieving optimal institutional performance. A total of 195 faculty members and 420 non-faculty personnel serve in diverse roles to support the learning related activities of the 3,747 students in the first semester of the 2004-05 academic year. The faculty account for 32% of all UPRC employees. The regular course load for faculty is 12 credits per semester and they tend approximately 800 sections of courses per semester, with an average the student-faculty ratio (in FTE) of 23:1. As mentioned in Section 2.2, the University has lowered its estimates of student carrying capacity in the past few years to match the actual human and physical resources available.

The recently revised norms and procedures for hiring faculty provide for a more coherent and uniform process based upon departmental needs. The procedures to assess the quality of faculty performance have also undergone careful revision and are explained in Chapter 10. Over the past two years, another policy that has a positive impact on human resources has been instituted: faculty service contracts have been extended to cover an 11-month period, thus assuring a better and more committed staff. This approach to faculty allocation also allows UPRC to manage fiscal resources creatively and efficiently, within the time frame needed to fill positions.

Non-faculty personnel are evaluated by their immediate supervisors annually; evaluations are based on their performance and accomplishments. A full-time employee can obtain a permanent position after maximum period of 12 months. Twenty percent of the non-faculty personnel are providing direct services to the processes of teaching and learning, and 13% are involved in student support services.

Technical Resources
Over the past several years, technology has been a central concern at UPRC. The institution has invested close to $750,000 in telecommunication infrastructure and has recently created an associate academic deanship to oversee instructional technology development. In addition, it has invested $75,000 over the past two years in the area of on-line course management environments. UPRC is utilizing the enterprise version of Blackboard and is also implementing Macromedia Breeze to improve students' learning experiences.

To keep in line with current advances in technology and its application in learning environments, UPRC is in the process of establishing five SMART classrooms equipped with projection

systems, computers, DVD and VCR players, receivers, and Internet connection. Four new SMART classrooms are projected for this academic year through the support of a Title V Cooperative grant from the USDE. These rooms will contain smart boards to enhance the teaching-learning process and will make the institution more efficient and technologically attractive. The advent of courses assisted by on-line technologies brought about other concerns such as printing costs, which have tripled over the past academic year alone. This increase is due in great part to the 33 courses[9] assisted by online technologies that allow students to access materials anytime/anywhere. UPRC's Microsoft Campus Agreement provides the entire academic community with Microsoft Office, publisher, and front-page applications.

UPRC has a total of 295 computers for the use of students, in centralized or dedicated technology centers. This represents approximately one computer for every 12 students in the Fall of 2004. One central 55-machine Student Computer Center is available to the entire student body and, during the peak period every semester, it serves an average of 600 students daily. The assessment of this facility's usage facility helped justify the need for allocating additional funds ($35,000.00) to computer resources last year. In addition, 21 computers were upgraded this semester and additional upgrades are planned for next semester. Other improvement options, which include leasing instead of purchasing computers, are being considered in order to keep up with the demand for fast and efficient computing environments. Many academic departments, as presented in Table 2, have enhanced their technology infrastructure and some have been able to develop state-of-the-art dedicated learning centers through the use, in some cases, of federal external funding sources.

Computer Center	Number of machines	Target Population
English Department (2 labs)	65 Imacs	Basic English Students
Office Administration (2 labs)	60 computers-PC Compatible	Office Administration Students
Business administration	25 computers	Accounting Students
Math/Physics Department	25 PC Compatibles	Physics Students
Academic Learning Resource Center (library)	30 PC compatibles	Research, Courses/General Use
LABDIES (library)	18 PC Computers	General Student Use
On-line Tutoring	5 computers	General Student Use
Spanish Dept. Res. Seminar	12 computers	Spanish Department Students

Table 2. Dedicated Computer Learning Centers

Another learning environment of wide educational impact on our campus is the Victor M. Pons Library, which displays advanced technological settings. It has 121 computers connected to Internet, access to 10 sets of specialized on-line databases, and an on-line catalog of all bibliographic resources. Other equipment such as printers, scanners, and wireless connectivity are also available. A very special feature is its *Electronic Inter-Library Loan* program for all faculty and students campus wide. This is a collaborative initiative among all UPR campuses. For further reference see Chapter 11, Section 11.4.

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[9] Exhibit 3.1

UPRC also has a Faculty Computing Center where professors have access to current software programs for preparing web pages (Front Page, Camtasia, Dream weaver), for desktop publishing (PageMaker 6.5, Acrobat, and the complete Office package), and for access to the Internet. The center contains ten computers, three scanners, three LaserJet printers (one color laser), and wireless access for laptop computers. Approximately 85% of the faculty also have access to computers in their offices.

Management of Technological Resources

Until recently all computer learning environments ran independently, receiving network support from the Office of Information Technology (OIT) which serves the entire administrative side of the university. OIT provides support for all three administrative computing systems (FRS, HRS, and SIS), which run on a VMS platform powered by an alpha server. The entire networking, as well as all the telecommunications, are also housed under OIT.

The improved technological expertise of the faculty has required a stronger pedagogical emphasis in managing this resource. Even though academic computing services were offered for many years, in January 2003, after appropriate assessment, the Office of Technology for Teaching (OTT) was created and a director was appointed with expertise in the technological matters of network learning environments, pedagogical research, and software application experience. This has resulted in a much more concerted effort to support faculty as they incorporate technology into their academic duties. Other critical assessment efforts have also been performed in OTT and have directed the expenditures in technology.[10] Considering that the University does not charge students a technology fee or any other related fee, elevated costs of these on-line environments obligate other cost effective measures. For example, UPRC has installed an open source course management system (Moodle).

A replacement program is in place for the computers purchased by the University. All computers must be purchased with a 3-year on-site warranty. This is a system wide requirement that aims to guarantee an extended period of performance and dependability. The University pays for the recycling of computers that are out of use and is in the midst of elaborating an institutional-level plan for recycling all computer equipment (some computers are being donated to local schools). UPRC, as well as the entire UPR system, has not reached an agreement with any computer manufacturer with regard to recycling purchased computers.

Currently, UPRC has a highly segmented data traffic network, permitting a secure optimized flow of data information. The current network contains highly sophisticated networking switches and allows data flow of 1gbs between buildings, thus increasing data flow capacity 10 times over the course of a year. Administratively, the University still depends on a self-contained VMS system for all of its administrative data management (Human Resources System, Financial Resources System, and Student Information Systems). Users access this system utilizing terminal emulation software. The UPRC Central Administration has purchased *Oracle eBusiness* for managing all three areas system wide. The planned implementation is to occur by stages and is scheduled to start in 2005. The Student Information System will be implemented first with the other systems to follow.

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[10] Exhibit 3.1A

Physical Resources

UPRC has 167 acres of land and fourteen main buildings. The Arturo Morales Carrión, the Miguel Meléndez Muñoz, and the Carlos Iñiguez buildings house 79 classrooms in total. A recent assessment of the daily usage of classrooms served the purpose of reassigning classrooms to each academic department.[11] The Miguel Meléndez Muñoz building is the main science building. A modern Natural Sciences building is currently under construction. This building will house 20 new state-of-the-art science laboratories and 3 classrooms, thus increasing the research capacity for professors as well as students who are actively involved in a variety of research initiatives such as RISE, Howard Hughes, and Bio-informatics research. This added facility should be completed by 2006.

The Víctor M. Pons Library is a modern five-story building containing both general and specialized collections and two computer centers. An initial investment of almost $500,000 was made this year to improve the air conditioning system and the humidity control of the library, resulting in better maintenance of the bibliographic resources. The Pío Lopez Art Museum is a unique museum, highly praised island-wide, that houses important historic collections and provides students of all ages with opportunities to create and study art. It has a permanent art collection from the nineteenth- and twentieth-century's outstanding Cayey artist Ramón Frade, as well as other important collections of "Carteles" (posters), exhibitions, and art pieces. The Ramón Frade Theater has a capacity of 516 persons and sponsors a large number of rich cultural and academic activities. The institution also has another, smaller theater with a capacity of approximately 200 persons. The following table illustrates the current space distribution in each building by specific use.

Building	Academic uses	General & Adm.	Student Services	Oper. & Mainte.	Non assignable	Total
Miguel Meléndez	35,416			13,919	12,484	61,819
Informática	12,216	7,446	568	3,033	9,047	32,310
Morales Carrión	33,891	115	1,079	1,166	15,251	51,502
Library	47,489		847	4,150	8,950	61,436
Carlos Iñiguez	2,200	13,470	2,308	2,133	6,829	26,940
Student Center		1,660	23,261	1,120	4,490	30,531
Gym & sports	33,152			3,818	13,345	50,315
Chancellor's bldg.		4,819		289	2,699	7,807
Acad. Deanship	6,039			1,039	1,919	8,997
TV and Communic.	1,805	2,000		492	290	4,587
Frade Theater	8,356	1,279	107	1,244	6,044	17,030
Museum	3,526	214		206	213	4,159
Maintenance bldg.		534		21,753	2,625	24,912
Houses	11,885				61,735	73,620
Total	189,936	37,576	28,170	54,362	145,921	455,965

Table 3. UPRC's Space Distribution in Each Building by Use (in square feet)

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[11] Exhibit 3.1B

The overall distribution of space is illustrated in Diagram 2. It is important to note that 42% of the total space in UPRC is currently dedicated to teaching, research, and academic related activities. The non-assignable spaces include houses, aisles, stairs, restrooms, and other common spaces, and their large proportion (32%) is mainly due to the 33 housing facilities for professors and student athletes (61,735 square feet). Other houses have been ceded to special projects such as the Honors Program and the Institute for Interdisciplinary Research. One house will be dedicated to an Environmental Educational Center in the near future.
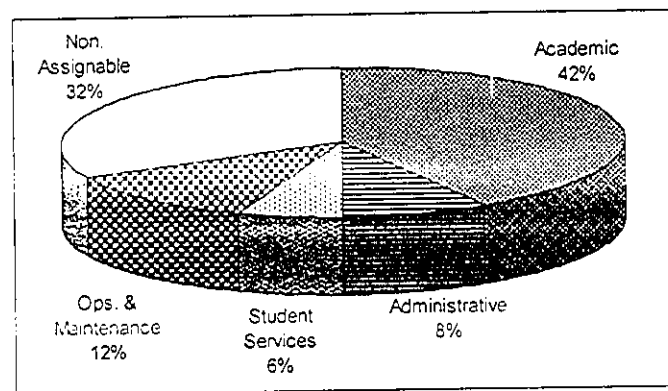
Diagram 2. Total Space Distribution in UPRC by Type of Use

UPRC has 875 parking spaces for students, faculty, and staff. Buildings and grounds are well kept by qualified and trained staff. Specific information on site plans and maps is included as an exhibit.[12]

Master Plan
UPRC has a *Master Plan*[13] on which the *Five-Year Capital Improvement Plan*[14] is based. The Master Plan includes historical and ecological criteria, which inform how the respective concerns of those areas will be handled in upcoming constructions. A request for a new Master Plan for the future development of physical facilities has been submitted to the President's Office, for approval by the Board of Trustees, at which level funds are allocated.

All academic and capital improvement projects for the institution arise from participatory processes. The Academic Senate, faculty, non-faculty personnel, and departmental meetings provide an opportunity for community members to voice their needs, discuss their projects, and express their views on the direction of institutional renewal and development. Preparation of the Five-Year Capital Improvement Plan is based on the needs that are brought up at these meetings. Included as an exhibit is a list of the capital improvement projects completed since 1998, projects in progress, or projects planned for the future.[15] The projects already completed represent a total investment of $16,168,018.85 and include the first phase of the construction of the new Science Building ($12,960,000) and remodeling constructions in the Chancellor's building, the Sub-

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[12] Exhibit 3.1C
[13] Exhibit 3.1D
[14] Exhibit 3.1E
[15] Exhibit 3.1F

electrical Station, and the Museum. In addition, UPRC has upgraded its sports facilities (gymnasium, pool, and tennis courts) for athletes and students in general. The track and field facilities were remodeled at a cost of $1,500,000. The fiber optic installation is in its third phase.

The Office of Planning and Development follows up on this comprehensive plan, but decision-making regarding capital improvements reaches beyond UPRC to the President, who in turn submits projects for the attention of the Board of Trustees, which ultimately approves them or not. Certainly, the Institutional Assessment Plan, which has recently been implemented, will be the most appropriate mechanism for assessing the impact of infrastructure life cycle on teaching and learning.

3.2 BUDGET, PLANNING, AND ASSESSMENT

The UPR system's budget is granted under legislation authorizing it to receive 9.6% of all revenues of the Commonwealth of Puerto Rico, based on an average calculated every two years. The budget is therefore directly related to the economic situation of the island and, as seen during recent years, may be affected in times of economic contraction. Annually, each of the eleven UPR units receives a specific amount of money to accomplish its educational goals. Diagram 3 illustrates the changes in UPRC's total budget assignment over the past 6 years.
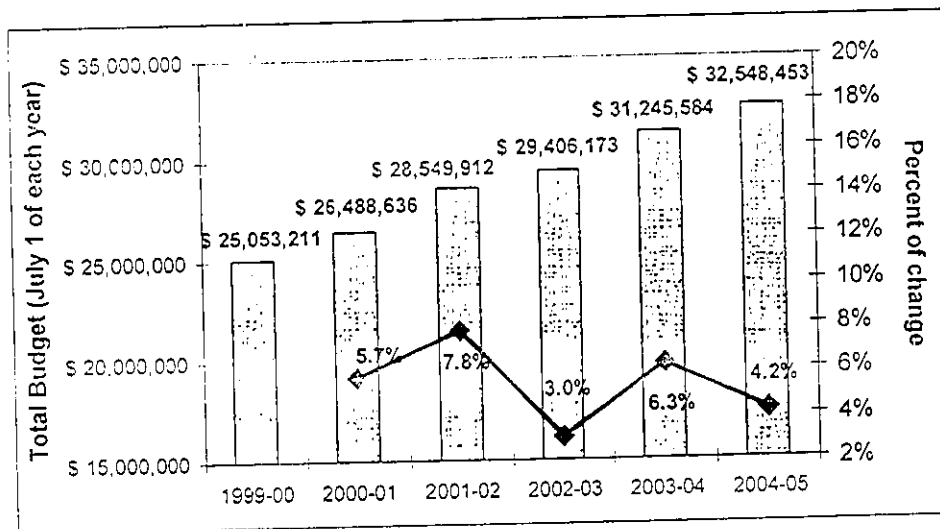
Diagram 3. UPRC's Total Budget at the Beginning of Each Fiscal Year and Annual Percent of Change over the Past Six Years

The diagram shows that UPRC's budget assignment has increased over the past 6 years at an average rate of 5.4%. This average increment, however, is lower than the annual inflation rate for the island over that same period. UPRC has strong fiscal accountability, even though its budget assignments for operational expenditures, which depend on decisions made by the Board of Trustees, have experienced a *de facto* decrease in the last few years.

Since the summer of 2002, the UPR President has not required an annual budget petition, but rather determined that each unit would receive a predetermined budget increase and also required that an internal adjustment of expenses include a specified reduction in operational expenditures: of 2.36% in 2002, 0.93% in 2003, and 1.61% in 2004. These monies represented by these

reductions were then allocated together with the annual net budget increase, to cover mandatory or negotiated salary increases and other fringe benefits for both faculty and non-faculty personnel. Because these personnel related expenditures have been greater than the net annual budget increases in the past several years, they have greatly affected the budget assignments for operational expenses. Therefore, the net increases in UPRC's total budget in recent years were based only on necessary salary increases and required proportional reductions in operational expenses, as illustrated in Diagram 4.
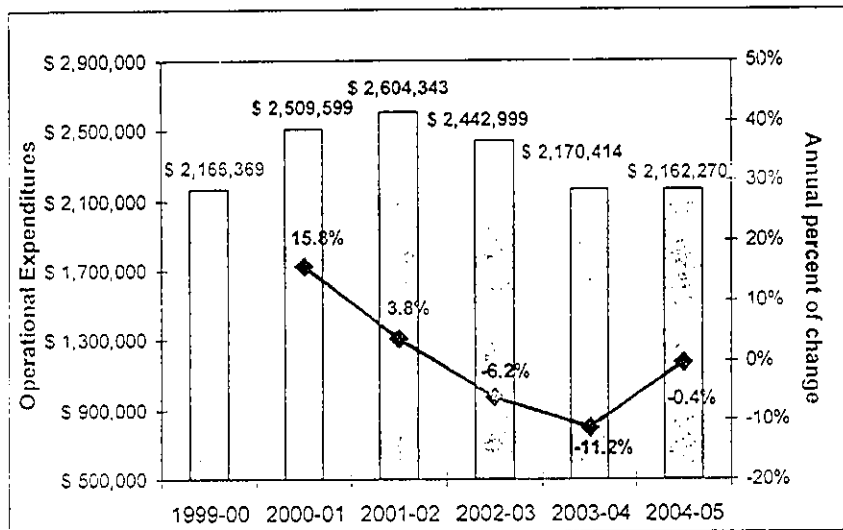
Diagram 4. Budget Assignments for Operational Expenses over the Past Six Years.

The diagram shows that, up to the year 2001-2002, the budget that is explicitly allocated to operational expenses (materials, equipment, and travel) had decreasing annual increments; since 2001-02 it has actually been reduced, by as much as 11.2% in 2003-04, as a result of the system-wide fiscal policy explained before. This year (2004-05) the budget assigned for operational expenses is essentially the same as the assignment for 1999-2000, even though the costs of materials and equipment have been increasing dramatically.

The improved planning and assessment methods developed so far at UPRC have allowed the institution to maintain high quality standards of teaching, research, and service in spite of these operational budget reductions. The two examples cited in Section 2.2 illustrate the careful fiscal planning and assessment that have been put in place to deal with the current difficult financial situation. In particular, the annual adjustment in the student carrying capacity has proved to be a responsible resource allocation strategy that guarantees academic quality for UPRC students.

Nevertheless, UPRC must analyze its current financial situation carefully, since the system-wide policy that has resulted in decreased operational expenses may continue in the years ahead. In anticipation of even more difficult economic circumstances, UPRC needs to assess the effectiveness of current local fiscal policies and to study resource allocation strategies from a broad perspective.

The 2004-05 total budget for UPRC is $32,548,453, but $30,386,183 is dedicated to salaries and other personnel services or benefits. Therefore, only $2,162,270 (or 6.6% of the total budget) is assigned for operational expenditures. The distribution of the total budget (in round numbers) is illustrated in Diagram 5-A. The distribution of operational expenses for the current academic year is illustrated in Diagram 5-B, which shows that most of this money is allocated to cover educational and office materials or to pay for electricity and communication utilties. A detailed distribution of this budget is included as an exhibit.[16]
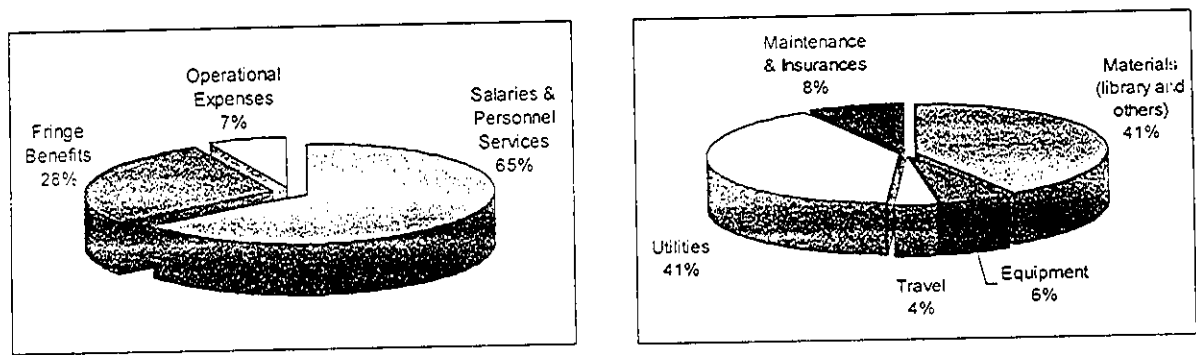
Diagrams 5-A. Distribution of UPRC's Total Budget (2004-05) and 5-B. Distribution of Operational Expenses (2004-2005)

The following table shows the distribution of UPRC's 2004-05 total budget assignment within each of the deanships as well as other budget categories. The Academic Deanship receives 38% of the total budget and 28% is reserved to pay fringe benefits for university personnel.

Academic Deanship	$ 12,625,944	38%
Students Deanship	$ 1,631,215	5%
Administrative Deanship	$ 5,243,536	16%
Chancellorship	$ 2,216,196	7%
Fringe Benefits	$ 9,040,227	28%
Other General Expenses	$ 1,791,335	6%

Table 4. Budget Assignments in UPRC (2004-05)

In order to handle the currently difficult financial situation, UPRC has aggressively sought external funding opportunities in recent years, as will be discussed in the next section.

External Funds
UPRC's administrations have become very conscious that the support that the University of Puerto Rico has received through the 9.6% formula does not guarantee the kind of sustained growth that would be desirable. Therefore, towards the end of the 1990s, a policy was developed

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[16] Exhibit 3.2

to seek external resources. A policy developed by the Office of the President seeks to increase the endowment, which is still minimal, to allow for addressing institutional priorities. With a view to diversifying the sources of funds, an Office of Strategic Alliances and Donations was recently created in UPRC. The Alumni Office, the Friends Council, and the Business Council have been created in order to engage in aggressive fund raising efforts. The Chancellor meets with these councils at least twice a semester and all these efforts have resulted in a total of $192,173 in donations (for renovation of the Ramón Frade Theater) over the past two years.

UPRC has dramatically increased the amount of external funds that it has obtained for improvement projects from 2000 to 2004. Evidence of this is presented in Table 5, which shows an increase of 242% in total external funds and an increase of 1680% in research funding for that period. The projects approved,[17] which vary in scope, supplement the academic initiatives set forth in the mission and goals statement and serve as an indicator of the faculties' increasing involvement in research. Other important projects relate to teacher training and teacher preparation, which constitute one of the institution's most outstanding initiatives. The Digital School project, for example, is designed to revamp instructional technologies in 45 public schools with the appropriate teacher training. This project has injected close to $750,000 in network upgrades for UPRC. Such an initiative serves to strengthen the University in providing cutting edge technological environments and meets a crucial institutional goal of serving the community and the entire public education system. In addition, UPRC is part of the *Puerto Rico Math and Science Partnership* (PR-MSP), sponsored by NSF, which is a comprehensive five-year project aimed at improving the teaching of Science and Mathematics in local public schools.

Academic Year	Research Project Funding	Total Approved External Funds
2000-2001	$ 176,600	$ 5,195,342
2001-2002	$ 516,947	$ 6,991,992
2002-2003	$ 1,687,327	$ 6,055,365
2003-2004	$ 3,134,075	$ 17,812,814
Total	$ 5,514,949	$ 36,055,513

Table 5. External Funding at UPRC (2000-2004)

Management of Financial Resources
All funding, institutional as well as external, is administered in accordance with municipal, state, and federal regulations and bylaws. A great diversity of by-laws and procedures regulate and help examine the use of both internal and external funds. The Finance Office administers the by-laws regarding budgetary concerns and the way funds are spent. All financial related offices (Budget, Finance, and Fiscal affairs) function under these by-laws. All the audits are channeled through the Finance Office, which is the coordinator and liaison for both system-wide and state-sanctioned audits. A bid board exists for purchases in excess of $25,000.00. Yearly internal and external audits are performed by the office of the Comptroller of Puerto Rico. Federal audits also take place because of the federal funding obtained from different programs (Title V, Title V Cooperative, Title III, Title II, MSEIP, MBRS-SCORE, NSF, and NIH among others).

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[17] Exhibit 3.2A

The Office of Accounts Payable, under the Finance Office, is the filter for all disbursements. To assure compliance with policies, this office revises and analyzes all financial transactions that require the use of public funds. In this area the university has shown consistent improvement. For the past two years, UPRC has been audited by the Comptroller's Office and has satisfactorily met the standards for healthy management practices.

FINDINGS

1. The use of human, financial, and technical resources, as well as physical facilities, reflects the fact that resource priorities are aligned to the mission, goals, and objectives of the institution.
2. UPRC has strong fiscal accountability even though decreases in budget assignments for operational expenses have been in place for at least the last five years.
3. While total budget assignments have increased in recent years, UPRC has experienced significant annual budget decreases in its operational expenditures. Currently, less than 7% of the total budget is assigned for operational expenditures.
4. A participatory decision-making process and consistent policies and procedures guide all resource allocation in UPRC.
5. UPRC has enhanced its physical facilities and has developed plans for future improvement.
6. Actions and policies for resource allocation promote student learning activities and the improvement of curricula.
7. There is evidence of strong development in the area of technology and telecommunication infrastructure.
8. The institution has been successful in seeking and obtaining external funding and donations.
9. UPRC has adequate institutional financial controls.

RECOMMENDATIONS

1. Develop and implement a new Master Plan.
2. Acquire or develop cost effective technological options, in order to minimize the increasing and recurring costs of maintaining access to technologies in both the administrative and academic areas.
3. Create a committee to foresee and analyze the financial situation of UPRC and to present possible recommendations and solutions that balance current income and expenses in light of the difficult budgetary scenario.
4. Implement annual surveys to assess the effectiveness and efficiency of the physical, human, and financial support provided to the entire community.
5. Strengthen the External Resources Office with trained personnel and additional budget to continue successful developments in grants and funding opportunities for the institution.
6. Complete on-line access to administrative procedures through all offices and programs.

Chapter 4

Leadership and Governance

As an autonomous unit of the University of Puerto Rico System, UPRC has a particular governance and decision-making structure relevant to all local matters. It has developed internal procedures concerning both student and faculty recruitment, curriculum evaluation, and personnel and resource allocation to promote adherence to its mission statement. The institution relies on the system's uniform governance and administrative procedures and policies. In agreement with the mission statement, UPRC has developed a collegial governance structure that gives primacy to academic issues on the institutional agenda.

4.1 SYSTEMIC GOVERNANCE STRUCTURE AND DOCUMENTS

The *General Regulations of the University of Puerto Rico*[18] is its main governing document and establishes the guidelines and standards to be followed in the entire system. The governance structure of the University of Puerto Rico is described in Section 12 the General Regulations and illustrated in general terms in Diagram 6.

The governing body of UPR, known as the Board of Trustees, was created under Act #16 of 16 June 1993, which amends Section 3 of Act #1 of 20 January 1966. The Board is composed of thirteen members, including one full-time student (who is at least a sophomore), two faculty members with tenure in the university system, and ten citizens designated by the Governor with the consent of the Senate of Puerto Rico. At least one of these ten members must be a UPR alumnus/a and all are designated for periods of four, six, or eight years. The student and faculty representatives are elected from among their peers in the University Board, for a period of one year.

