

INTRODUCTION OVERVIEW OF THE UPRB

The University of Puerto Rico at Bayamón (UPRB) is a branch of the University of Puerto Rico. As an institution of higher learning, it is striving to transmit knowledge as it cultivates the humanistic and social qualities as well as life-long learning skills in the individual so s/he may play an active role in society.

Located in the densely populated northeastern part of the island, the UPRB serves both the urban and the rural sectors of the community. Most students come from the municipalities of Bayamón, Cataño, Dorado, Comerío, Naranjito, Corozal, Toa Alta, Toa Baja, and Vega Alta.

The UPRB is a four-year college, which offers bachelors degrees in office systems, business, preschool and elementary education, physical education, materials management, electronics, computer sciences, and biology. It also has associate degrees programs in electronics, office systems, business, computer sciences, and engineering technology. There are also transfer programs in engineering, humanities, natural sciences, social sciences, and education. It began as a two-year college in 1971 under the Regional Colleges Administration (RCA) of the University of Puerto Rico (UPR) and was known as the Bayamón Regional College. At that time, the Institution began with a student body of 511 and a faculty of 36. In 1979, four-year programs began and the Institution's name changed to the Bayamón Technological University College (BTUC). In 1998, it became Bayamón University College (BUC) and was transformed into an autonomous institution. In other words, it became a self-governing institution where academic and administrative decisions were to be made by the chancellor and his/her staff. However, although the Institution is autonomous academically and administratively, since it is a public university and a part of the UPR system, decisions regarding budget and other

administrative procedures are determined by the office of the President of the UPR. For example, funds are allocated by the Senate of the Commonwealth of Puerto Rico to the UPR President and Governing Board, who in turn assign them among all the campuses of the system. The procedures followed are in accordance with the General Regulations of the UPR, which applies to all units of the UPR.

Recently, all the former regional colleges under the UPR underwent another name change. The Institution's name was changed to the University of Puerto Rico at Bayamón (UPRB). The UPRB presently serves almost 6,000 students with approximately 300 faculty members and 300 non-teaching administrative personnel.

In addition to becoming an autonomous institution, the UPRB has begun the process of substituting its temporary facilities for permanent ones. The new library has already been built (in operations since June 1998) as well as the gymnasium. Presently the student center and administrative offices building is under construction. Following the master plan, the construction of other buildings will be initiated. It is expected that all construction will have been completed by 2020. This means that for the next 20 years, construction will be an on-going process, with the completion of one phase and the beginning of the next. Although this may represent some limitations, planning has been carefully carried out to assure that the educational development of the University is not affected.

It has been a University policy to attempt to maintain enrollment in the technological areas as well as in the liberal arts. In addition, the UPRB has expanded its degree offerings. Last year the Biology Department initiated two bachelor's degrees: Human Biology Approach and General Biology. Also, some departments revised their existing programs and made significant

changes to the curriculum. Presently, the Humanities, Mathematics, Social Sciences, and Electronics Departments are each working on the creation of a bachelor's degree program.

The associate and bachelor's degree programs are also offered in the evenings and Saturdays, thereby giving the community the option to complete studies outside of their regular work schedule. The programs being offered in the evenings and Saturdays are Business Administration, Electronics, Computer Sciences, and Early Childhood and Elementary Education. In addition, the College offers service and continuing education programs to the community. This past year the University has been offering orientations and training in Distance Learning and hopes to initiate courses via the Internet in the near future.

The UPRB makes a great effort to offer a variety of specializations to provide for the diverse student interests and abilities and also attempts to offer students realistic goals through which they may serve the community, achieve a sense of well being, and benefit economically.

The students who enter the UPRB generally have a high school GPA over 3.00 (4.00=A) and usually score high on the College Board exams. Most also come from middle to low-income families.

The faculty of the UPRB is very competitive, 98 percent have at least a master's degree. The variety of offerings makes the faculty a diverse population with representatives in the humanities, sciences, and technology.

In order to meet the Institutional goals, various objectives have been established that appear enumerated in the mission that follows.

Philosophy and Mission

The UPRB is an institution of higher learning established with three fundamental purposes:

- *To function as a center for the dissemination and development of technological, scientific, and humanistic knowledge.*
- *To prepare persons who, through their university experience, will develop the knowledge, skills, aptitudes, and attitudes necessary to function as responsible citizens who are informed and capable of actively participating in a dynamic society that requires competent people in technological fields.*
- *To support and collaborate with the Puerto Rican society, paying particular attention to the Northeastern section of the island, with respect to human, technological, and cultural development.*

In order to comply with these goals, the UPRB should:

- *Foment critical thinking and self-expression in graduates, so they may react effectively to situations.*
- *Equip students to perform professionally in technological, humanistic, and scientific fields.*
- *Promote research in technological and humanistic disciplines to generate new knowledge.*
- *Develop interdisciplinary investigations so as to integrate and synthesize knowledge and derive new perspectives and focuses to identify, categorize, and solve problems.*
- *Apply technological, humanistic, and scientific knowledge in the design and evaluation of technical systems used in everyday situations.*
- *Offer administrative support to the college community in order to provide an appropriate educational and research environment that will benefit society.*
- *Serve the community through activities that contribute to the active adaptation and development by making the institutional resources available for investigating, acquiring, and applying knowledge.*

The mission is open to revision as new knowledge is discovered and developed.

Vision

The UPRB, an institution of higher education within the UPR system, has three fundamental goals:

- *Its principal goal is to offer university education, focusing primarily on technology, directed towards the transformation of the individual through an integrated vision of knowledge.*
- *The technological aspect satisfies a basic social need of Puerto Rico and the world: to promote critical thinking so as to prepare students to identify paradigms in transformation and to facilitate their adaptation to the social and natural setting of the new century.*
- *This active adaptation requires that the ability and disposition to think be effectively developed both in and out of a technological working context.*

According to this philosophy, a university education should be a process of intellectual transformation of students toward a state of developed knowledge. It should encourage a process of learning that stimulates student dispositions to continue learning and promote entrepreneurship for self-employment or for taking advantage of the opportunities in technological jobs.

The purpose of this acquired knowledge is the active adaptation of learners to their changing environment. This signifies achievement of the best possible interaction with themselves, society, and nature.

Students should:

- *Recognize change as a constant principle in the evolution process of humanity and, instead of conforming by simply reacting, they can integrate themselves creatively and consciously.*
- *Identify elements within themselves, society, and nature that need to be changed.*
- *Generate ideas and actions that contribute to produce desired changes in themselves as well as in their social and natural environments.*
- *Appreciate and integrate ethical and esthetic sense in ideas and actions that contribute to change.*
- *Identify with and support the values of a democracy and the ecological well being of society now and in the future.*

- *Foment the integration of knowledge gained through research and interdisciplinary teaching to achieve new connections, perspectives, and synthesis of present knowledge.*
- *Promote development of effective thinking processing in problem identification, definition, characterization, and solution as well as in decision-making processes.*

Effective thinking has four dimensions:

GENERATIVE: *To produce ideas for transforming information into knowledge.*

INTEGRATIVE: *To reconstruct systems with bits of knowledge in which the whole is greater than the sum of its parts.*

EVALUATIVE: *To contrast and evaluate ideas and actions according to criteria and alternate points of view.*

APPLICATIVE: *To transform knowledge into practical action oriented towards the solution of a specific problem.*

Technological education does not limit its objectives to a working marketplace; instead, it prepares learners for modern technological innovations. This includes the design and evaluation of technical systems or artifacts in which the application of knowledge and scientific methods are required. It allows learners to experiment with changes, whether they succeed or not in their intent.

The quality of UPRB was affirmed by the accreditation of the Middle States Association in 1996 and the Puerto Rican Council of Higher Education (*CES-Consejo de Educación Superior*) in 1997.

Through this Self-Study process, the University community has been able to examine the components of the Institution to determine to what extent the Institution has

- ✓ met the mission and vision
- ✓ complied with the Institutional Strategic Five Year Plan 1996-2001
- ✓ adjusted to autonomy

- ✓ complied with the recommendations made by the MSA-CHE in the Periodic Review Report of 1996.

It is the Institution's hope that its findings will guide it to make the necessary adjustments to successfully accomplish its mission and meet the needs of the Puerto Rican community in the 21st Century.

MISSION, GOALS AND OBJECTIVES

The mission statement (See Introduction for mission) of the Institution was approved by the university community in 1996 when the Institution was known as Bayamón University College (BUC). Since then, the BUC has become autonomous and its name has changed to the University of Puerto Rico at Bayamón (UPRB). Although the Institution has had changes in status and in name, our mission, goal and objectives have remained the same. As part of our self-study, it was essential that the mission, goals, and objectives were reexamined to determine if changes should be made in the light of its present status and the needs of the society served.

The standard that was used to guide this part of the study was as follows:

- *clearly stated mission and goals appropriate to the institution's resources and the needs of its constituents.*

Upon analysis of the questions posed in the Self-Study Design, the report revealed the following for each of the questions:

1. Are the objectives of the institution clear? Are they expressed in terms appropriate to higher education?

The objectives were examined as three distinct elements. First, they were examined in general as something that completes, or tries to complete, an action or operation. This perspective applies to the mission as well as the goals and objectives identified in each of the levels: faculty, department, and the academic, administrative, and student affairs offices. Next, the mission itself was analyzed as it refers to the purpose and the action needed in order to have objectives responding to the mission. Finally, the objectives were examined in reference to the specific actions at a particular moment as identified in the Institutional Strategic Plan (ISP). Based on this analysis, it was found that both the mission and the ISP are clear and present in

the academic departments' plans. They have also been taken into consideration by the writers of academic proposals when affirming the purposes and objectives. Based on the aforementioned analysis, the objectives identified are appropriate to our Institution and to the higher education level it represents (See Institutional Strategic Five-Year Plan 1996-2001).

2. Are the objectives suitably broad in scope?

The objectives stated in the mission, vision, and ISP of the UPRB take into consideration the needs and services essential to the Institution. The dissemination and acquisition of knowledge, the academic preparation of the professional, as well as the human, cultural, and technological development of the individual are objectives of the Institution which are met through various means.

Research is promoted through the Institutional Policy of Research and Academic Development which was adopted from the Regional Colleges Administration by the UPRB in February 1999. The dissemination of research results has been achieved through academic journals of the UPR, such as *Milenio*, which was created with this purpose in mind. Other academic journals, academic conventions of Latin America, the United States and the Caribbean, local newspapers, and the UPR newspaper, *Diálogo* have also been used to disseminate research results. In addition, faculty members actively participate in various forums in their specialized areas. One of these is the annual event known as the *Congreso Annual de Investigación y Creación Académica* (Annual Congress of Research and Academic Development).

Regarding the academic credentials of our faculty, our University remains current in the technological advances and in the latest pedagogical tendencies (Source: Academic Dean's annual reports). This strengthens and enriches the institutional programs. However, the need to

strengthen the area of assessment to ascertain the effectiveness of its academic goals and the pertinence of its alumni's academic preparation in the job market is recognized. The UPRB's efforts to do so are notable and can be witnessed by the Institutional Assessment Plan and professional activities. In order to address this, during these last two years, a coordinator has been appointed to develop an assessment plan. Orientations and training have been continuously offered to all university personnel on assessment; however, we are at the initial stages of having it become an integral part of the Institution.

The search for an appropriate attainment of the technological and the humanistic fields in the development of our students is what distinguishes the UPRB from other post-secondary institutions in our country. The general educational component required in each of the academic programs guarantees this.

3. Could the objectives of the Institution be identified in its programs, policies, activities and other characteristics? How does each department integrate the policies, priorities and objectives of the institution?

The Institutional objectives are included in the programs, policies, activities and overall identity of UPRB. The mission of the academic departments and the strategies of the administrative and student affairs offices sustain the goal of systematically meeting the ISP, which in turn is guided by the UPRB's mission (Source: Mission and Goals of the Academic Departments and the ISP of 1996). The Puerto Rican Council of Higher Education, known by its Spanish acronym as CES, and which has accredited the UPRB, requires that institutions, in their proposals for new academic programs, demonstrate how the program will meet the Institutional mission at both levels, the unit and at the UPR system.

In 1996, the CES established that all programs undergo curricular revisions in order to comply with the institutional mission, goals, and objectives of the UPR system. As a result, the

curriculum is being revised in order to comply with the mission. This was also incorporated to the ISP (See Objective 2.1 of the ISP). All departments have established their mission and goals according to the institutional mission.

Through the accreditation of the CES, the aforementioned is evidenced and confirmed. Programs, student profiles of the academic programs, activities, and course syllabi examined include the policies, priorities, and objectives of the Institution. For additional information, see the Charges of Educational Program (Question 1) and Institutional Effectiveness and Outcomes (Question 3).

Throughout the mission, it was identified that there is an emphasis on critical thinking abilities. In one way or another, the academic programs include the development of critical thinking abilities throughout the curricula; nevertheless, there is no evidence to confirm this in the student and administrative components.

Recommendation:

The academic programs and other components of the academic endeavor need to give more attention in the search for ways to monitor the effectiveness of curricula offerings to enhance critical thinking abilities and to achieve the goals and objectives of the Institution.

4. Does the Institution respond to the society and the cultural circumstance of its students? Is the Institution proactive or reactive to these issues?

The third point of the mission of the UPRB is to establish support and collaboration with the Puerto Rican society, specifically with the northeastern and central sector which is the part of the island that UPRB mostly serves. The focus of this support and collaboration has been humanistic, technological, and cultural. The findings of the sub-committee have demonstrated that the Institution has developed the humanistic, technological, and cultural aspects through the following:

A. *Humanistic Development*: The analysis was based on the general educational program courses and on the specific curriculum of the academic programs offered, since these contribute significantly in the formal academic preparation of the university student.

- The general educational program courses develop humanistic sensitivity essential in a university graduate no matter what is his/her area of major and empowers the individual to function in his/her profession as well as in his/her social and community environment.
- In addition, the recently created or revised bachelor's degrees programs are committed to integrate the humanistic element in the curriculum.

For example:

- the biology program develops scientists with a social consciousness with emphasis on community service.
- society has an urgent need to prepare effective pre-school and elementary educators sensitive to the educational needs of children. As a result, the UPRB through its bachelor's degree programs in Early Childhood and Elementary Education includes general and major courses that reflect the most recent educational tendencies and research related to humanistic education.
- society also recognizes the importance of Physical Education to promote the development of mentally and physically healthy individuals, especially those with special needs. To satisfy this social and cultural circumstance, the Special and Elementary Physical Education Program was developed.
- the UPRB's commitment to society and cultural circumstance is once again reaffirmed through the Institution's goal to "serve the community through

activities, which contribute to its active adaptation and development of the community members, by making the institution's resources available for investigating, acquiring, and applying knowledge. Some examples are:

- 1) Throughout the year, the Division of Continuing Education and Extension is constantly offering courses for teacher certifications and teacher-training sessions. In addition, the division offers a variety of non-credit courses in the manual arts, computer literacy, small business, communication, etc. to the community in general.
- 2) The UPRB also allows individuals to audit regular courses for their professional growth.
- 3) The UPRB meets with the application of acquired knowledge criteria through programs that integrate service to the community. The pre-school and kindergarten which, besides serving as training laboratories for our students, also serve the community by allowing them to register their children in the school following the process established by the Pre-school and Kindergarten Board.
- 4) Through the Education Department, the Professional Development School Project was created to satisfy society's needs of developing individuals able to work cooperatively. The emphasis of this project is to improve the quality of elementary school teachers as well as creating a community of learners among the public school teachers, student teachers and the UPRB professors.

- 5) Another example is the program for Special and Elementary Physical Education, which serves the special needs children of the community free of charge.
 - 6) Some faculty members are also involved in offering consulting services and intramural practicums. These help by giving the community services that are either lacking or insufficient. The UPRB also gives its professionals the opportunity to share their knowledge and maintain themselves up-to-date on the present-day needs of the job market.
 - 7) Presently, the University is in the development stage of a Distance Learning Project, which once again demonstrates the Institution's commitment to society's needs.
- B. In regard to the technological aspect, the UPRB programs are completely or directly involved with technology. According to the programs in the Institution's General Catalog 2000-2002, UPRB offers degrees in the areas of computer sciences, electronics, office systems, engineering technologies, and business, and it also has transfer programs in engineering. Even some of the programs that are traditionally not considered technological in nature include general educational program courses in the curriculum which deal with computer literacy.
- C. The analysis of the general education curricula shows the UPRB's commitment of collaborating and developing the Puerto Rican identity and the integration of the individual in society is confirmed. This guarantees the balance of the integral formation of the individual and is observed in classroom interaction in general

educational program courses which deal with Puerto Rico's history, literature, and culture.

Interviews with university personnel revealed that students have an opportunity for more exposure to the cultural aspects of Puerto Rican society through:

- exemption privileges for those with special talents (choir, band, theater, and sports).
- special activities to enhance cultural and social awareness, such as, The Artisan Fair, theater productions and concerts all sponsored by the Office of Social and Cultural Activities.
- the NCAA, academic and sports competitions.
- student organizations and student council
- the Student Exchange Program
- internships and practicums offered in the program requirements
- special internship programs, such as, Cordova Program of Congressional Internships in Washington, D.C., the Legislative Internship in the government of Puerto Rico, and HACU (Hispanic Association of Colleges and Universities).

The committee feels that the aforementioned demonstrates the proactive nature of the Institution towards the changes and transformation in the areas of employment demands, interests and vision of the Puerto Rican reality. Nevertheless, the committee understands that there is a need to transform the curriculum at a faster pace to be congruent with Puerto Rican social and cultural nature.

5. Is the mission pertinent to the projections and projects of the University for the next ten years?

The mission of the University is the basis for the development of the ISP. This plan guides the University to accomplish its mission in five-year periods. An analysis of the ISP of 1996 by the self-study committee in charge of the mission demonstrated that the mission is pertinent to the projections and projects.

6. Are the mission, goals and objectives clearly understood by all sectors (student body, faculty, and non-faculty personnel)? Are they used as guidelines within the Institution? How?

The mission, goals, and objectives of the UPRB have been exhibited throughout the University and are present in many important institutional documents. Through the incorporation of the mission in the development of projects and documents; such as, research projects, proposals, university budget, academic programs, and strategic plans, it is implied that the university community is aware of the institutional mission, goals, and objectives. In addition, these also exemplify how the mission, goals, and objectives are the backbone of the UPRB and guide the University in all its endeavors.

In addition, through a questionnaire administered by the Self-Study Faculty Subcommittee, the faculty's perception regarding their awareness of the institutional mission and vision was obtained. Out of 290 faculty members, 138 (48 percent) responded. Tables 1 and 2 that follow present the analysis of these results.

Table 1. Awareness and Understanding of the Mission

Very Much	Average	Some	None	No response
51% (71)	36% (49)	9% (12)	4% (6)	0

Table 2. Awareness and Understanding of the Vision

Very Much	Average	Some	None	No response
41% (57)	39% (54)	10% (14)	7% (10)	2% (3)

As illustrated above, the majority of the faculty has awareness and understanding of the institutional mission and vision.

7. In order to comply with the recent autonomy, do the mission, goals and objectives need to be rephrased or changed?

The analysis of the mission revealed that:

- the present mission remains pertinent to the institutional services and projects offered.
- the goals and objectives do not need to be altered since these were formulated according to the institution's mission.
- The essence of the mission and the present reality of the Institution are in accordance with its projections. The proposed changes can be made without altering the goals and objectives of the mission.