Diagram 6. System-wide Governance Structure

The Board is required by law to authorize the creation or reorganization of the System units (campuses), to approve the budget of the institution, to approve or amend the laws and regulations, and to supervise the general operation of the system. A detailed description of this Board appears in Section 4.2.

The *UPR Act*[19] confers on the President the most important position in the organization, with the responsibility of directing the University System. The Board of Trustees designates the

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[18] Exhibit 4.1
[19] Exhibit 4.1A

President for an indefinite period. With the collaboration of the Board of Trustees, the President coordinates and supervises all the activities of the University and assures the adequate development of the institution. He or she presides over the University Board and is an ex-officio member of the faculties, Academic Senates, and Administrative Boards of each of the eleven units. With the advice of the University Board, the President submits a plan for the comprehensive development of the University, based on projects and recommendations originating in the institutional units. He or she also prepares the system's budget, based on proposals submitted by the chancellors with the approval of their respective administrative boards.

The President also submits to the Board of Trustees the designations for chancellors and deans, the Director of the Finance Office at the central level, the vice presidency, and other designations that require the confirmation of this body. The Central Administration includes the administrative structures needed to carry out the functions of the Office of the President, including the areas of: academic, administrative, and student affairs; finance, planning and development, and budget; personnel; and university relations. Besides the General Regulations, the Board of Trustees and the Central Administration issue certifications that establish policies and procedures for the UPR system.

The systemic governance structure relies on the decisions of a University Board, which represents the constituencies of all campuses. This Board maintains integration of the System through joint planning and advises the President in the coordination of academic, administrative, and financial aspects of the different institutional units. Its members are:

* the President, who presides over it,
* the chancellors of all the units,
* the Director of Finance at the central level,
* three additional officials designated by the President with the approval of the Board of Trustees,
* one faculty member from each unit, elected by the Academic Senate, and
* one student representative from each institutional unit.

The University Board drafts the revision of all systemic governance documents, with input from all Academic Senates, and submits these revisions to the Board of Trustees. It considers and issues recommendations regarding the Strategic Plan and the budget for the System. Also, the University Board settles appeals regarding decisions of the administrative boards and the academic senates of the institutional units.

4.2 THE GOVERNING BODY

As mentioned in the previous section, the members of the Board of Trustees represent the different sectors with interest in the successful operation of UPR. The ten members representing the public interest, as well as the two faculty members, have thorough experience in their particular fields. The list of current members of this Board[20] shows evidence of their various academic and professional backgrounds. The Board is always chaired by one of the

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[20] Exhibit 4.2

representatives of the public interest and a complete list of its duties is included as an exhibit.[21] The Board of Trustees does not interfere in local matters, such as budget distribution, but it assists the University's President in generating external funds and donations to improve the institution. In particular, for the past two years the Board has distributed money leftover from its own operational budget back to the eleven institutional units, to be used specifically for the development of teaching and research. All possible conflicts of interest in relation to actions taken by members of the Board are resolved under Puerto Rico's Government Ethics Law, which directly applies to all board members. In addition, all of them are required to make a financial report to the Government's Ethics Office at the beginning of their term and when terminating their service period.

The Board has an Internal Regulations document, which is publicly known and handed to new board members, along with current certifications and other informative documents, as part of an orientation procedure. The Board's President is responsible for orienting new members and keeping all members informed of the progress on all board duties. He is also in charge of coordinating the periodic self-assessment that board members make of the results of their actions and decisions. The UPR Board of Trustees is a member of the *Association of Governing Boards of Universities and Colleges* and uses its valuable resources frequently. The Board will certify to the MSACHE that the institution is in compliance with the eligibility requirements, accreditation standards and policies of the Commission. It will also agree to disclose information required by the Commission to carry out its accrediting responsibilities.

4.3 UPRC GOVERNANCE STRUCTURE AND DOCUMENTS

The UPR General Regulations are complemented by the *Internal Faculty Regulations*[22] and the *Internal Student Regulations*[23] for dealing with all local governance matters. The campus-level governance structure, illustrated in Diagram 7, is described in all these documents.
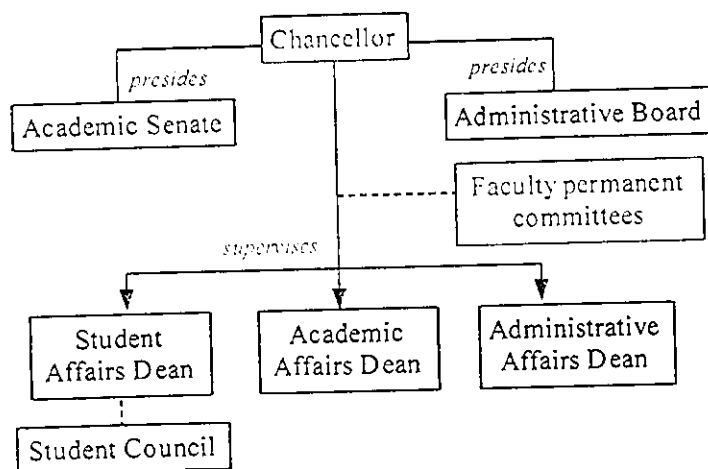
Diagram 7. Campus Level Governance Structure

The Chancellor is appointed by the President, with the consent of the Board of Trustees, after a consultation process in which all members of the community participate. This process is defined in the General Regulations and is coordinated by a committee elected by the Academic Senate with participation of faculty, students, and non-faculty personnel. They develop a profile for the new chancellor and conduct public hearings, interviews, and open forums. At the end of the process, they submit a report to the President for consideration.

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[21] Exhibit 4.2A
[22] Exhibit 4.3
[23] Exhibit 4.3A

All three Deans—Academic, Administrative, and Student—are appointed by the Chancellor, with the consent of the President and the Board of Trustees, after a consultation process very similar to the one described for the Chancellor. The Chancellor presides over the Academic Senate, which meets at least once a month and is responsible for defining the general academic orientation and practices within the campus.

The Academic Senate is the official forum of the academic community where curricular policies and academic programs, as well as faculty evaluation standards and procedures and student admission standards, are created or revised. The Senate consists of one faculty representative elected from every academic department and two from the faculty at-large, four student representatives from the Student Council, plus all deans and the Library Director. A student presides over the Senate's Commission on Student Affairs; a faculty member presides over its Commission on Faculty Affairs; and a librarian presides over its Commission on Learning Resources. The UPRC Academic Senate is the only one in the UPR system in which these commissions are not headed by Deans.

The Administrative Board, for its part, collaborates with the Chancellor in implementing the University's administrative plan. This Board is responsible for the approval of the unit's budget and other related issues, such as staff tenure, approval of leaves of absence, and promotions. The Chancellor, the Deans, the Library Director, four department chairpersons, and three senators (two faculty members and one student) form the Administrative Board.

The Internal Faculty Regulations define a set of five main permanent faculty committees to facilitate the participation of students and faculty in specific areas of importance, such as course and program revision, faculty evaluations, and the planning and assessment process related to the academic agenda. Academic life at UPRC is developed through the academic departments, under the leadership of the Dean of Academic Affairs. Each department chair is responsible for administrating and coordinating the available financial and human resources needed to realize its academic offerings. Departments are grouped in three areas for planning and organizational purposes: the Biology, Chemistry, and Mathematics-Physics departments constitute the Natural Sciences Area; the English, Hispanic Studies, Humanities, and Social Sciences departments constitute the Area of Arts; the librarians, counselors, psychologists, and researchers, as well as the Education, Business Administration, and Physical Education departments constitute the Professional Schools Area.

Student participation

UPRC fosters student participation in university affairs in a manner that best addresses their needs, while promoting and developing their leadership. The Student Council is the main body for student participation in governance. All its members are elected yearly, and it has five committees to deal with specific areas of concern: the bookstore, the library, cafeteria services, health and safety, and student discipline.

The students also participate by voice and vote in: department and area meetings; the Academic Senate and its commissions; the Administrative Board; the University Board; all Faculty Committees except the Personnel Committee; special discipline committees; the area of Health, Occupational and Environmental Safety; complimentary services—where students attend

meetings at which issues related to the cafeteria, the bookstore, and the Traffic and Parking Committee are discussed; and the consultation processes for the selection of Chancellors and Deans.

Various formal student organizations facilitate the ongoing participation of students in campus life. These interest groups organize many kinds of academic and social activities every semester and often voice their claims for better academic services to the Deans, the chairpersons, or the Chancellor.

4.4 ASSESSMENT OF LEADERSHIP AND GOVERNANCE

In the past two years UPRC's leadership and governance schemes have been restructured in two main ways, as a direct result of periodic assessment of their effectiveness: first, through a proposal for restructuring the permanent faculty committees and, second, through the creation of a new Associate Deanship for Academic Affairs.

After careful assessment of duties assigned to each of the permanent faculty committees and of their productivity, a new committee structure was proposed and approved in the Fall of 2004. The restructuring: eliminated two committees (learning resources and interdisciplinary activities), after demonstrating that their original duties were already handled efficiently in other ways; created two new ones (General Education and Student Support); and revised an existing one (Planning and Budget). These changes will facilitate participation of faculty and students in fundamental areas of the institution's agenda. The change in functions proposed for most of the committees will allow UPRC to further develop most of the policies and procedures that are contained in the Institutional Assessment Plan. Diagram 8 summarizes the new committee structure.

Curriculum Committee	Oversees the creation, assessment and revision of academic programs and upper level courses
General Education Committee	Oversees the assessment and revision of general eduction program and courses
Student's support Committee	Coordinates all student support services and activities and relates them to curriculum
Personnel Committee	Conducts all faculty evaluation procedures and helps with the faculty development activities
Planning and Assessment Committee	Supervises all institutional level assesment activities from the IAP

Diagram 8. New Faculty Committee Structure

As mentioned in Chapter 3, in 2002 and after the necessary assessment, an Associate Academic Deanship for Instructional Technology was created under the supervision of the Academic Dean; this deanship integrates the Instructional Technology Office and the Audiovisual Services

division. A coherent development plan was put in place and more emphasis was given to instructional technology training for the faculty. With an increased budget, this deanship has revamped the technology agenda campus wide.

FINDINGS

1. UPR has a well-defined system of collegial governance and evidence of written policies that outline governance responsibilities.
2. The Board of Trustees oversees the general functioning of the UPR system without interfering in local governance matters.
3. UPRC has a strong and participatory governance structure, which allows academic issues to prevail in the institution's agenda.
4. Students have ample opportunities to participate in leadership and governance at UPRC.
5. There is evidence that assessment has played an important role in the recent restructuring of leadership schemes.
6. Students and faculty have ample opportunities for participation in all important local decision-making bodies.

RECOMMENDATIONS

1. Study the possibility of offering academic credit for student participation in governance.
2. Study the adequacy of the current organization of all academic departments into the three areas (arts, natural sciences, and professional schools) that are specified in current faculty by-laws; and consider potential alternative organizations that would enhance the academic environment in cost-effective ways.
3. Develop specific procedures for assessing the level of satisfaction of all university constituencies with their governance structure.

Chapter 5

Administration

The administrative structure of UPRC supports effective implementation of administrative processes that facilitate learning, academic research, and continuous improvement. This structure has changed somewhat since UPRC's foundation in 1967, by formalizing the duties of its main officers, but it has stayed simple enough to allow for direct interaction among all its constituencies. This structure is vital for performing administrative procedures at a *human scale*, thus promoting the principles of the institution's mission which value collaborative work and *"recognize that all members of the university community are, in an essential sense, students, and that all may be teachers."* Administrative styles and mechanisms at UPRC have a distinctly collaborative character through which all administrators share responsibilities.

5.1 ADMINISTRATIVE ORGANIZATION

UPRC's administrative structure is very similar to that of the other seven undergraduate units of the UPR system and is illustrated in the following diagram.
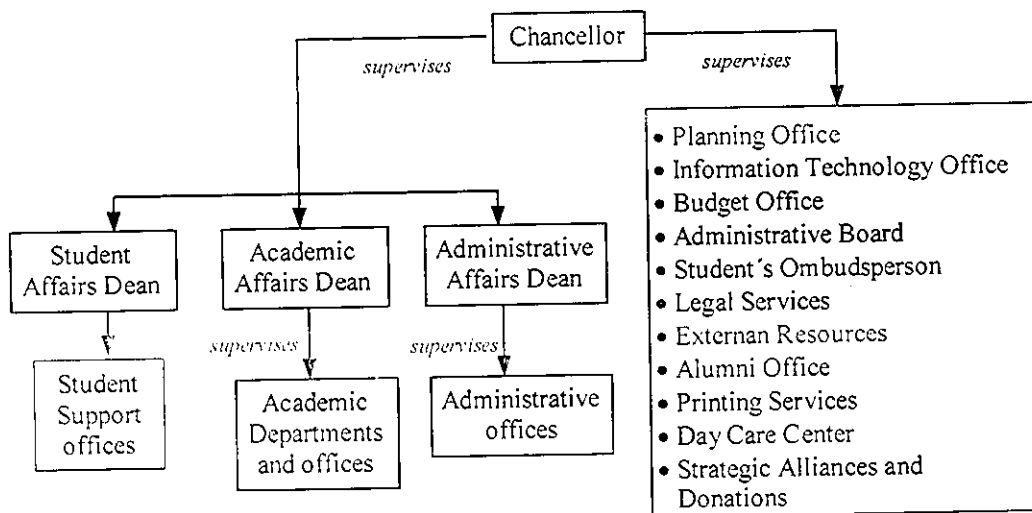
Diagram 9. General Organizational Chart of UPRC.

The Chancellor is the highest academic and administrative leader within the unit and provides the direction needed for proper internal functioning and fulfillment of the institution's mission, goals, and objectives. Three Deans, as illustrated in the diagram, comprise the immediate support staff for the Chancellor and collaborate in implementing the strategic and operational plans. Each Dean is responsible for the supervision of its offices and departments. Also as illustrated in the diagram, the Chancellor directly supervisors a number of offices whose roles have impact across all deanships.

The Deanship of Academic Affairs is the largest and most complex. Its Dean and supporting staff are responsible for coordinating the academic offerings as well as the proper functioning of

the academic departments and projects, research units, library, registrar's office, and other learning resource offices. The Deanship of Administrative Affairs has charge of the campus-wide administration of human resources, institutional finances, physical infrastructure, and campus security, among other functions. The Deanship of Student Affairs coordinates issues related to student life: counseling, sports, cultural activities, student organizations, financial aid, international and exchange study programs, and student housing, among other matters.

5.2 THE CHIEF EXECUTIVE OFFICER

The Chancellor is responsible for the academic and administrative performance and the well being of the unit. He or she advises and supervises the university personnel and the teaching, technical, research, and administrative functions of the institution. In addition, the Chancellor presides over the Academic Senate, the Administrative Board, and the faculty meetings and drafts the institution's budget petition every year. The Chancellor appoints and hires staff and officials, decides appeals that are brought to him on decisions made by the Deans, and submits an annual report on the activities of the unit to the President and the Board of Trustees.

The current UPRC Chancellor, *Dr. Rafael Aragunde*,[24] was appointed in summer 2002. Dr Aragunde has an interdisciplinary education and extensive academic experience in university processes and regulations. He is a full professor and holds a doctorate in Philosophy. Dr. Aragunde has worked for 28 years at UPRC and has participated actively in the most prestigious faculty committees at the institutional and system levels, as well as the most important faculty organizations, and he has extensive academic research experience.

He has shown leadership and a capacity for teamwork within all sectors of the university community and a commitment to improving university education. Dr. Aragunde's work plan demonstrates his knowledge of the principal needs of the institution: strengthening the university culture, fighting political cronyism, evaluating administrative academic staff, creating an advisory committee for the Chancellor that can decentralize operations, addressing planning issues, stimulating student participation in university processes, and responding to the need for evening classes.

During the search process for the Chancellor, Dr. Aragunde submitted a document setting forth the ten most important objectives for the institution, based on an assessment he had made as a candidate for the position. These objectives are included in his three-year work plan, which is written within the framework of the mission and goals of the institution. In fulfilling the plan, and in view of the budget limitations set by the government, Dr. Aragunde participates actively in the campaign to find sponsors that can provide financial support to projects that are important for the institution and can also support and broaden the scope of academic and administrative endeavors.

In order to fulfill his work plan and stimulate new areas for development, Dr. Aragunde has strongly supported the submission of proposals to sponsoring agencies at the federal and state levels. The internal budget distribution and usage is continuously evaluated with a view to assigning resources where they are most needed, according to established priorities. Since

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[24] Exhibit 5.2

assuming his position, the Chancellor has met regularly with the different sectors of the university community. While he is required to meet with the faculty twice a semester, during the five semesters in which he has administered the institution, he has convened the faculty three or more times per semester. The Chancellor also meets with non-faculty personnel, even though he is not required to do so. These meetings allow him to maintain communication with the largest sectors of the university and contribute to improvement of the campus ethos. Even though the Chancellor has the option not to teach any courses, Dr. Aragunde has continued to teach one course per semester since he was appointed, in order to keep direct contact with the teaching and learning conditions of the institution.

5.3 OTHER ADMINISTRATIVE LEADERS AND STAFF

The Deans are the main officers on the Chancellor's work team. The minimum qualification for these positions is a Master's degree from an accredited institution. The responsibilities of these academic administrators and managers include: planning, implementation, and evaluation of academic programs; personnel administration; budgeting; preparation and administration of proposals; evaluation of existing programs and creation of innovative programs; administration of externally funded projects; coordination of faculty committees; and supervision and evaluation of student services.

These duties[25] imply close collaboration with other administrators in the university system, the government, federal agencies, and the community at large. Each Dean has autonomy to handle internal programmatic and fiscal issues and they all meet with the Chancellor at least once a week to discuss the implementation of plans and to resolve campus-wide problems. They also make recommendations on appointments of staff in their respective areas.

The current Dean of Academic Affairs, *Waldo A. Torres,*[26] was appointed to the position in the fall of 2002. He is a full professor and a mathematician with extensive administrative and academic experience. He holds a Master's degree in Science and another Master's degree in the Arts. Professor Torres is a UPRC alumnus and has been a faculty member for the past 17 years. He served as Director of the Mathematics Program for Puerto Rico's Department of Education in 1993-94. From 1988 to 1990 he also served as Associate Dean for the Office that he now directs. He authored a pre-calculus textbook that is used at our institution and other universities in Puerto Rico. Professor Torres has evidenced a broad knowledge of academic affairs and has participated consistently and significantly in curricular planning, teaching, and many other ancillary processes related to academic affairs.

Three Associate Deans of Academic Affairs work closely with the Academic Dean in very specific matters. Dr. Aurora Rivera, a full professor in the English Department, has extensive administrative experience and is in charge of curriculum and assessment projects. Dr. Raúl Pérez-Sandoz, a full professor in the Mathematics-Physics Department, also has extensive administrative experience and is in charge of research, the budget, and academic offerings. Dr. Mario Medina, an associate professor in the English Department, was recently appointed as the Associate Academic Dean in charge of instructional technology developments. The following

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[25] Exhibit 5.3
[26] Exhibit 5.3A

diagram illustrates all components under the supervision of the Dean of Academic Affairs and the Associate Deans.
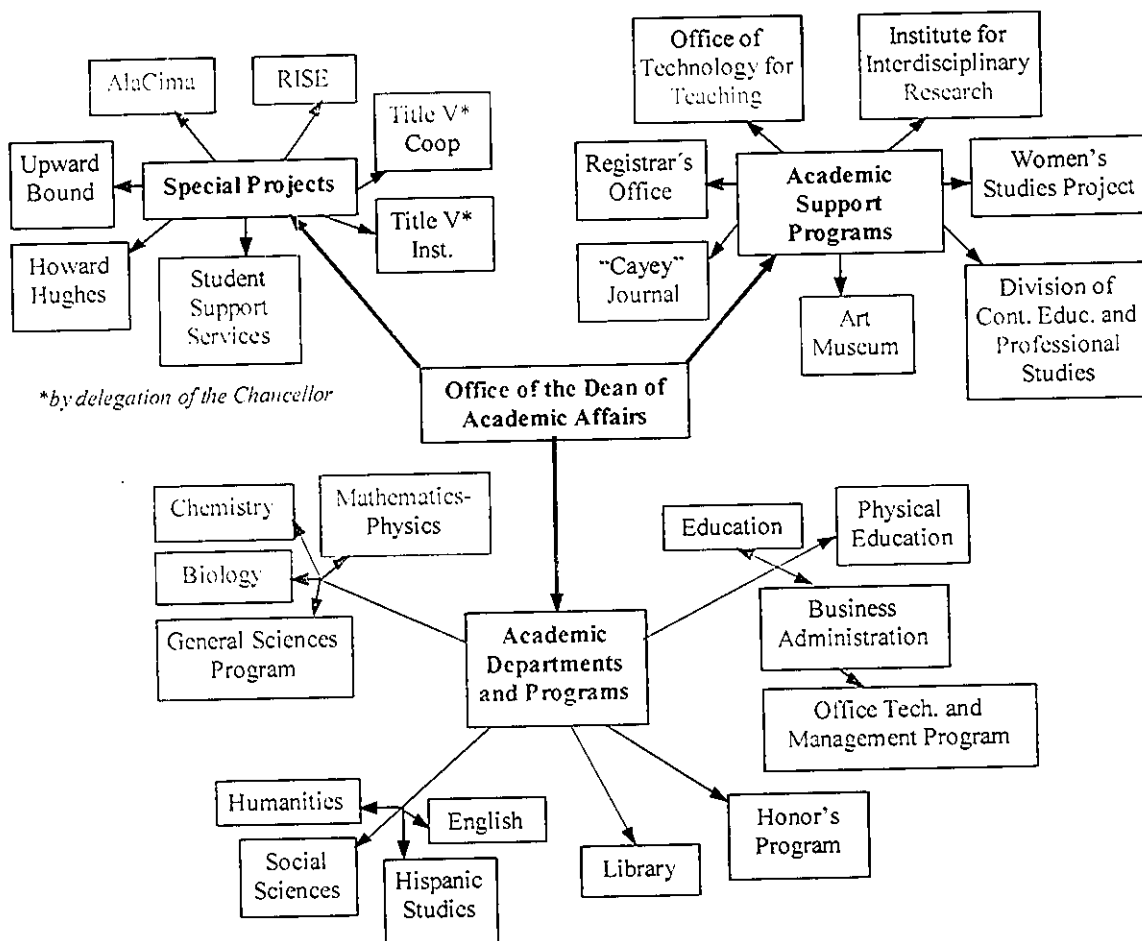
Diagram 10. Organizational Chart of the Deanship for Academic Affairs

The current Dean of Administrative Affairs, *Francisco Rivera-Pérez,*[27] was appointed in summer 2002 and has been a professor in the Department of Business Administration for 30 years. Among his extensive administrative experience, his service as Dean of Administrative Affairs at the University of Puerto Rico in Río Piedras, the largest campus in the UPR system, must be mentioned, as should his service as an academic senator, director of the Business Administration Department, and director of what is today known as the Division of Continuous and Professional Education (DECEP). Professor Rivera-Pérez holds a Master's degree in Accounting and a Master's in Finances and has also taken pre-doctoral courses. The following diagram illustrates all components under the supervision of the Dean of Administrative Affairs.

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[27] Exhibit 5.3B

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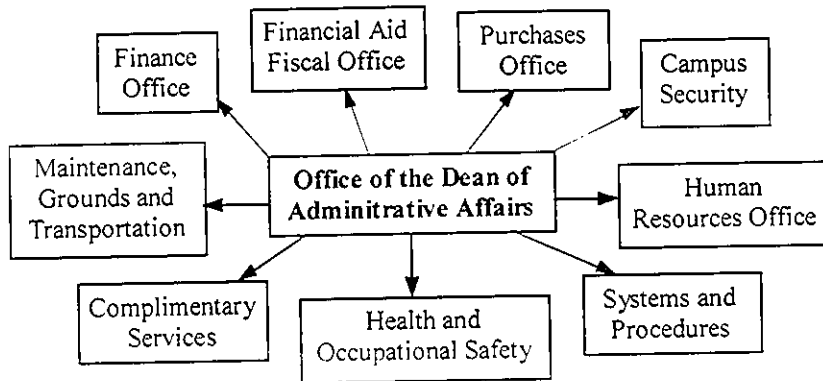
Diagram 11. Organizational Chart of the Deanship for Administrative Affairs

The current Dean of Student Affairs, *Dr. Lizandra Torres*,[28] was appointed during the current academic year based on her leadership qualities and commitment to student issues. She holds a doctorate in Latin American Studies with a concentration in Political and Social Sciences. Dr. Torres, an assistant professor, has taught in the Social Sciences Department since 1996 and has published several books and articles in newspapers and journals. She has served as an academic senator and a professor of Political Science, and she continues to direct the institution's Women's Studies Program. The following diagram illustrates all components under the supervision of the Dean of Students Affairs.
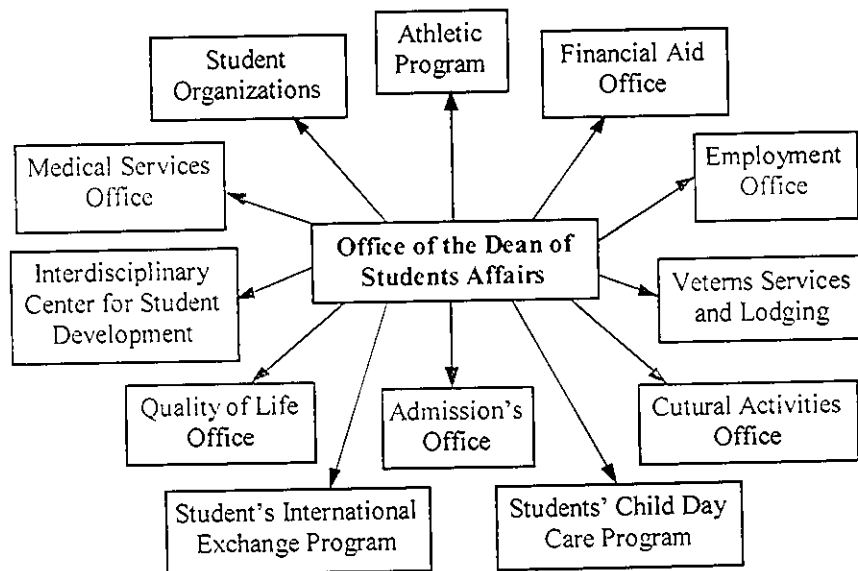
Diagram 12. Organizational Chart of the Deanship for Student Affairs

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[28] Exhibit 5.3C

The administrative staff under the Deans and the Chancellor are recruited according to standards defined in the *Classification Plan*, which establishes the titles and requirements of each position, as well as the recruitment standards, with a view to obtaining the best qualified staff. The Classification Plan also establishes the compensation to be received according to the classification and recognizes that compensations should be aligned with new academic offerings and technological changes, even though changes in compensation cannot be made at the unit level, but only by the Office of the President.