It is recommended that:

-The mission should be reduced to one paragraph to facilitate its memorization and internalization by the Institutional community and captivate the essence of what the Institution wishes to accomplish.

-The present name of the university: University of Puerto Rico at Bayamón (UPRB) should substitute the prior name of Bayamón University College (BUC) in the document.

8. How are the mission, goals and objectives articulated to the various constituents?

To answer this question, an analysis of the main documents that guide the UPRB operational plans were analyzed. It was found that the mission, goals and objectives are considered in all projects, proposals, annual work plans, retention plans, and research. All proposals presented for the creation or revision of academic programs and research must

include the mission, goals and objectives as well as the vision and strategic plan of the Institution as its main guide and focus. The Puerto Rican Council of Higher Education (CES) also requires this for the development of new programs. In this manner, it is guaranteed that all academic and/or administrative actions have the mission, goals, and objectives of the UPRB as the foundation for its educational programs. (See the response to Question six of this charge for examples.)

General Recommendations:

- ✓ The UPRB should continue enhancing the curricula with up-to-date education in technology.
- ✓ There is a need to transform the curriculum at a faster pace to be congruent with Puerto Rican social and cultural nature.
- ✓ It is recommended that the development of the next Five-Year ISP (20001-2006), which will comprise the projections, reflect as its main guide the mission.
- ✓ The strategies proposed for the next ISP should consider the changes that have been made in accordance with the document *Propuesta para la Conversión del Colegio Universitario Tecnológico de Bayamón en Recinto Autónomo 1997*. (1997-revision-Proposal for the Conversion of Bayamón Technological University College to an Autonomous Campus.)

INSTITUTIONAL INTEGRITY

The UPRB is a campus of the UPR system. The UPR functions as a public corporation and is governed by a Board of Trustees. The members of the Board are appointed by the Governor (See Charge related to Governance for a description of the board.) Two delegates from the faculty and one from the student body, elected by their peers, are also members of the Board. The Board of Trustees determines the guidelines for general orientation and development

of the University. It approves the General University Regulations, the General Student Regulations, the Student Regulations for each campus, the Retirement Regulations, and any other regulation of general application throughout the University of Puerto Rico.

The Chancellor of the UPRB, the staff, administrators, members of the faculty, and all other personnel are employees of the Commonwealth of Puerto Rico and, as such, are required to operate under its rules, laws, codes of ethics, and policies. As a public institution, the University is subject to extensive audits conducted by the Office of the Comptroller of the Government. The UPRB is also subject to regular audits conducted by the University of Puerto Rico System's internal audit division. The audits deal with the different processes, procedures, policies, and practices to determine if they are appropriate and function properly in order to assure that the Institution meets high standards of ethics and integrity and that fiscal management principles are followed.

As indicated in *The Characteristics of Excellence in Higher Education Standards for Accreditation*, "An institution of higher education seeks to provide the most conducive environment for achieving its mission and goals and for the pursuit of learning. One of the attributes which permits an educational institution to provide such an environment is integrity." With this in mind, the following standard was used as a guide to develop this part of the Self-Study:

➤ *integrity in the institution's conduct of all its activities through humane and equitable policies dealing with students, faculty, staff, and other constituencies.*

To answer the questions below, the Sub-Committee for this charge examined the last audit report made by the Office of the Comptroller, evaluated Institutional publications and other official documents, interviewed members of the university community, and administered a

questionnaire to the faculty members of the Departmental Personnel Committees. This section mainly discusses the accuracy of publications. Others are discussed in other sections of this Report. The following questions and answers were researched by the Institutional Integrity Committee:

1. Do the College Catalog, class schedules, Student Handbook, and all other documents related to student recruitment and orientation provide appropriate and accurate information to students and prospective students regarding academic policies and curricula?

The Academic, Student and Administrative Affairs Offices are responsible for producing and handing out documents related to student recruitment and orientation. The departments and offices of the Institution work together to collect the information that is included in the documents and verify that the information is accurate. The University's General Catalog, the Institutional Policies of the UPR system, the department brochures on programs offered, and the academic calendar include information about the administrative organization, mission and philosophy, student services, academic offerings and services, registration, admission, and other relevant information regarding academic policies. Class schedules, approved by the Administrative Board, are published each semester and are available to students during the academic counseling process and prior to the advanced registration period of the upcoming semester. The majority of these documents are available on the institution's Web site (<http://wwwcutb.upr.clu.edu>), in the Registrar's and the Student Affairs offices.

Other documents with relevant information about the University of Puerto Rico's policies, such as Security, Equal Opportunity, Sexual Harassment, Drug and Alcohol Abuse, and Student Disciplinary Code are also issued by the Central Administration of the University of Puerto Rico and distributed to students, faculty, and other personnel.

The UPRB's Student Handbook is presently under revision. The General Student Regulations, approved by the Board of Trustees, is the official document in use in the Institution.

Many of the aforementioned documents have been examined by those with the charge of Catalogs, Publications and Other Promotional Materials and are analyzed in more detail later in this report.

However, there is some concern that too few students know about and have certain documents, especially the General Catalog and the Student General Regulations. More should be done to encourage students to obtain them.

2. Are academic and financial transactions with students carried out in accordance to written policies and procedures?

Policies and procedures regarding the academic and financial transactions with students are detailed in the General Catalog (requirements and procedures for admission and readmission, transfer, in-transfer, change of college, reclassification, special permissions, application for degrees, grading systems, student records, probation, suspension and reinstatement, enrollment and withdrawals, tuition, payment fees, refunds, housing, and other financial obligations). Most of these are also made accessible to students in the Registrar's Office.

The Office of the Dean of Academic Affairs, the academic departments, and the Finance Office carry out the procedures in accordance with the policies established by the University authorities (Governing Board, University Board, Academic Senate, and Administrative Board). The policies are made public through the documents (certifications) issued by these authorities. The academic calendar for the semester, with

the most important dates for students, is published in the Catalog and is also available on the University Web site and at the Registrar's Office.

There is some concern about the procedures to evaluate courses from other institutions to determine if they are accepted or not by the UPRB. There is a student population, especially in the evening programs, who transfer from private institutions. Clearer and specific procedures are necessary to deal with the courses taken by students in their prior institutions that are not part of the UPR system. Regularly, it has taken from one or two years for students to obtain a final decision about the equivalency of courses. However, the Office of the Dean of Academic Affairs has initiated procedures to reduce this time.

Although there are procedures to deal with students' requirements for the equivalency of courses, the guides are not sufficiently specific as to always allow an objective evaluation by the department directors. Consequently, equivalency recommendations are commonly subject to the interpretations and decisions of the person in charge of the department at that time. The Office of Academic Affairs is aware of this problem and is working on an official document that assures a more objective and faster procedure.

Sometimes it is necessary to make exceptions on departmental course requirements for specific degree majors, such as, course substitutions and graduation requirements. Course substitutions can be made with the approval of the student's department chair, the department chair to which the course to be substituted belongs, and the Dean of Academic Affairs. Exceptions related to graduation requirements are approved by the Dean of Academic Affairs in consultation with the corresponding academic officials. All exceptions are made in writing, and copies are placed in the student's file.

3. Does the institution demonstrate impartiality in its procedures and requirements for the selection of new students?

The requirements and procedures for the selection of new students are established by the UPR system (See Instruction Manual and Application Form for Admission to UPR). To be considered for admission into the programs, students must fill out the UPR application for admission. The application is distributed to all prospective students in the private and public secondary schools on the island. It is also available in the UPRB Admissions Office. The application document contains information about requirements and procedures for admission, financial aid, academic fees and institutional policies. The General Catalog also provides information about admission requirements and procedures for freshmen and other populations of prospective students (transfer, in-transfer, and adults).

In addition to meeting academic requirements, the admission of transfer students is subject to the spaces available in the selected program at the moment they apply for admission. There is a high demand for studying at the UPRB, and it is not possible for the academic departments to accept all applicants. A careful analysis (transcripts and college entrance exam scores) is made to guarantee the admission of more qualified students. Students who have not been admitted have the right to apply for reconsideration.

4. Does the institution demonstrate impartiality in its procedures and requirements for the recruitment of faculty and non-teaching personnel?

As stated in Question #1 under the Faculty Charge of this report, the University of Puerto Rico has a system-wide general regulation for faculty recruitment, which is applicable to all the colleges of the UPR (Source: Article 47 of the UPR General Regulations Manual

and Article 48 of the Faculty Manual). This is also true for the recruitment of non-teaching personnel (Source: Article 77 of the UPR General Regulations Manual) and the Institution has followed the process for recruitment.

A questionnaire was administered to the members of the faculty Departmental Personnel Committee (Three to seven elected members and the director of the department compose these committees.) From the 17 academic departments, 13 responded. One of the questions posed was in regard to how impartial they felt the Institution was concerning recruitment. The results inferred a generalized perception that the Institution does not demonstrate impartiality in its procedures and requirements for the recruitment of faculty. Out of the 52 persons who answered the questionnaire, 60 percent of them indicated that the Institution does not demonstrate impartiality in the recruitment process, 35 percent answered that it demonstrated impartiality, and 5 percent did not answer the question because they did not have the judgment criteria to respond. However, in another question of the same questionnaire, 65 percent of the members answered that in the last five years their departments did not experience problems related to the absence of impartiality in the hiring procedures for faculty members. If we analyze the response in regard to the 13 departments represented, 9 of these departments indicated that there was impartiality in the recruitment process. No problems were detected in the recruitment of non-teaching personnel.

Recommendation:

-Since this is based on the responses to a questionnaire, it is recommended that a study be made of the recruitment process for both teaching and non-teaching employees to determine the impartiality of this process.

5. Do the Faculty Handbook and Financial Affairs documents provide appropriate and accurate information to faculty, staff, and administration regarding institutional policies and procedures?

The University regulations gather the institutional policies and procedures that guide faculty, staff, and administration matters. The Faculty Handbook and other financial affairs documents describe these policies and procedures in detail and in a useful format.

The last edition of the Faculty Handbook available in the UPRB was issued in 1991 by the Regional Colleges Administration (RCA). It applied to the six colleges registered under this Administration at that time. Even though the Faculty Handbook has not been revised since 1991, most of the information is still in effect. Some procedures have been modified due to the autonomous status acquired by the UPRB in 1998.

A committee elected by the faculty at the beginning of this year is working on the revision of the document to modify and update it according to the new autonomous status of the Institution. It is expected that a draft of the Faculty Handbook will be available to the faculty before the end of 2000-2001 academic year. A faculty committee appointed by the members of the University Board is also working on a Faculty Handbook at the UPR system level.

Although the Institution does not have a handbook with the record of all financial affairs procedures, every office has specific procedures in its area and follows them accordingly.

Overall, the University Regulations, the Faculty Handbook and the financial documents, for the most part, provide direction and answers to most inquiries of policies and procedures of the Institution and UPR system.

6. Does the Institution consistently carry out its obligations to personnel according to written policies and procedures?

In addition to the University Regulations and the Faculty Handbook, there are other documents that describe the obligations to non-faculty personnel in detail. The

agreements drawn up with the University organizations of non-faculty personnel (*Convenio de la Hermandad de Empleados No Docentes* and the *Convenio del Sindicato de Trabajadores*), faculty personnel (*Comité de Asuntos Laborales*) and the UPR system officials are examples of these. All personnel transactions, such as hiring, promotions, health insurance coverage, and teaching loads are carried out according to written policies and procedures.

There is a situation that is affecting the promotion of faculty since the Institution became autonomous. During the past two years, and due to financial limitations, the UPRB was not able to honor its commitment for promotion of qualified faculty. The budget assigned for this was not enough, and, as result, almost half of the faculty qualified and endorsed for promotion each year was not promoted. This causes a negative effect in the morale of these persons. A commitment should be made by the administration to provide for budget allocation that guarantees the promotion of every qualified faculty member.

7. How well does the Institution maintain an environment that supports sensitivity to diverse individuals and groups?

The UPRB is open to diverse individuals and groups because of its admissions policy. As stated in the Catalog and in many other official documents, the Institution “does not discriminate on the basis of race, color, sex, religious, or political beliefs, disabilities, or national origin in its admissions policy, educational programs, student services and activities, or employment practices.” The University recognizes the changing needs of its students and makes a great effort to offer a variety of specializations to provide for their diverse interests and abilities. In an attempt to satisfy the current market trends and the social, economic, and cultural reality of the contemporary world, academic offerings are available in the evening. Distance Learning is another alternative that is being considered

and a committee has been formed with this purpose in mind. It is expected that our students can benefit from this in the near future.

Efforts are being made to accommodate and serve students with disabilities and other special students. Assistance is available for students within a wide range of disabilities through the Counseling Department. Services are dedicated to respond to the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA). The UPRB's goal is to guarantee students with disabilities accommodation and services in order to level their opportunity for success with other students.

With the growing number of students with children, the UPRB in coordination with the UPR-Rio Piedras campus and the government agency, Department of Family Services, has the Child-Care Services for Students Program. Their office, located in the Office of Student Affairs, processes applications for those that qualify. Child-care services are paid directly by the program to the child-care center or caregiver.

The Honor's Program is another example of how the Institution meets the needs of special populations, in this case, gifted students. These students are provided with advanced courses that focus on research. In addition, the program offers these students individualized attention for their intellectual growth by stimulating analysis and creativity in an academic atmosphere favorable for studies and research.

The Institution also provides for the organization of different groups. These groups are organized under the Student Associations Office. There are more than twenty recognized organizations that serve the needs and interests of the students. Throughout these organizations, the UPRB sponsors the formation of leaders and personal development of its members according to academic, religious, environmental, cultural, and social interests.

The Division of Continuing Education and Extension serves the community by offering short-term, non-credit courses to the community. Some of these are in small business operations, computer literacy, arts and crafts, conversational English courses, real estate appraisals, and music. In addition, credit courses towards associate and bachelor's degrees in Education, Electronics, Computer Sciences, and Business Administration are offered to non-traditional students who cannot complete their degrees during the day.

Finally, one of the responsibilities of the University of Puerto Rico is to promote a healthy and safe educational environment. To comply, the University has established a series of institutional policies that promote the physical, mental, and social well being of its community. Some of these policies are *Policy on Use and Abuse of Controlled Substances*, *Equal Opportunity*, *Policy on Sexual Harassment*, *Student Privacy Act*, and *AIDS Policy*. In the UPRB, the Office of Quality of Life is responsible for informing the campus community of these policies. The university community performs conferences, workshops, group guidance sessions, and annual fairs to promote a better quality of life.

8. Does the Institution have in place, and properly monitor, policies regarding equity of treatment and access, nondiscrimination and affirmative action?

Part of the answer to this question has been provided in the aforementioned question. In addition, policies regarding equity of treatment and access, nondiscrimination, and affirmative action appear in many of the University official documents. The UPR Regulations and the Faculty Handbook detail hiring policies and procedures. In addition, agreements made with the *Hermandad de Empleados Exentos No Docente* and the *Sindicato de Trabajadores* detail hiring procedures for the non-faculty personnel using the UPR Regulations Manual as its base. These documents are available to the personnel at the Office of Human Resources and in many other offices. The Office of Academic

Affairs of the Central Administration of the University of Puerto Rico publishes an annual document with a summary of all institutional policies, including Equal Opportunities and Sexual Harassment. This document is available for everyone in the Student Affairs Office.

According to the UPRB's Legal Division, in the last five years two employees and one student have presented claims of harassment. No other claims regarding any other policies have been raised.

Compliance with the aforementioned policies is done through the Office of Quality of Life, Discipline Committee, Student Ombudsperson, and the administrative personnel.

9. Does the Institution have regulations regarding academic honesty and sanctions for violations?

The General UPR Regulations, Article 39, provides information related to disciplinary actions and sanctions for the personnel. Article 67 details information about the duties and attributes of academic personnel. The duties and attributes of the non-faculty personnel are described in Article 90. Disciplinary actions and sanctions pertinent to students are detailed in the Students Regulations. The Institutional Committee for Student Disciplinary Actions is in charge of reviewing the referrals and determining the action to be taken according to the Student Regulations and institutional policies.

The Institution also has internal policies and regulations that have been developed concerning academic honesty and sanctions for violations. Some of these are related to the use of University equipment and facilities, research and investigation, plagiarism and copyright, promotion guidelines, and evaluation procedures. In addition, other publications such as the Catalog, University Web site, and guidelines for the Library Resource Center are examples of documents developed to ensure integrity.

10. Does the Institution revise its policies, practices, and publications regularly to ensure integrity in all components about its mission, programs, and services?

The UPR revises its policies, practices and publications to ensure that they are consistent with the programs and services of the institution if the UPR system. The UPRB then revises its documents to comply with the changes made by the UPR.

The UPRB's Academic Senate and Administrative Board produce certifications regarding the policies and practices. Both components revise existing policies and practices or create new ones as needed.

The Institution's internal documents are not always revised regularly. For example, the Faculty Handbook has not been revised since 1991, the last edition of the Student Handbook (*Boletín Informativo Estudiantil*) was 1996-97, and the prior edition of the University Catalog was in 1995-97.

Presently the Student and Faculty Handbooks are being revised for publication. The UPRB Catalog 2000-2002 was recently published and is updated on the Institution's web page. Other sections of the University Web page are updated. (More information regarding publications can be found under the Catalogs, Publications, and Promotional Materials Charge of this report.)

General Recommendations

From the responses to the questions posed, it can be stated that the UPRB demonstrates its integrity in numerous ways. Policies and procedures are spelled out plainly in its official documents and are carefully followed.

Nevertheless, as stated in the analysis of the guide questions, some actions must be taken by the administration in order to guarantee that the Institution will always operate in an environment appropriate for learning and working.

To ensure that the standard of this charge is guaranteed,

- ✓ A plan of action should be made to maintain official documents, such as the General Catalog and the Faculty Handbook, updated. These documents should be accessible to every student and faculty member, respectively.
- ✓ Additional specific course equivalencies between private institutions and the UPRB need to be established. The time taken for the process must be reduced.
- ✓ The administration should ensure that the budget allocations provide for the promotion of every qualified faculty member.
- ✓ A study to analyze the recruitment procedures of teaching and non-teaching personnel that has been followed in the past five years should be made.

STUDENTS

Introduction

The following standards and questions guided the Self-Study Team on Student Life Services to accomplish its charge.

Standards:

- *integrity in the institution's conduct of all its activities through humane and equitable policies dealing with students, faculty, staff and other constituencies.*
- *student services appropriate to the educational, personal and career needs of the students.*
- *clearly stated mission and goals appropriate to the institution's resources and the needs of its constituents.*

To develop this part of the self-study, interviews were performed with personnel; analysis was made of written and published documents; annual reports were consulted; the UPRB catalog was examined; and a questionnaire that measured the effectiveness of student services was administered to a stratified sample of convenience.

1. How well informed are the students regarding the financial aid available and about the current financial regulations in the University?

The analysis of documents, the results of the questionnaire, and interviews demonstrated the following:

- The UPRB offers its students and prospective students information regarding financial aid through the Office of Financial Aid.
- Fifty-five percent (55%) of the student body receives some form of financial aid. (See Financial Aid Annual Report 1999-2000.) This in itself demonstrates that the students are well informed of the financial aid available.
- Students are informed through individual orientations at the Financial Aid Office, the Counseling Department or the academic departments.
- Newly admitted students are given a package with information regarding the policies, regulations and application forms to request financial aid.
- Officials from the university visit the various high schools and provide orientation concerning the financial aid available to university students.
- The University Catalog provides a section concerning the types of financial aid available.
- Another dissemination strategy includes bulletin boards, which provide information concerning important dates and deadlines, as well as regulations and institutional policies.

- Information regarding financial aid will be placed on the UPRB's web page and in the revised Student Handbook.

Recommendations:

1. *Follow-up to the posting of the financial aid information on the web page should be done.*
 2. *A plan to monitor the effectiveness of the previously mentioned aspects should be implemented to ensure the accuracy and quality of the services.*
2. **Is the University offering opportunities for undergraduate job experiences (internship, cooperatives, etc.)?**

Analysis of the College Placement Office reports indicates that the UPRB has developed various internships in accounting, marketing, management, computers, and electronics. They are offered during the fall, spring, or summer semesters. Some of the important highlights are:

1. At least 75 students have benefited from these internships during the 1999-2000 Academic Year.
2. The UPRB is a member of The Hispanic Association of Colleges and Universities (HACU), which offers work opportunities for students in the United States, thereby giving them the opportunity to learn about another culture and enrich their English language while acquiring jobs skills and experience. During this past academic year 1999-2000, 15 students in different majors and programs benefited from this project.
3. The Cordova Program in Washington D. C. (12 credits) and the Legislative Internship with the government of Puerto Rico (6 credits) are two programs that have been offering students internship opportunities. (See Reports submitted by the College Placement Office.)

4. The College Placement Office has also coordinated programs for job experiences for undergraduates. These have been coordinated with the federal and local governments and private companies in and outside of Puerto Rico. In 1999-2000, over 56 students had the opportunity to participate in an internship program. One example was the Environmental Education Program of The United States Department of Agriculture-Forest Services Division. This program gave the undergraduate students of the Education Department the opportunity to work in Summer Camps offering classes related to the environment to elementary school children in Wisconsin, North and South Carolina, Alabama, and Georgia.
5. Internships have been offered with Eastman Kodak (USA), Puerto Rico Telephone Company, Microsoft Caribbean, Department of Education, and Honeywell, Inc.
(Source: College Placement Office Report on Internships)

The Business Administration Department has developed internships for its majors in accounting, marketing, and management. The accounting internship has benefited 172 students in its five-year existence. (See Appendix B for Report of Internships in Accounting)

Recommendations:

-The Institution should strive to expand the opportunities for students to participate in internships.

-The UPRB should coordinate and monitor with industry and companies to ensure that the internship programs are effective.

3. How effective has the retention plan been?

The retention plan was initiated in 1996, when the Puerto Rican Council of Higher Education, during its accreditation visit, recommended that the Institution prepare one. From

that moment on, studies regarding the number of students registered in the bachelor's and associate degree programs were made. In the Retention Plan for 1999-2000, each academic department included the specific objectives, activities, resources, proposed dates, evaluation instruments, and evidence that would measure the level of achievement of the objectives. Since these plans are in process, their effectiveness is being measured.

However, in order to examine the retention level of the UPRB, various cohorts of the bachelor's degree programs were established that can give us some information regarding retention. The end of the 2001-2002 academic year will include the sixth year of the first cohort. When the fourth year of this cohort (1998-99) was analyzed, the retention index for bachelor degree programs was 65 percent. When compared to the national index level (46.7 percent) presented by Seidman (1999), cited in the *National Center for Educational Statistics & US Bureau Census Educational Attainment*, it was noted that the index for the UPRB is over the retention index established at the national level by 18.3 percent.

4. How has the autonomy of the Institution affected the processes of admissions and enrollment?

Based on the interviews and documents previously mentioned to analyze this charge, it was shown that

- The Admission's Office has not been affected by the Institution's autonomy. This is true because procedures dealing with admissions to the UPR system are dealt directly with the UPR Central Administrative Offices.
- Autonomy did facilitate the processing of applications and computerized reports. Presently this is done at the UPRB's Information Computer System. Prior to the autonomy, the UPRB had to request these reports from the Regional Colleges Administration (RCA).

- The process of autonomy helped decentralize various vital processes of the Registrar's Office, which has shortened the amount of time needed for the enrollment process. Other services which have benefited from the autonomous status are the preparation of the academic calendar, final grade lists, notification of grades, registration format, and registration permissions. Many of these are done in coordination with the Registrar's Office and the Information Computer Center.

Recommendations:

-The process of identifying areas where changes are needed due to the autonomy and the evaluation implemented should be continued. A dynamic and systematic evaluation should be continuous throughout to monitor this transitional process.

5. How has technology and its changes affected the processes of admissions, enrollment, and student records?

In 1993, the Student Information System (SIS) energy needs and utilization was established. This system facilitated the processes dealing with admissions, registration and academic records. Information is obtained more rapidly, efficiently and more accurately than with the former system. The SIS has expanded the possibilities of serving students better. For example, department directors and academic counselors can directly access and select courses for students. Also, professional counselors can readily acquire information related to the courses and grades obtained by the students, an important aspect in the counseling process. Through SIS the counselors, directors and students can obtain immediate information regarding number of credits students are registered in, registration costs, grades obtained, student status (probationary, regular, graduation candidate, etc.), and grade point average (GPA) keeping in mind the Family Educational Rights and Privacy Act (FERPA).

In addition, the grading process also improved. Once the optical readers for final grade lists provided by the professors detect the grades, the system is instantly updated. Student grade notifications are printed and sent by mail.

Another significant change made in the 1999-2000 Academic Year was the registration process. Students can now register via the Internet. In addition, the students are given the option of making their payments at any of the 200 branches of the bank, *Banco Popular de Puerto Rico*, or at the UPRB.

6. How does the institution guarantee the integrity of student records? How are students informed?

The Family Educational Rights and Privacy Act (FERPA) gives students the right to inspect their academic record and also protects the students' right to privacy by limiting access to records unless written consent is given by the student. Academic, medical, admissions, and counseling records are kept at the UPRB. The academic records are secured in two fireproof vaults of the Registrar's Office where only authorized personnel are allowed entrance. Other student records are kept in the offices where the particular service is offered, and these are filed in a designated area. Also, only university officials have access to SIS for certain student procedures.

Annually, the vice-president of Academic Affairs and Research of the UPR President's office publishes a bulletin on the institutional policies with general information concerning policies, which are directly related to the university. On page 24 of the bulletin, students are informed of the privacy act concerning their academic records and of their right to inspect and revise them. In addition, students are informed of their right to file a complaint and are given the address of the FERPA Office. This information is also available through bulletin boards throughout the University.

The Registrar's Office provides a document to each of the students enrolled at the UPRB in August, in which they are asked if they authorize the University to publish information about them in the College directory. This must be signed and returned by the student.

7. Do student affairs services provide assistance during the student transition experience (from admissions through graduation)? How well informed are students regarding these services (tutoring, orientation, counseling, health, placement office, athletic and cultural activities, student organizations and others)?

From the moment students select the University as an option for their studies, the processes of student support and the dissemination of information are initiated. Incoming students (for August) are first summoned to the Admissions Office during April for orientation on the processes related to admissions and the services the University offers. Later, during the month of August and before classes begin, an Open House for students and parents is offered. Here students and parents have the opportunity to receive orientation and guidance regarding programs and services. This academic year 2000-2001, an Open House was substituted by an orientation week. Not only did students have a chance to learn more about programs and services, but they also had an opportunity to familiarize themselves with the facilities and received talks related to university life. (See Annual Report of the Office of the Dean of Student Affairs.)

Until the 1999-2000 academic year, new students had available in their regular academic schedule a 15-hour seminar (EDFU 3005) which dealt with topics related to university life. This academic year (2000-2001) the seminar was offered during the universal hour. Themes include the following: *Learning About Your University, Academic Health, How to Plan Your Life as a Professional, Your Mental and Physical Health, and Interpersonal Relationships*. This seminar gives students security and offers them the opportunity to acquire the tools necessary to survive in a university environment. The Counseling Department is responsible for offering the seminar.

In addition to the seminar, talks, workshops, and lectures are offered during the semesters on other topics related to university life. These are open to the university community in general. Other talks are coordinated with the Library Resource Center, College Placement Office, and Social Sciences Department.

The Health Services Office offers students medical primary care, talks, detection clinics, and vaccines. The College Placement Office has a variety of services leading to the development of occupational skills and experiences. The Student Council and the student associations give students the opportunity to participate in activities which contribute to the development of leadership, responsibility, and personal growth. Presently the student council has 38 elected members, and there are 21 student organizations with 700 members.

The Student Support Services Program (SSSP) offers tutoring services to its participants in English, Spanish, mathematics, chemistry, and biology. The Writing Laboratory offers tutoring in English for all UPRB students. Students are informed of the services and schedule of the Writing Laboratory through their English classes and flyers. Cultural activities are announced by the Social Cultural Activities Office through flyers, monthly schedules distributed, and the public address system. The Athletic Activities Office announces the various athletic activities to the university community. The University also has an annual Job Fair and an ADEM-Expo activity which are very well attended by our students and nearby community.

In May 2000, a questionnaire was administered to a stratified sample (according to year of study, gender, and program) of 358 students to evaluate the services the Institution offers. From these, 303 students answered the questionnaire. Table 3 that follows, presented in response to Question 9 of this charge, represents the response given by the students regarding their awareness and use of the services available.

Table 3. Percentage of students with awareness of institutional services and use them

OFFICE / AREA	AWARE OF THE SERVICE (%)	HAVE USED THE SERVICES (%)
Admissions	86.8	82.1
Registration	95.7	94.4
Financial Aid	88.7	71.5
Counseling	87.1	74.8
College Placement Office	53.3	18.2
Athletic Department	45.0	13.9
Child Care Program	48.3	9.9
Medical Services	83.4	50.0
Cafeteria	90.4	83.1
Student Ombudsperson	20.0	6.0
Work-Study Program	50.0	12.3
Exchange Program	40.7	4.0

Those services that were rated lowest were those that were less solicited since they are designed for a specific student population. This is true for the Child Care Program which serves students who are parents. Therefore, less knowledge and use of these services would be expected. However, the majority of the other areas were recognized and well known by the students that answered the questionnaire.

8. Does the Institution provide offerings and support for special needs students, including part-time, non-traditional, and students with disabilities?

The UPRB has services for students with special needs. Students with disabilities voluntarily identify himself or herself with a professional counselor assigned to serve them. Among the services offered to these students are the following: tutoring, advanced registration, special accommodation with facilities, faculty and course selection, use of a

room in the library reserved for students with disabilities, and services outside the University designed for the particular needs of these students.

In recent years the number of students who become parents has increased. The Counseling Department has developed a project to provide support, counseling, and services to attend the needs of these students.

The Division for Continuing Education and Extension offers an alternative for non-traditional students by extending the day program offerings to evening and Saturday classes leading to associate and bachelor's degrees. This division is known by its Spanish acronym UNA (*Universidad Nocturna para Adultos*). Degrees are offered in Business Administration with majors in Management, Marketing, Finance, Accounting, Computer Sciences, Electronics, and Early Childhood and Elementary Education. Local government employees (under the Public Employees Program) who wish to improve their skills and develop professionally are also given the opportunity to study at night and receive a degree in Business Administration or Computer Sciences.

The Division of Continuing Education and Extension also serves the community by offering short-term, non-credit courses in a variety of topics. These include computer applications and literacy, keyboarding, culture, art, manual arts, athletic activities, and music.

These courses are offered on weekdays during the evenings and on Saturdays during the day.

Finally, the Institution offers remedial courses to freshman students in the summer prior to their enrollment. These courses include Spanish, English and mathematics. In the summer of 1999, 229 students participated and in the year 2000 the number of students increased to 307 participants.

9. How are student services evaluated?

The questionnaire used to obtain the response to Question 7 of this charge, also asked the students to rate the services offered at the UPRB in regard to availability, employee attitudes towards students, agility in processing information, and days and hours of service. A question regarding how they would evaluate the services offered in general was also given. Students were also asked if they knew about or had used the various services offered to them and to rate the level of satisfaction with the particular office and services offered was used. The results of the questionnaire indicated that students rated the services from good (minimum selected) to excellent (See Report of findings of questionnaire).

The Office of Student Associations and the Office of Cultural and Social Activities have their own forms to evaluate their services and activities. The results of the participants' evaluation of the activities have been positive for both offices. Aside from these offices, no others presented evidence of evaluation of services by students.

General Recommendations:

- ✓ All offices should develop additional strategies to disseminate information regarding services offered.
- ✓ All offices that offer services to students should prepare assessment instruments to evaluate student satisfaction with the services. This will help the Institution in monitoring services.

FACULTY

Introduction

The UPRB is committed to providing excellence to the students it serves. Through its program offerings, it develops students to meet the needs and challenges of society in the new millennium. As stated in the UPRB's mission, the goal is *to prepare persons who, through their university experience, will develop the knowledge, skills, aptitudes, and attitudes necessary to function as responsible citizens...informed and capable of actively participating in a dynamic society*. With this in mind, the faculty's objective is to prepare individuals with the humanistic, social, cultural, scientific, and technological knowledge necessary for the development of an integral, universal being. In order to comply with the above, it is the responsibility of the faculty to

- remain updated in their field,
- promote research for the acquisition of knowledge,
- continually strengthen the teaching-learning-assessment process and
- contribute to society's needs through service to the community.

These tasks must respond to and be guided by the mission and vision of the Institution. Therefore, in order to achieve the goals, the UPRB must maintain or improve the high quality of its programs. This can only be done when the faculty is committed to the teaching-learning-assessment process.

Before examining the standards and questions regarding this charge, information regarding the faculty profile is presented. For the 2000-2001 Academic Year, the UPRB had 325 faculty members. These included 218 full and 107 part-time personnel. In comparison with the

figures of the 1991-1992 academic year that had 205 (169 full and 36 part-time) faculty members. The faculty growth is due to the rise in students registered and the expansion of the programs' offerings to evenings and Saturdays. Presently, over 600 students are served with evening and Saturday courses, and over 5,000 students are served during the day.

Table 4 below presents the faculty composition in regard to gender.

**Table 4. Faculty composition according to gender
1991-1992 and 2000-2001 academic years**

Gender	1991-1992	Percent	2000-2001	Percent
Male	104	51%	152	47%
Female	101	49%	173	53%
TOTALS	205		325	

As noted in Table 4, during the 2000-2001 academic year, of the 325 professionals, 47 percent are male and 53 percent are female. There has been an increase in the number of female faculty members in 2000-2001 when compared to 1991-1992 academic year.

In Table 5 that follows, the present faculty composition of 2000-2001 is compared in terms of the academic preparation to its composition from the last accreditation visit in 1991-92.

**Table 5. Faculty composition according to academic preparation
1991-1992 and 2000-2001 academic years**

Academic Preparation	1991-1992	Percent	2000-2001	Percent
Doctorate	30	14%	72	22 %
Master's	165	80%	248	76%
Bachelor's	12	6%	5	2%
TOTALS	205		325	

The highest academic degree of the total faculty is as follows: 22 percent have doctorate, 76 percent have master's degree, and 2 percent have bachelor's degrees. If we compare this to

the 1990-91 figures, only 14 percent had doctorates, 80 percent had master's degree and 6 percent had bachelor's degrees. The percentage of faculty members with master's degrees decreased in 2000-2001, the number of faculty members with doctorates increased 8 percent and those with bachelor's degrees have decreased almost 4 percent. As can be noted from the above table, the percentage of doctorates in 2000-2001 has risen when compared to the 1991-1992 figures.

Table 6 presents the distribution of the ranks among the faculty.

**Table 6. Faculty composition according to rank
1991-1992 and 2000-2001 academic years**

Rank	1991-1992	Percent	2000-2001	Percent
Full Professor	18	9%	63	19%
Associate Professor	50	24%	47	14%
Assistant Professor	64	31%	79	24%
Instructor	73	36%	136	42%
TOTALS	205		325	

In 2000-2001, 19 percent of the faculty consisted of full professors. Associate professors were 14 percent, Assistant Professors were 24 percent, while 42 percent were classified as Instructors. In comparison with the 1991-1992 figures, in 1999-2000 there was an increase of 45 faculty members ranked as full professors, a decrease of 3 associate professors, an increase of 15 assistant professors, and an increase of 63 instructors. When we consider the promotion process and criteria followed to achieve these ranks, we can state that, in general, there has been an increase in academic degrees, research, publications, presentations, community and institutional work among the faculty members. In addition, the UPRB's faculty is aging. There are many

that have been with the Institution since its beginnings. Therefore, there are many that have become full professors.

From the information present in the Tables 5 and 6, we can see that the preparation and rank of the UPRB's faculty has improved since the Institution's last accreditation period. This is demonstrated not only through the distribution of degrees, but also in the number of faculty who have been promoted. In addition, the faculty has increased by 120

Another important element of the profile is the type of appointments and contracts assigned to the faculty. These are compiled in Table 7.

**Table 7. Faculty composition according to appointment and contract
1991-1992 and 2000-2001 academic years**

Type of Contract/ Appointment	1991-1992	Percent	2000-2001	Percent
Permanent (Tenured)	138	67%	180	55%
Tenure-Track	24	12%	28	9%
Temporary	6	3%	0	0
Substitute	2	0.09%	0	0
Service Contracts				
Full-time	21	10%	41	13%
Part-time	14	7%	76	23%
TOTALS	205		325	

(See Faculty profile in the departments)

Presently (2000-2001), the UPRB's faculty has 55 percent tenured, 9 percent tenure track and 13 percent have full-time service contracts. Twenty-three percent of the faculty is part-time. While there has been a sharp increase in the number of part-time faculty members, it is important to note that the 14 percent (out of the 23 percent in the 2000-2001 Academic Year) of these are

contracted in the evening in the program of university offerings for Adults (Evening Program), known by its Spanish acronym *UNA (Universidad Nocturna para Adultos)*. During the evenings the degrees may be obtained in Business Administration, Computer Sciences, Electronics, and Early Childhood and Elementary School. Because of the expertise needed in specific areas taught and the difficulty in recruiting qualified personnel who are willing to commit themselves to a full-time teaching load, it is necessary to contract part-time personnel. Many of these part-timers are either employed full-time in agencies and companies where the monetary and non-monetary benefits are more attractive or are self-employed in their own companies. Therefore, a full-time position is not of interest to them. Yet, because of their expertise in the area, the University hires them to offer specific courses where they can contribute with their knowledge to the development of professionals in their field. The majority of part-time personnel is in the Business Administration Departments which, in addition to being the largest academic department in the Institution, offers degree programs with the *UNA* and also with the Public Employees Program.

Another reason for the growth in part-time and full-time service contracts is to cover courses of faculty members with academic load releases for administrative tasks, research, or studies.

In order to complete this part of the Self-Study, two questionnaires (Director's and Faculty) were prepared, administered and analyzed. These were based on the standards and recommended guide questions to compile information regarding the demographic data of the faculty, activities performed by departments for the community, Institutional and departmental committee work, proposals and research carried out, and the awareness of the administration and faculty of administrative tasks. These questionnaires were sent from April to May of the 1999-2000

Academic Year and were collected and analyzed during June and August of 2000. Of the 290 questionnaires sent out to the faculty, 138 responded (65 percent). In addition to the questionnaires, the subcommittee requested the departmental directors to submit their faculty profile for the subcommittee to study. The Annual Reports (1990-2000) filed in the office of Academic Affairs and the Office for Planning and Institutional Research, as well as the UPR Faculty Manual, were also examined for information regarding changes in the faculty profile. Based on the data compiled and reports consulted, the sub-committee proceeded to respond to the questions of the Self-Study Design using the following standard to measure the effectiveness of this area:

- *faculty whose professional qualifications are appropriate to the mission and programs of the institution, who are committed to intellectual and professional development, and who form an adequate core to support the programs offered.*

1. What is the policy for faculty recruitment and what role does the Departmental Personnel Committee play in this?

The University of Puerto Rico has a system-wide general regulation which is applicable to all the units of the UPR. Article 47 of the *UPR General Regulations* stipulates the guidelines for faculty recruitment. These guidelines include quality of the candidate's academic records, quality and competitiveness of the university where degrees were granted, mastery of subject area, publications and presentations offered (lectures, workshops, panels, etc.), research capabilities, and commitment to the objectives and philosophy of the Institution.