In addition, staff in positions of trust, who direct some of the most important offices of the institution, such as Human Resources, Finance, Purchasing, Cultural Activities, and the Athletics Program, are selected for their educational background and professional experience. A continuing education program[29] has been developed for them and the people they supervise and is renewed every six months.

5.4 DECISION-MAKING SYSTEMS

Decision making on campus is characterized by ample participation opportunities for faculty, students, and non-faculty personnel. The four main decision-making groups (Academic Senate, Administrative Board, Faculty Committees, and Academic Departments) are described in Table 6. As mentioned before, the Chancellor presides over the Academic Senate and the Administrative Board. The Dean of Academic Affairs presides over some of the faculty committees and supervises all academic department chairs.

Decision-making group	Avg. number of meetings per semester	Methods for communicating results
Academic Senate	5	Reports from senators in academic department or student council meetings; written certifications made public via the Internet
Administrative Board	2	Written reports to persons affected by decisions
Faculty committees	8	Written reports in faculty meetings; oral reports in department or area meetings
Academic departments	5	Expressions to the Senate, Deans, or Chancellor

Table 6. Profile of UPRC's Main Decision-Making Groups

In addition, committees have been defined for almost every aspect of campus life: bookstore management, appeals, campus landscapes, student's registration procedures, advice on information technology, student research, physical facilities, among many others. In order to provide time for meetings as well as extracurricular activities for students and the entire community, no classes are scheduled from 10:30 to 12:30 on Tuesdays and Thursdays.

As one example of a collaborative decision-making scheme, Diagram 10 illustrates how the Academic Senate operates to turn issues into actions and decisions. Some issues are sent to commissions for detailed study while others are treated directly in the monthly meetings. In

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[29] Exhibit 5.3D

cases for which further participation is needed, issues are submitted to academic departments or faculty meetings for discussion. While Senators are senior faculty members, they sometimes prefer to consult directly with their peers before they vote on issues in the senate meetings. They are elected to serve for three consecutive years and participate in at least one commission each year.
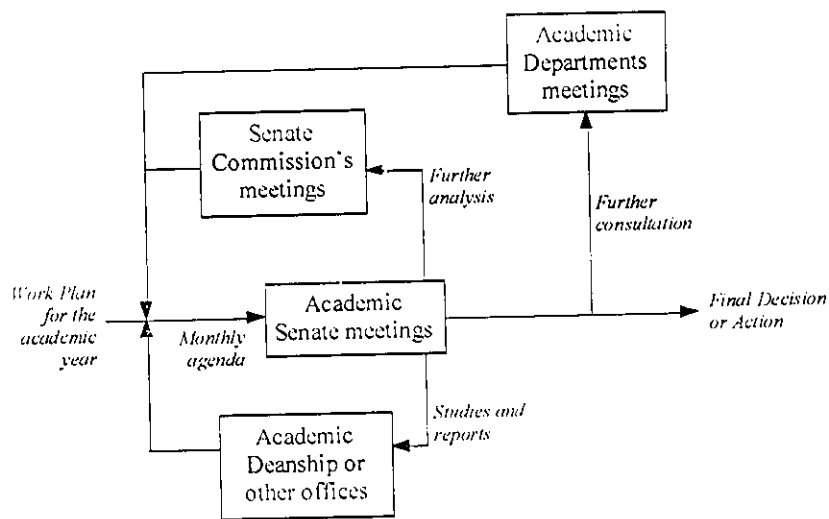
Diagram 13. Flowchart for Decision-Making in the Academic Senate

5.5 ASSESSMENT OF ADMINISTRATIVE STRUCTURES AND SERVICES

Changes in the administrative structure follow from the evaluation of programs, based on their purposes and needs. The creation, relocation, and reclassification of positions, as well as changes in staff, are governed by the Rules and Regulations of the University of Puerto Rico and contractual agreements with labor organizations.

Currently, the Deanship of Student Affairs is undergoing reorganization, as documented in revised procedures and regulations that are being considered by the Chancellor, for later consideration by the Academic Senate and the Administrative Board. In addition, a comprehensive restructuring of the Deanship of Academic Affairs is scheduled for next year so that changes and complexities in the roles of academic chairs and other officers may be given consideration.

UPRC has recently adopted a local procedure to assess the services and performance of the Chancellor, the Deans, and the Academic Department Chairs. These procedures,[30] which were approved by the Academic Senate during the past two years, require the annual evaluation of these officers. The assessment gathers input from the three sectors of the institution: faculty, students, and non-faculty personnel. Each sector uses a specific evaluation instrument.

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[30] Exhibit 5.5

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The Senate's Commission on Faculty Affairs submitted its first reports on the evaluation of the Chancellor in March 2004 and on the Dean of Academic Affairs in May 2004. Academic department chairs have been evaluated annually for the past two years. Throughout this process, the Chancellor, Dean, and chairs had an opportunity to carry out a self-evaluation based on the findings. These efforts initiated a significant evaluation process[31] in which the university community is motivated to participate actively. It is expected that the Chancellor and all the Deans will be evaluated again during the current year.

It is important to mention that the Board of Trustees has recently established an evaluation model for assessing the President of the UPR system and the Chancellors of the institutional units, in every term not shorter than 3 years and not longer than 5 years of their incumbency. Because UPRC already has a working procedure for the evaluation of its main officers, as described above, it is more prepared than other units for such evaluation.

Finally, UPR is subject to evaluations or audits[32] by external and internal agencies. The evaluating agencies include: the Federal government through its sponsoring agencies, the Comptroller's Office, State agencies that fund projects, and the Office of Internal Auditors. In other cases, assessments or audits are prompted by internal evaluation of situations that have arisen in the course of conducting daily business. Corrective actions have been taken in view of comments made in the audits, in order to prevent or minimize further occurrence of the observed undesirable activities.

FINDINGS

1. UPRC's organizational structures respond to its mission and goals and the institution has well-defined lines of authority.
2. The administrative staff have the academic credentials and experience to carry out their responsibilities.
3. UPRC promotes the participation of all constituencies in its decision-making processes.
4. UPRC has initiated a necessary assessment process of the Chancellor, Deans, and Department Chairs.

RECOMMENDATIONS

1. Establish formal professional development experiences for all its academic and administrative leaders, so that updated knowledge and administrative skills may help them discharge their duties more effectively.
2. Continue to improve communication among all administrative structures.
3. Continue the evaluation process of the Chancellor, Deans, and Department Chairs.

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[31] Exhibit 5.5A
[32] Exhibit 5.5B

Chapter 6

Integrity

As a public institution that depends on State budget allocations for more than 90% of its operational expenditures, UPRC is legally responsible for providing the best possible undergraduate education to the population it serves and is also morally responsible for contributing to a better quality of life among all its constituents and the community in general. , In both academic and administrative endeavors, integrity is a fundamental characteristic of UPRC, as it makes every effort to accomplish its goals of excellence.

Central to its mission is a commitment "*to a well-rounded education of excellence*" and "*the conquest of prejudice by reason, and respect for differences of opinion.*" In accordance with these principles, UPRC promotes academic and intellectual freedom and guides its educational activities so that they meet high ethical standards of respect, justice, and equity. As a system, the University of Puerto Rico has the necessary mechanisms to ensure that academic freedom is used wisely, to serve the purpose of improving the quality of teaching and learning.

6.1 EQUITABLE AND ETHICAL PRACTICES FOR STUDENTS

The student policies at UPRC are publicly accessible, non-discriminatory, and consistently applied. Students admitted to UPRC receive valuable information regarding norms and policies, from a team of well-prepared and responsible counselors as well as admission and financial aid officials. Orientation days at the beginning of each academic year serve to clarify all pertinent information that is distributed in printed form, either in the University Catalog[33] or in complementary materials.

The catalog is available on-line at http://www.caycy.upr.edu to better respond to the needs of all constituents and to better reflect the dynamic nature of its contents. All students have access to the catalog through web accounts provided by the University and paper copies are always available. The Catalog, in all its editions, contains the norms and regulations that are summarized in Table 7, and all changes to these are always prospective (they apply only to students admitted the year after the changes are made).

Class attendance	Course syllabi
Exams and grades policies	GPA and satisfactory academic progress
Dean's list	Dismissal for academic reasons
Dropping a course	Privacy of academic records
Admission and transfer requirements	Financial aid norms and regulations

Table 7. Topics for Norms and Regulations included in the UPRC Catalog

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[33] Exhibit 6.1

All students enrolled at the university have direct access to counselors and academic and financial aid advisers who can further clarify all these norms at any time; the Office of the Registrar is very efficient in providing orientation to the students. The catalog also contains detailed information on graduation requirements, the status of the institution's accreditation by the Middle States Association, and the accreditation and licensing of our programs, among other issues.

UPRC acts in accordance with affirmative action principles for student admission and promotion and offers a wide range of support services, as described in Chapter 9. Inquiries for reconsideration by any student who is denied admission to the University are handled on a strict merit basis by a committee composed of representatives from the Academic and Student Affairs deanships. Graduation requirements, grades, and all other academic issues are handled with the same rigorous but fair methods and the highest ethical standards. For example, students can request a grade revision for any course up to one semester after course completion, and faculty are required to evaluate its merits based on sound evidence. After reviewing the evidence, both the Department Chair and the Academic Dean must approve any grade changes prior to final action by the Registrar.

Student grievances are handled with procedures that respond to their nature in order to guarantee fair and prompt responses to every claim. All norms related to grievances appear in the Internal Student Regulations. All grievances and complaints are handled with strict confidentiality.

Complaints related to specific administrative areas such as financial aid or other student support services are handled directly by the corresponding office director. The Dean of Student Affairs acts as an appeal agent when students are not satisfied with actions taken or not taken to correct the situation. As with all complaints that come from any of the campus constituencies, the Chancellor handles any further appeal or may reconsider actions or decisions taken at the Deanship level. The UPR President and the Board of Trustees may also consider appeals that can't be resolved locally.

Complaints related to academic issues, on the other hand, are first handled by the faculty involved. The Academic Dean and the Chancellor may then handle subsequent appeals.

Complaints related to issues such as harassment, unethical behaviors, and discipline are handled by the Students' Ombudsperson and, when appropriate, by a Dean or the Chancellor. All complaints must be submitted in written form with adequate evidence, and fair processes are guaranteed for every person involved (information on actions taken by the office of the Students' Ombudsperson appears in Chapter 9).

The Discipline Board is convened in cases where the evidence is very solid, as required by the norms stated in the Internal Student Regulations. This Board is composed of two faculty members from the Academic Senate, two students, and a representative of the Chancellor. After completing a careful fact-finding process, it is responsible for informing the Chancellor on the merits of each complaint.

Finally, all student organizations, in order to be certified and as part of their by-laws, are required to present a statement on how their procedures will follow a code of ethics.

6.2 EQUITABLE AND ETHICAL PRACTICES FOR FACULTY AND OTHER EMPLOYEES

It is a policy of UPRC to provide equal opportunity in all facets of education, hiring, and continued employment regardless of sex, race, marital status, creed, age, national origin, sexual orientation, the presence of any physical challenging disability, veteran status, or religious preference. In addition, UPRC is committed to Affirmative Action policies through which specific additional efforts are made to recruit, hire, and promote persons from backgrounds that have been traditionally underrepresented. These efforts apply to all levels of the institution.

Recruitment policies and procedures for faculty[34] were revised and approved by the Academic Senate in the 2003-2004 academic year. Such recruitment is made solely on a merit basis and under strict non-discrimination criteria. These policies, as well as the new policies and procedures that are being prepared for faculty evaluation and promotion, which are described in Chapter 10, define fair and impartial processes. Recommendations for the hiring of faculty are made, in first instance, by the corresponding Personnel Committees and are then endorsed by the Academic Dean and the Chancellor. Very detailed descriptions of the hiring procedures and criteria for non-faculty personnel are widely disseminated. All personnel receive a copy of the UPR policies and regulations upon employment.

Complaints and grievances from faculty are handled by the corresponding Department Chair, but may be appealed to the Academic Dean and the Chancellor. The Discipline Board is activated in cases where faculty do not comply with the norms and regulations stated in the Internal Regulations.

Workshops on Ethics and Integrity are part of the institution's professional development activities. All community members, including the Chancellor, participate in various activities sponsored by the Office of Governmental Ethics and are required to complete at least 10 hours of continued education on different topics regarding ethics and integrity. An Institutional Ethics Committee at UPRC distributes information and organizes professional development activities twice a year.

6.3 PLAN TO INFORM AND PUBLICIZE INSTITUTIONAL INFORMATION

UPRC uses a variety of procedures to disseminate information about its mission, goals, objectives, services, activities, student eligibility, and ethical practices to the campus community. The UPRC web page has enabled the institution to better communicate with potential students, current students, and alumni anywhere in the world. Its contents are frequently updated and/or revised. The Chancellor shares pertinent information about the institution with campus administrators, faculty, students, and staff members. Flyers, posters, and brochures that describe recruitment and admissions procedures are prepared at Central Administration and are distributed on every campus as part of its promotional activities.

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[34] Exhibit 6.2

Promotional material detailing department or office services are also developed and distributed. Every week, *"Cartelera"* (a College Information Bulletin) displays announcements, advertises activities and Student Organization meetings, among other features, and serves as an effective mechanism to keep all the community informed.

Specific norms concerning intellectual property are posted and obeyed. At the printing unit, these norms are prominently displayed and presented to all faculty members.[35]

6.4 INTEGRITY IN RESEARCH

Integrity in research is very important for promoting a climate of academic inquiry with a sound ethical basis. This concern is particularly relevant not only because of the increase in the number of research projects conducted by faculty members, but also because of the plans to expand undergraduate research as part of the curriculum renovation process.

The institution has a Research Misconduct Committee, which operates under the guidelines of the *Office of Research Integrity* (ORI) of the *Office of Public Health and Science* (OPHS) within the *Office of the Secretary of Health and Human Services*. Four faculty members elected by the Academic Senate, the director of the External Resources Office, and the Academic Dean comprise this committee. At the beginning of each academic year, the Chancellor informs the community of the current members and the relevance of their duties. The committee is responsible for monitoring institutional research projects, implementing local and systemic policies for handling claims of research misconduct, and foreseeing all regulatory activities.[36] The Committee meets at least once every semester and whenever it is needed.

Last year, UPRC created an Institutional Review Board (IRB) to oversee all proposals that require human subjects for research purposes. The IRB complies with all the rules and regulations of the United States Department of Health and Human Services (Office for Human Research Protections-OHRP) and is coordinated by the Director of the Office of Sponsored Research. This Board consists of five members, including one representative from the external community. The institution is covered under the FWA00007679, which expires on 19 October 2007. Both faculty and student research projects are subject to formal evaluation by this board.

FINDINGS

1. The institution conducts its programs and activities, involving the college community and the constituencies it serves, in compliance with ethical standards.
2. Academic freedom, intellectual freedom, and freedom of expression are central to UPRC's academic enterprise.
3. Ethical conduct is evident within the institution and UPRC has the mechanisms and policies that are necessary to ensure continued integrity in all areas.

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[35] Exhibit 6.3
[36] Exhibit 6.4

RECOMMENDATIONS

1. Improve timely dissemination of all polices regarding student grievances, research misconduct, and other issues related to integrity. These should be explicitly stated in the institution's catalog.
2. Establish procedures to review all promotional materials before publication—for compliance with institutional standards, accuracy, and consistency of the information.
3. Revise the composition and duties of the Institutional Ethics Committee, in order to develop a periodic assessment of integrity in institutional policies and procedures.
4. Incorporate a Code of Ethics in the revised Student Regulations and also in the Internal Faculty Regulations.

Chapter 7

Institutional Assessment

UPRC completed its *Institutional Assessment Plan*[37] (IAP) in September 2002, when it was approved by the Academic Senate and endorsed by the Faculty. This accomplishment allowed the institution to comply with a request made by MSACHE as part of the institution's most recent Follow-up Report. The IAP was extensively discussed by all members of the university community and since its approval it has been a valuable reference for institutional planning and for assessing UPRC's overall effectiveness. For the past two years, as the institution has begun implementing this comprehensive assessment plan, it has recognized that implementation is a challenging enterprise because it requires a transformation of the institutional culture.

7.1 INSTITUTIONAL ASSESSMENT PLAN

The purpose of the IAP is twofold: 1) to evaluate how effective the institution has been in the attainment of its mission, goals, and objectives, and 2) to use the results obtained from this evaluation to improve the institution's effectiveness. With the IAP, the institution's commitment to fulfilling its mission is strongly focused on the assessment of student learning. The IAP establishes such assessment activities throughout the institution's instructional, research, and public service functions, as well as its administrative components.

The three areas into which the IAP is divided were designed to reorganize, for the purpose of assessment, the four institutional goals and their related objectives. Theses areas are:

 I. *Excellence in the Undergraduate Programs*: divided into four parts, this area covers the assessment of student learning outcomes—at the institutional, program, and course levels. (Refers to all objectives of Goals 1 and 4)
 II. *Services, Resources, Policies, and Structures*: this area assesses planning, the adequacy and allocation of institutional resources, and governance and administrative structures and services, as well as integrity. (Refers to all objectives of Goal 2 and some of Goal 3)
 III. *Institutional Profile and Prestige*: this area provides for a holistic assessment of student learning outcomes as well as the institutional renewal processes. (Refers to the remaining objectives of Goal 3)

For each area, the Plan defines methods, sources of information, persons or groups in charge of the assessment, as well as indicators and "dimensions" of effectiveness. The "dimensions" of effectiveness are those critical issues that identify the essential characteristics of the subjects or objects being assessed; the indicators of effectiveness are the quantitative or qualitative criteria, or "benchmarks," that allow the institution to judge its results. These indicators are used to design instruments or protocols that will enable UPRC to collect the precise information needed.

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[37] Exhibit 7

The Plan clearly identifies the personnel who will carry out the many tasks included in each area. By reassigning and redefining tasks within already existing groups, this Plan can function without creating the need for a new administrative structure; a new faculty committee structure (see Section 4.4) will coordinate most IAP assessment tasks. The timetable included in the Plan sketches, in broad outlines, the progress of the different parts of the Plan over a five-year period. Similarly, a plan to assess this Plan (meta-assessment) defines indicators that can track effectiveness of the assessment program by means of existing procedures.

UPRC's plan to assess student learning outcomes is not a separate document, as is the case in many other institutions, but is embedded in the IAP. In particular, all four parts of the first area of the IAP constitute UPRC's plan for assessing student learning outcomes. While the second and third areas of the Plan are also linked to students, they concentrate on parameters that assess overall institutional effectiveness.

The IAP is soundly related to other fundamental UPRC plans. As explained in Chapter 2, UPRC has implemented *operational plans* whose results have been assessed every semester. These plans are aligned with the current Institutional Strategic Plan. As recommended above, UPRC should initiate a process to update the Strategic Plan with all the assessment results that have been gathered through implementation of the operational plans and by means of the IAP.

7.2 ASSESSMENT PROCESSES AND USE OF RESULTS

In the three years following approval of the IAP, UPRC has conducted many professional development workshops[38] in order to involve faculty members in assessment related activities. In addition, the Chancellor and the Deans have given priority to the development of assessment activities within their work plans. As a result, there have been many initiatives, mostly from the faculty, to improve classroom and program assessment which complements the IAP. These initiatives and their results are discussed in Chapter 14.

Before approval of the IAP, UPRC had reported many assessment activities that were conducted without appropriate coordination. Since the number of assessment activities increased after approval, particularly with regard to student learning, the need for better coordination continues.

Since the results from the first area of the IAP, as well as everything related to student learning assessment, are treated in Chapter 14, this section will concentrate on discussion of overall institutional assessment. Areas II and III of the IAP focus on the assessment of institutional effectiveness in relation to the quality of services, resources, policies, and structures, as well as their alignment with the mission. They also assess the image and prestige of the institution as an outcome of its effectiveness. The following table summarizes the assessment activities, and the use of their results, that UPRC has performed in these two areas of the IAP. While many of the activities are not explicitly stated in the IAP, their inclusion is expected within the areas of the IAP. As is common in the process of building a new institutional culture for assessment, many spontaneous assessment activities occur concurrently with ongoing planned assessment activities. Eventually, however, it is expected that all assessment activities will converge into a well-defined set of coordinated efforts.

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[38] Exhibit 7.2

	Assessment Activities	Use of Assessment Results
Planning, Resource Allocation and Institutional Renewal	The current Faculty Committee on Planning and Budgeting carried out a summative evaluation of the Strategic Plan.	A recommendation was made to update the mission, goals, and objectives statement, as well as the Strategic Plan. The Academic Senate is considering the process for this revision in the light of the Self Study results.
	Preparation of a coherent database to assess student learning through the four-stage model described in the IAP is ongoing. The instruments for incoming freshmen are almost finished and those for sophomores and seniors are being created or revised.	Reports from the freshman database have been used to revise the institution's retention initiatives. In the long run they will enable longitudinal studies of incoming students' needs.
	Demand, efficiency, and selectivity indexes for all academic programs, as well graduation rate statistics, are readily available and are updated and analyzed each year.	Results from these analyses have provided the basis, in part, for the decision to lower the institution's carrying capacity and for resource allocation decisions in the academic programs.
Institutional Resources	The procedures to assess the quality of faculty performance have undergone careful revision as have the decisions to distribute classroom space. To streamline the budget assignment, annual assessment of the allocation of institutional resources is ongoing.	Results include: a new faculty evaluation system to promote quality of teaching; readjustments in the amount of classroom space for the various academic departments; allocation of additional funds for technological equipment; creation of An Office of Strategic Alliances and Donations, the Friends Council, and the Business Council, in order to promote aggressive fund raising.
Leadership and Governance	All deanships have planned a comprehensive assessment of their decision-making structures, taking into consideration the changes and complexities in the roles of their corresponding units and their officers, financial sustainability, and alertness to institutional renewal.	Results include: a proposal to transform the Physical Education Program into a separate academic department; creation of an evening school (UNEX) to satisfy a growing demand of the current student population; creation of the OTT to better satisfy the growing demands for instructional technologies.
	The productivity and the duties of the permanent faculty committees were assessed in relation to other decision-making groups.	A new faculty committee structure has been approved by the faculty. The change in functions will allow UPRC to further develop most of the policies and procedures that are contained in the IAP.
Administration	A procedure has been implemented to assess the performance of the Chancellor, the Deans, and all the academic department chairs annually. Students, faculty, and non-faculty personnel participate in this assessment.	These evaluations are formative up to the third consecutive year, when a decision must be made on whether or not the person should be recommended to remain in office. In the meantime, assessment results serve to improve efficiency and redefine methods and working plans.
	Duties and accomplishments of the OTT were thoroughly revised in relation to the technology-related services provided by other offices, such as the Audiovisual and Television services divisions.	An Associate Academic Deanship for Instructional Technology was created, under the supervision of the Academic Dean, to oversee all technology-related decision-making issues. A coherent development plan for technological resources was put in place.
Integrity	Assessment activities are in their initial stages.	An Institutional Ethics Committee was created.

Table 8. Use of Assessment Results to Improve Institutional Effectiveness.

The IAP requires frequent measurement of student, faculty, and non-faculty satisfaction with the results of all educational offerings, services, and processes. Although some opinion polls have been conducted in past years, they have not been systematically implemented or validated. With the recent investment in state-of-the-art software, UPRC will be in a position to use efficient on-line formats to gather opinions from all its constituents on their level of satisfaction with the results of planned activities.

In addition, the IAP requires an efficient inventory system in order to assess the adequacy of services, resources, and procedures as well as their alignment with the institution's mission. This task still requires more coordination. For example, UPRC makes periodic inventories of the cultural activities held on campus each semester, and also of service requisitions made to the Maintenance Office, but the information still needs to be analyzed for its impact on student learning and overall institutional renewal. As mentioned in Chapter 4, the faculty approved a revision in the duties of one of its permanent committees, so that it will now be in charge of overseeing the overall implementation of the IAP. This committee should provide the coordination necessary for the increasing number of assessment initiatives at the institutional level.

FINDINGS

1. The Institutional Assessment Plan is in its initial stages of implementation; in order to create and nurture a collaborative environment in which individual assessment activities will become more articulated, it is essential that faculty, students, and non-faculty personnel all be involved in its implementation.
2. The institutional assessment model is mission-driven and allows for periodic assessment of institutional effectiveness by addressing all educational offerings, services, and processes.
3. Many assessment activities of institutional effectiveness have been performed and their results used to improve planning, resource allocation, and governance structures, among other improvements.
4. Some assessment activities occur apart from the framework of the IAP, but they relate directly to the measures of institutional effectiveness contained in it.

RECOMMENDATIONS

1. Continue to provide leadership, training, and administrative support to increase campus-wide involvement in assessment.
2. Disseminate outstanding efforts and promising practices in institutional assessment, especially through annual plenary sessions in which faculty and administration participate actively in discussing the results of all major assessment initiatives.
3. Initiate a revision of the IAP in order to make necessary adjustments in content as well as implementation strategies.

Chapter 8

Student Admissions

Student admission policies and procedures in the UPR System are uniformly applied among all institutional units and respond to the institution-wide mission. UPR has a Central Office of Admissions that is responsible for putting in practice all system-wide policies and standards and for establishing general admission procedures. The Directors of Admissions at the various units participate in the decisions made at this central level. UPRC defines the specific minimum admission index and carrying capacities for all its academic programs, on an annual basis, so that matriculation better reflects the particular emphasis of its mission and goals.

8.1 RECRUITMENT EFFORTS

Annually UPR publishes a *Manual of Offerings*[39] with a precise description of the eleven campuses and the academic programs offered. This publication also contains the *Standard Application Form for the University of Puerto Rico*, which can be accessed on both the UPR and the UPRC web pages. In addition, the Office of the UPR President publishes a *Manual of Procedures*[40] with valuable information for prospective students. This manual is available at all admissions offices and online at www.upr.edu.