Every academic department (including the Counseling Department and Library Resource Center) has a Departmental Personnel Committee made up of three to seven elected members of the department and the director. The members are elected (according to the

guidelines presented in the UPR General Regulations Manual) on the basis of the higher ranks and tenure whenever possible. The Departmental Personnel Committee is responsible for evaluating applications and interviewing candidates. Once this is done, the committee sends its recommendations for contracts to the Dean of Academic Affairs for review. The final decision is made by the Dean of Academic Affairs and the Chancellor. If they are in agreement, the candidate is hired to a faculty position. Contract personnel may compete for tenure-track positions. Recommendations for tenure-track positions follow the same procedure as established for contracts. After five years of satisfactory service to the University, a candidate in a tenure track position may be recommended for tenure. In this process, the Departmental Personnel Committee sends their recommendations to the Dean of Academic Affairs and the Institutional Personnel Committee, who in turn submit their recommendations to the University Administrative Board. The final decision for tenure is made by this board.

In addition to recommendations regarding tenured positions, the Departmental Personnel Committee submits recommendations to the director on other matters related to the administrative and academic tasks of the department. The Institutional Personnel Committee (made up of one representative and an alternate member of each Departmental Personnel Committee and four departmental directors appointed by the Dean of Academic Affairs) advises the Dean of Academic Affairs on promotions, leaves, and tenure, bearing in mind the reports and recommendations made by the Departmental Personnel Committees.

2. Does the faculty, both full-time and part-time, have the academic qualifications and competitiveness to offer the courses in area or program they were hired to teach?

The evidence analyzed indicates that the faculty members have the professional qualifications to offer their assigned courses. The department faculty profiles representing the faculty composition according to the academic preparation held, demonstrated that 98.5 percent (See Table 5 of this section) of the faculty members have a master's or doctorate degree in the area they are teaching.

In the analysis of the faculty profile by department, it was revealed the academic that in the Chemistry Department there were some cases of instructors with a bachelor's degree. Since chemistry is an area of difficult recruitment in Puerto Rico, from 1996 to 1997 there were seven laboratory instructors who were graduate students from the UPR-Rio Piedras campus Chemistry Department and were hired to teach laboratory courses on a part-time basis. However, since 1999-2000, there has been a change in this tendency. Presently, only one faculty member has a bachelor's degree; however, s/he is pursuing studies towards a doctorate degree. All other faculty members of the UPRB have master's or doctorates degrees.

Finally, all teaching personnel must be qualified according to the amended Certification 80-4 to offer courses. While there may be cases of personnel hired who may not have a degree in the specific area they are teaching, they must have a master's degree and a minimum of 15 credits at master's level in the specialty. This personnel is hired only if there are no other candidates available with a degree in the area needed.

3. Does the faculty profile respond to the department needs in the various programs and courses?

The analysis of the Annual Reports and faculty profile indicate that UPRB has a faculty

that is qualified to teach a variety of courses within their departments. (See Faculty Profile of each department.)

4. How does the faculty represent the mission and goals of the Institution?

The UPRB's mission is to prepare students with technological, scientific, and humanistic knowledge. From the faculty profiles and curriculum vitae examined, it can be stated that the faculty composition and profile includes members who represent this mission. (See faculty profiles and curriculum vitae in the departments.)

If we analyze the tenure and tenure-track faculty members indicated in the UPRB 2000-2002 Catalog, there are 50 percent in technology, 30 percent in humanities, and 20 percent in the sciences. These three areas are the emphasis of the Institution's mission, goals, and objectives. Therefore, we can conclude that the composition of the faculty of the UPRB responds to the mission, goals, and objectives.

5. How well does the faculty recognize and understand administrative processes; such as, recruitment, evaluation, promotions, retirement, sabbaticals, leaves of absence, economic aid, petition of funds for professional improvement, health plan, tenure, medical plans, etc.

Table 8 below summarizes the responses of the questionnaire regarding faculty awareness of administrative policies and processes.

Table 8. Faculty awareness of administrative policies and processes

Policy/Process	Very Much	Average	Some	None	No response
1. Faculty recruitment policy	33% (46)	52% (72)	9% (13)	4% (6)	0.7% (1)
2. Evaluation process of the faculty	67% (93)	27% (37)	4% (6)	1% (2)	0
3. Promotion policy	53% (73)	25% (35)	15% (21)	1% (2)	1% (2)
4. Retirement policy	16% (22)	34% (47)	33% (46)	14% (20)	2% (3)
5. Support services for faculty	55% (76)	33% (46)	5.7% (8)	0.72% (1)	5.07% (7)
6. Professional Improvement Plan	15% (21)	48% (66)	21 % (29)	16 % (22)	0

The information presented in the above table (using the results under *very much* and *average* as reference) reveals that the majority of the faculty is aware of the administrative processes especially in faculty evaluation process, support services, and promotion policy.

Recommendation:

-The Faculty Subcommittee recommends that information regarding administrative policies and processes be continuously disseminated to the faculty.

6. How well informed is the faculty regarding their rights and responsibilities and the role of academic freedom in the academia?

Article 68 of the General Regulations Manual of the UPR, establishes the tasks of the Faculty members, and Article 69, states the elements of the academic responsibilities concerning contact and office hours, preparation time and supervision of faculty responsibilities. Article 11 establishes the definition of academic freedom and research. The University protects academic freedom and research while ensuring that it does not infringe on students' rights. Although this is a moral and ethical dilemma, which is

difficult to verify, the student, peer, and administrative evaluations of professors give an idea of how professors have interpreted the limits of academic freedom.

The contract signed by the faculty when hired and the evaluation forms used to evaluate faculty performance at the classroom, administrative, and student levels also indicate the responsibilities of the faculty. It is also the responsibility of the director to orient the faculty members of their department on the rights, responsibilities, and academic freedom of the faculty. All of the aforementioned help maintain the faculty informed on these issues.

Recommendation:

- A formal orientation on the faculty's academic freedom, rights, and responsibilities should be offered annually to all faculty members.

7. How involved is the faculty in other institutional tasks such as committees, senate, academic counseling, community services, proposal writing, investigations, professional organizations, etc.?

Faculty members actively participate in committees at departmental and institutional *levels*. Through a survey to the academic departments where 12 out of the 17 departments supplied the information, 10 departments had 100 percent participation of their staff in departmental committees.

In addition, the Offices of the Deans and Chancellor have committees where faculty participation is evident. (See list of committees and members in the departments and offices.) The Academic Senate and the Institutional Personnel Committee have representatives from each of the academic departments.

Table 9 below presents the results of a questionnaire regarding faculty participation in other academic endeavors in which 138 (out of 290) faculty members responded.

Table 9. Summary of faculty participation 1999-2000

Participation	Yes	No	No Response
Have written proposals	(79) 57%	(57) 41%	(2) 2%
Have offered lectures/workshops to students in the University	(100) 72%	(37) 27%	(1) 1%
Have offered lectures/workshops to faculty	(104) 75%	(31) 23%	(3) 2%
Have worked as a consultant	(98) 71%	(39) 28%	(1) 1%

As we can see from the table, the faculty is also active in writing proposals, offering lectures and workshops to students and other colleagues, and offering their expertise as consultants.

In addition, evidence of community involvement of the UPRB's faculty is provided in the Annual Reports submitted by the Departments and Promotion Files presented by individual faculty members. Some of these activities are organized in the departments, as is the annual Outreach activity offered by the English Department to Elementary and Secondary School Teachers of the Bayamón Educational Region. The individual faculty members are also active in various community affairs dealing with the environment or charitable causes. Some may offer their services regarding their specialty, free of charge, to the community. The form used for faculty promotion includes a section dedicated to Community Service where this is evidenced.

8. How is faculty evaluated?

All faculty members are evaluated according to Certification 1989-90-3 approved by the Academic Senate of the Regional Colleges Administration (former administrative agency under the UPR system that all regional colleges responded to). This Certification

includes the document of norms, criteria and procedures to be followed in the evaluation of teaching personnel. Even though it was designed by the former RCA (Regional Colleges Administration), it is still used as the official document for evaluations. The form used in the evaluation process establishes specific criteria with values assigned according to points.

The classroom evaluation process is done by the Departmental Personnel Committee using the official form prepared by the RCA. The faculty discusses their evaluations with the members of the Personnel Committee and/or departmental director. Other faculty evaluations include the student and the administrative evaluations. The original evaluations are filed in the departments and copies are sent to the Office of the Dean of Academic Affairs.

Besides the aforementioned evaluations, faculty members who submit for promotion are also evaluated. Again, the document used for promotion in rank is the one prepared by the RCA (JA-2 March 1995), which is accompanied by an outline and letters of recommendation from the director and the Departmental and the Institutional Personnel Committees. In addition to the three evaluations mentioned above, the faculty must submit evidence of work and achievements in the following areas: Dissemination and Creative Activities, Professional Improvement, Participation in Committees and Dedication to the UPR, Community Service, and Years of Service at the Institution. The areas are given different values and at the end, the total number of points is calculated. There are minimum points required to compete for promotion to each rank (Full Professor = 115, Associate Professor = 100, and Assistant Professor = 90). The Departmental and the Institutional Committees are responsible for the evaluation of the faculty files submitted and their recommendation for promotion. Presently, the process and document used are under revision by the University.

Recommendations:

-Since promotion in rank is competitive and evaluated according to the total points obtained, the minimum points established should be the same in all categories.

- All evaluation processes and instruments should be revised.

9. How are faculty evaluations used to affect change?

The Law and Regulations Manual of the University of Puerto Rico specifies the process and uses given to faculty evaluations. Classroom evaluations must be discussed with the faculty members within a period of five working days. These evaluations provide for recommendations concerning faculty strengths and weaknesses in teaching. The recommendations are made by the faculty's peers who are members of the Departmental Personnel Committee. The administrative evaluation completed by the departmental director is also discussed with the faculty member. Both evaluations must be signed by the individual and the evaluators. Student evaluations done during the semester are received by the faculty after the grades have been submitted. These are given out to the faculty members, and it is emphasized that they examine all the evaluations to determine the areas that need improvement.

Faculty evaluations are also used for faculty promotions in rank; therefore, the higher the evaluation averages, the higher the total number of quality points used to determine promotion. These evaluations are also determinant in the renewal of contracts for personnel, the recommendation of leaves for sabbatical, and leaves for studies or research, and the identification of human resources that can be used in the University to develop special projects or orient/train other personnel on effective teaching-learning-assessment techniques.

Recommendation:

-The evaluation process should be revised to ensure that it provides for positive changes in the faculty.

10. What mechanisms are in place to support the professional development of faculty (research, conferences, symposia, etc.)?

One of the mechanisms established by the Office of the Dean of Academic Affairs was a faculty-training center to plan and promote professional activities with the academic departments according to the needs of the faculty.

In addition to this project, the Office of the Dean of Academic Affairs has funds assigned for professional activities. The faculty of the academic departments can request funding for professional improvement activities in or outside of Puerto Rico. Many times, in addition to attending the activity, the faculty member is also a presenter. A report of the activities attended is submitted to the Dean of Academic Affairs.

Many academic departments have a Professional Improvement Committee. One of the major tasks of this committee is to identify the areas where improvement is needed and organize training for department members. Some of the departments have a Professional Improvement Plan or an objective related to this in their work plan. Activities to meet these objectives and the needs of the faculty are carried out during the year and reported in the departmental annual reports.

The Office of the Dean of Academic Affairs also provides funding and facilities for faculty research. An annual convention (*Congreso de Investigación*) is held where professors are provided with a forum to present their research projects. Faculty may also request time release from their academic loads or request sabbaticals for research. In addition, they may request funding from the Office of the President of the UPR to carry out research projects. A facility for

research by professors has been prepared in the Library Resource Center with computers and access to the Internet. *Milenio* is an annual publication of the UPRB which includes research articles written by faculty in and outside of the UPRB. It has facilitated communication among the academic community and provided a forum for research.

11. Is there shared governance?

Since 1998, when the UPRB became autonomous, the faculty participates in the decision-making process through its voted representatives of the Administrative Board and Academic Senate. Before this, participation was through faculty representatives in the Collegiate and Academic Boards, both which no longer exist. The Auction Board is another entity where faculty representatives take part in fiscal decision-making processes. (See University of Puerto Rico's General Regulations for duties and make-up of these boards and senate and the charges of Governance and Governing Board in this report.)

The greatest faculty representation is in the Academic Senate where there is one elected representative per department. Decisions arrived at in this forum affect university policy and norms, and it is essential that the norms and policies established contribute to the optimum development of the academia and the well being of the personnel and students. Another important body that advises the administrative personnel is the Institutional Personnel Committee that, like the academic senate has one representative from the Departmental Personnel Committee of each department. In addition, there is an alternate in the Institutional Personnel Committee for every department representative to ensure that each academic department is represented at the meetings.

There is also faculty participation throughout the college via committees (Institutional and departmental) and other programs or offices in the UPRB (See Appendix for list of

committees). This allows the faculty, as well as other members of the university community, to actively participate in the decision-making process.

Finally, there are established procedures for presentation of grievances when a faculty member feels s/he has been affected by the decision-making process.

Recommendations:

The laws and regulations of the UPR system should be revised so as to provide more power to the faculty in the decision-making processes.

General Recommendations:

In regard to the standard identified in this Charge (Faculty), the majority of the faculty is qualified professionals who strive to improve and implement the institutional vision and mission in the teaching-learning-assessment and other activities. There is also faculty participation in the decision-making process through the Academic Senate, Administrative Board, and Auction Board.

The subcommittee with the Faculty Charge recommends the following:

- ✓ Additional strategies to promote faculty participation in research and in student activities could be implemented by the University administration.
- ✓ The Professional Development Center needs to be strengthened.
- ✓ There should be more orientation regarding UPR regulations, benefits and administrative processes. This could be done by expanding the means presently used to disseminate the information.
- ✓ The evaluation instruments and processes should be revised to ensure that they provide for positive changes in the faculty.

- ✓ The laws and regulations of the UPR system should be revised so as to provide more power to the faculty in the decision-making processes.

EDUCATIONAL PROGRAM AND CURRICULA

An educational program includes all the elements that contribute to the full development of the student. Therefore, in addition to the curriculum, the use of other learning resources such as laboratories, library facilities, and support services (counseling, student activities, athletic activities, exhibits, and others) is also considered in an educational program. The quality of the educational program is measured by how the curriculum and other educational activities have fostered the achievement of the institutional mission, goals, and objectives.

The standards of this section are the following:

- *programs and courses which develop general intellectual skills such as the ability to form independent judgment, to weigh values, to understand fundamental theory, and to interact effectively in a culturally diverse world.*
- *curricula, which provide, emphasize, or rest upon education in the arts and sciences, even when they are attuned to professional or occupational requirements.*

Thirteen questions (Questions 4 and 7 were subdivided) were formulated and answered to present this section. A table was prepared to determine what type of information was needed and how it was going to be found. Interviews, analysis of documents and questionnaires for both the faculty and the students were used to respond to the questions. The table and the questionnaires are included in the appendix.

1. Is there evidence of the mission, goals and objectives of the Institution in the resulting achievements of the academic programs and support services?

The academic programs and support services are essential contributors to the development of the following purposes of the institutional mission stated below:

- *To function as a center for the dissemination and development of technological, scientific, and humanistic knowledge.*
- *To prepare persons who, through their university experience, will develop the knowledge, skills, aptitudes, and attitudes necessary to function as responsible citizens who are informed and capable of actively participating in a dynamic society that requires people competent in technological fields.*

The academic programs, as well as the support services, offered by the following departments and offices: Counseling, Library Resource Center (LRC), Financial Aid, Quality of Life, College Placement, Health Services, Student Support Services, Student Associations, Athletic Division, Student Ombudsperson, Registrar's, among others, are aware that their mission, goals and objectives should be in harmony with those of the Institution.

Evidence of the inclusion of the mission, goals and objectives of the Institution can be found in:

- Mission statements of the academic programs and support services
- Course syllabi
- Student profiles

The academic programs, together with the support services, work toward the achievement of the mission, goals, and objectives.

Evidence of these achievements is, among others, the following:

- Graduation rate
- Companies that employ the UPRB students and alumni
- Feedback from alumni and industry
- Number of students who obtain professional certifications
- High scores obtained in the professional certification exams
- Number of students who participate and the awards obtained at local, national, and international competitions
- Number of alumni who pursue graduate studies in public service and related areas (Truman Scholarships Competition-Two of the UPRB students are finalists)
- Number of scholarships granted to students by industry
- Reports of internships results
- Number and reputation of companies interested in recruiting our students and alumni
- Number of students, faculty, personnel and community members that benefit from the support services
- Level of satisfaction with the services offered
- Number of students that graduate with high honors

Recommendations:

-The Institution should strive to continue and expand the support services offered to achieve the mission.

-The support services should design more assessment instruments to evaluate their effectiveness and determine how the mission is being achieved. This assessment should be a continuous process.

2. How articulate are the support services with the educational programs?

The articulation between the support services and the educational programs is, in most cases, informal. Formal articulation with some support services and the educational programs is demonstrated through the following:

- All the educational programs are represented in the Library Institutional Committee.
- The LRC coordinates orientations with the academic programs to serve the needs of the students and faculty in the use of the facilities.
- The Student Services Support Program, which serves first generation university students with low incomes, offers tutoring in Mathematics, Spanish, English, Biology, and Chemistry. Professors of these academic programs are appointed as coordinators. One of the main tasks of the coordinators is to ensure that there is articulation with the educational programs. Some examples of this articulation are meetings held, development of teaching manuals and assessment instruments, recruitment and training of tutors, and activities coordinated with the academic programs.
- Through referrals from the academic departments to the counselors and psychologists and vice-versa, the Counseling Department articulates with the academic programs. Some counselors or psychologists are also assigned to disseminate and coordinate services to students with special needs.

Recommendation:

- Articulation between the academic programs and some support services needs to be strengthened.

3. Do the curriculum and syllabi integrate the new educational tendencies, technological advances, and the needs of the global society?