There are approximately forty target high schools, both public and private, in the region served by UPRC. Students in these schools receive periodic orientation on the different academic programs, admissions requirements, and application deadlines for the institution. The UPRC Office of Admissions schedules orientation visits to these schools and the Chancellor participates in most of them.[41] During these visits, information on current outstanding student accomplishments is delivered along with procedural information. In addition, the UPRC Interdisciplinary Center for Student Development (Counseling Office) coordinates periodic visits of high school students to the campus so that prospective students can become acquainted with the institution's resources and facilities.

All these recruitment efforts have proven successful and contribute to UPRC's strong reputation, which is made evident by the excellent performance of its students and alumni as well as the quality of its undergraduate programs. UPRC graduates have high admission rates to the highly prestigious UPR School of Medicine, as well as other graduate schools in Puerto Rico and abroad. Moreover, UPRC Education graduates have some of the highest scores on Puerto Rico's Teacher Certification Test. These, as well as the many other accomplishments of current students who participate actively in research and other creative works, and who present their results on and away from the Island, are communicated to prospective students.

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[39] Exhibit 8.1
[40] Exhibit 8.1A
[41] Exhibit 8.1B

8.2 ADMISSION POLICIES AND PROCEDURES

Last year, the UPR Board of Trustees approved a new *Admission Policies and Standards for the UPR System* through Certification #25,[42] which stipulates the requirements for admission at any of the degree programs offered in UPR, based on the use of a *General Admission Index* (GAI). This index is calculated with a formula that uses the normalized and standardized values of the high school GPA and the two aptitude tests of the College Entrance Examination Board (CEEB). Weights of 50%, 25%, and 25% are assigned to each of these values, respectively. Every academic year, UPRC defines the carrying capacities and corresponding *Minimum Admission Index* (MAI) for all its programs, using the new internal procedure that was explained in detailed in Section 2.2.

Simulated admissions are carried out by the Central Admissions Office using as input the previous year's MAI and carrying capacities, as well as the prospective student admission index. The results from this process are used to determine whether or not adjustments are needed to harmonize demand and offerings. The admission procedure is structured so that the electronic system accepts the applicants in order, starting with the highest GAI and continuing until the maximum capacity of each academic program is reached. Students are informed of their admission status, as well as specific requirements of the academic programs, by mail. Some students admitted to UPRC are required to take summer preparatory courses in math, English, or Spanish, depending on the scores they obtained in the corresponding Achievement Tests of the CEEB. This information is explained in detail in all orientation activities, as described before.

This year's Minimum Admission Index for all 4-years academic programs at UPRC ranges from 254 to 304 and ranks among the highest indexes[43] within the undergraduate units of the UPR System. Indexes for the evening school (UNEX) are the same as those for the corresponding regular programs. All prospective students are made aware of these admission standards.

The system-wide admission policy also authorizes special procedures for the admission of students with special talents and abilities. These policies produce the flexibility needed to recruit outstanding students in specialized areas yet are rigorous enough to guarantee that admissions reflect the principles of excellence in the unit's mission and goals. The number of students admitted through this special procedure should not exceed 2.2% of total admissions for each unit. Students with disabilities fill out a questionnaire during the registration process in which they can request the services they need and to which they are entitled under *Public Law 51*.[44]

Technology and the Admissions Process

The admissions process at UPR is completely automated. Students may complete admission application forms electronically and search for information on academic offerings and admission requirements at UPRC or any other UPR unit. The *Student Information System* (SIS) processes applications electronically and uses CEEB scores and high school GPAs to evaluate applications. In addition to evaluating an applicant's qualifications, it controls the carrying capacity of the different academic programs, completes or corrects applicant information, and mails

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[42] Exhibit 8.2
[43] Exhibit 8.2A
[44] Exhibit 8.2B

correspondence and reports. The effectiveness of this process is assessed annually by the Office of Admissions at the central level, so that further improvements may be proposed.

Results from the Admissions Process
These admission policies and procedures are sufficiently accurate and produce excellent results for UPRC as evidenced by the statistics from the past two years, which are presented in Table 9. Approximately one third of all applicants indicate that UPRC is their first choice for admission. Since the institution's carrying capacity has been reduced in the past two years, however, only one of approximately every five applicants can be admitted each year. This factor has increased the selectivity standards of the institution.

High School applicants to UPRC	Fall 2003	Fall 2004
Total applicants	4,082	3,976
Applicants (1st. Choice)	1,311	1,247
Total admitted	891	719
% admitted from total applicants	21.80%	18.00%

Table 9. UPRC's Applicant Statistics in the Past Two Years

The increased selectivity of UPRC has had the effect of increasing the academic performance indicators of its freshman classes, as illustrated in Table 10. This information is also delivered to prospective students, to help them make informed decisions when applying to one of the institution's academic programs.

Freshmen registered at UPRC	Fall 2003	Fall 2004
Average GAI	280	299
Average high school GPA	3.41	3.62
Average score in verbal aptitude test	521	546
Average score in math aptitude test	541	563

Table 10. Academic Indexes of Students Registered at UPRC in the Past Two Years

Early Admission Option
Until last year, UPR had an *Early Admissions Process* that would admit all applicants with a GAI of at least 324. Under this option each institution would receive a selected cohort of very talented students in some of its academic programs. This year UPR changed this procedure for a method that compares the GAI of an applicant with the median of the last three minimum admission indexes for the particular academic program to which he or she is applying. As a result, students with an index lower than 324 might be admitted early to some programs.

UPRC decided not to implement this change, however, but to continue with the previous procedure, which guaranteed higher standards for all students. As a result, in the Fall of 2004 UPRC granted early admission to 15% of the total freshman group, as compared with a range of 21% to 34% in the other units. The institution prefers to keep early admissions at a reasonable number, guaranteeing that they have a higher admission index. Nevertheless, UPRC granted early admission to 116 students in 2004, compared to only 20 in 2003 (a 480% increase).

8.3 TRANSFERS, CHANGES, VALIDATION OF CREDITS, AND SPECIAL PERMISSIONS

UPRC complies with the *Institutional Policy on Change and Movement of Students between Units of the UPR* as stated in Certification #115 (96-97).[45] which was issued by the Board of Trustees. Congruent with institutional policy, all application requirements and deadlines for transfers from other universities to UPRC are disseminated via the institution's web page, through the Office of the Registrar's link.

Academic departments evaluate transfer applications by comparing course descriptions in the catalogue of the university of origin with those of UPRC. In the event of doubt, the department chair consults with the coordinators of each academic program. If the courses are from units within the UPR System, they are awarded full credit value. UPRC receives approximately 100 transfer applications each year.

UPRC is currently working in coordination with the other units of the UPR system to create an equivalence file for courses at the system level so that students who apply from institutions outside of the System can know beforehand what courses will be accredited upon admission. In addition, UPRC authorizes special permissions that comply with institutional requirements: satisfactory academic progress, general GPA, and number of credits approved. Decisions on accepting students who apply for a transfer or on special permissions are also subject to the availability of space and the maximum capacities defined for each academic program each year.

8.4 FINANCIAL AID

UPRC offers financial aid services to students through the Office of Financial Aid, under the Office of the Dean of Students. The office publishes the *Information Manual on Financial Aid*[46] with detailed information and requirements for different kinds of financial aid and scholarship. This manual was revised in 2003 and is distributed to current and prospective students. Table 11 shows the number of students who received different types of scholarship and financial aid in the institution last year.

Currently, 75% of UPRC students receive Pell grants. Financial Aid Officials provide direct assistance for the individual needs of students and inform recipients of any changes in benefits or regulations. They provide orientation to parents and, beginning this year, to high school counselors. When there are changes, the Office publishes leaflets, bulletins, and notices on the web page.

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[45] Exhibit 8.3
[46] Exhibit 8.4

Type of Aid	Amount	Number of participants	Average Amount of Aid
Pell Grant	$ 10,094,682.65	3,073	$ 3,284.96
Legislative Grant	$ 892,456.33	1,530	$ 583.30
FSEOG	$ 319,403.66	745	$ 428.73
FCWSP	$ 356,944.12	387	$ 922.34
Stafford Loan	$ 1,199,597.00	346	$ 3,467.04
Total	**$ 12,863,083.76**	**6,081**	**$ 8,686.37**

Table 11. Distribution of Financial Aid by Type (2003-2004)

8.5 STUDENT RETENTION AND ASSESSMENT OF STUDENT SUCCESS

The Retention Plan at UPRC seeks to strengthen all efforts made towards the academic, social, and emotional development of the student through the integration of social and personal support activities. The following table shows evidence or the institution's capacity to retain first year students.

Academic Year	New Students	Promoted to Second Year	Percent
2003	814	689	84.64 %
2002	887	778	87. 71 %
2001	907	777	85. 67 %
2000	955	816	85. 54 %
1999	895	744	83. 13 %

Table 12. Retention Rates Among First-Year Students

In order to achieve these high retention rates UPRC provides specific support experiences for incoming students, such as: a reception for early admissions students; an orientation week for new students, as well as invitations to participate in different student organizations; plus tutoring and mentoring services for most introductory courses, among others. Chapter 9 provides further detail on student support activities.

Further assessment of the success of UPRC students reveals a match between the attributes of admitted students and the institution's mission and programs. According to a 2004 study, *New Students, 2003-04: Baselines for the Student Tracking System* (see Exhibit 2.3), more than 50% of the students indicated that the main reason they selected UPRC was its academic reputation and the programs and courses it offers. In spite of its modest size, UPRC is among the top 50 institutions awarding science and engineering degrees to Hispanics (#33) and is also in the top 25 Hispanic-serving institutions whose B.S. graduates completed a Ph.D. in science from 1995 to 1999.[47] During the past academic year, two UPRC students obtained an American Chemical Society (ACS) Scholar Award at the national level. The Student Chemistry Club has also

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[47] Exhibit 8.5

obtained outstanding and commendable awards from ACS at the national level during the past ten years.

FINDINGS

1. The UPRC admission policies and procedures are aligned with the institution's mission and programs.
2. Admission is a highly efficient process in the entire UPR system, and in UPRC in particular; the process is periodically assessed, technologically enhanced, and well-known to all prospective students.
3. UPRC has had excellent results from the current admission process, which has resulted in a well-prepared student body of adequate size and composition.
4. UPRC has effective dissemination procedures regarding its academic programs and admission requirements, and it complies with all applicable regulations on this matter.
5. UPRC shows evidence of achieving high retention rates.

RECOMMENDATIONS

1. Continue to enhance assessment activities regarding student outcomes and to disseminate their results to prospective students.
2. Establish a bridge program for incoming students, to help them integrate into university life.

Chapter 9

Student Support Services

UPRC promotes the comprehensive development of its student population through a program of activities and services that complement classroom learning experiences, enabling students to achieve their personal and professional goals. UPRC's mission statement highlights its commitment *"to the development of human beings who are whole, autonomous, critical, and sensitive"*; this statement sets the standard that guides all student support services campus-wide.

9.1 THE BASIC NUMBERS

In the fall of 2004, UPRC had 3,747 students: 3,658 enrolled in its regular daytime programs and 89 studying in its new evening programs (UNEX). The following diagrams illustrate the basic composition of the daytime student body, which consists of mostly female and full-time students, almost evenly distributed among the four academic areas, and with most at the senior level.
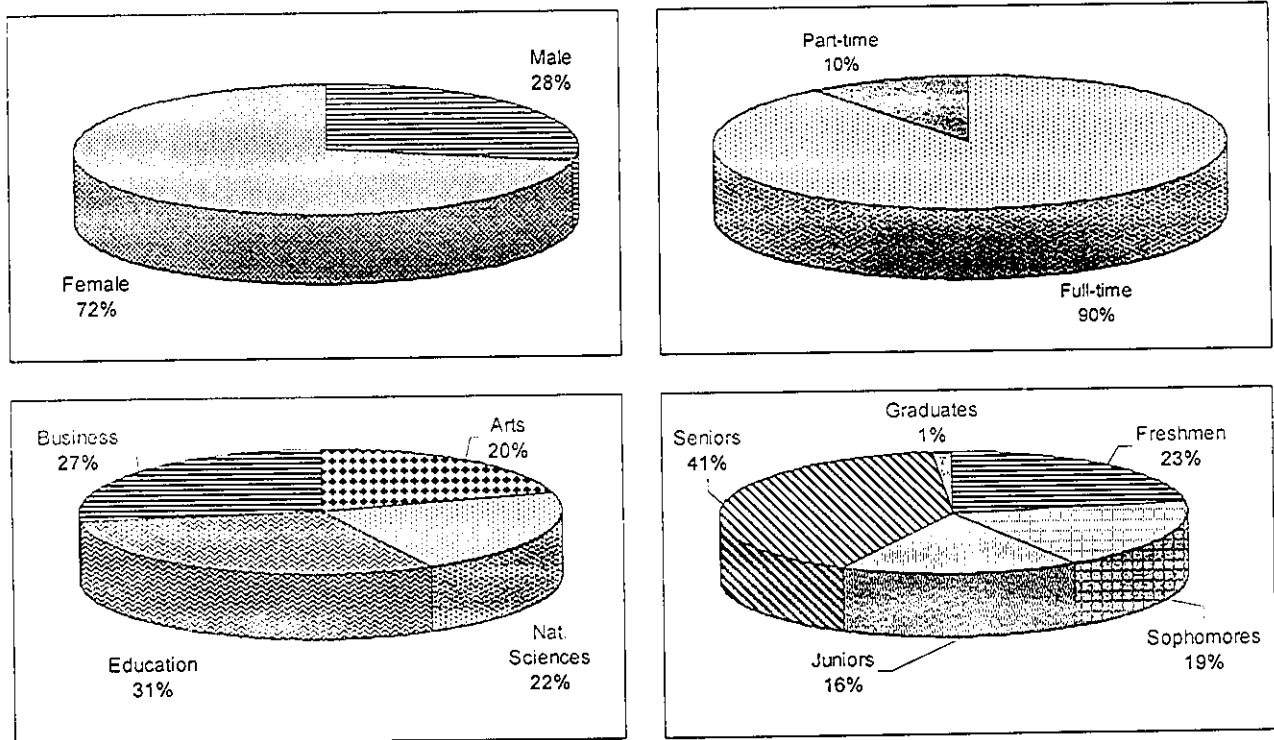
Diagrams 14-17. UPRC's Student Composition (gender, study status, area, and level) in Fall 2004

Most of the UNEX students are in their freshman or sophomore years and are enrolled in the area of Business. A detailed description of UPRC's student body is included as an exhibit.[48] Each

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[48] Exhibit 9.1

year, the institution graduates approximately 500 students. Last year, the graduating class included 497 students distributed as follows: 74% were female, 85% started in UPRC as freshmen, 55% graduated from the Professional Schools (Business and Education), and 66% matriculated for 5 or 6 years before graduation. This graduating group reflected an average institutional graduation rate of 33.6% and spent an average of 5 years to graduate. More information on UPRC's graduates is included as an exhibit.[49]

Synopsis of UPRC's Freshman Class

A total of 640 students enrolled as freshmen in the Fall of 2004. This number has been decreasing, as explained in the previous chapters, due to a planned adjustment in the institution's carrying capacity. The following table shows the high percentage of students who enroll in the institution after being admitted.

Academic Area	Max. capacity	Students admitted	Students enrolled*	Percentage of admitted who enroll
Arts	115	111	105	95%
Natural Science	180	202	191	95%
Education	162	147	152	103%
Business	223	209	192	92%
Total	680	669	640	96%

* includes those admitted after the reconsideration period

Table 13. Admission and Enrollment Statistics at UPRC (Fall 2004)

As part of its assessment initiatives, UPRC has begun to administer a comprehensive survey to all incoming freshmen in order to identify specific academic and personal needs. The most recent results (for the year 2003-04) indicate the following basic facts about the freshmen at UPRC:

- Approximately 66% are female;
- They have very high college admission test results and high school GPAs;
- Almost all describe themselves as single and 95% are economically dependent on their parents;
- One third are first generation students;
- 58% live with both parents and 2 out of every 3 plan to continue living with them while in college;
- 76% come from public schools;
- An increasing number of them work part-time or are seeking part-time jobs;
- Approximately 70 are handicapped;
- 60% have access to computers at home;
- More than half studied only 5 hours or less per week while attending high school;
- More than half selected UPRC because of the academic programs offered and its high reputation.

A detailed report on the freshman group characteristics is included in Exhibit 2.3.

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[49] Exhibit 9.1A

9.2 STUDENT SUPPORT SERVICES

The Office of the Dean of Student Affairs has the primary responsibility for planning and providing efficient student support services. The Admission and Financial Aid offices, which are part of this deanship, offer valuable assistance for all students, as described in Chapter 8. The other offices of the deanship offer a wide range of services, explained in this section, which respond to the students' strengths and needs and aim to promote their comprehensive development.

Cultural Activities

The *Cultural Activities Office* offers a diverse program of activities that complement the academic formation of the student. More than 50 activities[50] were conducted during the 2003-04 academic year, including: conferences, theater plays, workshops, concerts, and crafts festivals, among other activities that promote a rich academic environment on campus. These activities also contribute significantly to the cultural life of the central region and the entire Island, providing unique opportunities for many students and others who otherwise would be unable to experience these cultural happenings. In the 2003-04 academic year, UPRC had the fourth highest per capita investment ($8.95) for cultural activities among all 11 campuses of the UPR system.

Study Abroad Program

The *Office for International Studies and Exchange Programs* (OISEP) coordinates credit or non-credit Study Abroad courses for all students. Its services are based on the premise that globalization has made international studies a priority; it exposes students to other educational systems, as well as diverse cultures, languages, and experiences that are vital to a broader perspective of the world.

UPRC maintains collaborative academic agreements with international universities, enabling students to study abroad for a full year, a semester, or a summer. Four international agreements (with France, Mexico, Spain, and Argentina) have been signed with UPRC. In addition, 179 national exchange programs allow UPRC students to study abroad for a year, a semester, or a summer. UPRC is part of the *National Student Exchange Program* and participating students pay the same tuition they would pay for studying at UPRC. During the 2003-2004 academic year, 68 UPRC students attended foreign universities, while 21 students from abroad enrolled at UPRC. The program has been well received by the students who attend UPRC from the mainland, as evidenced by a recent article (11 Nov. 2004) published by Bloomsburg State University, PA.[51]

In coordination with OISEP, the Humanities Department organizes study abroad courses every summer, so students can study in and learn about diverse parts of the world. These trips are offered with or without credit and are conducted by regular faculty members.

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[50] Exhibit 9.2
[51] Exhibit 9.2A

Quality of Life

The *Office of Quality of Life* (OQL) sponsors activities that focus on aggression and sexual harassment, as well as activities that focus on preventing the use and/or abuse of drugs and other illegal substances. The OQL coordinates with student organizations to organize forums and seminars on how to enjoy life without drugs and alcohol. The administrative personnel coordinate the activities for students and the external community, to promote healthy life styles and security on campus and to ensure a better quality of life for students and the rest of the university community. In the 2003-04 academic year, UPRC had the second highest per capita investment ($10.36) for Quality of Life related activities among all 11 campuses of the UPR system.

Health Services

The *Medical Services Office* provides primary emergency and ambulatory services to students and employees. It has direct access to nearby hospitals and emergency rooms and periodically organizes health education activities. During the 2003-2004 academic year, 6,420 medical services were offered to students and 1,700 to employees.

Student Housing and Service to Veterans

The *Veterans and Lodging Office* acts as liaison to the Veterans Affairs Administration and provides students with services related to educational benefits for veterans, National Guard members, and their dependents. Approximately 75 students currently receive these services. The office also orients students about the 203 registered private lodgings in the vicinity and makes sure that the lodgings comply with state norms and legal requirements.

Day Care Program for Students

UPRC has a *Day Care Program for the Children of enrolled students*, which is endorsed by the Administration of Child Care and Integral Development in the Puerto Rico Department of Family Affairs. Currently, 47 students receive these services and 25 students are on a waiting list.

Student Organizations

UPRC currently has 10 student organizations that are registered as bona-fide academic, non-profit, groups and that reflect the varied interests of the student body. The deanship promotes the creation of new student organizations based on the artistic, cultural, and athletic interests of the UPRC community, and it provides logistic support to these organizations. Most of these organizations sponsor educational activities related to their area of interest, as well as community services and cultural and social activities. Many of them promote healthy lifestyles and ecologically responsible attitudes within the university community.

Membership in these organizations stimulates leadership skills and provides a context for effective learning among future professionals. Students in these organizations also collaborate with students from other UPR campuses and represent UPRC in theatrical, research, or other cultural activities in various countries. The following list illustrates the wide variety of areas represented by the student organizations:
- International Association of Administrative Professionals,
- Psychology Students Association,

- American Medical Student Association,
- Biology Honor Society—BBB,
- Theater Clubs ("Café" Teatro and "Atelier Teatral"),
- Honor Student's Association,
- University Christian Association (known in Spanish as CONFRA),
- Chemistry Students Association,
- Human Resource Management Society,
- Students Developing Well-Rounded Leaders and Proposing Successful Solutions (known in Spanish as ECLIPSE),
- GAIA (Students' Ecological Society),
- Future Professionals of Education.

9.3 ADVISING, COUNSELING, AND TUTORING

The *Interdisciplinary Center for Student Development* (known in Spanish as CEDE) provides personal, occupational, and academic guidance as well as advising services to all UPRC students. Its major goal is to facilitate critical reflection by students, approaching their experiences from cognitive, affective, and behavioral perspectives. The center helps students understand their historical, social, and cultural environment/surroundings and empowers them to assume a self-directed attitude towards learning. In this way, students also learn to identify their strengths, personal goals, and limitations.

CEDE coordinates a first-day orientation for all incoming students in order to help them develop a sense of pertinence about university life and to acquaint them with the new academic environment. The following table summarizes the various services provided by CEDE.

Type of Service	# of students that received the service in 2002-2003	# of students that received the service in 2003-2004
Personal Counseling	714	534
Vocational Counseling	542	281
Educational Counseling	1166	655
Psychological Services	379	418
Graduate studies orientation	296	181
Workshops	217	352

Table 14. Services Provided by CEDE 2002-2004

All UPRC students receive academic advising from professors assigned these duties in each academic department. This advising process handles mainly the programmatic issues related to the academic career of students. Professors often recommend specific elective courses and generally advise on specific academic needs. Such counseling is required once a year for students to pre-enroll in courses and to participate in the regular registration process every Fall. Those who do not attend counseling can neither pre-enroll nor register for courses during the last day of the Fall registration process. Academic advising for second-semester courses is always available, but not required.

Last year, UPRC created an integrated tutoring-mentoring program, under the name of *Center for Student Support*,[52] unifying all peer tutoring and mentoring services that had been provided independently by offices such as Student Support Services, CEDE, and the academic departments. This Center is housed in the Library and tutors/mentors receive adequate training every semester. A new on-line tutoring system is being developed this year, sponsored by a Title V Coop grant.

9.4 THE ATHLETIC PROGRAM

The UPRC *Athletic Program*, established in 1997, promotes healthy lifestyles through the development of physical, mental, and spiritual capacities. The program assumes that the development of athletic and physical capabilities does not interfere with the academic development of the student but, on the contrary, the practice of any sport as well as the active participation in competitive athletics can translate into an experience that influences the students' personal development and promotes academic success. Participation in sport activities promotes self-care, teamwork, and better interpersonal skills. With regard to competitive sports, the program is committed to the establishment and maintenance of sport teams, according to the preferences and cultural diversity of the UPRC community. The teams require daily training and have access to training facilities and qualified trainers in order to compete in diverse sport events within and outside of Puerto Rico.

The Intramural Program fosters the development of well-rounded students. It aims to stimulate both student and community participation in athletic and cultural programs and to promote the formation of individuals with high levels of self-discipline and self-confidence, who appreciate diversity, are tolerant, and have a sense of belonging and solidarity. UPRC athletes participate in NCAA and LAI (*Inter-university Athletics League*) activities. Table 15 describes the sports in which UPRC participates within the NCAA.

Sport	Number of Athletes	Percent
Soccer	14	8.9%
Wrestling	4	2.5%
Track and field	19	12.0%
Basketball (male)	16	10.1%
Basketball (female)	12	7.6%
Baseball	17	10.8%
Weight lifting	11	7.0%
Softball (female)	18	11.4%
Tennis	9	5.7%
Ping pong	6	3.8%
Volleyball (male)	14	8.9%
Volleyball (female)	18	11.4%
Total	**158**	**100.0%**

Table 15. UPRC Athletes in the NCAA (2002-2003)

In order to represent the institution in these athletic activities, a student must have a minimum GPA of 2.00, excel in one sport, and sign a participation contract. The student athlete receives many benefits: tuition waiver, diet fees payment, free lunch, lodging within the UPRC facilities,

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[52] Exhibit 9.3

travel opportunities, and specialized trainers, among others. This year, 200 students athletes benefit from a complete tuition waiver. In the 2003-04 academic year, UPRC had the second highest per capita investment ($84.46) in sport and recreational activities among all 11 campuses of the UPR system.

9.5 QUALIFICATIONS OF STUDENT SERVICES STAFF

A total of 41 full-time professionals supervise or provide direct student support services at UPRC. More than 50% of these personnel have between 11 and 20 years of experience and they are fully qualified for their respective duties. A full 49% of these employees hold a Bachelor's degree and 29% have earned a Master's degree or higher in their area of expertise. Almost 90% of these personnel hold permanent positions. Five counselors with Master's degrees and two psychologists with doctoral degrees provide therapy for the students.

Student service personnel actively participate in professional development activities, such as the: *National Assembly for Financial Aid Administrators, National Student Exchange Convention, National Meeting on Prevention of Alcohol and Other Drug Abuse in Higher Education, Annual Psychology Convention, and the NCAA Annual Conference.*

9.6 ATTENTION TO STUDENT CLAIMS AND COMPLAINTS

The *Student's Ombudsperson Office* was established to attend to student complaints regarding the services offered by UPRC. It promotes non-adversarial, fast, and informal conflict solution. Its goal is to assure students fair and reasonable treatment from university employees and authorities. The following table summarizes the cases processed by the office between the years 1999 and 2003.

Type of complaint	July 2002 – June 2003		July 2001 - June 2002		July 2000 - June 2001		July 1999 - June 2000	
Academic	69	30%	71	36%	58	33%	93	56%
Student-related	19	8%	6	3%	45	25%	50	30%
Administrative	49	22%	51	26%	39	22%	23	14%
Other	91	40%	70	35%	35	29%		
Total	228		198		177		166	

Table 16. Cases Processed by the Office of the Student's Ombudsperson (1999-2003)

As mentioned in Chapter 6, UPRC has well-established and publicly-known procedures to address student complaints and grievances. The Student General Council is particularly important in these matters because its members actively participate in major administrative and academic committees, like the Academic Senate.