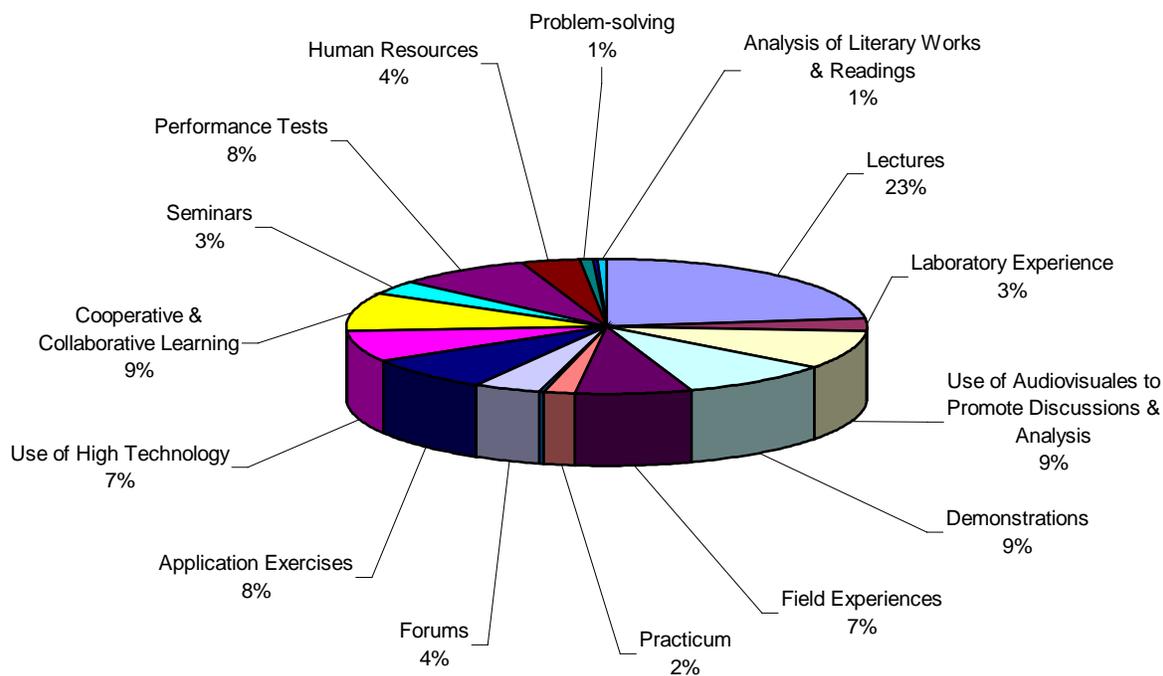
To answer this question, the syllabi and the different activities sponsored by the departments were studied. Also a questionnaire was prepared and administered to the faculty.

The educational tendencies identified in the questionnaire were:

- Active learning
- Cooperative learning
- Clinical experiences
- Critical thinking
- Distance Learning
- Quality control
- Learning communities

Other educational tendencies most commonly incorporated in the classroom are represented in Figure 1.

Figure 1: Summary of Teaching Methods Informed as Implemented in the Academic Departments of UPRB



Source: Report by the Institutional Effectiveness and Outcomes Sub-Committee

The technological advances most commonly integrated in the curriculum and syllabi are the following:

- Use of e-mail
- Internet
- Electronic records
- CD of textbooks
- Tests through computers
- Attendance records
- Presentations on Power Point
- Use of word processing programs (Word, Word Perfect, etc.)

- Use of computer-aided manufacturing (CAM and CAD/CAM with CNC-Computer Numerical Control)
- Programmable Logic Controller used in electronics
- Use of other programs (Excel, SPSS, AUTOCAD, PSPICE, etc.)
- Chats
- Graphic calculators

The results obtained by the questionnaire indicate that there is awareness of the importance of integrating new educational tendencies, technological advances, and the needs of the global society in the curriculum and syllabi of the programs.

In addition, the Institution and the different academic departments of the UPRB are promoting this integration by offering conferences, seminars, lectures, and workshops on critical thinking, Distance Learning, use of e-mail and Internet, use of word processing programs, Power Point, and new teaching-learning-assessment modalities. Currently, the Title V Project, reinforces the use of technology in the classroom through training to faculty and students in the use of facilities and equipment. There is wider use of the Internet and e-mail in the academic and the administrative processes of the Institution. There is also a Distance Learning Committee (See the Office of the Dean of Academic Affairs Annual Reports).

Recommendations:

- The use of technological advances should be more clearly stated in the syllabi.

.-More workshops and seminars in these tendencies should be offered.

4a. How is the university assessing the effectiveness of its programs in the development of professionals?

The Office of Planning and Institutional Research has carried out studies of graduates of the UPRB. Only some departments such as Biology, Engineering, Business Administration, and

Physical Education have prepared their Work Plan to conduct studies of graduates to determine the effectiveness of the program in the development of professionals. The Office Systems Department conducted such a study in 1999.

Different academic programs such as Business Administration, Electronics Technology, Computer Sciences, and Office Systems have a high number of graduates hired by the industry and by the government. This is a measure of the effectiveness of the aforementioned programs. Constant dialog with the industrial sector offers good feedback of the high qualifications of employees that graduated from the Institution. (See Report on Student and Employers Perceptions of the Quality of the Education Received at UPRB-2000-2001).

The Education Department and the Physical Education Department use the percentage of students that pass the Teacher's Certification examination as an indicator of program effectiveness. The following tables represent the results of the scores obtained by the UPRB students of these programs in comparison to the total candidates who took the exam.

Table 10. Total candidates of the UPRB tested and percentage that passed the section of educational foundations and communication competencies for the elementary school teacher certification exam from 1992 to 2000.

Year	Total Candidates Tested	Candidates that Pass		Total Candidates of UPRB Tested	UPRB Candidates that Pass	
		Number	Percent		NUMBER	Percent
1992	3,247	2,352	72%	66	59	89%
1993	2,910	2,133	73%	65	59	91%
1994	2,730	2,134	78%	72	62	86%
1995	3,012	2,372	79%	80	74	93%
1996	2,179	1,644	75%	65	55	85%
1997	3,602	2,868	80%	74	68	92%
1998	3,405	2,564	75%	61	52	85%
1999	3,534	2,642	75%	95	85	89%
2000	3,865	2,913	75%	85	73	86%

Source: College Board Report on PCMAS 2000

Table 11. Total candidates of the UPRB tested and percentage that passed the section of professional competencies for the elementary school teacher certification exam from 1992 to 2000.

Year	Total Candidates Tested	Candidates that Pass		Total Candidates of UPRB Tested	UPRB Candidates that Pass	
		Number	Percent		NUMBER	Percent
1992	3,120	2,504	80%	64	62	97%
1993	2,698	2,185	81%	63	61	97%
1994	2,553	2,102	82%	66	64	97%
1995	2,804	2,319	83%	79	76	96%
1996	2,045	1,680	82%	60	59	98%
1997	3,344	2,782	83%	65	63	97%
1998	3,160	2,563	81%	57	55	96%
1999	3,267	2,639	81%	91	87	96%
2000	3,547	2,789	79%	80	75	94%

Source: College Board Report on PCMAS 2000

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percentage of total population who passed the exam. For the scores separated by programs Early

Childhood and Elementary School and Special and Elementary Physical Education see departmental reports.

Departments such as Chemistry, Social Sciences, Humanities, and Engineering have Transfer Programs whose students have to complete a Bachelor's Degree at other units of the UPR system. The high quantity of students transferred and accepted in other institutions of the system is used as an effectiveness criterion for the programs.

Exams, portfolios and oral presentations are also effective criteria used by some academic programs. These can be found in the syllabi.

Recommendations:

-Assessment plans in all offices and departments should be developed. (Presently only some of these have assessment plans.)

-More training and workshops should be conducted in different methods of assessment.

-Studies of the UPRB alumni performance in the job market should be conducted frequently.

4b. How varied, relevant, and reliable are the evaluation techniques used in course measurement?

To determine how varied, relevant, and reliable the evaluation techniques used in course measurement are, a questionnaire was prepared and administered to the faculty. The results of the questionnaire demonstrated that the faculty is using techniques that are varied and pertinent, and that are in more authentic contexts.

Among the techniques, means, and instruments used by the faculty in their courses, the most common are the following: (listed from the most frequent to the least)

- Tests
- Quizzes

- Performance tests
- Oral presentations
- Book reports
- Laboratory reports
- Monographs
- Investigative projects
- Essays
- Critiques of books and articles
- Portfolios
- Journal entries
- Proposals
- Projects and/or designs

Even though the most common evaluation techniques among the faculty are the more traditional ones, the results of the questionnaires demonstrate that the faculty is incorporating new assessment techniques in course evaluations and are more aware of the variety of ways they can use to assess student learning.

Also, an awareness of the importance of using the evaluation techniques that are valid and reliable is being developed. Evidence of this awareness can be observed through the following:

- Different workshops and seminars are being offered on alternate assessment in the classroom.
- Some departments offer pre and post tests and conduct statistical analysis with the scores obtained on both to determine the reliability of the tests.

- Certain tests, especially those to be administered to a large number of students, are analyzed by different faculty members with expertise in the subject to ensure that the tests measure the mastery of the skills they are intended to measure.

5. How do the educational programs provide for the intellectual, personal, cultural and social growth of the individual?

The intellectual growth is provided through the

- core courses
- general education courses
- clinical experiences
- laboratory courses and activities

The personal development is provided through

- Seminars, lectures, and workshops
- Teaching-learning techniques (journals, portfolios, self-assessment)
- Coordination of academic departments with student associations

The social development is provided through

- Socio-cultural activities
- Student Associations
- Field trips
- Work experiences in internships and practicum
- Teaching techniques (cooperative and collaborative learning)

The general education component (basic courses in humanities, languages, natural sciences and social sciences) of each program provides for the growth of the individual in all of these aspects. The specific courses offer skills in human intellectual development, art and music

appreciation (including computerized music that promotes artistic creation), and provide intellectual, personal and cultural growth. These skills have been integrated to the course syllabi of the academic departments.

Academic Programs such as Electronics Technology, Materials Management, Business Administration, Office Systems and Computer Sciences provide for the social, intellectual, and personal growth of the individual through the Institutional student associations affiliated with the departments. Conferences, seminars, expositions, field trips and socio-cultural activities are organized among the members of the associations. (See the Annual Reports of the Office of Student Organizations.)

The Chemistry, Biology, Physics, Computer Science and Mathematics Departments, among others, provide for analytical reasoning and scientific development. The Chemistry, Biology and Mathematics Departments collaborate with the Student Support Services Program, which provides tutoring in these areas as well as socio-cultural activities. Biology and Mathematics have a mentoring program through the Puerto Rico Alliance for Minority Participation (PR-AMP). Some Departments such as Electronics and Chemistry have undergraduate research also through the PR-AMP program to provide research experience thereby helping to increase the intellectual and personal growth of the students.

The bachelor's degree program in Special and Elementary Physical Education provides courses which contribute to the social and personal growth of the individual. It includes three laboratory courses where interaction with a disabled individual and their family is the main focus. Additionally, there is a course which provides students with a similar experience in an aquatic environment. The students participate in a pre-practicum in a community school and are responsible for the organization of the Field Day and educational trip.

The Social Sciences, as a multidisciplinary and dynamic field, provides intellectual and personal growth based on the contents of its courses. It provides ecological, psychological and decision-making skills for the social growth of the individual, which help him/her manage personality and tolerate differences. The political sciences courses help the individuals to integrate into our democratic system, while the areas of anthropology and geography, as a part of the curriculum of the Social Sciences Department, integrate the cultural aspect of the individual.

The Bachelor's degree in Science in Human Biology emphasizes the social aspect of biology, including volunteer work in the community. Also, the Student Exchange Program, under the supervision of the Counseling Department, provides for the intellectual, personal, cultural and social growth of the students. The students have the opportunity to study in different institutions and meet people with different ideas. In addition, students from other institutions have the opportunity to study in our institution and learn from us. This experience helps students to widen their perspectives about other communities and as a result contribute to their development as an individual in a global economy. Finally, the Honor's Program offers individualized attention for the intellectual growth of its students, stimulating analysis and creativity in an academic atmosphere favorable for studies and research.

6. How are the criteria for course equivalencies applied in the case of transfer students?

Even though several attempts have been made to improve this situation, in general, the criteria for course equivalencies in the case of transfer students are not clear and specific, often depending upon the opinion of the department director in charge at the time of the course equivalency request. On the other hand, in some cases, it has taken more than one year for students to have a final decision of the courses that will be accepted as equivalent to those of the UPRB, for there seems to be difficulties with the equivalency process.

The Office of the Dean of Academic Affairs has prepared a course equivalency document with the purpose of making the procedure faster and more objective. This document is currently being implemented by the department directors for every post secondary institution for which courses are being considered for equivalency.

Recommendations:

Since a considerable number of students transfer to the UPRB from other institutions, the following recommendations are presented:

- The criteria for course equivalency in each of the academic departments, in the case of transfer students, should be clearer and more specific, using equivalency tables and indicating years each equivalency is effective (*For example, due to the constant changes in technology, some courses become outdated after a certain time.*).
- The process for course equivalency should be revised in order to make it faster and more efficient.

7. How relevant are the existent programs to the students of today and do the syllabi reflect updated sources and information?

With the intention of determining how relevant educational programs are to the full development of the students, a questionnaire was prepared, discussed and approved by the subcommittee. The questionnaire consisted of 13 items; questions 1-6 were specifically related to this issue. It was completed by 280 first to fourth-year students from different academic departments. There were also students from bachelor's and associate degrees, and transfer programs represented in the sample.

Question 7 was divided into two parts: the relevancy of the programs and the updated information on the syllabi. The students' responses were tabulated and eighty-four percent (84%) of them considered that the quality of the program they belonged to was relevant and

pertinent to their personal, social, and professional goals. However, twelve percent (12%) were not sure and only four percent (4%) believe their needs are not being met and programs are not relevant.

In the section on comments, some of the concerns that repeatedly came up were the need for:

- ✓ Modern equipment, computers, software and laboratories to complement their programs.
- ✓ More intensive training or hands on experience, especially in electronics, computer and business administration programs. In other words, students would like to have more practical experiences and laboratories that will prepare them for the job market.
- ✓ Specialized computer courses for the Business Administration Program and English conversational courses for the majority of the programs.

Recommendations:

- The institution should work intensively on obtaining external sources for funding new and specialized laboratories with the latest equipment.
- Each academic program should provide or expand existing outside-of-the-classroom experience for the students. This can be offered to the students in semester practicum, internships, cooperative education or simply requiring a certain amount of volunteer work in the field before graduating.
- Companies, industries and ex-alumni should be surveyed regularly to determine the needs of the job market, so programs can be revised based on this input.

- Students should continuously be oriented on the importance and relevancy of the general courses included in their curriculum and how these general educational program courses contribute to the development of a university graduate.

In regard to the question concerning the updated sources and information reflected in the syllabi, various course syllabi were collected and analyzed. The sections on course textbook, reference materials and books, and bibliographic resources were carefully examined. The dates of the sources were tabulated, and the findings revealed the following:

- a) The majority of the courses have updated textbooks. Their publication dates ranged from 1996 to 2000.
- b) Most of the reference materials were from textbooks; only a few articles were listed.
- c) Only one of the courses included Internet sources on their reference list.
- d) Most of the evaluation criteria included in the syllabi had more innovative, varied, and updated assessment strategies.

The recommendations regarding this second part of Question 7 are as follows:

- Course syllabi should include Internet sources as reference material.
- Updated articles should be added to the list of references.
- Workshops should be coordinated by the Learning Resource Center for each department, so professors are informed about the many options available on the Internet for locating reliable, updated sources.
- Professors should be able to continue to use those textbooks which are a valuable source of information, without having to worry about its date of publication.

8. Does the university demonstrate data gathering and analysis to improve the teaching and learning process?

The Institutional Data Fact Book, Departmental Annual Reports, grade statistics and grade lists, information from other offices related to the programs, and student and professor evaluations are instruments used to gather and analyze data concerning the effectiveness of the teaching-learning-assessment process.

Some of the academic departments have conducted studies of graduates and/or have elaborated curriculum revision plans. Other academic departments have studies pending, such as the Business Administration Department, which is interested in working on three studies, one of these with the industry. With respect to the service departments, some are using pre and post tests in their basic courses. Examples of these are the English and Spanish Departments. The English Department is also distributing questionnaires to be completed by the students before and after the basic courses, to compare results. In the Biology Department, the information gathered helped in the implementation of the bachelor's degrees in General Biology and in Biology with a Human Approach. This department is currently conducting surveys to gather information about the satisfaction of the students with their courses. Others, such as the Education Department, also use the information gathered from their student association to make curriculum revisions.

Most of the departments and administrative offices of the UPRB are working on assessment plans. An Institutional assessment plan has been submitted to monitor the articulation among the academic, student, and administrative efforts and to monitor the effectiveness that will be the basis for the curriculum revision and the improvement of the teaching-learning-assessment process.

Based on Question 8, it is recommended that more meetings should be conducted about data gathering and analysis to improve the teaching-learning-assessment process.

9. In what way do the existing courses provide for the development of critical thinking skills?

Most of the faculty of the Institution provide for the development of critical thinking skills, as indicated by the results obtained from a questionnaire that was administered and the analysis of course syllabi.

According to the results of the questionnaire administered to the faculty, the critical thinking skills most commonly developed are as follows:

- a) Observe and recall
- b) Organize ideas or events
- c) Classify
- d) Apply deductive reasoning
- e) Evaluate
- f) Compare and contrast
- g) Interpret
- h) Identify problems
- i) Make generalizations
- j) Distinguish between pertinent and non-pertinent information.

The faculty uses different strategies to develop critical thinking skills among the students.

The following strategies are most commonly used:

- a) Informal discussion
- b) Assigned projects or research
- c) Readings and discussions
- d) Team work

- e) Comment and analyze situations / Problem solving
- f) Presentation or exposition
- g) Presentations and discussion of reports
- h) Socratic dialog

Most of the syllabi demonstrate through the objectives and the activities included that the courses provide for the development of critical thinking skills. Results from the questionnaire demonstrate that the faculty considers this to be true and that students accept these types of activities with a positive attitude. Some professors consider that the students at first do not accept them, but after a while, they realize the importance of developing critical thinking skills. Others consider that it is vital to initiate activities that provide for the development of critical thinking skills because we live in a complex and changing world in all aspects of life. There are some professors who don't emphasize critical thinking skills development. They feel that some students are either against or not accustomed to this type of analysis. As a result, the presentation of critical thinking abilities in class is stressful. On the other hand, some professors expressed that there is not enough time to discuss the many topics included in the course syllabi during the semester and at the same time develop these skills.

However, the form use to evaluate classroom performance includes the development of critical thinking skills as one of the criteria. This is another way the effectiveness of the development of critical thinking abilities can be measured.

From the information obtained for this question, the following recommendations are presented:

- ✓ More course syllabi should be revised to ensure that they provide for the development of critical thinking skills.

9. Are the programs structured so as to provide for internships and job experiences?

Some of the bachelor's degree programs of the UPRB are structured so as to provide for internships and/or job experiences. There are different ways in which the programs provide for these experiences:

- a. The Early Childhood and Elementary Education Program and the Special and Elementary Physical Education each offer a practicum (EDPE 3345 and EDFI 4199, respectively). In this practicum, students teach in a school with the supervision of a teacher.
- b. The Early Childhood and Elementary Education Program also has a seminars which include laboratory experience in the pre-school and kindergarten levels.
- c. The Business Administration Program offers internships in accounting (CONT 4026) and in marketing (MERC 4235).
- d. The Office Systems Program also has a practicum course (SOFI 4985). In this practicum, students work as secretaries in different practice centers.

Other programs are fully aware of the importance of job experience and are working towards implementing activities in their curriculum that provide for internships or some kind of job experience:

- a. The Electronics Engineering Technology Program notifies its students about job opportunities through the College Placement Office. In addition, internships for students have begun.
- b. The Business Administration Program with specializations in Finance and in Management, although not yet implemented, has created internships for their students.