9.7 MAINTENANCE OF STUDENT RECORDS

UPRC complies with the Buckley Amendment (*Family Educational Rights and Privacy Act of 1974, as amended*). This federal law protects the privacy of the students' educational records and establishes their right to revise these records. It also provides guidance for correcting the information on these records by means of informal and formal hearings. Students have the right to submit a formal complaint with the Family Educational Rights and Privacy Act Office. Any student can obtain a copy of the Institutional Policy to comply with the law at the Registrar's Office, the Library, the Student Deanship Office, or the Financial Aid and Medical Services Office.

These offices maintain a list of educational records and their location in the institution. When admitted to the institution, each student signs a commitment of participation that authorizes the Program Director to obtain information from the Admissions Office, the Registrar's Office, the Financial Aid Office, and any pertinent government offices. By the next academic year, this document will incorporate the student's right to revise his or her educational record and to authorize the release of his or her student information.

The Central Archives, ascribed to the Complementary Services Division, has custody of the inactive medical records and the Student Services Program records. The Medical Services Office and Student Services Program complete record transfer forms. Once the disposition period (ten years) comes to an end, these records are confiscated. The alumni can request their medical records from the Central Archives through the Medical Services Office. The Document Manager supervises the Central Archives but is not authorized to directly provide record information. In general, other aspects regarding medical information (e.g. HIPAA law, ethic codes, etc.) are also taken in consideration in the Medical Services Office and the Student Support Services (TRIO-SSS).

9.8 ASSESSMENT OF STUDENT SUPPORT SERVICES

Each office that provides services to students uses different criteria and procedures to assess its services. For example, the Office of Student Support Services (TRIO-SSS) compiles evidence of student attendance at tutoring classes, freshman orientations, and diverse workshops. The counselors also submit workshop and direct service reports. During the second semester, a sample of students that have attended three or more individual counseling sessions receive an evaluation form. The format enables the student to provide honest answers, commentaries, and recommendations. The assessment findings have been translated into greater attention in the following areas: service promotion, research on campus life, establishing contact strategies, and student follow-up. The Counseling component offers a series of workshops that follow from the needs assessment. The students evaluate these activities and the Counseling personnel modify their workshops according to the student suggestions.

In May 2003, the Office of the Dean of Students conducted a detailed assessment of the opinion that student service personnel had about their duties and working conditions.[53] In the Athletic Program, an assessment process was started last August in order to revise the mission and goals

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[53] Exhibit 9.8

of this program and to assure adequate records in the following areas: profile of the ideal athlete, recruitment guides, minimum records per individual and per team, varsity team participation norms, types of aid for athletes, and guides for lodging.

FINDINGS

1. UPRC provides an adequate amount of effective services to support students towards their educational goals.
2. A team of qualified professionals delivers direct services to students in a supportive and sensitive way.
3. UPRC provides efficient student record management and adequate attention to student's claims and grievances.

RECOMMENDATIONS

1. Create a referral system for student orientation and support by improving coordination among academic advisors, counselors, and personnel from CEDE.
2. Develop specific mechanisms for the ongoing assessment of student satisfaction with the services provided.
3. Complete assessment of the Athletic Program, taking into consideration input from student athletes, trainers, and recruitment guides, in order to revise norms and procedures to adequately address student needs.
4. Provide better coordination among all student support services through the Faculty Committee on Students Affairs.

Chapter 10

Faculty

The academic backgrounds of UPRC faculty are highly diverse. The mission statement requires that this diverse group be capable of developing a *"college united in its components"* and of offering *"an innovative and interdisciplinary education"* with a strong liberal arts component. Most faculty members dedicate themselves primarily to teaching and to fostering education *"at a human scale with attention to the personal dimension."* In general, UPR faculty are highly committed to the academic goals of the university and have a strong sense of attachment to the institution. Students get to know their professors well, either through formal curricular, research, or service activities, or through informal interactions at other enrichment activities on campus.

The faculty is currently facing the challenge of maintaining its focus on the liberal arts tradition while handling new developments in the curriculum's core disciplines, changes in student career goals, and the difficult economic circumstances of the institution. *"A commitment to education not as a task, but as a way of life,"* as mandated by the UPRC mission, is an increasingly complex goal that requires strategic plans and actions. The faculty plays an essential role in this endeavor and must be ready to collaborate in the process of reshaping UPRC's academic agenda.

10.1 THE BASIC NUMBERS

UPRC's faculty is grouped into the following categories: teaching faculty, librarians, counselors, psychologists, and institutional or academic researchers. As of the first semester of the 2004-05 academic year, there were **195** full-time faculty members distributed according to the following table (17). The only increase in faculty numbers during the past decade has resulted from adding the 7 counselors and psychologists to the faculty, to accord with the faculty definition in the General University Regulations.

Detailed descriptions of the roles and responsibilities of the faculty are also included in the Regulations. However, some faculty groups have requested clarification of the specific roles that are expected from them and of how the university will recognize the dynamic nature of those roles. Librarians, for example, have argued that their roles have a fundamental impact on teaching and learning. In addition, both teaching and non-teaching faculty have requested clearer rules related to active research duties. Section 10.4 describes how the new faculty evaluation system attempts to resolve such matters in a flexible and effective way.

Faculty Group	Full-time Faculty	Percent
Teaching faculty	174	89%
Librarians	10	5%
Counselors	5	3%
Psychologists	2	1%
Researchers	4	2%

Table 17. UPRC Faculty Distribution (Fall 2004)

Among the 174 teaching faculty, there were 12 on leaves of absence (sabbatical or other), leaving only **162** full-time teachers to be responsible for the regular curricular offerings of the

semester. Moreover, faculty members involved in administrative, research, and curriculum revision duties (approximately half of it for the administrative work of department chairs and deans) account for a faculty release time of another 21.5 FTE. Each full-time member of the teaching faculty is required to teach a total of 12 credits per semester, but extra courses (overload) are often taught for additional compensation. For the Fall 2004 semester, the faculty overload FTE was 32.

Although the regular student population has been reduced in the past few years, a significant problem of faculty overload, which was also mentioned in the 1994 Self Study, remains. Part-time faculty in the regular program account for an FTE of 14. Therefore, of the 46 extra faculty needed for the Fall 2004 semester, 46% were the direct consequence of the release time for others, and 54%, or close to 25 teaching faculty, were needed to fulfill the regular academic offerings. The following table shows the teaching faculty FTE in each of the academic areas of the institution.

Area	Full time faculty	Faculty on leave	Faculty present	Overload FTE	Part-time faculty FTE	Release time FTE	Total FTE
Arts and Humanities	79	4	75	14.95	3.58	8.50	85.04
Natural science	54	4	50	7.21	5.00	8.75	52.20
Professional schools	41	4	37	9.25	5.50	4.25	47.49
Honor's Program	0	0	0	0.67	0.25	0	0.92
Total	174	12	162	32.08	14.33	21.50	186.91

Table 18. FTE of Teaching faculty per Academic Area (Fall 2004)

Faculty in the arts teach the highest overload; Humanities, Social Sciences, and Spanish all have overload FTEs close to 5 teaching faculty, while English and Physical Education have the lowest overloads (FTE of 1 or lower). The Business Administration department has the highest part-time FTE (2.83), followed by Biology (2.5). The high release time FTE in the natural sciences, on the other hand, has only increased teaching faculty by 2.2 FTE. The total teaching FTE for the fall 2005 semester was equivalent to 186.91 faculty members.

The current institutional student-faculty ratio (in FTE) is 23:1 and is distributed as follows: Arts 25:1, Natural Science 18:1, Professional Schools 24:1. The student-librarian ratio is 450:1; the student-counselor ratio is 720:1; and the student-psychologist ratio is 1,801:1.

In Fall 2004, only 22 (13%) of UPRC's full-time teaching faculty have service contracts, while the other 152 have tenure or tenure-track positions. UPRC does not have full-time faculty appointed in the newly developed evening program (UNEX) and all courses are offered either by part-time faculty or as extra courses by regular full-time faculty. The faculty FTE for the evening program in the Fall 2004 was **9.75**.

The fact that 73% of full-time faculty are already tenured (see Table 19) is an indication of the institution's maturity, and an increasing number of faculty will approach retirement age in the

next few years. The institution has kept to a minimum the proportion of part-time faculty dedicated to teaching; only 33 faculty, accounting for an FTE of 14, held part-time teaching contract during the Fall 2004 semester. The low number reflects deliberate choice, since there is concern that a growing number of part-time faculty members might affect the quality of the academic experiences that UPRC offer students.

Area	Tenure	% of total in area	Tenure track	% of total in area
Arts & Humanities	58	73%	8	10%
Natural Sciences	43	80%	5	9%
Professional Schools (teaching faculty)	30	73%	6	15%
Prof. Schools (non-teaching)	11	52%	7	33%
Total	142	73%	26	13%

Table 19. Tenure and Tenure Track Faculty per Academic Area (Fall 2004)

Approximately half of the UPRC part-time faculty is currently hired in departments from the professional schools area and they account for 27% of the total faculty in this area.

10.2 ACADEMIC QUALIFICATIONS AND THEIR IMPACT ON TEACHING AND LEARNING

There has been an 8% increase in faculty members with terminal degrees (generally a PhD) over the past decade. In the Fall 2004 semester, 104 faculty members, or 53% of the total, hold PhDs. The following table (20) shows that approximately 70% of the faculty in the Arts and Natural Science areas hold PhDs, while only 22% of the teaching faculty in the Professional Schools have a PhD. The degrees of UPRC's faculty were awarded by prestigious universities, either in Puerto Rico or abroad, such as Cornell University, Notre Dame, Sao Paulo, and Complutense University.

Area	PhD	% of total in area	Full or associate professor	% of total in area
Arts & Humanities	54	68%	54	68%
Nat. Sciences	38	70%	40	74%
Prof. Schools (teaching)	9	22%	22	54%
Prof. Schools (non-teaching)	3	14%	7	33%
Total	104	53%	123	63%

Table 20. Faculty Distribution by Rank and Degree (Fall 2004)

Table 20 also shows that 63% of all UPRC full-time faculty are senior (either full or associate professors). This proportion has remained relatively stable over the past decade (67% of full-time faculty were senior ten years ago). Again, the highest proportions of senior faculty are in the areas of the Arts and the Natural Sciences; about half the faculty in the Professional Schools area have a senior rank.

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UPRC faculty have demonstrated high standards of excellence in teaching and other faculty related activities, as revealed in the results of evaluation by their peers and students. The following table (21) presents the tenure status and evaluation results for all non-tenured faculty over the past four years. The average results for the evaluation made by department chairs, personnel committees, and students were all above 3.5 (on a 4.0 scale), with faculty from the Professional Schools earning the highest scores. Analysis of the more detailed results confirms that most of the average scores are at or above 3.5, except for the non-tenure track faculty evaluations in the Spanish and Chemistry departments. In most cases, the evaluation scores of tenure track faculty were above those of the non-tenure track faculty.

Area	Total	Tenure track	Non-tenure	Tenures Granted	Chair. Avg.	Comm. Avg.	Students Avg.
Arts	84	19	65	11	3.68	3.67	3.71
Nat. sciences	46	8	38	4	3.68	3.52	3.57
Prof. Schools	66	14	52	6	3.81	3.68	3.80
Total	196	41	155	21	3.72	3.62	3.69

Table 21. Tenure Status and Evaluation Results for UPRC Faculty (2000-2004)

Out of the 196 faculty that were evaluated, only 41 (21%) were tenure-track and about half of these were granted tenure sometime during the 2000-2004 period. This means that no tenures were denied during this period. In addition, all faculty members (except one) who are still on tenure track are making positive progress towards tenure. It is worth mentioning that 58.5% of the 41 tenure track faculty members held a terminal degree, but only 15.4% of the 155 non-tenure track faculty did. Most of the latter group worked on a part-time basis.

The academic qualifications of faculty are best recognized by the results of their active involvement in research, service, and curriculum revision. Over the past decade, the faculty have developed three additional undergraduate academic programs and designed 36 new courses, as is further explained in Chapter 11. In addition, much recent work has been devoted to revision of general education courses, as described in Chapter 12.

Diagram 18 illustrates the distribution of UPRC faculty research projects and other creative work over the past four years. The majority of the 63 projects were conducted in the Natural Sciences area. In addition, 20 projects were teaching-related (14 of them in the natural sciences), evidencing a general interest in pedagogical research that will directly impact college-level teaching effectiveness (close to a third of the projects relate to this topic).

The EPSCOR research program and other NSF and NIH funded projects have allowed faculty to conduct more cost intensive research. Overall, faculty was granted approximately $3 millions in external funds in 2003-2004, for different kinds of research activities. An important interdisciplinary research project (RIMI) was recently funded by NIH ($4.4 millions) to enhance the infrastructure for research on health related issues. Faculty from the natural and social sciences departments will be working on this comprehensive project over the next five years.
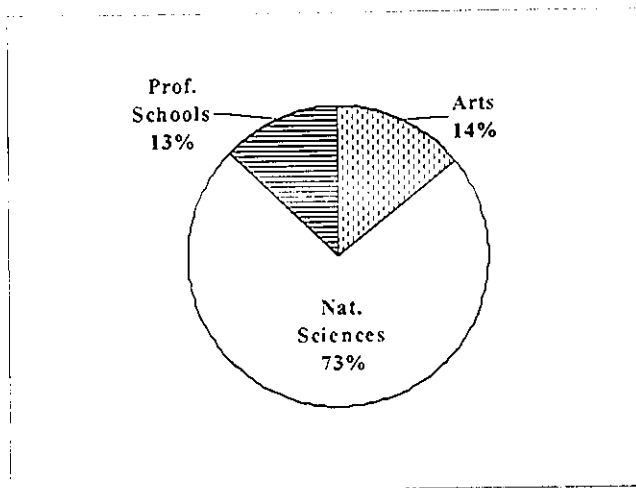
Diagram 18. Distribution of Faculty Research in the Academic Areas (2000-2004)

Prof. Schools 13%
Arts 14%
Nat. Sciences 73%

Since 1995, the institution has also provided a small amount of seed money for research, creative work, or publications, on a competitive basis. This annual allocation was increased from $25,000 to $35,000 in 2003-2004, but the state of the unit's existing physical facilities and the teaching overload are factors that limit further development of research activities on campus. The Academic Senate should approve revised institutional policies for research before the end of the 2004-2005 academic year. In addition, the Academic Dean has established advisory boards for both research and community service in order to plan and implement these activities with adequate relevance.

The research and creative work of UPRC faculty members is also evident in the increasing number of publications and presentations that they make every year.[54] In addition, UPRC faculty have demonstrated an increasing interest in developing community service projects with direct impact on teaching and learning. Many of these projects are conducted in local area schools (through tutoring and teacher mentoring), while others have a larger target population. Some of these projects also have a research component that involves active student participation.

In the 2003-04 academic year, a project funded with federal money was initiated to incorporate service-learning strategies in the curriculum for the Office Administration's associate degree. It is expected that this initiative could serve as a model for reform in other programs, to strengthen the linkage between teaching, research, and service.

10.3 PROFESSIONAL DEVELOPMENT

Professional development activities have a direct impact on the quality of teaching, research, and service and, thus, a positive effect on student learning. Many opportunities for professional development are available to UPRC full-time faculty, and these are grouped into three main categories. In the first place, each year full-time tenured faculty can apply for different types of leave, with and without salary. Table 22 summarizes the information on leaves granted over the past 5 years. A total of 24 sabbatical leaves (92.3% of all sabbatical applications) and an average of 4.8 sabbaticals per year were approved in that period. This average more than doubles the annual average a decade ago.

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[54] Exhibit 10.2

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Year	Sabbatical leaves	Leaves with full salary	Leaves with financial aid	Tuition or other expenses
1999-00	7	1	1	8
2000-01	3	1	1	4
2001-02	5	0	0	8
2002-03	5	1	0	10
2003-04	4	1	0	6
Total	24	4	2	36

Table 22. Sabbatical and Other Leaves Approved for UPRC Faculty

Most sabbaticals are approved for the completion of doctoral degrees and some to sponsor research or the preparation of publications. In addition, all 4 paid leaves were approved for faculty to complete their doctorates. Most of the other leaves had the same purpose and averaged up $10,000 per person. In addition, annual averages of $16,337 were invested in tuition payments and other related expenses for faculty enrolled in graduate programs.

Besides the opportunity of applying for a leave, faculty can benefit from the Professional Development Fund, administered in the Academic Deanship. This fund, which doubled to $20,000 last year, is distributed annually for faculty to attend professional development workshops or symposia in Puerto Rico or abroad. The office of the Chancellor also sponsors travel for some faculty members each year. Assignments for individual faculty are given on a merit basis and can total up to $800 a year. This money can be used to cover registration or travel expenses. With this support, many UPRC faculty members have traveled to give speeches or conference papers at national and international activities in India, the Czech Republic, Greece, Spain, Latin America, and many places across the United States. UPRC faculty members are also often invited to serve as peer reviewers for grants awarded by agencies such as NSF and USDE.

The third category of professional development at UPRC consists of the local workshops and conferences that are sponsored each year. A summary of such activities for the 2003-04 academic year is presented in Table 23. The topics for this professional development program are aligned with the areas emphasized in the institution's academic agenda: interdisciplinary studies, research methodologies, community service, and teaching methodologies.

The increased interest of UPRC faculty in instructional technology workshops is also evident. As a result, 33 courses were revised to include a significant amount of on-line content (see Chapter 3). Table 23 does not include the numerous conferences and activities that other academic departments and offices offer each semester, as part of their departmental agenda. These are often less structured and tend to focus on the particular discipline of the department.

Since 1999, UPRC has sponsored six *Professional Development Days* each academic year (three per semester) with various workshops and presentations related to current academic plan. In the beginning, these activities were conducted more as faculty meetings rather than professional growth experiences and faculty rightfully complained. In response, all activities in the past few

years have included thematic groups of workshops[55] that relate to faculty needs and institutional priorities. These six days are reserved in the official academic calendar, and no classes are scheduled, so that all faculty members can attend. UPRC is the only higher education institution in Puerto Rico that has established this practice to support the continued professional growth of its faculty.

Sponsor	Number of workshops	Approx. # of hours	Total faculty attendance	Topics
Office of the Academic Dean	6	24	522	Teaching, assessment, research and community service best practices
Instructional Technology Office	20	64	144	Instructional design, on-line technologies, software applications
Interdisciplinary Research Institute	9	41	200	Research methodologies and frameworks
Women's studies project	5	10	220	Gender, Caribbean and cultural studies
Title V Coop project	7	21	25	Curriculum revision and teaching technologies
Library	4	8.5	18	Library and information services
Total	51	168.5	1,129	

Table 23. Professional Development Activities for the Faculty (2003-04)

10.4 PROCEDURES AND CRITERIA FOR APPOINTMENT AND PERIODIC EVALUATION

In March 2004, the Academic Senate approved the institution's new *Faculty Recruitment Policies and Procedures.*[56] This document thoroughly revises an earlier recruitment policy that was written ten years ago, and it defines high standards for the academic qualifications of new faculty. It emphasizes the interdisciplinary focus of most faculty duties and provides a general framework to guarantee equitable recruitment processes in all academic departments. In addition, terminal degrees are generally required for recruitment to tenure track positions. The departments are welcome to add recruitment criteria and specific procedures that are aligned to their long-term goals, but they must comply with all the general criteria and procedures in this document. This revision process was undertaken because of evident disparities among the recruitment practices followed by various departments in past years.

Annual full-time faculty recruitment depends on the needs revealed by projections of curricular offerings in each department. The total number of full-time faculty has been stable over the past few years and stands at around 200. Part-time faculty are hired to teach mostly evening classes, especially in Business, Mathematics, Education, and Social Sciences. However, part-time

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[55] Exhibit 10.3
[56] Exhibit 10.4

faculty are also often needed in departments where full-time faculty cannot cover the curricular offerings. This is more common in the Business and Education Departments, where the Fall 2004 part-time faculty FTE represented 20% and 14% of the total faculty FTE, respectively.

The current gender distribution of faculty (both teaching and non-teaching) is different than that of the student body, with the majority of faculty being male (55% vs. 45%). However, 59% (10 out of 17) of the new tenure track faculty hired over the past two years are female. Table 24 shows that the distribution by gender in the all the academic areas is very similar, with only a slight majority of male faculty in two of the three areas.

Area	Male faculty	Female faculty	Total
Arts	40	39	79
Nat. Sciences	35	20	55
Prof. Schools	33	28	61
Total	108	87	195

Table 24. Gender Distribution of Faculty

Performance Evaluation

The current faculty evaluation system was approved by the Academic Senate in 1992 through *Certification #31*.[57] Late in the 1990s, the Commission on Faculty Affairs of the Academic Senate began working on a completely new model for faculty evaluation and promotion called *System for the Promotion of the Quality of Teaching*.[58] A complete draft containing specific proposals for this system was completed in October 2001 and the Academic Senate has been analyzing it since then. The process is currently nearing completion. The new system, which incorporates many of the recommendations made in the previous self-study process, has truly taken a lot of time and effort. The new set of norms and procedures has been designed to contribute to the faculty's professional development even as it serves the purpose of conducting summative faculty evaluations.

The rigorous work of revision made in the evaluation criteria reveals the institution's emphasis on interdisciplinary activities, research, and community service, as means to strengthen teaching and learning. The system as a whole provides an operational definition of academic productivity in terms of outcome measures that are used to evaluate faculty performance, as recommended by the Middle States visiting team in 1995. In addition, the proposed system has an intrinsic relation to academic planning since the evaluation mechanism is based on an alignment of faculty and departmental plans and goals. Table 25 describes the main characteristics of the proposed faculty evaluation system.

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[57] Exhibit 10.4A
[58] Exhibit 10.4B

Characteristics	Proposed system of evaluation
Philosophy	Clearly stated principles for evaluation, to serve as an instrument for professional development.
Framework	Based on clearly stated evaluation criteria (instruments are also designed to assess the criteria)
Formative actions	Focus on improvement and professional development. Balance between summative and formative evaluation.
Database	Continuously updated, even after tenure, with input form students, colleagues, supervisors, and self-evaluation.
Summative procedures	Clearly stated and based on weighted averages of judgments from evaluators on each criterion.
Flexibility	Flexible application of criteria to specific groups of faculty and alignment with academic planning at both departmental and institutional levels.

Table 25. Proposed Faculty Evaluation System

The Academic Senate should be presenting the completed proposal to the faculty for detailed analysis and participatory discussion during the second semester of the 2004-05 academic year. Concurrently, there will be much fine-tuning of the instruments and the detailed implementation procedures. The plan is to begin piloting an implementation project by August 2005.

10.5 WORKING CONDITIONS

The basic duties and responsibilities of UPRC faculty are described in the University Regulations. In general terms, these include either teaching or teaching-related duties (counseling, research, and information literacy), as well as administrative or "committee" work related to curriculum, personnel, planning, or student support services. In addition, faculty members are expected to keep up to date in their particular fields of study and to participate in relevant intellectual activities (professional development, publication, and other scholarly activities). Academic freedom is granted for all faculty-related activities within the context of the university norms and procedures.

All full-time faculty are given office space and the basic materials required for their work, but both physical and fiscal constraints keep these allowances from being optimal. Most, but not all, faculty have computers in their offices, but it hasn't been possible to keep them fully updated. The institution currently has a total of 6,899 square feet of space dedicated to research. This accounts for 2.1% of the total space and also 1.5% of the space dedicated to research among all campuses of the UPR System (the three graduate campuses comprise 94.1% of this total).

For the past six years all faculty in the UPR system have received a uniform annual salary increase of approximately 4%, but the increase has always been below the annual inflation rate in Puerto Rico. Many of the teaching faculty teach extra courses, leaving less time available for other teaching related duties or professional development. The often time-consuming, but necessary committee work has been affected because of this situation. Working on committees is the way in which faculty participate in many decision-making processes and collaborate to accomplish the institution's goals. Every department has between three and six faculty committees, and there are at least a dozen other institutional-level committees that are composed

primarily of faculty representatives. While student academic advising is an important role for faculty every semester, it is often understood as an extra burden.

The faculty depend mostly on academic administrators (department chairs, Deans, and the Chancellor) to handle job-related complaints, although some specific complaints are handled by the Student's Ombudsperson. The frequent departmental, area, and faculty meetings are also open forums in which faculty can discuss working conditions. Academic departments meet at least once every month and at least five or six area faculty meetings are held every academic year.

FINDINGS

1. UPRC faculty have the highest professional qualifications and work intensively to maintain high standards of quality in teaching, research, and service.
2. The faculty have a strong commitment to professional development and scholarly activities in general and UPRC provides adequate support in this area.
3. Current planning processes should guarantee that faculty positions are adequate, in quantity and quality, to carry out the academic agenda and to offer quality learning experiences to students.
4. The faculty have demonstrated a renewed interest in research and community service that have a positive impact on curricular renovation, and this interest has been supported by the administration.
5. UPRC has a very high proportion of tenured faculty, which may have the following effects: resistance to institutional renewal and curricular innovation.

RECOMMENDATIONS

1. Evaluate and implement alternative methods of reducing the teaching overload, in a way that improves teaching quality and does not focus on downsizing the daytime student population.
2. Further reaffirm the positive aspects of implementing the proposed evaluation system for the faculty, through articulated and effective methods.
3. Continue to engage faculty in submitting proposals that seek to obtain external funds, in order to maintain the high quality of their work in research and community service.

Chapter 11

Educational Offerings

UPRC is committed to offering a comprehensive and relevant education in its undergraduate programs in the fields of the Natural and Social Sciences, the Arts and Humanities, Education, and Business Administration. The academic offerings reflect the rigorous requirements of these disciplines, which will allow each student to become a competent professional and a responsible citizen. In addition, the offerings foster development of knowledge, skills, and the attitudes that contribute to the academic development of students, as envisioned by the institution's mission and goals.

The University Board and the Office of the Vice President for Academic Affairs establish policies in curricular and program development areas, but the Academic Senate has the primary responsibility for the development of UPRC's academic offerings. The Dean of Academic Affairs provides leadership in the institution's efforts to set and attain all academic-related goals.

Since the most recent accreditation visit, the General Education Program has undergone rigorous revision. The *Profile of the Ideal Graduate of the Institution* was approved and three new undergraduate programs were created: Special Education, Office Management, and Office Systems. A new evening school was created, under the name UNEX (for Extended University), to offer incoming freshmen seven bachelor's degrees with the same admission and graduation requirements as their daytime versions. Curricular revision has been carried out in many academic programs and thirty-six courses were created to respond to changes in knowledge in the corresponding fields. New Curricular Sequences ("minors") are being created to provide students with flexible learning opportunities that are relevant to their professional and personal development.