- c. The Materials Management Program of the Engineering Department requires students to prepare a research report based on a study of the purchasing processes of an industry in one of their courses. Students must visit the industry and observe operations in order to prepare their report for the course. Their findings are also presented to the industry's management personnel.
- e. The Computer Sciences Program has a research workshop and seminar, in which its students prepare computer programs for private companies. It is also preparing a practicum course for its students.

Finally, there are special programs where students can acquire experience during the summer or a semester with the private industry, or the local or federal government. Examples of these are the Cordova Program and HACU (Hispanic Association of Colleges and Universities). Students participating in the Honor's Program also have the opportunity of participating in research experiences during the summer.

Recommendations:

- ✓ More programs should have some kind of internship or provide job experience to its students.
- ✓ More communication should exist between the program directors and the employers.
- ✓ Although each of the programs has information related to their students and these experiences, data related to job experiences and internships need to be centralized in an office where dissemination and follow-up could be offered.

10. Do the courses respond to the expectations and particular needs of the students?

A questionnaire was administered to 280 students from all the academic departments from first to fourth year. It was found that:

- Eighty-five (85%) consider that the courses included in the curriculum will prepare them professionally, nine percent (9%) are unsure and six percent (6%) disagree or completely disagree.
- Fifty-two percent (52%) consider that the courses included in the curriculum respond to their social needs, twenty-six percent (26%) are unsure and twenty-two percent (22%) disagree or completely disagree.
- Seventy-four percent (74%) consider that the courses included in the curriculum respond to their academic needs, eighteen percent (18%) are not sure and eight percent (8%) disagree or completely disagree.
- Fifty-eight percent (58%) of the students consider that the courses included in the curriculum of their programs respond to their personal needs, twenty-three percent (23%) are not sure and nineteen percent (19%) presented some degree of disagreement.

Most of the directors of the academic programs and service departments consider that the courses offered in their departments satisfy the needs and expectations of the students. The departments offer the students the courses they need for transfer, for obtaining an associate or a bachelor's degree, and for employment. In some programs, such as Computer Sciences and Office Systems, students find jobs before they graduate. In other programs, such as Early Childhood and Elementary Education, school system recruiters visit the Institution to hire students.

In the degree programs of Early Childhood and Elementary Education and Special and Elementary Physical Education the results of the certification tests demonstrate program effectiveness. (See Tables 10 and 11 in questions 4a of this section.).

In the technological departments such as Electronics, the courses provide laboratories in which the students discover the basic principles in electronics and apply theory to practice. In other departments, such as Education and Business Administration, the students are exposed to clinical experiences. The UPRB also has an Honors Program, which responds to the particular needs of talented students by providing them with special courses and activities. The Honor Program, among other things,

- offers individualized attention for the intellectual development of its students.
- encourages independent study and research, and
- provides for the exchange of ideas between the students and the faculty of the different disciplines.

In order to meet the new trends of today's world, the Institution needs to incorporate new technology and respond to the industry. As a result, courses are revised frequently.

General Recommendations:

- ✓ More orientation and workshops should be offered to the faculty on alternate means of assessment and the incorporation of technology.
- ✓ The Academic Departments and the Office of the Dean of Academic Affairs should provide follow-up to their Assessment Plans to ensure that the orientations are being offered.
- ✓ Follow-up must be given to determine the effectiveness of the assessment modes being used and the identification of the areas of assessment that need further training.
- ✓ Studies of the UPRB alumni performance in the job market should be conducted frequently.

- ✓ The process for course equivalency should be revised in order to make it faster and more efficient.
- ✓ More course syllabi should be revised to ensure that they provide for the development of critical thinking skills.
- ✓ The Institution should strive to continue and expand the support services offered to achieve the mission.
- ✓ The support services should design more assessment instruments to evaluate their effectiveness and determine how the mission is being achieved. This assessment should be a continuous process.
- ✓ Articulation between the academic programs and some support services needs to be strengthened.
- ✓ The use of technological advances should be more clearly stated in the syllabi.
- ✓ The institution should work intensively on obtaining external sources for funding new and specialized laboratories with the latest equipment.
- ✓ Students should continuously be oriented on the importance and relevancy of the general courses included in their curriculum and how these general educational program courses contribute to the development of a university graduate.
- ✓ More programs should have some kind of internship or provide job experience to its students.

LIBRARY AND LEARNING RESOURCES

Introduction

The Library and Learning Resource Center (LRC) is located in a recently inaugurated building. The LRC has 54,471 square feet, 596 carrels, eight (8) group-study rooms and a Media Center. The LRC also has 44,482 book titles and 60,132 volumes; 70,562 periodical and newspaper items; 30,184 ERIC Collection of microfiches; and 5,992 audiovisual resources at the Media Center. Library books and audiovisual materials are organized according to the Dewey Decimal Classification System. The LRC is a repository of knowledge and gateway to information and is thus the cornerstone of all educational activities of the UPRB. The Center has assumed a leading role in researching and applying new information technologies to improve information access for users. The guiding principles for library services are driven by student success, learner needs, information literacy, and learner independence.

In considering this charge, the following standard was taken into consideration:

- *library/learning resources and services sufficient to support the programs offered and evidence of their use.*

During the second semester of 1999-2000, the LRC conducted a library-specific survey (See Appendix under Library Charge for survey) that was administered to faculty and students. This survey was designed to be used as a possible model for future use by the LRC, and to address specific questions concerning the adequacy of library resources in terms of quality, availability and delivery of library services. This survey, which was examined and analyzed by the Library and Learning Resources Committee, will be referred to in the information included here. The following are the guide questions and findings:

1. Does the library serve the curriculum and research needs?

The library serves the curriculum and research needs by providing the necessary documents and references for the courses offered at the Institution and by maintaining copies of the updated course syllabi. According to the survey conducted with the students, 56 percent of the participants stated that the library included the bibliography and syllabi references of their courses (See question 9 of student questionnaire in Appendix). The library also serves these needs by maintaining its collection up to date. More than 63 percent of the students evaluated the book, magazine and periodical collections above average. More than 65 percent of the faculty also evaluated these collections highly.

The library offers the students the opportunity to use materials on reserve and 68 percent of the students stated that they used these services. Also 67 percent of the students came to the library to consult materials for assignments.

The library is using the latest technology such as computers and Internet to support curriculum and research needs by developing an instructional computer lab and by permitting students and faculty access to personal computers connected to the Internet and CD databases; such as, encyclopedias NISC (National Information Services Corp [Latin American Studies-HAPY]). These personal computers are found in various locations of the library such as the Reference Section, the Periodical Room, and the Puerto Rican Collection.

The library tries to enhance its collection by processing purchasing requests made by the different academic departments. From the years 1996 to 2000, the library has spent approximately \$130,000 per year to maintain this collection up to date (See Library Director's Annual Reports 1996-2000). The library strongly supports inter-library loans services.

In general, the library complies with trying to support the curriculum and research needs. It is recommended to have more computers available for students to use in the different areas of the library.

2. How does the library provide those services necessary to stimulate academic activities among the community and educate the information seeker?

The library offers hands-on workshops on library instruction to students, faculty and staff members on a regular basis. These workshops deal with how to use the library's resources such as Infotrac for periodicals, Webpac for the online catalog, and the use of the Internet. The library has offered 503 hands-on workshops (1998-2000) on library instruction to students through professors' requests. The students have participated in workshops that deal with Infotrac, bibliographic styles, and ERIC. They have also received tours of the library. Since 1996, more than 2000 students have participated yearly in these workshops (Source: Library Instruction Reports 1996-2000). The purpose of these workshops was to help students become independent research seekers and to apply these skills in their lives and future careers.

The library personnel have participated in hands-on library supplementary funded instructional programs during the summer for incoming students. For the past three years, freshman students of the Student Support Services Program (SSSP) have participated in a series of library instruction workshops. By the time the students begin their first year, they already have the knowledge to conduct research in the various areas of the library (Source: Proposal Learning a Third Language: The Learning Resource Center).

The public-services staff regularly compiles bibliographies on topics of high interest; in addition, the staff compiles bibliographies upon request of its clientele. As a result, recent acquisitions are automatically generated by the on-line system.

Librarians work with teaching faculty to assist in the effective use of resource materials and to plan instructional sessions that are most appropriate for their classes. An example of this relationship is the active participation of the professional librarians in a new course that heavily emphasizes the use of electronic information resources in the Social Sciences.

Professional librarians participate in workshops for teaching faculty. The library provides services such as conferences, workshops and locally produced materials to educate the community on how to fulfill their information needs. Artistic and educational exhibitions offered by the LRC are also part of this effort (Source: Library Resource Center Annual Reports 1996-2000).

In 1990, the reference area in the library was redesigned so that librarians and other staff could work effectively in assisting users with both print and electronic resources.

Formal assessment of programs and facilities that is conducted annually appears in the Library's Annual Report in which supporting statistical information on the growth of the collection and number of services is presented (See 1998-1999 Public Services Annual Report).

The library staff regularly uses standard communication mechanisms such as suggestion boxes, meetings and informal contacts to learn about the users' needs (See Minutes of Public Services Staff Meetings).

Results from the questionnaire reflect that 32 to 45 percent of the students locate their resources through electronic catalogs, Internet and databases. Similarly, 32 percent of the faculty has shown satisfaction with the use of locating resources electronically. Although the library offers more than 500 workshops a year to the students, still more than 50 percent of the students stated that they had obtained their information with the help of other users. Also, 40 percent of the users expressed that they had previous knowledge (See student questionnaire Part II - 13).

The results of the questionnaire also revealed that more than eighty percent (80%) of the students asked the librarian how to access information. To satisfy this high demand, the library has appointed a librarian who is in charge of the computer instruction lab. This lab is known as know Infonexus and includes among its objectives to help students locate information (See student questionnaire Part II -7).

3. How has the library taken full advantage of the explosive growth of web-based library products and services?

The library has changed its online catalog to a web-based system since 1999. One of the most important features of the online catalog is that it is integrated to the University of Puerto Rico's network. The academic community can access the library's resources from any terminal or computer connected to Internet. The library is also changing from CD databases to Internet databases, for example, Infotrac. Also the UPR has plans to purchase more Internet databases for all of the campuses. Citation databases and full text databases will be available via the electronic networks.

The Technical Services Department of the library has been changing from manual procedures to a web-based system. This is used for daily operations acquisitions and cataloging modules. It creates bibliographic records for library materials using the Dewey Decimal Classification scheme and standard MARC (Machine - Readable Cataloging) communication format. Because of its shelf list conversion project, the library's monographic holdings have all been converted to machine-readable form. The library's new on-line system (HORIZON) offers more information such as on-line records (e.g., the location of material being processed or checked out) than what is available through a card catalog or the NOTIS on-line system.

With the use of technology in the library, it is important that all students take a library literacy skills seminar of the use of the facilities. Many students do not have the skills; and the courses, for the most part, do not provide for the development of these library skills.

For the next few years, the library will have to continue to confront the challenge of maintaining and enhancing its services while at the same time it will have to invest substantial funds to acquire the latest technology and programs.

Recommendations:

- ✓ A library literacy course should be given to all students upon entering the UPRB.
- ✓ The library must continue to maintain and enhance its services and equipment on a continuous basis.

4. What evidence exists that demonstrates that the library orientations are designed to increase the information competence of students, faculty and administrative staff to know when they have an information need and to evaluate and effectively utilize the information?

Since the student library instruction orientations consist of hands-on workshops, the participants are given various exercises in which they have to locate and evaluate information they could use. During these orientations, the librarians make sure that the access of information is done appropriately. In their evaluations, the students indicate that they have successfully completed the objectives of the orientations (See samples of evaluations - Summer proposal evaluations of 1998 and 1999).

The information needs of our library user are an important concern of our staff. The library has conducted studies, surveys and used statistical and library's instruction questionnaires to evaluate this matter among the users. The efforts have increased library service hours and new additions have been made. The development of an independent, information literate user is one of the library's ongoing goals.

Within the library, regular meetings are held at various levels to improve library management and communication. These include meetings of department heads, all library staff. Library functions and tasks are also advanced through the existence of both standing and ad hoc committees with cross-organizational membership.

The guiding principles for library services are driven by student success, learner needs, information literacy, and learner independence. Information technology is at the heart of the delivery of instruction and information resources.

The access to the technology and Internet has made the library face many challenges concerning its library instruction for students, faculty, and administrative personnel. Some of the challenges consist in helping the academic community to locate, limit, and assess the vast amount of resources and information adequately.

5. Are the library sources available adequate to support the programs and services being offered?

Results from the faculty questionnaire indicated that 62 to 79 percent of the participants rated their level of satisfaction with the library's collection between excellent to good. The participants also highly rated their satisfaction with several resources such as the circulation and periodical collections; the hours of availability of librarian assistance; number of librarians, the borrowing periods of books and reserve materials; and the communication with the library personnel. Between 43 and 64 percent of the students reported a similar level of satisfaction with most of the library's collections. The students were also satisfied with the hours of availability of librarian assistance, the number of librarians, the use of the study rooms, the services of the Audio Visual Department, and the rules for the library users (See faculty and student questionnaires Part III).

The library has established access to the resources both on and off campus to students, faculty, administrative staff, and the community through its electronic Web site. The library has increased its operating hours to 79 hours weekly and to 85 hours during the final examination period (See library schedule and Annual Report 1999-2000). At the present, the library has 8 full-time professional librarians, 35 support personnel, and 40 student assistants. In the near future, the library plans to increase the number of librarians.

A new position, Collection Development Librarian, will be created for the academic year 2000-2001 Academic Year, to support the development of collections in electronic form through both ownership and network access. The circulation module for the new on line system includes not only standard automated-circulation features (checkout, renewals, holds, and billing), but also additional data such as on line information in relation to course materials placed on reserve in the library.

In 1998-1999, the library circulated nearly 74,934 items from its general and reserve collections, both automated and manually (See Public Services Annual Report 1998-1999). Although the Library is open to all users, only students, faculty and staff (automatically) have full access to the borrowing privileges of the library's materials. Reference library materials are available in open stacks; the other materials are located in locked locations. The Periodicals Room, Puerto Rican Collection, Juvenile Collection, and the Reserve Area are available through sign-out systems. Annual statistics for the 1998-1999 Academic Year indicate that 117,955 items (books and periodicals) were used (1998-1999 Public Services Annual Report).

The library is an important component in any new program; therefore, steps have been taken to update course syllabi, and the Office of the Dean of Academic Affairs strongly emphasizes the

updating of the collection to support course bibliographies. An Institutional Library Committee is part of this effort.

In conclusion, both the faculty and the students have stated that they are satisfied with the services they are receiving from the library. Also, they rated the communication they have established with the personnel of the library as very highly. This personnel has been described as helpful, knowledgeable, and cooperative. It is recommended that the library establish a regular and systematic evaluation process that can further determine the adequacy of the library's resources and services for the academic community on a continuous basis. The results of these evaluations can be used to make improvements to the library.

6. Is there evidence of updated materials and resources?

The Technical Services Department, through its monthly and annual reports, compiles statistics on recommendations before ordering and purchasing bibliographic resources suggested by the faculty members and the university community. This Department also updates the standing order file. Faculty should be strongly encouraged to support and maintain the collection development. Many times very few recommendations are received by the faculty regarding the purchase of library materials for the collection. The library collection must constantly be updated to include current materials and resources that should be included in new or updated syllabi.

The Institutional Library Committee, which consists of faculty members from different academic programs, began a project in 1996 for the evaluation of the collection. (See Institutional Library Committee file).

7. Has the collection taken into consideration the Institutional Strategic Plan when expanding its collection?

The library has strongly supported the Institutional Strategic Plan in its collection development (See Institutional Strategic Plan-May 1996, Objective 4.1 & 4.3). The addition of new programs has been supported by affirmative actions in the evaluation and purchasing of new materials. The needs of the local community are also of concern when the collection is updated.

8. Does the faculty have a role in the selection and weeding out of the library collection?

The library has an Institutional Library Committee made up of members of different academic departments and library personnel. Through this committee the library makes contact with the different departments to select and weed out the library collection. Even requests made by individual faculty members are taken into consideration. The library makes an effort in acquiring as part of its collection the sources that are included in the bibliographies of the course syllabi. The faculty plays an important role in weeding out and selecting new library materials. Efforts have been made to increase faculty involvement in shaping the collection. The Institutional Library Committee serves as a liaison between library and faculty; however, increased participation of the faculty must be strongly encouraged

The faculty has an active role in the selection of materials. The requests are granted as long as the funds are available. Faculty members have felt very comfortable in making recommendations. However, more faculty participation is needed to maintain the collection current and relevant to student and course needs (See Self-Study Library Survey in the Appendix.)

9. Does the library have policies on collection development?

The library is working on development policies for the different collections. These policies will dictate goals, objectives, and procedures for evaluating, replacing and acquiring of library materials. The University community will be informed of these policies through the Institutional Library Committee.

10. To what extent are the resources actually utilized by students, faculty and staff?

The library is a major component of the learning process within the college environment. The utilization of the facilities, materials and services is constant. Statistical data of all services is gathered throughout the library components (See Annual Reports 1996-2000).

General Recommendations:

- ✓ In areas such as curriculum and research needs, the library should be supported by all the academic departments. Faculty should be strongly encouraged to support and maintain the collection development. The library collection must constantly be updated to include current materials and resources that should be included in new or updated syllabi.
- ✓ Academic activities should be stimulated by aggressive library activities such as the offering of seminars, the publication and distribution of handouts, the presentation of online materials, and information fairs. Innovative programs, service hours and initiatives should serve as a new alternative to a constantly changing academic community.
- ✓ The library should create a special task force to deal with the areas of new technologies and with the development of proposals, studies of usage, and the establishment of policies concerning technological realities, trends, and projections.

- The members of this committee should be experts in the areas of educational technology and library services.
- ✓ If the library wishes to expand its technological efforts, it is necessary that the Institution's infrastructure support these efforts by increasing the number of computers, software, CD and online databases, telephone lines, and fax machines. This support is crucial for the Public Services Department.
 - ✓ In the areas designed for the University faculty members, it is essential to support faculty research by increasing the number of computers, the amount of space, a wide range of software and resources, and a variety of formats, such as hardcopy, online electronic texts, and other media.
 - ✓ A collection development position is necessary.
 - ✓ It is important for the Library Resource Center to develop an assessment plan as soon as possible. This plan should be put into practice without delay. Workshops in the area of assessment should be offered to the library personnel as a way to design and implement this type of plan.
 - ✓ A formal course on information literacy should be part of the overall curriculum.

INSTITUTIONAL EFFECTIVENESS AND OUTCOMES

Introduction

Assessment should be undertaken on a regular basis so as to determine the next steps to be taken to continue, adapt, eliminate, or develop a particular strategy or activity in order to achieve the goals established. In this way, the Institution promotes an effective assessment process in all its components, especially in the academic component, which is the main focus of any educational institution.

The Institutional Effectiveness and Outcomes Committee's objective was to evaluate the departments quantitatively and qualitatively to determine how well prepared they are in assessment techniques at classroom, departmental, and Institutional levels in attaining the following standards:

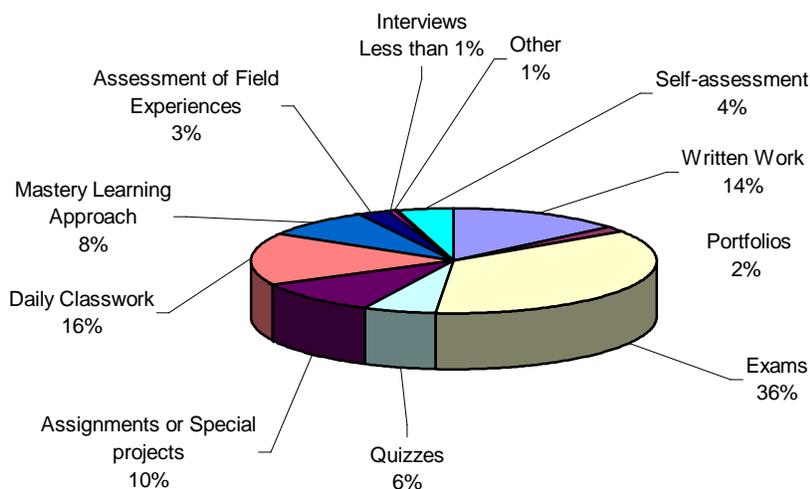
- *policies and procedures, which lead to the effective assessment of institutional, program, and student learning outcomes.*
- *ongoing institutional self-study and planning aimed at increasing the institution's effectiveness.*

The following are the questions that were presented in the Self-Study Design and used to guide the Institutional Effectiveness and Outcomes Sub-committee in their charge.

1. What methods are used to evaluate the effectiveness of the teaching-learning process in the Institution?

The methods used to evaluate the effectiveness of the teaching-learning process are represented in Figure 2 that follows.

Figure 2: Summary of Assessment Techniques Informed as Implemented in the Academic Departments of UPRB



In general, partial and final exams are the most used assessment tools in the departments. The syllabi indicated assessment techniques that, according to the information compiled in the interviews and questionnaires, were not identified as being used in the classroom. Yet, it is noted from the data collected that the faculty has been searching and incorporating new techniques to evaluate student performance. Among the new techniques used, we may mention portfolios (these include the electronic portfolio as well), web page designs, quizzes via e-mail, and critical thinking tasks to mention a few. Some professors from the English and Education Departments reported they are using rubrics for students to reflect and do self-evaluation. These techniques have been identified through interviews since many have not been documented in the syllabi as yet. Technology has brought about new paradigms in evaluation techniques, and there is evidence that the faculty is using these technological tools in assessment more frequently.

In addition to these modes of assessment, effectiveness is also measured through the analysis of grade distribution, feedback from employers regarding job performance of the UPRB's graduates, and the statistics of the number of students that are recruited once they graduate. The majority of the companies and agencies that recruit our students are highly competitive and selective of the employees they chose. Many of these visit the campus annually for recruiting purposes (Source: Reports from the College Placement Office).

Based on the data collected in interviews with department directors and examination of course syllabi,

- the departments, in general, have balance between the teaching methods and the assessment techniques used.
- there is a growing awareness of the variety of assessment techniques that can be used in the academic environment. However, it is important to note that there are

still some syllabi of the departments that have not included alternative assessment techniques. Seventy-four percent of all the academic departments had alternate assessment techniques in their syllabi. The other 26 percent are in the process of revising the syllabi so as to include alternate assessment techniques.

2. How effective has the outcomes assessment been in the development of academic programs?

According to the interviews and questions posed to the directors of the academic departments, awareness has developed regarding the analysis of the data generated through the assessment process to evaluate and make decisions in regard to the revision and improvement of academic programs. During the interviews, the program directors informed that, in general, the faculty and university community has attended workshops and seminars on assessment.

Even though the documents reporting on academic program effectiveness offer arguments to support curriculum changes and innovations, there is limited empirical evidence that presents reliable and valid data to support the effectiveness of the changes and innovations.

As a result of the findings regarding assessment introduced by the departments, the following activities have occurred in the departments:

- a. Promotion of the revision of programs and/or syllabi (ex. Office Systems [SOFI], Biology [BIOL], Humanities [HUMA])
- b. Development of new courses and/or incorporation of innovations in the teaching of assessment based on the constructivist approach; for example:
 - SOFI 4040 – Planning and Implementation of Office Systems - (Office Systems Department)
 - SOFI 4038 – Office Administration – (Office Systems Department)

- SOFI 4005 – Integration of Data Processing Programs – (Office Systems Department)
 - MUSI 3301-3302 - Music through Computers
 - FILO 4028 – Bioethics
 - EDPE 2008 & 4115 – Seminar on the Elementary School Curriculum & The Teaching of Science and Mathematics in the Elementary School.
 - INCO 3006 – Business Communication II
- c. Development of assessment sub-committees in some departments that give support to the assessment process.
 - d. Administration of student surveys to learn about course preferences at bachelor's and associate levels (Computers) or other topics of interest (English)
 - e. Writing of proposals for external funds (Electronics obtained \$135,000 in external funds for equipment)
 - f. Retention of students in the engineering transfer programs to Mayagüez
 - g. Revision of pre-basic courses (Mathematics, English & Spanish)
 - h. Maintaining statistical information on the use of the laboratories (English)
 - i. Performance of studies regarding preparatory courses (Mathematics)
 - j. Development of proposals to improve courses and programs and increase achievement in students deficient in the skills needed for success (Mathematics)
 - k. Development of proposals which integrate other departments. (Humanities)
 - l. Development of special projects (ex. Distance Learning Project with Education Department and the Professional Development School of Education)

3. What relationship exists between the assessment outcomes and the Institution's missions, goals and objectives?

Through the interviews and the information compiled from various departments demonstrated a direct relationship between the established mission, goals, and objectives and the assessment outcomes.

The mission, goals, and objectives state:

- ✓ *To prepare persons who, through their university experience, will develop the knowledge, skills, aptitudes, and attitudes necessary to function as responsible citizens who are informed and capable of actively participating in a dynamic society that requires competent people in technological fields.*
- ✓ *To function as a center for the dissemination and development of technological, scientific, and humanistic knowledge.*

Some examples of outcomes assessment that contribute to the improvement of the teaching-learning process for the development of the individual the Institution wishes to develop are the following:

- a) Creation or strengthening facilities for professors and students to conduct research and to develop specific skills. (Electronics Department)
- b) Promote and support student associations which enhance humanistic and leadership skills. (Materials Management in the Engineering Department)
- c) Development of the Multimedia Language Laboratory Center (English Department)
- d) Title V Proposal to strengthen skills in the academic areas through technology. (Spanish, English, and Mathematics Departments)

- e) Teaching and evaluation techniques which incorporate technology such as use of e-mail, the Internet, Power Point presentations, (English, Computer Sciences, Engineering, Electronics, and Office Systems Departments)
- f) Development of critical thinking and self-motivated learning (See study of student performance in comparison with the Institutional mission, goals, and objectives.)
- g) Gathering of evidence regarding the performance of the UPRB engineering transfer students in UPR-Mayagüez and other engineering institutions. (Mathematics)
- h) Competitions for students to demonstrate their knowledge, special skills and abilities. (Office Systems, Programming, Mathematics, Biology, and Chemistry Departments)
- i) Mentoring Program-TADDEI (Biology)
- j) Educational Activities such as EXPO-ADEM, Educational Services end-of-the-semester activity, and Job Fair.

The departments, in general, are becoming aware of the importance of outcomes assessment and are integrating innovative teaching-assessment techniques. In addition, this assessment process extends to the administrative aspects. This is a process that has become a part of the Institution and will be the one to guide it in the decision-making process. The aforementioned is an example of how the Institution is complying with the outcomes assessment.

Recommendations:

1. All departments must have an assessment plan

4. How effective is the assessment plan in areas such as programs, curriculum, courses, and other educational activities?

The UPRB has developed an Institutional Assessment Plan based upon the University's mission and ISP. The plan has been in effect through stages. The first stage was the orientation of the UPRB's community of the concept of assessment and what is used to measure effectiveness in their areas. The second stage was the development of departmental and office assessment plans based upon the Institutional Assessment Plan, ISP, and the individual departmental and office needs. We are now training personnel in teaching-learning-assessment techniques focusing on alternate means of assessment and the development additional instruments to measure the effectiveness of programs, curriculum, courses, and other educational activities.

Many of the academic departments are presently in the process of developing an assessment plan and as a result have not been able to strategically and systematically evaluate its results to determine the level of effectiveness. The series of orientations and workshops in assessment that have been offered have contributed to the polishing of the assessment plans and the improvement of the effectiveness of educational activities. These assessment plans are in accordance with the work plan that each department has established. Examples of activities that are used or being developed for assessment in some of the departments are as follows:

- a) Monitoring students to determine if they are graduating within the time established.
- b) Determining if the students are acquiring the job skills needed for employment.
- c) Compiling information regarding student retention, graduation, registration of new students, and job placement.

- d) Developing awareness in the departmental directors of the need to gather and classify evidence of assessment.
- e) Identifying resources and training of professors to work on assessment. (All programs)
- f) Evaluating education activities, such as Job Fair, EXPO-ADEM, and Student Support Services Program end-of-the-semester Presentation

The development of assessment plans has helped in making the departments aware of the importance of outcomes assessment. As a result, the departments are integrating more assessment techniques academically and administratively. This is a process that has become a part of the Institution and will be the one to guide it in the decision-making process.

5. What kind of follow-up procedure has been offered to measure the effectiveness of academic programs in the preparation of future professionals?

Although the departments are in the initial phases of the outcomes assessment process, follow-up to determine the effectiveness of programs has always been done. In addition, the Institutional Assessment Plan has guided the UPRB in measuring the effectiveness of academic programs and the achievement of the mission. Examples of the follow-up given are the following:

- a) Studies based on follow-up studies of graduates of the Institution
- b) Questionnaires to students and employers
- c) Evaluation of Practicum
- d) Internships with industry
- e) Research done by students in industry
- f) Meetings with faculty and people from industries
- g) Departmental assessment committees

- h) Academic Counseling Reports
- i) Monitoring of students who transfer to other units from the UPRB
- j) Analysis of grade reports
- k) Study to compare or establish the student profile in the academic programs
- l) Analysis of information gathered from questionnaires sent to graduates of the UPRB
- m) Mechanisms used to offer orientation regarding graduate programs.
- n) Effectiveness of special programs

Recommendations

According to the study carried out by the Institutional Effectiveness and Outcomes Subcommittee, the following is recommended:

- ✓ More seminars and courses in innovative teaching-learning-assessment techniques for faculty and other members of the University community with an interdisciplinary focus need to be offered continually.
- ✓ The teaching-learning-assessment process in the syllabi should reflect clearly and specifically up-to-date and effective teaching-learning-assessment techniques which foster the development of student conceptual learning and general abilities that lead to the development of an individual. The data must be presented so as to demonstrate the collaborative interdisciplinary efforts made to enrich the learning process.
- ✓ There should be more collection of data to generate evidence of program effectiveness in different contexts, time periods, programs, and classroom-assessment techniques. This data must be made available and taken into account when planning changes to courses and programs.

- ✓ The academic departments and support services must identify, collect and analyze specific data to demonstrate the impact of the efforts on learning of all university community members.
- ✓ More evaluations are needed to measure program effectiveness in the development of skills students acquire for their professional development
- ✓ The mission and vision of the Institution needs to be shortened in order to make them more understandable and obtainable to the university community so as to guide academic programs in curricular and outcomes assessment efforts towards the Institutional mission.
- ✓ Student profiles of graduates needed in society must be done through an assessment process that includes feedback from the workplace. Evidence of consultation is needed and must be made available for institutional planning.

PLANNING AND RESOURCE ALLOCATION

Resource planning provides an opportunity for administrators to effectively organize, reconsider and upgrade the Institutional resources. This planning requires accountability in order to determine if the monies invested in the academic endeavors are yielding an optimum product. Therefore, the decision-making process regarding planning and resource allocation must be guided by the mission, goals and objectives which strive towards the development of a humanistic, scientific, and technologically capable individual who will contribute positively to society.

Through the Planning and Resource Allocation Charge, the UPRB was able to re-examine the strategies used to determine effectiveness of this area. Each of the components of the Institution (Academic, Administrative, and Student Affairs) was studied in the light of the

standards and questions posed in the Self-Study Design. Questionnaires, interviews and reports were used by the sub-committee to inform its findings.

The standards considered in this charge were as follow:

- *ongoing institutional self-study and planning aimed at increasing the institution's effectiveness*
- *integrity in the institution's conduct of all its activities through humane and equitable policies dealing with students, faculty, staff and other constituencies.*

The following questions and responses will evaluate planning and resource allocation effectiveness:

1. Does the strategic plan respond to and guide the institution to the attainment of the established mission, goals, and objectives?

The ISP complies with the continuous evaluation and re-evaluation of the University's environment. Each of the Institution's components (Academic, Administrative, and Student Affairs) has an obligation to fulfill and monitor the critical factors presented in the strategic plan. The Institutional Strategic Five-Year Plan (ISP) of May 1996 was used to evaluate the extent to which these offices have complied with them. Using the SWOT (strengths, weaknesses, opportunities and trends) strategy, the UPRB identified the critical factors in each of the components (Academic, Student, and Administrative). This helped to ensure on ongoing process improvement aligned with the Institutional mission, goal, and objectives.

Evidence of this is presented in the annual reports submitted by the office of the Chancellor to the Administrative Board and the Academic Senate. (See Annual Reports 1996-2000).

Upon analysis of the relationship of the critical factors of the three components and the humanistic, scientific, and technological aspects contemplated in the mission, goals, and objectives, it was found that the ISP and the academic, student, and administrative actions are in

compliance with the mission, goals, and objectives. (See Appendix B for the Critical Factors by Component and Table of Relationship of Critical Factors and Mission.)

2. What mechanisms and evidence exist to demonstrate that there is an effective and continuous assessment of the strategic plan?

The Institutional Plan guides the process of collecting, organizing and presenting varied and validated evidence related to the performance of the components as they contribute to the achievement of the mission, goals, and objectives of the UPRB. Each office/department of the three deanships has a plan which determines the degree of effectiveness of each component. These offices and departments submit annual report findings related to their achievements, strengths, and limitations according to the data provided and the evaluation of the ISP, the retention, and assessment plans. The results are used to establish priorities in subsequent plans.

The Office of the Dean of Academic Affairs is continually evaluating the strategic plan (Refer to the objectives for the Academic Affairs Office outlined in the Five Year Institutional Strategic Plan). This is evidenced by the academic offerings, which harmonize with the mission of the University (See ISP, p. 10 - Objectives 2.1 and 2.2, Refer to Catalog 2000-2002). The existing curriculums and their content are reviewed and updated taking into consideration the pedagogical innovations and the needs of the population served. New programs are created to satisfy those needs and the demands of the community.

The Education, Computer Sciences, Business Administration, and Technology and Engineering Departments are presently revising their curriculums. The Office Systems Department recently revised its program and, in addition, the Biology Department has begun a bachelor's degree in Natural Sciences. Other departments have initiated efforts to the development of new degree programs. An example of this is the Mathematics Department that is writing a proposal for a bachelor's degree program in Mathematics Education. An up-to-date-

report on the status of each program is available in the Office of the Dean of Academic Affairs (See ISP-Objective: Curriculum Revision).

There is also a component of the Office of the Dean of Academic Affairs dedicated to professional improvement in order to maintain the faculty trained and updated on the strategies, methodologies, and use of technological advances in the teaching-learning-assessment processes (See ISP, pp. 14-16, Objective 3.1). Evidence of this is found in the evaluation sheets of the activities, reports, and attendance sheets.

Research is promoted through the Policy for Academic Research and Investigation Development of the Academic Office (See ISP, p. 16, Objective 3.2). This is evidenced by the research proposals submitted and approved, reports, professor time releases, the Congress for Academic Research and Development, the Division of Continuing Education and Extension, and publications.

In addition, there is interest in the Office of the Dean of Academic Affairs to provide for the professional improvement of non-teaching support personnel (Objective 7.1). Therefore, training in the use of technology and activities geared towards the development of interpersonal relations is supported and provided.

In regard to the University's relations with the external community (See ISP, p. 24, Objective 6.1), the Office of the Dean of Academic Affairs indicated that the Institution promotes the interchange of services with the community. This is evidenced by committee reports, student organizations and their activities, activities sponsored by faculty and academic departments, and board members. The Division of Continuing Education and Extension offers courses to meet the needs of the community, industry, and adult population.

The Library Resource Center also contributes to strengthening external relations by providing services to the community. This facility, which was recently constructed, has expanded its personnel and schedule to attend the needs of the internal and external community. There is also an Institutional Library Committee, which serves as liaison with the various academic departments. Its main objective is to evaluate resources available and recommend those that are needed. The Library Resource Center also has its own operational budget, which facilitates budget planning and the acquisition of resources. (See ISP)

In the Office of the Dean of Student Affairs, the annual reports compiled reflect the actions taken during the year. These reports indicate accomplishments and actions pending that will be the priorities for the following year. Requesting a budget increase in order to improve the quality of the services, holding meetings with the deans and work groups of each office to improve the flow of communication, establishing committees, and reporting activities and processes to be carried out are examples of how each aspect is strengthened. Suggestions and recommendations received are attended to and priorities are altered accordingly. Lists of evaluation instruments are used to evaluate the strategic plan. The development of an assessment plan is currently in process.

A questionnaire was administered to the Dean of Administrative Affairs. One of the questions asked if there was an effective and continuous assessment of the Strategic Plan. However, when asked what mechanisms were used, she answered that these were in the assessment plan. Samples of the documents or instruments used were not provided.

3. Up to what degree are resources being used effectively to develop the strategic plan?

The Office of the Dean of Academic Affairs was found to be using the assigned resources

effectively. It indicated that most of the strategies identified in the strategic plan for the fulfillment of objectives do not require additional budget, and those areas that require funds are taken care of in the annual budget. In regard to curricular revision, the Office of the Dean of Academic Affairs informed the committee that it has the human, economic and physical resources to reach its goals. Nevertheless, it is continually working towards strengthening these areas. The Master Plan for a total remodeling of the Institution was approved. This means that the institutional facilities will be expanded and improved in the upcoming years. This will provide the facilities needed for the academic component. Although the Master Plan has been approved to begin the construction phases, the office facilities and academic laboratories have already been improved. Some improvements have been made through the budget assigned to the Institution and others through external resources. In addition, the faculty has been oriented towards the identification of external resources to strengthen the budget of the programs.

In order to determine the budget allocation for professional improvement, the Office of the Dean of Academic Affairs establishes priorities to take care of the immediate needs of the faculty. This office has also created a Center for Professional Development whose responsibility is to identify those aspects that must be strengthened in the area of pedagogical methodology. The activities are directed toward that purpose.

The professional improvement of non-teaching personnel is organized by the chancellor's office on a monthly basis to include other personnel, in addition to those involved with the Office of the Dean of Academic Affairs. This office helps to provide the resources needed for the training sessions. The Office of Academic Computing, a component of the Office of the Dean of Academic Affairs, organizes training sessions in the area of technology.

As mentioned in other parts of this report, the Office of the Dean of Academic Affairs is constantly strengthening its ties with the external community through the Division of Continuing Education and Extension's activities and proposals.

In order to comply with the critical factor identified by the Dean of Administrative Affairs in the ISP, the Institution appointed a committee to develop an evaluation form for non-teaching personnel. Some discrepancies were raised concerning uniformity and the document was not completed.

Upon the attainment of the autonomy, the University reorganized the Budget Office to manage the budget and reinforced it with additional personnel with specific duties. A master plan and maintenance plan were prepared to maintain the physical facilities in operating conditions.