11.1 CURRICULAR OFFERINGS

UPRC currently offers 31 bachelor's degrees and one associate degree (see Catalog). The curricular offerings for each of these degrees are included in the General Catalog. The academic departments and the Dean of Academic Affairs make every effort to ensure that the course offerings each semester are adequate, in quantity and quality, for students to complete the requirements of these degree programs. The curriculum committees ensure that all courses are designed to comply with the institutional mission and goals. As stated in the catalog, academic programs include three inter-related components: general education, concentration courses, and electives. The Faculty Curriculum Committee and the Academic Senate ensure that any programs that are created or revised include a strong general education component that is integrated with the specialized education component.

In 2000-01, the Academic Senate approved the *Profile of the Ideal Graduate* through Certification #64 (see Chapter 14). This document, which had been created by the Curriculum Renovation Committee, establishes 16 characteristics that graduates of the institution should have, regardless of their course of study (more information is provided in Chapter 14). This

document sets the standard for all academic departments when revising their program goals and particular graduate profiles. The English and Education Departments, for example, state their program goals in terms of student learning outcomes and similar work is ongoing in the Chemistry, Psychology, and Biology departments. The Dean of Academic Affairs has taken steps so that all programs will have completed this assignment by the 2007-08 academic year.

During the past two years, and as a consequence of the analysis performed in the Curriculum Renovation Project since the late 1990s, UPRC's academic agenda has been redirected to foster programs and courses that integrate research, community service, the use of technology, and interdisciplinary approaches. In fact, Certification #49 (2002-03)[59] of the Academic Senate mandates that all UPRC graduates participate in undergraduate research or community service projects during their academic career. Almost all of the academic departments offer courses that are exclusively devoted to providing research experiences for students. In addition, an analysis of course syllabi shows evidence that a full 75% of all UPRC courses include some kind of research exercise or experience in the field, such as: pedagogy action research projects, monographs, research papers, bibliographic research, critical analyses, and reviews of literature.

Academic departments and programs have been integrating community service experiences into their educational offerings. The Education, Biology, English, and Physical Education Departments offer community service experiences as part of the regular courses. The Honors Program, the Pro-Mujeres (Women's Studies) Project, the Art Museum, the Center for Interdisciplinary Research, and the Social Science and Chemistry Departments all offer formal community service experiences. A recent grant from the *National Center for Community Engagement* (SAFE) will make it possible, starting next year, to offer faculty development activities that are aimed at incorporating service learning into the curriculum of the Office Administration's associate degree. In addition, many student organizations have actively integrated community service in their work plans.

The integration of technology into the course offerings has been strengthened principally through grants (such as Title V) from the Departments of Education at the federal and state levels. Most courses use technology as a resource to strengthen the teaching and learning processes. Faculty members commonly use overhead projectors, as well as video and TV, and a growing number use multimedia presentations to facilitate teaching. The Internet is commonly used to search for information related to courses. However, there is a growing need to increase the number of classrooms that are equipped with projectors and communication facilities, in order to make multimedia presentations feasible. The Natural Science faculty use graphic calculators, sensors, and computer programs to strengthen the student's mathematical and scientific skills. The Chemistry faculty, for example, use computer software to simulate scientific experiments. Many courses in Spanish, English, Education, and Business Administration also make extensive use of computer software applications. In addition, an increasing number of professors are beginning to post their courses on the Blackboard platform. Currently, 33 courses are assisted by on-line technologies through several available computer labs. An analysis of the Blackboard initiative shows that approximately 41 courses are in the developmental stages, and 30 other courses are in

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[59] Exhibit 11.1

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the design phase. Faculty receive further training through quality workshops that are given by trained and experienced professionals from both internal and external sources.

The interdisciplinary focus of the educational offerings at UPRC is best represented in its General Education component. UPRC already has an Interdisciplinary Seminar, required as part of the *General Education Transformation Project* (see Chapter 12), and interdisciplinary courses are required for General Science majors and talented Biology students (RISE program). But other interdisciplinary courses in the majors are developing at a slow pace.

Following is a brief description of several programs or initiatives that enrich UPRC's regular educational offerings.

- The Honors Programs offers three courses that allow students to complement and successfully integrate their other learning experiences at UPRC. The Seminar Course on Interdisciplinary Research enriches the academic life of students through activities such as lectures, guided trips, concerts, and film cycles. The Seminar-Practicum Course on Community Service encourages students to develop both intrapersonal and interpersonal skills within the community. The Independent Study and Research Project courses provide students with the opportunity to carry out research in their area of concentration or interest.[60]

- The Women's Studies Project (Pro-Mujeres) promotes the creation of interdisciplinary courses and fosters the integration of different gender perspectives into general education courses. A curricular sequence in Gender Studies is currently being developed. With the support of the "Fundación de Puerto Rico," an Orientation Center for Women and Families was founded, to provide family-counseling services to the town of Cayey.

- Several projects sponsored by external funds foster scientific research skills among students, beginning in their freshman year. These include: RISE, MBRS SCORE, and Howard Hughes (see Exhibit 3.2A).

- The Institute for Interdisciplinary Research, founded in 2000, promotes academic research by faculty and students through projects that foster interdisciplinarity. This year NIH approved an Institute proposal to improve the research infrastructure on campus and to promote Social and Natural Science research related to health disparities (RIMI).

- The Museum of Art, under a grant from the Chana Goldstein Foundation, sponsored the "Árboles con Dos Vidas, Escalera Letrada" project, through which Cayey high school students were trained in working with stained glass and in wood carving.

11.2 PROGRAM DESIGN: FOSTERING STUDENT LEARNING EXPERIENCES

Faculty recognize that courses and related academic activities should support and enhance student learning experiences and they dedicate much time and effort to this endeavor, as

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[60] Exhibit 11.1A

explained in the previous chapters. The minimum of 12 credits in elective courses that is built into all programs and the availability of more than 10 optional Curricular Sequences ("minors") encourage students to obtain a varied education and to participate in creating their own course of study. Certification #27 of the Board of Trustees, as amended,[61] defines the norms and procedures for offering Curricular Sequences in UPR and has made it easier for students in one bachelor's degree program to take courses in other programs, in order to obtain special certifications or licenses. This certification has authorized up to 15 credits in free electives to be taken in an integrated sequence of courses in order to broaden, enrich, and diversify the academic experience of students. In the past two years, for example, about 275 students from other bachelor's degree programs have chosen to obtain a Teacher's Certificate. Business Administration students, and Chemistry students who plan to work in the pharmaceutical industry, often take additional courses to obtain a CPA or a Chemist's license, respectively.

In accord with the Curricular Sequence initiative, the Academic Senate approved a new Curricular Sequence in Statistics submitted by Department of Mathematics and Physics. Another Curricular Sequence in Physics is also being developed. The Biology Department is creating a Curricular Sequence in Environmental Preservation, and the Department of Education is developing several new sequences: Secondary Certification in Spanish, English, History, Mathematics, or General Science; Elementary School Certification for the 1st through 6th Grades in all subjects; Secondary School Certification in the Visual Arts; and Certification for Adapted Physical Education. The Department of Hispanic Studies created and has submitted two curricular sequences to the Senate: Hispanic Literature, and Writing and Communication in Spanish.

11.3 CURRICULAR, CO-CURRICULAR, AND EXTRA-CURRICULAR EVALUATION

During the past seven years, curricular revision efforts were mainly concentrated in the project known as "Renovación Curricular" (Curriculum Renovation). Participants in this project, in regular consultation with the university community, revised the conceptual framework for the General Education component, as discussed in Chapter 12. At the same time, faculty from the English, Biology, Education, and Sociology programs evaluated and revised their curricular offerings and these initiatives have been approved, or are in the process of being approved, by the Academic Senate. These initiatives were carried out under the parameters contained in Certification #93-113 (1992-93)[62] of the former Council on Higher Education.

Beginning with the development and approval of the IAP, a structure was created for a process to evaluate and review programs. The plan established that programs should be evaluated every five years and courses should be evaluated annually. The Commission on Academic Affairs of the Academic Senate has established a pilot plan and a timetable for on-going academic program review.[63] Ten programs have been evaluated as part of this pilot study: Biology, Mathematics, Office Management, Office Systems, and the six concentrations in Elementary Education. The reports on these evaluations are under consideration by the Commission and its findings will

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[61] Exhibit 11.2
[62] Exhibit 11.3
[63] Exhibit 11.3A

allow for revision of the plan and the start of the second phase. Chemistry, Business Administration, and the Honors Program are scheduled for evaluation during this phase.

Co-curricular and extracurricular experiences have been less formally evaluated. However, implementation of the IAP will ensure a systematic evaluation of the effectiveness of co-curricular and extra-curricular experiences. It will also provide for the utilization of evaluation results to improve these experiences (see Chapter 14).

11.4 LEARNING RESOURCES: SUFFICIENCY AND APPROPRIATENESS

UPRC has a general library, computer laboratories, and special multimedia rooms ("smart rooms") to support its curricular offerings, as well as the research and information needs of the academic community. The Victor M. Pons Library, which serves 3,608 students and 195 full-time faculty members, is housed in a 61,666-square-foot structure and holds collections, equipment, and study areas. The collections include: 190,251 volumes; 2,103 periodicals and newspapers; more than 4,520 rolls of microfilms; 4,404 recordings; and subscriptions to 56 on-line databases with access to millions of full-text articles and graphics.[64] The Library is open for 84.5 hours a week, including evenings, holidays, Saturdays, and Sundays. During summer sessions it is open 71 hours per week. On Mondays through Thursdays it operates from 7:30 a.m. to 11:00 p.m., giving it the most extensive working hours of all libraries in the undergraduate units of the UPR system. The services provided are aligned with UPRC's mission and goals.

The Library provides acquisition, organization, conservation, bibliographic, and electronic access services to support academic programs and activities. To facilitate teaching and research work, faculty and students have access to the on-line databases 24-7 from the campus and from their homes. Throughout the year, the Library holds exhibitions which foster interdisciplinary activities on campus as well as community relations. The Library is part of The Puerto Rican Heritage Digital Library, a digitalization project of the Library System at the Río Piedras Campus.

During recent years the technological infrastructure has improved in terms of service provided to users as well as in terms of the professional and administrative staff who work in the Library. The Library currently has 121 computers, 7 printers, 3 digitalizers, 5 switches, 1 microfilm reader-digitizer. and 3 wireless antennas. It also provides Inter-Library Loans through the Ariel Program. Students may print out information at no cost, send it by email, or record it on a floppy disk. Table 26 displays services by area, number of clients, and resources provided during the 2003-2004 academic year. A detailed report of library services is included as an exhibit.[65]

The Library has two computer laboratories: the *Information Laboratory for Student Development* (LABDIES) and the *Academic Research Laboratory* (Title V proposal). LABDIES is a place where students can print files or use computer applications. It provides space and facilitates contact for students to use technological resources and enhance their academic progress through database and Internet searches. During the 2003-2004 academic year, it had approximately

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[64] Exhibit 11.4
[65] Exhibit 11.4A

16,325 users. The Academic Research Laboratory (ARL) coordinates with professors to provide educational activities that strengthen oral and written expression in English and Spanish, as well as information and academic research skills. The program incorporates new technologies into the teaching and learning processes in pre-selected courses.

Area	Types of Services Offered	Clients	Loaned Resources
Reference	Liaison between bibliographical resources and user needs	22,185	3,862
Research and Documents (Periodicals)	Public catalog, magazines and journals, and indexes; consultation and orientation on the use and management of databases	8,308	2,620
Circulation	Book loans (general and specialized)		3,333
Puerto Rico Collection	Information on PR	10,680	11,299
Luisa Capetillo	Bibliographic and audiovisual materials on women's and gender studies		3,189 (books) 77 (interlibrary loans)
Family library	Community services	12,084	
Campos Parsi	Audiovisual materials; collection of books and music magazines	2,059	911
Technological Assistance	Equipment and materials for students with disabilities	1,050	

Table 26. Library Services by Area (2003-2004)

During the 2003-04 academic year, 90 workshops and presentations related to the Internet and electronic databases were offered. Reference lists for documenting internet databases with different manual styles were also provided. To complement these efforts, instruments were designed to assess needs, attitudes, and skills related to information literacy and information technology and were administered before and after the workshops. Assessment results provided evidence that students had learned to use the databases available in the Library and had increased their willingness to use them for assignments and research. Table 27 shows the activities carried out by the ARL last year.

Description of Activities	Faculty and Students
Research and development of information skills	1,322
Information Technology and Computers	6,234
Information skills for research in introductory courses	406
Faculty members using the Academic Research Laboratory	625
Faculty Workshops	260
Individual Assistance	27

Table 27. ARL Activities in 2003-04

The library has made a great effort to provide bibliographic resources that address academic offerings. Resource acquisition has responded to direct requests from users and the library leadership who, through their participation in the Academic Senate, curricular revision committees, and ongoing review of syllabi, attempt to ensure that needed bibliographical resources are available in the collection. Table 28 lists the educational materials (books, periodicals, data bases) acquired by department, during the first semester of the 2004-05 academic year and the two previous years.

Department	2002-03		2003-04		2004-05		TOTAL	
	Titles	Volumes	Titles	Volumes	Titles	Volumes	Titles	Volumes
Business Administration	13	13	50	50	0	0	63	63
Biology	36	57	37	41	10	12	83	110
Bib.	36	89	57	139	26	40	119	268
Social Science	96	96	204	210	29	32	329	338
Hispanic Studies	110	114	138	161	7	9	255	284
Humanities	129	129	167	167	28	29	324	325
English	21	21	76	76	7	7	104	104
Math-Physics	6	6	31	32	4	4	41	42
Pedagogy	72	72	43	43	5	5	120	120
Chemistry	7	7	14	15	7	7	28	29
Sub-Total	526	604	817	934	123	146	1466	1684

Table 28. Educational Materials Acquired through Budgetary Assignments during the Past Two Years and the First Semester of the Current Academic Year

Library personnel are highly regarded by faculty and students. The Director of the library supervises 9 Faculty Librarians and 11 Assistant Librarians. He also supervises 3 Library Technicians, 3 secretaries, one administrative assistant, and one computer technician. Work-study program students and part-time student workers complement this working team.

All faculty librarians hold at least a Master's degree in Library Sciences and have an average of 15 years of experience. The librarians are distinguished by their willingness to offer workshops and orientation sessions as well as their participation in professional development activities. They belong to several campus committees, such as the Curriculum Renovation Project and the Middle States Association Steering Committee. Their participation in these committees enhances the interaction among librarians, faculty, and students. Librarians are also members of the Academic Senate. Assistant librarians hold bachelor's degrees, have an average of 17 years of experience, and participate actively in professional development activities.

Librarians have also shown an outstanding interest in research. During the 2003-04 academic year, four proposals developed by librarians were approved through the Institutional Fund for Research Development. The proposals were directed at studying the development of information

skills in faculty syllabi and at validating the relevance of the general collection for teaching, research, and virtual references. Another research project is a "bibliometric" study of the use of the library's resources by faculty in the past 10 years, to determine whether or not the resources for their research are available at the library. The Library staff is in regular contact with faculty who teach courses focused on gender in many departments; they are also collaborating on a proposal for a Curricular Sequence in Gender Studies. Faculty librarians have participated successfully in the Project for the Transformation of General Education through the integration of information skills in the curriculum, evaluation of syllabi, and participation in the interdisciplinary seminar, classrooms, and assessment activities.

Librarians have collaborated with Natural Science Departments in revising the QUIM 3006 course, Seminar on Chemistry Bibliography and Literature, and in integrating information skills into the QUIM 3124 course and the BIOL 3095 course, Literature and Bibliography in Biology Topics. It should be noted that the librarians often collaborate with faculty as team teachers and participate in final evaluation of the students.

The museum also plays an important role in fostering student learning experiences. It complements and enriches learning activities by contributing to interdisciplinary studies and the general education component. It has a meaningful academic program linked to the Humanities, Social Sciences, and Pedagogy departments. It has a major impact in UPRC's academic endeavors in all areas.

11.5 COURSE SYLLABI THAT INCORPORATE EXPECTED LEARNING OUTCOMES

The Board of Trustees Certification #130 (1999-2000) establishes the official model for a course syllabus. According to this certification, all syllabi should specify the general objectives for the course and include a content outline as well as instructional and evaluation strategies and a bibliography. The departmental curriculum committees evaluate their syllabi to ensure that they comply with Certification requirements. The Dean of Academic Affairs is working on a project for revising this Certification. His team has focused their efforts on ensuring that all syllabi are written in terms of expected learning outcomes. In fact, a plan has been drafted to have all departments evaluate their Graduate Profiles in terms of the *Profile of the Ideal Graduate*. This process will allow the departments to focus their efforts on revising syllabi so that they are drafted in terms of expected student learning outcomes.

It is worth mentioning that most of the course syllabi developed after 2001 have been incorporating expected learning outcomes. An examination of 144 syllabi showed that 83% had objectives drafted in terms of student-learning outcomes.

11.6 ASSESSMENT OF STUDENT LEARNING AND PROGRAM OUTCOMES

Assessment efforts are at different stages and levels of implementation. The IAP recognizes three levels of assessment: course, program, and institutional. Since the approval of the IAP, a systematic process of assessment has been gradually implemented, which has helped to organize the isolated assessment efforts that had been made in the programs. To this end, workshops and

seminars have been offered on the topic of assessment. Faculty participation and the coordination of assessment activities by the Dean of Academic Affairs guarantees that the data gathered will be used as feedback for revising the teaching and learning processes.

Most faculty members have incorporated a variety of assessment techniques into their courses, including reflexive diaries, writing prompts, classroom assessment techniques, oral and written reports, portfolios, and research projects. The English and Psychology programs are implementing their respective assessment plans and using the results to improve the teaching-learning process. Recently created or revised programs, and those undergoing revision, have also drafted their assessment plans. The Chemistry, Education, and Business Administration programs are developing systematic and comprehensive assessment processes as part of the process of complying with the preconditions established by their professional organizations. The Dean of Academic Affairs has set a goal that all programs will have developed their graduate profiles by 2006. The development of these profiles will better enable the development and effective implementation of their academic assessment plans. A detailed description of the assessment efforts carried out in the various programs may be found in Chapter 14.

FINDINGS

1. Current curricular offerings contribute to achieving the Mission and Goals of UPRC.
2. Course offerings, in alignment with established academic agenda, have been directed towards the incorporation of research experience, community service, interdisciplinary studies, and the use of technology.
3. The interdisciplinary focus of the General Education Program is seen as a model for curriculum revision in the majors.
4. The programs are committed to using the Profile of the Ideal Graduate to revise their objectives in terms of student learning outcomes. This profile will also be instrumental in the revision of course syllabi.
5. Course sequences ("minors") will give students the opportunity to broaden and enrich their courses of study.
6. The Institutional Assessment Plan ensures ongoing revision of academic offerings, which in turn guarantees the excellence of the programs.
7. The program assessment process is being implemented at different levels and faculty are using a variety of assessment practices in their courses.
8. The library provides the bibliographic services and resources needed by students and faculty to develop their academic activities.
9. Participation by librarians in the teaching process ensures that the collections and data bases are aligned with academic programs.
10. Library staff has the knowledge and experience to support academic endeavors.
11. Library staff regularly offer workshops to improve the information skills of students and faculty.
12. The museum has taken on a very important role by supporting academic experiences and also outreach initiatives.

RECOMMENDATIONS

1. Continue to promote the development of interdisciplinary courses and courses with an interdisciplinary approach.
2. Continue to promote the integration of community service within courses.
3. Equip additional classrooms with multimedia presentation equipment.
4. Continue to integrate librarians in the teaching process and academic tasks of the Departments.
5. Identify specific strategies to further promote the contribution of the museum as a learning resource.

Chapter 12

General Education

UPRC has a sound liberal arts tradition that inspires all its educational activities and is unique among other higher education institutions in Puerto Rico. In the last decade the institution has developed many important efforts that recognized the need for a more flexible and integrated curriculum with a clear interdisciplinary focus. A curriculum with these characteristics is fundamental to accomplishing UPRC's mission and goals. In order to improve the quality of its educational programs, and to respond to changes in higher education and society in general, UPRC has embarked on a long-range comprehensive revision of its general education component. This revision is characterized by an interdisciplinary approach, a focus on research, the development critical thinking skills, and a commitment to community service and the democratic promotion of peace. A specific set of general abilities and content areas have been agreed upon and they frame all general education revision efforts; current implementation activities are producing important results that will guide further development of this initiative.

12.1 SCOPE OF GENERAL EDUCATION

The current General Education Component at UPRC consists of a set of sequentially organized courses, commonly spread throughout the first two years of college work. These general education courses are accurately described in the institution's Catalog and on the web page.

General education requirements are clearly stated in all curriculum description sheets, included in the Catalog, and available in all academic departments and from all academic advisors. The number of general education credits required for each major varies by department, however, and they range from 48 to 75 credits. Significant differences also exist in what various majors consider to be "general education courses," and these differences partly explain the wide range of credit requirements. Nevertheless, there is general consensus that the courses listed in Table 29 form the core of UPRC's current General Education Component.

General Education Courses	Credits
Spanish 3101-3102	6
Spanish 3211-3212	6
English 3101-3102	6
English 3221-3222	6
Social Sciences 3121-3122	6
Humanities 3101-3102	6
Humanities 3201-3202	6
History 3241-3242	6
Math 3041-3042	6
Physical Sciences 3001-3002	6
Biological Sciences 3001-3002	6

Table 29. Core General Education Courses

Although many of these courses have been recently revised in their departments of origin, it is not possible to say that they currently form an integrated whole of interdisciplinary experiences for students. A review of their course syllabi, however, indicates that they aim at the development of sound ethical values, effective communication skills, critical analysis, and

quantitative reasoning.[66] Technology and information literacy, although not explicitly included in the course titles, are also embedded in basic language and mathematics courses as required skills for successful course completion. Current curriculum renovation projects have contributed to the emphasis on information literacy skill development as a regular outcome of general education courses (see Chapter 14). Assessment initiatives on student learning outcomes in some of these courses are discussed in Chapter 14.

UPRC is currently conducting a wide-ranging renovation process of the General Education Component, whose conceptual grounds are explained in the next section. The general idea is to redefine the curricular structure in order to increase both flexibility and cohesion in the general education requirements. The renovation proposal, under the name of *Project for the Transformation of General Education at UPRC*,[67] defines a curricular model with the following distribution: 60 general education credits spread throughout the entire course of study; 55-62 credits in specialty courses, with some of them offered upon entering college; and 12 credits in free electives. The general education component would be organized in a flexible manner using the following pattern:

- A core component of 36 credits, generally taken during the first two years, which should include: 6 credits in Spanish, 6 credits in English, 6 credits in the Humanities, 6 credits in the Natural Sciences, 6 credits in the Social Sciences, and 6 credits in Mathematics.
- A component of 18 credits that, beginning in the second year, are taken in combination and selected from a variety of thematic interdisciplinary clusters properly identified for those purposes.
- A first year four-credit interdisciplinary seminar (2 credits per semester) designed to be an integrative experience among the first year cluster courses and to be team-taught. This seminar also emphasizes information literacy and provides space for many first year retention initiatives.
- A two-credit capstone course taken during the last year. The specific course varies with the major but should provide an integrative experience such as research, creative work, or community service.

The general proposal for this renovation project was approved by the Academic Senate in May 2004 and assessment results of its implementation activities will be discussed in this forum next year.

12.2 ABILITIES AND CONTENTS OF GENERAL EDUCATION : A RENOVATION PROCESS

As reported in its June 2000 Periodic Review Report, UPRC's Curriculum Renovation Project (CRP) led the process of creating a sound conceptual framework that could serve as a foundation for the needed comprehensive general education revision. During several years of careful investigation and ample opportunity for participation by faculty, students, and the community in general, the CRP produced a set of documents[68] which outlined the particular objectives and methodologies that would serve to guide the renovation process. The most significant achievement of the CRP was the unanimous approval, by the Faculty and the Academic Senate,

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[66] Exhibit 12.1
[67] Exhibit 12.1A
[68] Exhibit 12.2

of the document that identified the *Abilities and Contents of the General Education Component at UPRC*[69] in 2001. UPRC's nine general education abilities should be integral to the entire curriculum; briefly described, they are:

1. Effective communication: *capacity to communicate effectively and critically, both orally and in writing, in Spanish, English, and, if possible, in other languages, as well as in the arts and mathematics.*
2. Team work: *capacity to carry out activities in a group, in a reflective, critical, and active manner and with the purpose of achieving a common goal.*
3. Reflexive, creative, and critical thought: *the capacity to investigate and construct knowledge or interpretations in a conscious, organized, valid, and solid manner, in order to solve problems and make decisions. Creative thought is the capacity to produce unexpected and innovative answers or solutions, and critical thought is thought that examines itself and that considers the validity, support, context, and intrinsic values of a belief, argument, fact, or source.*
4. Information management: *the capacity to critically and effectively participate in the world of the computer sciences by being able to assess, evaluate, manage, and produce information through the use of electronic media.*
5. Ability to make decisions and act in a fair and just manner: *the capacity to identify and responsibly resolve the moral implications of all human affairs.*
6. Aesthetic appreciation: *the capacity to identify, interpret, create, and enjoy aesthetic events, creations, or values as much in nature as in the arts, and also in the sciences and technology.*
7. Care of one's self: *capacity to live independently, in a physically, mentally, and spiritually healthy way, and in harmony with the natural and cultural surroundings.*
8. A sense of shared existence: *capacity for reflective and critical participation in the processes of transformation and in the government of the local, national, and world communities.*
9. Mathematical reasoning: *capacity to reason logically and to handle Algebra; competency in the use of numbers, symbols, and graphs to understand situations and to predict and solve problems.*

In addition, six content areas serve as connective strands throughout the general education courses and provide points for interdisciplinary connections: Puerto Rico, Cultural Diversity, the Environment and ecology, Health, the Natural world, and Technology.

The implementation process that aims to incorporate these abilities and content areas into the curriculum is presented in the next section, together with its ongoing results. This reform has the benefit of bringing about an articulation between general education and the major programs and of allowing for fruitful and novel encounters between the disciplines. UPRC's current challenge is twofold:

- to implement a major curricular change in all general education courses, and
- to promote a direct impact of the new general education principles on revision of the majors.

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[69] Exhibit 12.2A

UPRC's mission clearly states that *"We understand general education and professional specialization as complimentary experiences in the formation of a human being."* As a result of this renovation effort, the majors at UPRC are required to adopt the main characteristics of the general education reform as guiding principles in any program revision that is submitted to the Academic Senate.[70] The programs of all the majors are required to expose their graduates to strong general education experiences that enhance their intellectual growth and promote a sense of social responsibility based on respect for all human beings and the natural environment.

12.3 IMPLEMENTATION OF A GENERAL EDUCATION TRANSFORMATION PROJECT

Upon approval of the guiding documents created by the CRP, UPRC developed implementation strategies to transform the conceptual framework that was agreed upon for revising general education into actual curricular experiences. The first strategy was to implement pilot projects with a reduced number of students in order to develop specific methodologies that could promote interdisciplinary work as well as the other characteristics of the new curriculum. An adequate assessment of these pilot projects gave the feedback that was necessary for putting a more wide-ranging reform project in practice (see Section 14.2).

Pilot Projects for Curricular Renovation 2002 - 2004

The first pilot project was conducted in the 2002-03 academic year, with a randomly selected group of 24 freshmen who took all their first year courses with a selected group of faculty who collaboratively planned all learning experiences. During weekly meetings, professors, librarians, and advisors identified the general education abilities that would be emphasized and spread throughout the four courses (Basic English, Humanities, Biological Sciences, and Basic Mathematics). An interdisciplinary approach was developed with a thematic integrative model to foster learning about a single concept from the multiple perspectives of the disciplines under study. For example, the concept of identity was presented from the perspective of various disciplines, as illustrated in the following diagram.
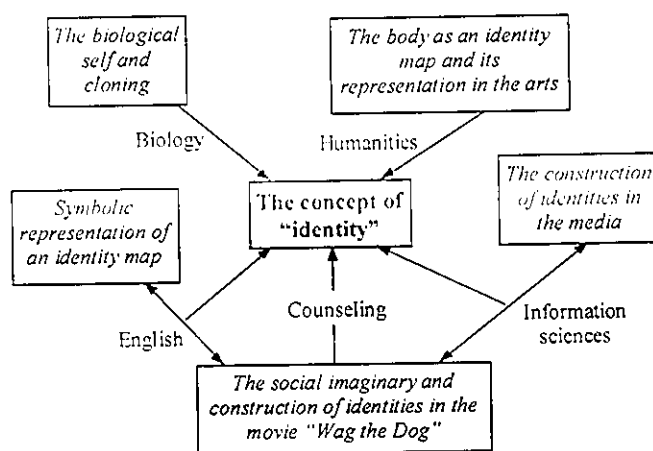

Diagram 19. Integrative Model for Teaching the Concept of Identity

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[70] Exhibit 12.2B

The pilot project continued with three groups of students during the 2003-04 academic year and built upon what was learned in the first year. All groups in these pilot projects experimented with active teaching methodologies and pertinent learning environments to promote research, creative work, and information literacy. Faculty members used various strategies to assess student learning outcomes: portfolios, open-ended questions, focus groups, and interviews. among others.

The faculty who participated in these experiences have produced a written monographic series with concrete examples of the types of strategies that could be used to transform the general education curriculum. Three monographs[71] have been completed so far, two on student learning assessment and one on field trips as a strategy for examining an object of study from an interdisciplinary perspective. Four other monographs are nearly complete and will serve as valuable dissemination instruments for other faculty members to become involved in the renovation process. A detailed account of all teaching activities and assessment results can be accessed through the UPRC web page.

Project for the Transformation of General Education at UPRC
After careful consideration of the assessment results from the pilot projects conducted in the previous two years, UPRC decided to initiate a far-reaching renovation project with a more formal structure and broader objectives. Approved by the Academic Senate, the *Project for the Transformation of General Education at UPRC* was initiated in May 2004. During its first year the Project has the following objectives:

- To experiment with a new curriculum structure that takes into consideration the fundamental characteristics that have been agreed upon in recent years, as well as the abilities and contents of general education at UPRC. These include the need for general education courses to be offered throughout the entire undergraduate experience and for students to take concentration courses beginning in their freshman year.
- To accrue assessment results at the program and course levels, in order to enrich, modify, and eventually expand the curricular experiences of the Project.
- To plan the academic offerings for the completion of students' degrees so that they use flexible strategies such as the creation of course clusters.
- To increase and further disseminate the inventory of effective teaching methodologies and assessment techniques in the classroom.

In the long range, and as described in Section 12.1, the project aims at reorganizing the General Education Component to promote flexibility and a more pertinent teaching and learning environment. During the first semester of this year, three thematic clusters of courses have been offered to freshman students in the Natural Sciences and Elementary Education majors. Diagram 20 illustrates how one of the clusters was structured. The new Interdisciplinary Seminars have been taught by teams of faculty members, including librarians and advisors, and they serve as the convergence point for integrating the content and skills development of all the courses. The collaborative teamwork among faculty members from different areas and the emphasis on an

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[71] Exhibit 12.3

integrated approach to the development of general education abilities were so well treated in the pilot projects that these features have continued as a central focus of the current project.
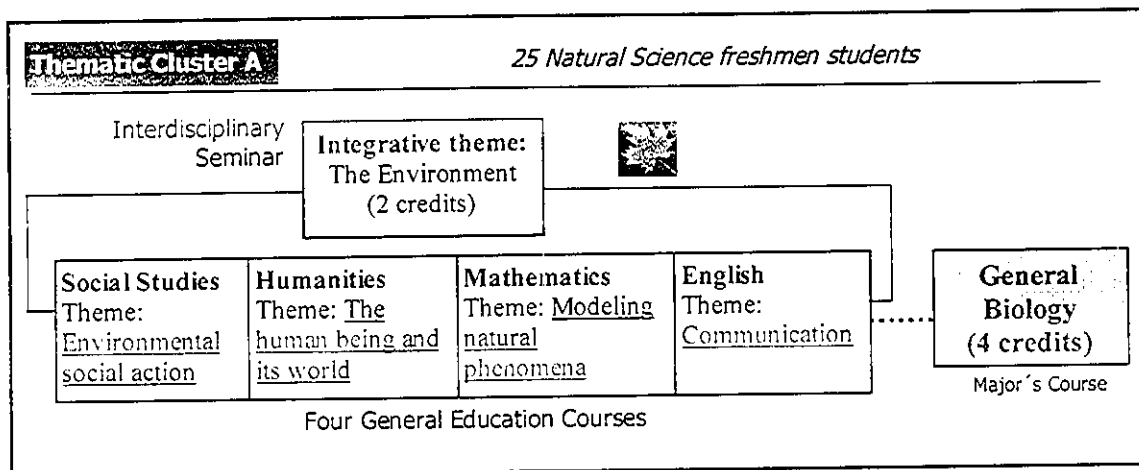

| Thematic Cluster A | 25 Natural Science freshmen students |

Interdisciplinary Seminar

Integrative theme: The Environment (2 credits)

| **Social Studies** Theme: Environmental social action | **Humanities** Theme: The human being and its world | **Mathematics** Theme: Modeling natural phenomena | **English** Theme: Communication | **General Biology** (4 credits) |

Major's Course

Four General Education Courses

Diagram 20. Example of a First Year Cluster Structure – Fall 2004

12.4 ASSESSMENT OF GENERAL EDUCATION OUTCOMES

The assessment of student learning outcomes within the general education component is based on UPRC's Institutional Assessment Plan. The Plan specifies three dimensions for this assessment task: 1) development of abilities that result from the integration of skills, knowledge, and attitudes; 2) mastery of content areas as objects of interdisciplinary study; and 3) holistic or integrated development that serves to unify the ability outcomes and the content areas. Much of this formal assessment can only be carried out when the revision of the general education component is further developed. However, formative assessment activities have been performed at all the initial implementation stages (pilot projects), as has already been described, and they have resulted in improved plans for refining the revision of the general education component.

In Chapter 14 appears a discussion on the assessment activities and results from the pilot projects, as excellent examples of student learning assessment at the course level. These assessment activities include the use of both quantitative and qualitative instruments such as a student profile analysis, a student perception survey, and videotaped pre and post interviews. The students found the first year's project effective in helping them develop the abilities and knowledge of the content areas of the courses. For example, at least 86% of them felt they had developed the abilities of creative and critical thinking and mathematical reasoning, while most (60% to 70%) felt they had improved their ability to communicate effectively in English and Spanish. A sizeable 88% recommended the project to other students and they considered it a supportive experience that allowed students to help each other.

In the second year of piloting, the student perception survey was qualitatively validated and again administered. In terms of academic success, students felt they had been well prepared or even very well prepared in the abilities and content areas covered throughout the semester. They identified the assessment methods of oral presentations, oral reports, and investigative essays as

the most effective in helping them develop the abilities and learn the contents covered throughout the semester. When asked about adapting to university life, they responded that the project had been effective in fostering a sense of belonging to and being a part of the institution.

The *Project for the Transformation of General Education at UPRC* also has a formal assessment model[72] based on student learning outcomes. The initial results from this assessment should be available in the Spring of 2005 and will be discussed and disseminated widely.

FINDINGS

1. UPRC is in the middle of a carefully planned and profound transformation of its general education component that represents a responsible first-rate option for students.
2. The General Education renovation process has a sound conceptual framework that emphasizes abilities, content areas, and methodologies that have resulted from a consensus process over the past several years.
3. Formative assessment activities have been extremely valuable in redefining strategies for curriculum renovation, as well as for gaining experience in methods for effectively assessing student learning outcomes.

RECOMMENDATIONS

1. Continue disseminating the results from the General Education revision, in order to attract more faculty members to become involved in this important initiative.
2. Offer additional faculty development activities on alternative curricular structures,. integrative models for teaching and learning, and assessment of student learning in order to adequately prepare them for the change process that is currently under way.
3. Develop a work plan for the Faculty General Education Committee to articulate current and future plans for curriculum renovation in this important component.
4. Complete the integration of information literacy skills in all general education courses.

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[72] Exhibit 12.4

Chapter 13

Related Educational Activities

Most UPRC students come from the 10 towns surrounding the campus in the rural central-eastern part of the Island. They have diverse educational backgrounds and multiple academic and personal needs, often reflecting the difficult economic and social environments in which they live. Although most of them have a high standard admission index, as compared to their peers in other public and private undergraduate institutions in Puerto Rico, many of them come under-prepared for college level work. In order to help these students enrich their lives academically and professionally and to succeed in achieving their educational goals, UPRC offers coordinated services that are consistent with its mission and goals. In addition, UPRC offers non-credit developmental and continuing education courses, as well as related educational activities, to adults who want to develop a more sound or diverse educational background.

13.1 BASIC SKILLS – PRE-COLLEGE COURSES

UPRC uses the results of the three CEEB achievement tests to identify students who are under-prepared in mathematics, Spanish, and English language skills. The scores in these tests do not count in the calculation of the General Admission Index (GAI) that was explained in Section 8.1 and are used only for identifying the need for specific academic preparation in these areas. The corresponding academic departments recommend, and the Academic Senate approves, the cut-off CEEB scores that signal under-preparation. These decisions are based on the internal characteristics of each achievement test as well as an assessment of the basic skills required for successfully completing the corresponding first year courses.

The current cut-off scores are: 650 for Math, 500 for Spanish, and 450 for English (each test's scores range from 200 to 800). Students admitted with scores lower than these are required to take non-credit preparatory courses during the summer prior to their first semester in college. The mathematics course is given only to Natural Science or Business students. Information on these pre-college courses is given to all students prior to admission.

The faculty from the corresponding academic departments design and teach these preparatory courses every summer. The Faculty Curriculum Committee endorses the design of these courses according to the same policies and methods used for approving regular college level courses. In addition, the department chairs select the competent teaching faculty and ensure the availability of appropriate learning resources in order to guarantee the attainment of UPRC quality standards in these academic offerings.

All administrative procedures for the offering of these courses are handled by the *Division of Continuing Education and Professional Studies* (DCEPS), under the Dean of Academic Affairs. All preparatory courses include 30 hours of teaching and are geared towards the personal and professional development of under-prepared students to help them reinforce, refine, or re-learn the basic skills they need in order to succeed in college. Course sections have a maximum capacity of 25 students and learning outcomes are carefully assessed. In addition to diagnostic

tests, pre- and post-tests are given to ensure that the course standards are met. DCEPS also coordinates with the academic departments by providing a peer tutoring program for these students.

While no grades are assigned in these courses, there is a predefined passing score for each one: 75% for English and 80% for Mathematics and Spanish. The courses have high passing rates: 78.8% for Mathematics, 91.9% for English, and 96.8% for Spanish. Students who do not pass a course may not enroll in the corresponding first year college course. Students in English and Spanish must repeat the preparatory course; since 2001-02, they have been allowed to repeat the course in the first semester, instead of waiting until the next summer. In the case of Mathematics, by contrast, students who fail the preparatory course are required to take a *College Algebra* course, during the first semester, before they can enroll in the Pre-calculus course. The following chart shows the number of students who took these courses in the past five years.

	1999-00	2000-01	2001-02	2002-03	2003-04
Spanish	308	417	371	342	215
English	410	394	392	328	286
Mathematics	450	353	339	326	272

Academic Year
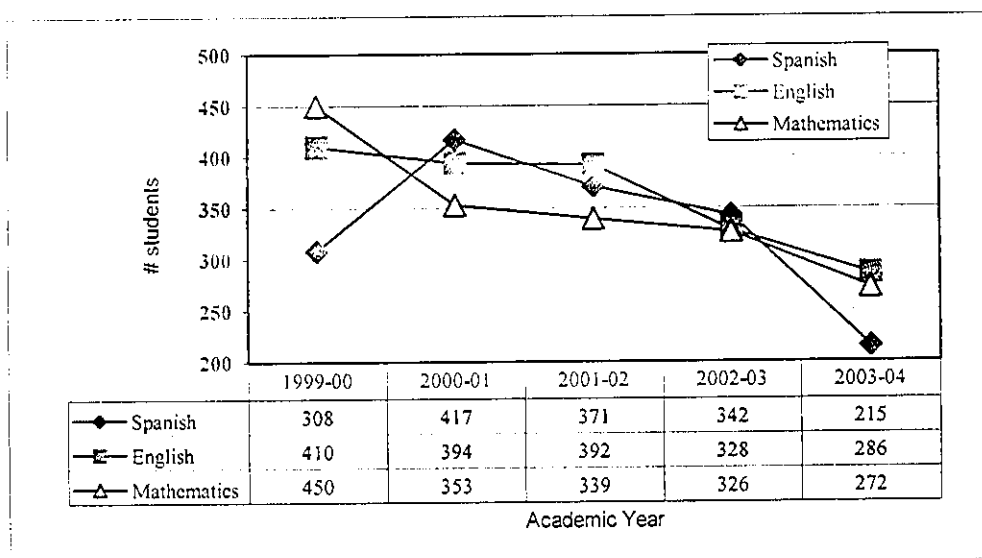
Diagram 21. Students Registered in Preparatory Courses from 1999-2000 to 2003-2004

It is evident that the basic English and Mathematics skills need most improvement among UPRC freshmen. While the number of students registered for these preparatory courses has decreased in the past few years, the decrease is directly related to the decrease in total admissions and does not indicate a corresponding decrease in the proportion of incoming students who are under-prepared.

DCEPS evaluates the preparatory courses each summer with an instrument specifically designed for this purpose and the results are used to improve their design and implementation in the following year.[73] The evaluation includes input from various sectors of the university community and the results are disseminated to academic departments through the Office of the Dean of Academic Affairs. Each year, the Chancellor, the Deans, the Department Chairs, and the faculty share their ideas regarding the admission of these under-prepared students; it is an

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[73] Exhibit 13.1A

important factor that is considered annually in the analysis of the institution's carrying capacity and admission index. The university community is convinced that these non-credit preparatory courses help develop the competence and skills that students need in order to succeed academically and professionally. For assessment results see Section 14.4

13.2 BASIC SKILLS – SUPPORT SERVICES

In order for learning to take place, there must be well-planned and relevant services that stimulate and motivate students to acquire the knowledge they need to develop their intellect. These services and activities foster the attainment of UPRC's mission and goals along with the development of under-prepared students as educated persons. Most of these services were discussed in detail in Chapter 9 and have impact on the entire student population. There are, however, certain specific support services for under-prepared students; these services complement the preparatory courses described before, but are provided after students enroll in college.

One subsequent indicator of under-preparedness is the student's college GPA; after their first year, students are put on academic probation whenever their GPA falls below 2.0. In these cases, students are limited to enrolling in a maximum of 12 credits the following semester and are also required to repeat any classes they failed. Each semester the Registrar's Office identifies these students and also all juniors and seniors who fail to achieve satisfactory academic progress because they have passed fewer credits than the minimum standard. All these cases are referred to the *Interdisciplinary Center for Student Development* (CEDE) where students receive special orientation and counseling services.

Student Support Services (TRIO-SSS)
Student Support Services (TRIO-SSS) is a federally funded program at UPRC. Beginning in 1973, it has provided high quality support services to students admitted to the institution who meet any of the following criteria: academic need, economic need, first generation student status, or physical or mental impairment. Each year, approximately 384 students are accepted in the TRIO-SSS program. In the past five years a total of 1,920 students were accepted and approximately 25,465 different direct services were offered to them. During the previous self study process, the Middle States Visiting Team commended the excellent work provided by this program.

TRIO-SSS coordinates and offers academic services that focus on the development of learning skills through "first year experience" activities that aim at increasing the retention of these students with special needs. Both academic and personal support services are essential for helping the students adjust to their new academic environment. The services offered are coordinated to encourage these students to finish their bachelor's degree, to continue with graduate studies, and to become model members of society. To attain these goals the program focuses on three major components: cultural, academic, and advising. TRIO-SSS offers: tutoring in English, Spanish, and Mathematics; vocational, academic, and peer counseling; and cultural activities such as field trips, concerts, plays, workshops, and conferences. The program

personnel conduct a close follow-up of the student's academic progress and participation. Program assessment results reveal its high success rate.[74]

TRIO-Upward Bound Program
UPRC has another first-rate TRIO program: the *TRIO-Upward Bound Program (TRIO-UBP)* is a federally funded pre-university program that services the high school student population in the region served by the institution. Begun in 1973, this program offers curricular and extracurricular activities that help high school youth develop their academic potential so that they can attain their personal and vocational goals. Each year, the program identifies and accepts close to a hundred high school students from five different schools. Potential candidates are identified in coordination with school teachers, parents, and school counselors. The students who compete for admission have high school GPAs that range from 2.0 to 3.3. All participants take pre- and post-tests, as well as PIENSE II—a standardized instrument designed by the CEEB to diagnose students' abilities in English, Mathematics, and Spanish. Parents participate actively in the process of identifying their children's learning needs.

TRIO-UBP provides specific academic services that prepare high school students from neighboring schools for future studies. It offers *high school level courses* during the semester and in the summer. Some of these courses are: English, Spanish, Mathematics, Science—with a corresponding laboratory, Counseling, Physical Education, French, Communications, and Art.

13.3 NON-CREDIT OFFERINGS AND CONTINUING EDUCATION

In addition to the summer preparatory courses, DCEPS also provides continuing education courses to the external community. These courses are offered each semester, in two modalities: tailor-made study programs, or single non-credit (developmental) courses.

The latter option is offered through catalogued courses that serve to satisfy specific educational needs of the community in the surrounding towns. These are individual non-credit courses that are not bundled into sequential programs of study. Some of the most popular offerings are: Introduction to Computers, Conversational English, Swimming, and Billing Medical Plans. Approximately 25 courses are offered every semester and 10 to 15 students register in each course. DCEPS also coordinates seminars to prepare: High School students for the College Admission Test (a CEEB exam), future teachers for the Certification Board Exam, and potential tutors for the Spanish "Lectoescritura." These services provide ample opportunity for students to succeed in attaining their personal and professional goals.

On a contractual basis, DCEPS also offers training programs that are specifically designed to meet the needs of nearby private industries or government agencies.[75] Although these are not formal certificate programs, they are designed as coherent and sequential programs of study. DCEPS has also offered needs-based courses, such as French and Spanish, to employees of companies like Coca-Cola and *"Caribbean Refrescos."* Most of the training programs developed by DCEPS, however, aim to serve the needs of in-service teachers in Puerto Rico's Department

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[74] Exhibit 13.2
[75] Exhibit 13.3

of Education. It has provided numerous special training programs for both elementary and secondary school teachers in Mathematics, Science, Physical Education, English, and Spanish.

This year UPRC has a comprehensive project designed to provide the college courses and training required for the re-certification of Math, English, and Special Education teachers. This re-certification is a high priority for the Department of Education, in compliance with the *No Child Left Behind Act*, since many teachers do not have certification in the areas they are assigned to teach. Since January 2004, over 500 in-service teachers have been trained and a second grouped will enroll in 2005.

FINDINGS

1. UPRC provides high quality non-credit preparatory courses to students identified as under-prepared for college-level work.
2. Support services such as tutoring, mentoring, and counseling are provided to at-risk students who are identified based on their GPA and deficiencies in academic progress.
3. UPRC offers quality support services through its TRIO programs, to both high school and college students.
4. Services and programs for under-prepared students are assessed on a regular basis by the respective departments and the DCEPS.
5. Numerous developmental and continuing education programs are offered to the community, with special emphasis on meeting the needs of in-service teachers.

RECOMMENDATIONS

1. Develop a tracking system to monitor at-risk students in order to individualize support for their academic and personal needs.
2. Incorporate the use of web-based technologies as teaching resources in preparatory courses.
3. Offer formal certificate programs, through the DCEPS, based on current needs of private and public agencies.

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Chapter 14

Assessment of Student Learning

UPRC's Institutional Assessment Plan (IAP) establishes a model for assessment that places special emphasis on the assessment of student learning. Even at the broadest institutional level, the Plan establishes indicators that emphasize the quality of student learning and the variables that affect that quality. In this chapter, discussion will be limited to the first area of the IAP, *Excellence of Undergraduate Programs*, and will describe how the institution assesses this goal at the institutional, program, and course levels. During the past several years UPRC has begun creating a culture of assessment at all levels of the institution. Recent examples of formal and articulated efforts to assess student learning outcomes are The *Pilot Project for Curriculum Renovation* as well as the assessment efforts being carried out in the English, Hispanic Studies, Mathematics, Social Science, Natural Sciences, Education, and Biology Departments. Other formal and informal efforts to assess learning outcomes also exist and will be reported here.

14.1 EXPECTATIONS OF STUDENT LEARNING

One important accomplishment of the collaborative work of the Curriculum Renovation Project (CRP) was preparation of the document known as *Profile of the Ideal Graduate at UPRC,*[76] which was approved by the Academic Senate in March 2001. As a formal statement of student learning goals at the institutional level, this document is an important reference for assessing the institution's accomplishment of its mission and goals. The *Profile of the Ideal Graduate* reflects the institution's general expectations regarding student learning: it emphasizes the main characteristics of general education and sets the standard for defining student learning outcomes in all the majors. Given their importance, the 16 characteristics of this profile are summarized here; the ideal graduate will possess:

1. *An ability to act as an agent of change, as a person with critical judgment and an integrated vision, as someone who is independent, responsible, and committed to the democratic promotion of peace.*
2. *A commitment to becoming a responsible citizen who contributes to improving the quality of life in Puerto Rican society.*
3. *Proficiency in writing and speaking skills, mainly in Spanish, but also in English and other languages of relevance in a global society.*
4. *Proficiency in quantitative abilities.*
5. *A humanistic, cultural, social, technological, and scientific foundation, characterized by an interdisciplinary perspective.*
6. *Ecological awareness.*
7. *A conviction that both physical and mental health need to be cultivated.*
8. *Computer literacy, characterized by an interdisciplinary perspective.*
9. *A profound knowledge of some facet of Puerto Rican society.*
10. *Familiarity with, plus openness and receptivity to, other cultures.*

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[76] Exhibit 14.1

11. A commitment to respecting diversity and overcoming prejudice through reason.

12. A sensibility that appreciates the aesthetic values of different cultural traditions.

13. An appreciation of art.

14. An extensive knowledge of the area of study in which the student has specialized, and the preparation and willingness to continue lifelong learning and to pursue that goal through both research and creative activities.

15. A willingness to grow as an honest and competent human being, who is able to work within a group of people, demonstrating both leadership abilities and initiative.

16. A capacity to analyze and transform everyday life.

At the program level, each academic department has defined expected learning outcomes for their various academic offerings. These outcomes are all contained in the General Catalog but, except for the English, Biology, and Psychology majors, they have not been recently revised. Most unrevised outcome objectives are not expressed in terms of student learning, nor do they clearly specify learning outcomes. Instead, many are written as "departmental objectives" with a very broad, and often more administrative, scope and therefore are not suitable for developing adequate assessment of the corresponding program's accomplishments. As stated in Section 11.1, the Dean of Academic Affairs will give high priority in 2005 to the revision of all program level outcomes, with active participation by the faculty in each academic department.

At the course level, as was mentioned in Chapter 11 (Section 11.5), many course syllabi (83% of a sample of 144 syllabi prepared after 2001) already incorporate student learning outcomes within the course objectives. Ongoing efforts to revise all course syllabi are being promoted in order to align outcomes from each set of courses with the expected outcomes of the program to which they belong. This kind of initiative is essential for assessing the institution's effectiveness in promoting high quality student learning.

14.2 STUDENT LEARNING ASSESSMENT ACTIVITIES – INSTITUTIONAL LEVEL

The first part of Area I in the IAP (see Section 7.1) covers assessment of the General Education Component according to what students have learned and can demonstrate. The second part highlights student and faculty opinion about important characteristics of the General Education curriculum and some quantitative measures of its effectiveness. The model proposed in the Plan is an input-process-outcome model, which treats student development as a continuing and dynamic process and identifies values or improvements added in different stages. The four stages used to track improvements in the results of each dimension of assessment are: Input (incoming students), Process (after sixty credits), Process ("seniors"), and Outcome (graduates). UPRC has developed important assessment initiatives at this level, including both direct and indirect measures of student learning.

Indirect Measures
UPRC studied graduation rates for the past three years as an indirect measure of student learning. It produced two important documents that explain possible connections between these statistics and both academic and non-academic characteristics of incoming students: *Graduation Rates by Academic Programs (Cohorts of 1995 to 1997)*[77] and *Longitudinal Study of Some Determinants*

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[77] Exhibit 14.2

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for Success in Completing the Bachelor.[78] These have recently been distributed to the Academic Senate and all academic departments so that results can be analyzed at both the institutional and program levels. Another indirect measure of student success is contained in the *Annual Report of the Results on the Teacher's Certification Board,*[79] on which UPRC Education graduates always perform well, attaining some of the highest scores among all university graduates in Puerto Rico.

Student grades are another common indirect measure of student learning. The *Preliminary Report on Withdrawals, Failing Grades, and Repetition of Courses*[80] (May 2004) indicates that, between 1998 and 2003, on average 79% of all student grades were A, B or C. Since last year, updates of this grade report are sent to every academic department for use in assessing the productivity of their programs and courses. The report details failing grade rates at the institutional, program, and course levels; the percentage of failing grades (defined as D or F grades, as well as all withdrawals) for each academic department is presented in the following table, and more detailed information is included as an exhibit.

Department	Total students enrolled in courses	% of F, D, and W	% of withdrawals (W)
Chemistry	13,330	35.67%	10.11%
Mathematics-Physics	28,431	34.99%	13.05%
Business	21,939	20.17%	7.59%
Biology	18,846	18.88%	5.39%
Humanities	33,131	18.46%	5.78%
Hispanic Studies	25,406	18.30%	5.27%
English	22,821	17.40%	6.08%
Social Sciences	31,553	16.34%	4.92%
Physical Education	8,971	14.22%	5.02%
Education	13,496	13.93%	4.89%

Table 30. Failure Rates in Departmental Courses (1998-2003)

Assessment Results of Pilot Project during 2002-2003
The effectiveness of the pilot projects of the General Education Renovation Project, described in Chapter 12, was assessed by quantitative and qualitative means, such as: analysis of student profiles, student perception surveys, and videotaped pre and post interviews. A brief description of the results from this project during the 2002-03 academic year follows. Results of specific courses, and assessment of specific General Education abilities, are presented in Section 14.4.

Student Profile 2002-03
Both academic and personal information was compiled by the Counseling Office and the two participating librarians to draw up the student profile. Many of the students had low CEEB scores in one or more disciplines; even though they took required summer preparation courses, they were still struggling. Furthermore, they were unaware of the many library services and

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[78] Exhibit 14.2A
[79] Exhibit 14.2B
[80] Exhibit 14.2C

databases they could use for their studies. Based on these findings, professors made adjustments in their courses and documented them in the final report.

Student Perception Survey 2002-03

A questionnaire designed to measure student perception of the project provided the following results in the areas of academic success and overall perception. The students found the project effective in helping them develop the ability and content objectives of the courses. For example, between 86% and 100% of the students felt they had developed the abilities of creative and critical thinking and mathematical reasoning while most (60% to 70%) felt they had improved their ability to communicate effectively in English and Spanish. They found the teaching methodologies and the interdisciplinary focus effective in helping them to integrate knowledge. Overall, students were satisfied with their experiences in the courses (88%) as well as the relationships they established with each other and with their professors (94%). Many (88%) said they recommended the project to other students and considered it a supportive experience that allowed students to help each other. The reasons they gave for wanting to stay in the project were the relationships between students and professors, comradeship, and the academic support it provided through the counseling and library components.

Videotaped Pre and Post Interviews to Measure Whole Development

Students were interviewed by the professors to determine success in developing effective communication skills as well as some of the notions included in *Profile of the Ideal Graduate* about responsible citizenship, goodness, beauty, solidarity, and the role of the university in their whole development. By the end of the year, students were more articulate and spoke more freely, with richer and more fluid expressions. Students also demonstrated that they had substantially enriched their concepts of goodness and solidarity. By the end of the year, being a good Puerto Rican meant having a social conscience, defending and protecting the environment, and defending the culture as well as one's identity. Their concept of solidarity was enriched to include the responsibility of defending just causes. Their concepts of citizenship and beauty were developed to a lesser degree. They perceived the University as a place of reflection, analysis, and critical thinking where they could acquire skills and knowledge to defend their ideas more coherently, to communicate better, and to serve society better.

Assessment Results of Pilot Project during 2003-2004

During its second year, the project produced a monograph series to provide concrete examples of the types of strategies that could be used in transforming the General Education curriculum. Three monographs have been completed; four others are in process. Two of the completed monographs concern strategies used to assess the overall project; the third promotes field trips as a strategy for examining an object of study from an interdisciplinary perspective. The four monographs in process concern the curricular integration model used, the library component, the orientation component, and team teaching in the Basic Biological Sciences.

Student Profile 2003-04

The data obtained from the electronic information system and the *Report of Incoming Freshmen 2003-04* indicate that all the participating students were single, lived with both parents, and were not employed, while two had physical impediments. They were interested in pursuing graduate studies in medicine, science, or law. The majority were majoring in Natural Science in Biology,

Math, or Education in the areas of Math and Secondary Level Science. Knowing student results on the CEEB and their GAI helped professors adjust course content and assessment activities to student needs. Both scores were high. Even the lowest score, for the English section of the CEEB, was above the cutoff score for Basic English, indicating that most did not need the preparatory Pre-Basic English course. The high GAI implied that the students had good study habits.

Student Perception Survey 2003-04
In the second year of piloting, the student perception survey was qualitatively validated and administered again In terms of academic success, students felt they had been either very well or well prepared in the abilities and content areas covered throughout the semester. They identified the assessment methods of oral presentations, oral reports, and investigative essays as the most effective in helping them develop their abilities and learn the content material. When asked about adapting to university life, they responded that the project had been effective in developing in them a sense of belonging to and being a part of the institution. In general, they expressed certainty that, through the interdisciplinary focus and the selection of teaching methods and strategies used in their classes, they had developed the abilities and learned the content required in their courses.

14.3 STUDENT LEARNING ASSESSMENT ACTIVITIES – PROGRAM LEVEL

At the program level, the IAP requires that self-analysis of program effectiveness be initiated in every academic department. Using a model with need and quality indicators that are uniform but flexible, the faculty of each department will document their program's effectiveness in meeting its own goals and objectives. Program level assessment should consider the relationship between curriculum and the needs of students and society. During the 2002-2003 academic year, the Academic Senate's Commission on Academic Affairs approved procedures and indicators to assess the quality of academic programs, based on the IAP; these were submitted to and endorsed by the Academic Senate (see Exhibit 11.3A). In order to pilot test the procedures and assessment indicators, four departments volunteered to participate in assessing the quality of their programs. During the 2003-2004 academic year, the following programs were assessed: Biology; Mathematics; Technology and Office Management, and Office Systems; and six programs in elementary education—Natural Science, Spanish, English, Social Studies, Special Education, and Mathematics.

Assessment Reports were submitted to the Commission of Academic Affairs in May 2004. The Commission is currently studying the reports, in preparation for submitting its own report to the Academic Senate Its report will synthesize the assessments and recommend actions to be taken. It will also recommend changes in the procedures and indicators used to assess the quality of the academic programs, if needed. The Academic Senate will study the Commission's recommendations and decide both on the actions, if any, to be taken concerning the programs and on implementing any recommended changes in the established procedure for assessing the programs.

It is also important to note that UPRC has initiated a process to obtain external accreditation, or evaluation, for some of its programs. These efforts will provide valuable information on student

learning outcomes as well as overall institutional effectiveness. With support from the UPR Central Administration, UPRC is seeking candidacy for the NCATE's accreditation of its teacher preparation programs. The Library, Museum, Chemistry, and Business Administration programs are in the orientation stage for eventual external accreditation.

Complementary Program Level Assessment Activities

English Department

In August of 2002, Dr. George Noble, the former UPRC English Department chair, presented a proposal for an *Institutional Mentoring Project for Course and Program Assessment*[81] to complement the IAP. The objective of this assessment initiative was to promote classroom assessment throughout the faculty and to cultivate course and program assessment at the grassroots level of the academic departments. Through its mentoring efforts, other departments representing the three academic areas are also immersed in the process of developing program assessment plans. A key element of this plan is that it gives faculty the opportunity to share ideas with each other and to collaborate in the revision of their teaching. The proposal was presented to the Board of Directors and Academic Senate and implemented in January of 2003. As a result of this initiative, several departments have initiated assessment activities and have student-learning outcomes to report at the course level; in the near future they will also report outcomes at the program level. In addition, workshops on assessment techniques have been offered and meetings have been held to share concerns on assessment, as well as to share information on the procedures used and the resulting course improvements.

Biology Department

Instruments were designed to evaluate the departmental offerings and to solicit student opinion of the curricular changes that were approved by the Academic Senate in 1999. The revision made the program more flexible and attuned to student goals and interests. Because it eliminated several courses and prerequisites, students were able to graduate in 4 years. In April of 2002, the Departmental Curriculum Committee also approved revisions to the student profile.

Hispanic Studies Department

Since 1999, the Hispanic Studies Department has been conducting surveys of its Alumni. These reveal that, after graduation, most students go on to graduate school and later successfully finish their degrees. They also show which courses students perceive as most helpful, as well as which areas need to be improved. Students suggested that the Investigation Seminar should be taught in one semester, instead of a full year, and that a course on Literary Theories would be helpful for those planning graduate studies. The Department has implemented both recommendations.

Chemistry Department

The Chemistry Department revised its program goals and objectives and the profile of its ideal graduate. Assessment revealed such deficiencies as withdrawals and failing grades in General and Organic Chemistry, as well as lack of lab skills and few opportunities for students to do quality research. Correcting of these deficiencies is necessary for the accreditation by the American Chemical Society, which the department is striving to attain. In 2002, through a MSEIP federal project, Chemistry faculty began to assess whether they were achieving the following objectives: an increase in student recruitment, higher graduation rates, increased

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[81] Exhibit 14.3

numbers of students who pursue graduate studies in chemistry, improvement in lab skills, increased undergraduate research, and enrichment of the curricular sequence through enhancement and incorporation of its technological infrastructure.

The Library

Library personnel have developed various strategies to assess: their policies and practices, student services, physical facilities, the pertinence of their collections, and conservation of their resources. A revision of course syllabi, evaluation of the collections, and full inventory of their resources have allowed them to: develop a strategy for making better use of their budget, update the public electronic catalog, and revise working instruments such as the data bases for cataloguing and classifying resources. Research conducted by some library faculty through the *Institutional Fund for the Development of Research* has been instrumental in the betterment of their general services.

Honor's Program

In 2003, an Assessment Plan was designed by a committee comprised of faculty from each of the academic areas, the Dean of Academic Affairs, the president of the Student Association, the Director of the Honors Program, and a professor who was mentoring faculty participating in departmental assessment initiatives. The plan is being implemented and results will be analyzed next semester.

14.4 STUDENT LEARNING ASSESSMENT ACTIVITIES – COURSE LEVEL

At the course level, the IAP recommends three strategies: individual assessment projects that are motivated by an assertive institutional policy and facilitated by a good training or instructional program; a system for identifying courses with serious problems in their passing rate and, consequently, require intensive assessment; and a simple process of course auditing carried out by each professor and submitted with his or her final grade report. The audit system is already under discussion at the Faculty Curriculum Committee and a specific proposal is due next semester. In terms of passing rates, Section 14.1 already described the report that is presented to every academic department with specific grade statistics for every course. The report recommends that departments contemplate assessment projects for courses with high failure rates, to determine whether the high level of failure is a new tendency or a constant pattern; such projects are under discussion at the departmental level.

Assessment of Pilot Project at the Course Level during 2002-2003
The results of course level assessment for the General Education Pilot Project are presented in Table 31.

Abilities	Assessment Results
Effective Communication	Although students arrived with great limitations in effective communication in English, they showed improvement in structuring an essay, listening, vocabulary, and the mechanics of reading. They still need to work on reading comprehension and grammatical skills for more substantial improvement in their overall competence. End of course grades (A's and B's) in Humanities evidence effective writing. By the end of the year, 86% of students in basic Biology demonstrated effective writing in their portfolios. The librarians found the science research projects were coherent and clear but needed more work in terms of documentation. By the end of the year, 86% of the students showed effective communication in algebraic language.
Critical Thinking	In English, most students (90% to 92%) were able to make logical inferences in their oral presentations and to substantiate their ideas by including other sources in their research essays. Use of a reflective diary throughout the year stimulated development of the thinking process in students taking Humanities. In CIBI, all students were able to identify scientific facts in anecdotes. In Math, less than half (40%) of the students were able to justify operations they performed using algebraic expressions with principles from the body of real numbers. In the library discussion of a movie ("Wag the Dog"), it was not evident to the students that there was a complete manipulation of public opinion. When a counselor asked students to write a short reflective essay on how they plan and manage their time, 66% were able to complete it satisfactorily.
Use of Technology and Information	In English, all students learned to use PowerPoint and were able to effectively use computer programs and internet sites to learn independently during lab hours. More than half effectively designed a webpage. In Humanities, students designed a virtual university of the future as a final project. Librarians collaborated with CIBI professors by offering and assessing a series of workshops on how to prepare a research project. The post-test showed improvement in attitudes and information skills.
Teamwork	In English, all students learned to assume group responsibilities and to participate actively in group discussions. In Humanities, students worked in groups to prepare and present a video essay on identity as a cultural concept. In CIBI, 67% of the students developed competence in the ability to work in groups; all of them handed in their group research projects and self-assessed their teamwork skills and attitudes.
Care of oneself	By the end of the year, 71% of the students taking CIBI were able to identify healthy life styles and explain how these help maintain the body in optimum condition. The results of a pre test administered to the group by the Counselor showed that students' most common fear (52%) was failure. In the post test all students were able to explain the relationship between sentiments, thoughts, and behavior and how they affect academic motivation; 86% had acquired knowledge related to the theory of emotional intelligence. They took a workshop to develop study habits using the study SQ4R system and successfully completed (86%) an exercise on the use of the strategies of pre-reading and rapid review of a chapter.
Mathematical Reasoning	Mathematical reasoning was developed in the Math class. A majority of the students were able to do demonstrations of theorems and correctly analyze numeric and graphic information, while less than half were able to interpret lineal mathematical models correctly. More than half felt that math was essential in various aspects of daily life.

Table 31. Assessment Results at the Course Level (Pilot Project 2002-03)

First Year Basic English Course
The assessment of INGL 3101 and INGL 3102 during the 2002-2003 academic year responded to the English Department's desire to know whether the Basic English Program was meeting its goals and objectives and how students perceived their own learning. A representative sample of 171 students in 7 course sections (30% of the Basic English population) was used to evaluate the program. The Language Assessment Scale (LAS) was used to assess students' linguistic competence in reading and writing, while the Online Peak Test measured their listening comprehension. Students' perceptions of their learning was measured using various questionnaires. One major finding was that 60% of the students taking Basic English entered the university with serious limitations and deficiencies in English. Six of seven sections increased their scores in reading. All sections improved in writing, indicating that the methods and strategies used had been effective. Student perceptions coincided with post-test results.

Preparatory Basic English Course
The course goals include improving listening, speaking, reading, and writing skills, as well as increasing motivation and curtailing affective barriers. For the summer of 2000, the teaching methodology was changed to team teaching. Achievement of the goals is measured by a pre/post diagnostic test. Fifty-four percent (54%) improved in their post-test scores. In 2001, the pre/post test was changed to the Language Assessment Scale (LAS). Implementation of recommended changes had a positive effect on student performance. In the area of reading, 61.51% of the students improved their post-test score by 5% or more, and 63.03% improved their post-test score in writing by 5% or more. In 2002, four different types of instruments were used: a 50-item pre/post test, 10 questionnaires from Douglas Brown's book *Strategies Based Instruction* (2001), a technology questionnaire, and a questionnaire for student assessment of the course. Of the 393 students enrolled, 96% were post tested. Eighty percent demonstrated progress. Students felt they had improved their skills and attributed that improvement to the course. In the summer of 2003, 235 students took Pre-Basic. A comparison of the pre/post test results shows that 82% of all students improved their scores. A majority felt the course contributed to their improvement and would recommend the course to other students.

First Year Basic Spanish Course
Dr. Janette Becerra participated in the *Institutional Mentoring Project for Course and Program Assessment* and prepared a report on the results of the pre-test administered to students taking the Basic Spanish Course (ESPA 3101-02) during this academic year. The course is being revised in its contents and objectives. During the summer of 2004, the Hispanic Studies Department designed an instrument to assess whether or not students were achieving the objectives of ESPA 3101-02. It consisted of a multiple-choice section as well as an essay. The 30-item multiple choice section covered 15 distinct areas ranging from the history of the Spanish language and linguistics to reading comprehension. It was administered to 595 students (out of a 637 student population). The essay was assessed using a holistic rubric and was administered to a representative sample (six sections) of the population. Eighty percent (80%) of the students failed the pre-test, answering less than half of the 30 items correctly. Their knowledge of the history of the Spanish language and linguistics demonstrated the greatest deficiencies, with a failure rate of 84%. In the area of writing, 80% of the students classified in the intermediate category, with 17% in the superior category, and only 3% in the inferior category. The post-test will be administered in May 2005.

Preparatory Basic Spanish Course

The pre-test includes various orthographic areas and results are graded on a 100% scale. In 2000, of 296 students enrolled, 61% obtained a score below 70%. On the pos-test, 94% scored 70% or higher. The following year, 57% scored below 70% on the pre-test, and 96% scored 70% or above on the post-test. In 2002. 317 enrolled in the course: 70% scored below 70% on the pre-test, while 84% scored 70% or higher on the post-test. In 2003, of 225 students, 218 passed the course. In 2004, 225 students enrolled and 72% of them scored 70% or higher on the post-test. Though these numbers show success, the Department is experimenting with new strategies for addressing specific learning units and is seeking to write a book that focuses on the particular skills that our students lack. In the past three years, the Department integrated a survey on student satisfaction into this course. Results show that students perceive the Pre-Basic course in Spanish to be a meaningful and attractive one.

Mathematics Courses

The Mathematics Department has been carrying out assessment efforts that include their *Preparatory Mathematics Basic Course, Pre-Calculus. Algebra,* and *Introductory Math* courses. Based on the results of previous action research in Pre-Calculus, an additional 1.5 hours per week of laboratory activities were added to the course. These activities include supervised practice, cooperative learning, application of modeling techniques, and the development of meta cognition. The piloting of the course demonstrated that close to 76% of the students passed the course with a C or higher grade. The Preparatory Mathematics Basic Course contains a strong assessment component that includes a pre/post test, professor and student assessment of the course, and self-assessment of learning goals.

Other Assessment

Other assessment efforts include: a study in progress of graduates from the Social Science department; an assessment plan in the Education department that includes assessment of students. curriculum, and programs; and a questionnaire to assess needs of incoming freshmen from the Natural Sciences program.

14.5 USE OF ASSESSMENT INFORMATION

Student learning assessment at UPRC is essential to every curriculum revision process that takes place in the institution. At the institutional level, the rigorous and extensive assessment that was performed in the pilot projects led the way in designing a more ambitious renovation project, as described in Chapter 12. Ongoing assessment of the General Education renovation process is currently a central part of the institutional renewal agenda. At the program level, the English Department has assumed a leadership role by modeling for others the use of sound assessment practices in order to increase the productivity of their academic program. The *Institutional Mentoring Project for Course and Program Assessment,* initiated in this department, has promoted many more assessment activities campus wide.

There are abundant examples on how student learning assessment at the course level has motivated changes in teaching methodologies and in classroom assessment techniques. In the case of the Preparatory Basic English Course, to mention one example, there is clear evidence of

the impact of assessment on improved teaching. Based on difficulties students demonstrated in listening and speaking in the summer of 2003, the Pre-Basic Coordinator decided to focus more on productive skills than on learning styles in the summer of 2004. With the change, 62% of the students increased their scores. Most students felt the course had contributed to their improvement.

The assessment of student learning has also been used as part of institutional assessment efforts in many areas. Graduation rates, for example, have been used as an important variable in the analysis of and decisions about institutional and departmental student carrying capacities. They are also used as a measure of program effectiveness and are updated every year to follow up on improvements. In addition, the regular report on passing and failure rates for all courses in every department has allowed the institution to assess the financial impact of course repetitions. For example, between 1998 and 2003, 23.6% of all students who obtained an F grade and 14.7% of those who obtained a D grade repeated the course. The annual cost of these repetitions has been estimated at $315,084, which amounts to 57% of the budget assigned for extra course compensations that are paid to the faculty. In the near future, the Academic Senate will consider establishing more strict conditions for course repetition.

FINDINGS

1. The effective use of assessment results has improved in recent years at UPRC and now guides decisions related to teaching and to overall institutional effectiveness.
2. Student learning outcomes at the program and course level need prompt revision.
3. Program level assessment of student learning has improved in some departments that should be models for others to follow.
4. Documentation of assessment efforts needs to be an ongoing process and should replace more informal assessment.
5. Many direct and indirect student learning assessment activities at the course level, mostly in basic courses, are guiding revision of teaching practices.

RECOMMENDATIONS

1. Complete the revision of student learning goals in all academic programs.
2. Continue faculty development on assessment techniques.
3. Continue the comprehensive assessment of general education courses, disseminate the results, and share successful assessment practices with other institutions.
4. Continue to provide administrative support in order to increase campus-wide involvement in student learning assessment.
5. Recognize and disseminate outstanding efforts and promising practices in student learning assessment at all levels.

Conclusions, Recommendations, and Future Plans

This Self-Study Process has revealed that during the last decade UPRC has undergone dramatic changes in the areas of academic offerings, faculty, upgrading of equipment and educational resources, student services, governance, and administration. It has provided a clear picture of what is being accomplished and has identified current strengths and challenges. A key element in the process has been the active participation of faculty, students, and non-faculty personnel, within a collegial environment.

The Steering Committee recommends the preparation of a comprehensive plan of action to address each of the specific recommendations included the individual chapters of this report. Ongoing good work in many areas is included in some of the recommendations to emphasize the importance of continuing on the right track. Recommendations of this kind relate primarily to the ongoing assessment environment that has been set up after the approval of the IAP and to the curriculum renovation underway in the General Education component. Specific and deliberate actions have to be planned in order to maintain progress in these areas. Several recommendations specify new actions to be taken in order to improve institutional effectiveness.

These actions recommended in each chapter are summarized and grouped in the following six tables according to general key areas (the numbers in parentheses indicate the chapter and corresponding recommendation numbers). The proposed time frame for completing the activities related to each recommendation is an estimate, in semesters, starting in academic year 2005-06, to span the five-year period between now and the next Periodic Review Report. Most recommendations will require the collaborative work of many entities, but the tables also include The names of those who will provide leadership and be held responsible for directing the implementation activities needed to accomplish each task.

RECOMMENDATIONS ON PLANNING AND ASSESSMENT	Semesters (est.)					Coordination By
	1	2	3	4	5	
1. Revise the Mission, Goals, and Objectives (1|1)	■	■				Academic Senate
2. Complete the database structure for institutional research (2|1)	■	■				Planning Office
3. Update the Strategic Plan (2|2)			■	■		Faculty Committee on Planning and Assessment
4. Develop a new Master Plan (3|1)	■					Planning Office
5. Revise the Institutional Assessment Plan (7|3)		■			■	Faculty Committee on Planning and Assessment
6. Develop specific mechanisms of assessment of student satisfaction with services (9|2).	■	■				Dean of Student Affairs
7. Complete assessment of the Athletic Program (9|3).	■	■				Dean of Student Affairs
8. Develop a work plan for the Faculty General Education Committee (12|3).	■					Faculty Committee on General Education

RECOMMENDATIONS ON CURRICULUM AND OTHER ACADEMIC ISSUES

Recommendation	Semesters (est.) 1	2	3	4	5	Coordination By
1. Establish a bridge program for incoming students (8|2).	■	■				*Faculty Committee on Student Affairs*
2. Identify strategies to further promote the museum as a learning resource (11|5).	■	■				*Academic Senate's Learning Resources Comm.*
3. Complete the integration of information literacy skills into all general education courses (12|4).	■	■	■	■		*Faculty Committee on General Education*
4. Incorporate the use of web based technologies in preparatory courses (13|2).		■	■			*DCEPS*
5. Offer formal certificate programs through DCEPS (13|3)			■	■	■	*DCEPS*
6. Revise student learning goals in all academic programs (14|1).	■	■				*Dean of Academic Affairs*
7. Create a referral system for student orientation and support (9|1).	■					*CEDE*
8. Create a tracking system for at-risk students (13|1).		■	■			*CEDE*

RECOMMENDATIONS ON PERSONNEL ISSUES

Recommendation	Semesters (est.) 1	2	3	4	5	Coordination By
1. Establish formal professional development experiences for academic and administrative leaders (5|1).	■					*Chancellor*
2. Evaluate and implement alternative methods to reduce teaching overload for faculty (10|1).	■	■	■	■	■	*Dean of Academic Affairs*
3. Offer faculty development on curriculum and pedagogical issues (12|2).	■	■	■	■	■	*Dean of Academic Affairs*

RECOMMENDATIONS ON RESOURCE ALLOCATION AND FINANCIAL ISSUES

Recommendation	Semesters (est.) 1	2	3	4	5	Coordination By
1. Acquire or develop cost effective technological options (3|2).	■	■	■	■	■	*Chief Information Officer*
2. Provide on-line access to administrative procedures (3|6).	■	■				*Chief Information Officer*
3. Create ad hoc committee to make recommendations for dealing with financial situation. (3|3)	■			■		*Administrative Board*
4. Strengthen the External Resources Office (3|5).	■	■				*Chancellor*
5. Equip additional classrooms with multimedia presentation equipment (11|3).	■	■	■	■		*Dean of Academic Affairs*

RECOMMENDATIONS ON GOVERNANCE AND ORGANIZATIONAL ISSUES	Semesters (est.)					Coordination By
	1	2	3	4	5	
1. Study the possibility of offering credit for student participation in governance (4|1).	■					*Academic Senate*
2. Evaluate alternatives to the current organization of academic departments in three areas (4|2).	■	■				*Dean of Academic Affairs*
3. Revise composition and duties of Institutional Ethics Committee (6|3).	■					*Chancellor*
4. Provide better coordination of all student support services (9|4).	■	■	■	■	■	*Faculty Committee on Student Affairs*

RECOMMENDATIONS ON DISSEMINATION AND DOCUMENTATION	Semesters (est.)					Coordination By
	1	2	3	4	5	
1. Improve dissemination of institutional policies on integrity (6|1).	■					*Chancellor*
2. Establish procedures to review all promotional materials before publication (6|2).	■					*Chancellor*
3. Include a Code of Ethics in current student and faculty regulations (6|4).		■				*Academic Senate*
4. Further disseminate outstanding efforts and promising practices in both institutional assessment and student learning assessment (7|2) (14|5).	■	■	■	■	■	*Dean of Academic Affairs*