In addition to the actions mentioned previously, the institution has initiated local procedures to carry out the tasks related to recruitment, purchases, payroll, student registration, and fund transfers. Each one of these activities has been implemented based on the allocated budget and the human resources available. In spite of the limitations, the services have continued as established in the Work Plan and the ISP in harmony with the mission and vision of the Institution.

The Office of the Dean of Student Affairs states that although physical, human, and fiscal resources are available to fulfill educational goals, these should be improved. The services offered by this component respond to the critical factors of the ISP. With the construction of the student center and the offices under the Office of the Dean of Student Affairs, more services can be offered to achieve the objectives.

4. How involved are the students, faculty, non-teaching personnel, and community in the creation, development and evaluation of the strategic plan?

The sub-committee assigned to the Office of the Dean of Academic Affairs found that the teaching and non-teaching faculty and the other personnel participate in the creation, development, and evaluation of the strategic plan. Students participated in the development and evaluation of the ISP. This is illustrated through the following: The strategic plan had its origin in the academic departments. In writing the plan, the recommendations of the committees of the departments were taken into consideration.

- The students participate in the process of curricular revision through their recommendations and evaluation of the programs; in addition, they have active participation in the evaluation of the faculty.
- The faculty evaluates and makes recommendations with respect to the academic offerings, participates in the revision of programs, recommends and participates in activities for professional development, and participates in different departmental and institutional committees.
- The non-teaching personnel recommend and participate in the professional improvement activities and participate in the different committees in the Institution.
- The quality of education produced in the students is evident in the community through the Institution's graduates. Additionally, University personnel contribute actively with recommendations for curricular revision, the processing of proposals, and the making of alliances to share services.

In addition to the administrative forums (Academic Senate and/or Auction Board), the students and administrative personnel are involved in the activities and decision-making activities through committees. Examples of these are the Transit and Safety Committee and the Cafeteria Committee.

General Recommendations:

- ✓ Evidence of activities carried out need to be gathered, organized, and analyzed on a more frequent basis.
- ✓ The evaluation form for non-teaching personnel is essential in order to determine the effectiveness of the resources and the assigned tasks and to recognize excellence in employees.
- ✓ A formal assessment process needs to be initiated in the components since in some areas, a formal assessment process has not been done.
- ✓ Studies to measure the effectiveness of human resource allocation should be done.
- ✓ There should be more involvement of the non-teaching personnel in the decision-making process.

FINANCIAL RESOURCES

Introduction

For any educational institution to develop, it must have the financial resources available to support its programs. Since the last study that was submitted to the Middle States Association, the UPRB has become autonomous giving it more control over financial resources. This Self-Study will examine our present situation in regard to financial resources to determine how the university can meet its expectations with the available funds and what other sources need to be examined to increase the budget.

The standards used to measure the effectiveness of this charge were as follows:

- *financial resources sufficient to assure the quality and continuity of the institution's programs and services*

- *integrity in the institution's conduct of all its activities through humane and equitable policies dealing with students, faculty, staff, and other constituencies*

Before responding to the questions, summaries of the recurring budget and the total enrollment are given. With the 1998-99 fiscal year as its base, the total budget of the UPRB had an increase of 12 percent (See Table 12 below).

**TABLE 12. RECURRING BUDGET SUMMARY
ACADEMIC YEARS 1998-99 TO 2000-2001**

Fiscal Year	1998-99	1999-00	2000-01	Increase last 3 years	% 3years Base 1998-99 12%
Budget	\$23,620,646	\$24,502,210	\$26,340,418	\$2,719,772	12%

For the 1998-99 fiscal year, in addition to the budget allocations to cover mandatory costs, \$500,000 was assigned to cover the costs of the conversion of the UPRB to an autonomous institution. During the 1999-00 fiscal year, additional budget allocations were also received to cover those financial transactions identified as mandatory.

Throughout each fiscal year, funds received are classified as Recurrent and Non-recurrent to attend the diverse situations that may or may not be contemplated in the Work Plan. Some examples of these are research proposals, maintenance of the facilities, study of human resources (positions), academic programs (bachelor's degree program in Human Biology), professional development of personnel (trips), and student services.

From 1998-99 until 2000-2001, the enrollment diminished 1 percent in order to stabilize the students to an optimum number that could be served so as not to affect the programs and services offered. Table 13 below presents the Total Enrollment Summary for the 1998-99 until 2000-01 Academic Years.

TABLE 13. TOTAL ENROLLMENT SUMMARY
Academic Years 1998-97 to 2000-2001

Fiscal Year	1998-99	1999-00	2000-01	Increase last 3 years	% 3years Base 1998-99 12%
	5,900	5,797	5,835	(65)	(1%)

However, if we use the 1993-94 academic year as base, the percent of increase in enrollment was 36 percent due to an aggressive recruitment and orientation policy established by the UPR in all its units. The percent of students who chose to study at the UPR increased from 33.5 percent to 40.5 percent in 1997 as compared to the total students who enrolled in all the other universities of Puerto Rico during this year. Table 14 represents the total enrollment summary from 1993-94 until 1997-98.

TABLE 14. TOTAL ENROLLMENT SUMMARY
Academic Years 1993-94 to 1997-98

Fiscal Year	1993-94	1994-95	1995-96	1996-97	1997-98	Increase Last 5 years	% 5 years Base 93-94 (36%)
	4,282	4,263	5,066	5,827	5,826	1,544	(35%)

For the same period, the University's budget increase was 57 percent (see Table 15 that follows).

TABLE 15. RECURRING BUDGET SUMMARY
Academic Years 1993-94 to 1997-98

Fiscal Year	1993-94	1994-95	1995-96	1996-97	1997-98	Increase last 5 years	% 5 years Base
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							93-94
Budget	\$13,117,376	\$13,366,248	\$15,987,228	\$18,303,123	\$20,545,825	\$7,428,449	(57%)

In spite of the achievements made in the percentage of growth of both the budget and enrollment, the percentage of committed funds assigned for specific and mandatory actions are between 86 percent and 91 percent, which complicates the administrative and financial management. With this in mind, the Self-Study Report was prepared focusing on the questions identified in the design.

1. How has the transition of UPRB into an autonomous university affected funding sources and budget allocations?

As an autonomous unit, the UPRB can now actively participate in the various phases of the budget cycle. The Chancellor has the opportunity to submit and defend the institutional budget proposal directly to the Board of Trustees and the President of the University of Puerto Rico.

The direct assignment of the University's budget, once approved by the Board of Trustees helps to facilitate and accelerate the processes. The assigned budget is approved by the Administrative Board of the UPRB and then registered in the UPR system's budget allocation.

The recommended net increase for the 1999-2000 fiscal year was \$1,158,960. Therefore the only changes that occurred as a result of autonomy were in regard to the process, but not in terms of funding and budget allocations.

2. How much control does UPRB have over its financial resources?

The Institution has the fiscal autonomy to make use of the resources in accordance with the rules and regulations of the local and federal governments and the Institution's priorities. The identification of resources to attend the priorities allow the administration to facilitate the decision-making process. Therefore, while the UPRB has more control than when it was not

autonomous, as a public institution that is mostly funded by the government and part of the UPR system, budget control must be guided by the policies established by the government and the UPR.

3. What are the policy and procedures followed for the assignment of financial resources to the university as a whole by the central administration of the UPR system? By UPRB's administration for programs, academic support services, general administration, and other resources?

The policy for the assignment of funds to all units of the UPR is determined by the Board of Trustees. The Office of the President of the UPR presents the guidelines for budget allocation to all the UPR units. The chancellors of each of the units presents a budget proposal to the UPR central offices which has been determined in conjunction with the offices of the deans based on the budgetary needs of the Institution. These needs were identified through meetings with the various offices and department directors of the Institution.

Once the budget proposals are submitted to the Office of the President of the UPR and the Board of Trustees, they study the proposals of all the units and assign resources according their availability and the institutional policy established at central level.

The process is then repeated at the local level, taking into consideration the priorities identified in the Institutional Strategic Plan (ISP) and the Work Plan for that particular year, and the mission and the goals of the Institution.

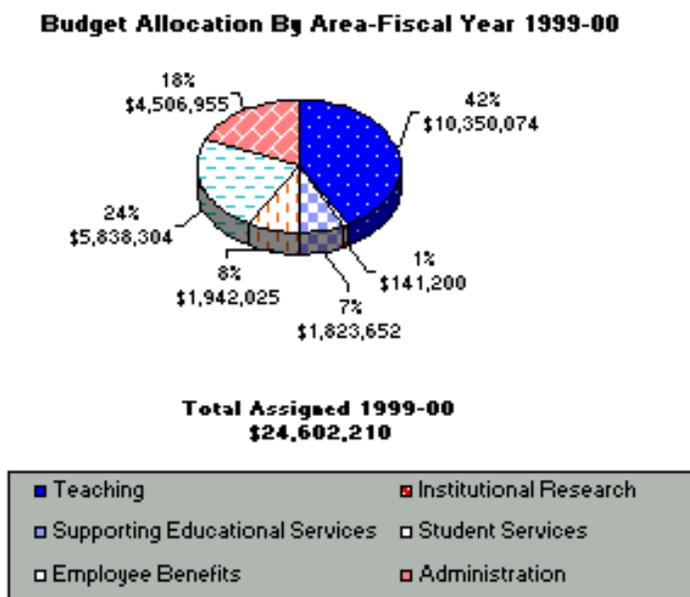
4. Are the priorities established for the assignment of financial resources compatible with those stated in the mission, goals, and objectives of the Institution?

The assignment of financial resources is compatible with those stated in the mission, goals, and objectives of the Institution. This is demonstrated by the Institutional Work Plan and the Institutional Strategic Plan which establish the priorities and are mentioned in the response to Question 3.

The various phases that comprises the planning and budget process is guided by the activities scheduled for the Budgetary Cycle of the UPR. During August to November of each year, the budget requests for the following academic year are made. The ISP identifies the factors that will affect the objectives of the academic, administrative, and student offices. The Budget Request Project are directly linked to the strategies and objectives presented in the ISP to comply with the mission, goals, and objectives of the Institution.

The figure below presents the distribution of funds for the 1999-00 Fiscal Year of the UPRB.

Figure 3.



From the above figure, it is noted how the budget allocation is primarily assigned to the academic area (See Appendix for Budget Allocations for the years 1998-99 to 1999-00) and specifically to teaching. Since the UPRB is mainly a teaching institution as opposed to a research

focus, the budget assignment corresponds to this. In addition, it is primarily through the academic programs that the mission, vision, goals, and objectives of the institution are obtained.

5. How have the programs and supporting services been considered in the Institution's planning of financial resources?

The various components that constitute educational support services comprise between 10 to 12 percent of the total operational budget. This amount remains constant if it is compared to the budget assigned every fiscal year. Nevertheless, depending on the strategies identified in the annual Work Plan, additional funds are assigned to comply with the goals and objectives indicated. For example, during the fiscal year 1997-98, the Library Resource Center (CRA), received \$300,000 for its new facilities. In the fiscal year 1998-99, \$49,000 was obtained to strengthen the bibliographic resources, in addition to other budget allocations related to academic affairs.

Within the plan for the improvement of facilities of the UPRB, priority has been given to the construction of a student center with an assigned budget of \$10,780,305. During the 2001-02 fiscal year, priority will be given to the construction of a building for science and technology. There is \$5,184,000 assigned for this project. Since the principal components of the mission relate to the development of a humanistic, social and technologically capable person, the priorities set for the construction are consistent with those in the mission.

In addition, the critical factors presented in the ISP were developed as a result of what the Institutional mission established. For example, one critical area identified in the academic affairs area was strengthening of the academic programs. As a result, funds have been assigned in response to this critical factor

6. What has been used to measure the accountability of the financial resources in use to ensure they are being used effectively?

Institutional studies made during 1996 and 1998 establish the teaching expenditure per FTE (Full Time Equivalent) student in the units of the UPR System as less than the national average. (all except the UPR-Rio Piedras and the School of Medical Science). The teaching expenditure per student is known as the efficiency indicator and as the academic excellence index.

Another indicator of the UPRB's competitiveness is the percentage of the teaching expenditure as opposed to the total operational budget assigned. This demonstrates the Institutional commitment of the Institution to the academic endeavor.

The annual report of the UPRB during 1996-97/1999-98, prepared in the Office of the UPR President, established that during those years all units of the UPR had the teaching expenditure between 27 and 47 percent.

The following table presents the budget allocations of the UPRB for Academic and Supporting Services.

TABLE 16 - BUDGET ALLOCATION BY AREA - UPRB

1995-1996 to 1999-2000

Fiscal Year	Academic	% of Total Budget Used	Supporting Services	% of Total Budget Used
1995-96	7,066,283	49%	1,852,305	12%
1996-97	7,866,591	43%	1,996,600	11%
1997-98	8,459,850	41%	2,613,213	13%
1998-99	10,560,287	45%	2,785,187	12%
1999-00	10,350,074	42%	2,925,067	12%

From the table it is noted that the large majority of budget allocation is assigned to the academic component. The amount assigned to the academic and the supporting services' components are over 50 percent. In addition, it is noted that while the percentage of the total budget assigned to the supporting services remained constant, the total funds assigned in 1995-1996 compared to 1999-2000 increased \$1,072,762. The percentage of funds assigned to the academic area in 1999-2000 decreased when compared to 49 percent assigned in 1995-1996; however, the budget allotment increased \$3,314,791.

The Budget Office in conjunction with the Finance Office is constantly auditing the funds and accounts in order to ensure that they are used effectively (See Internal and External Audit Reports). Both of these offices use a great number of reports prepared by the computerized system FRS (Financial Resources System). They are prepared daily and monthly. In addition, other financial reports such as the Budget Situation Status Report are produced.

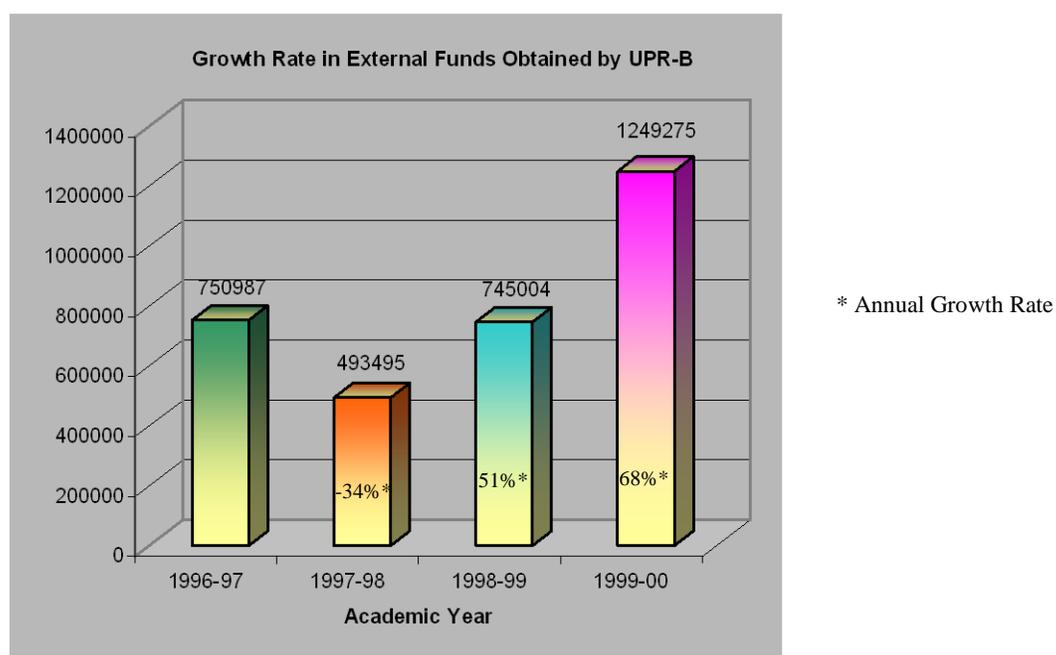
7. What are the sources of income for UPRB, and what additional strategies has the university used to increase its budget?

The Office of the President of the UPR receives budget allocation from the Government of Puerto Rico. These funds are distributed to the various units according to the recommendations made by the Board of Trustees and the petitions made by the institutions (See response to Question 3). The financial resources assigned to the Institution are from the Government of Puerto Rico; however, the demand for technological innovations and the cost of living make it insufficient to fulfill our necessities. As a result of this situation, the Institution is working to acquire external funding that will aid in maintaining the budget so that the UPRB can obtain its mission, goals, and objectives.

One of the ways external funds are acquired is through proposals. Therefore, the Institution encourages the faculty to write proposals for this purpose. Orientations have been

given and announcements regarding Calls for Proposals are sent out to the university community. Some proposals have been written with positive results. An example is the Title V Proposal which acquired \$2,125,000 to strengthen skills in Spanish, English, and mathematics through the use of technology. Through proposals the Electronics Department has obtained over \$120,000 in external funds for equipment. Figure 3 below presents the external funds acquired by the UPRB in the last four years (1996-2000).

Figure 3.



Source: OPEI Reports

From the table it is noted that the growth of external funds had a significant increase in 1999-2000 when compared to the prior years.

Another strategy was the incorporation of an Intramural Plan, which would offer services through contracts to individuals and public and private institutions, domestic or foreign, using teaching and administrative personnel, generating resources for the Institution and the

participants. This program would also contribute to promote and increase the participation and contribution of the UPRB in the social and economic processes of the island.

The Division for Continuing Education and Extension is another important source for funding. The Institution benefits economically from non-credit courses that are open to the general community, certification programs, and the bachelor's and associate degree programs for adult students (*UNA*).

Also, the Institution has received donations from industries. In addition to the Electronics Department, the Computer Sciences and the Engineering Departments have also benefited from external donations.

Presently, the Institution is working towards the creation of an office dedicated to the acquisition of external resources which would strengthen the university community's search for additional funds.

8. Are financial resources adequate to support the academic enterprise?

Although there are limitations regarding the financial resources available, the Institution has been able to meet its financial commitment. However, in those areas related to the renewal of laboratory equipment, maintenance of facilities, and other significant areas, financial resources have been limited to meet these needs.

Presently, the Institution is preparing a self-study through the ZERO-Budget process, to respond to the budget proposed for the 2001-2002 fiscal year. Through this process, the departments will be guided to redistribute their resources according to their real needs. The ZERO-Budget process will provide a mechanism to evaluate and effectively use the available resources.

General Recommendations:

- ✓ The Office for External Funds should be established and the university community should become more active in the search for outside sources to strengthen the UPRB's financial status.

ORGANIZATION, ADMINISTRATION AND GOVERNANCE

Introduction

In order to function adequately and efficiently, institutions need people to administer the operations and activities, which lead to the achievement of the mission, goals, and objectives. The Institution's administrative component must ensure that those dedicated to teaching and research have an excellent environment and the appropriate resources for the development of their activities. They also need to follow clear and specific standards in order to reach excellence in service and effectiveness in the attainment of their objectives.

The following standards were identified by the Self-Study Committee to guide them in the evaluation of the charge Organization, Administration, and Governance.

- *Integrity in the institution's conduct of all its activities through humane and equitable policies dealing with students, faculty, staff and other constituencies.*
- *Organization, administration and governance which facilitate teaching research and learning and which foster their improvement within a framework of academic freedom.*

Questionnaires, interviews and the analysis of existing documents were used to gather the information needed to respond to the questions indicated below.

- 1. What has been and is being done to maintain the channels of communication open among the administration, university community, and community in general?**

The Institution recognizes that one of the most important aspects in administration is communication. As a result, the administration has tried to look for ways to ensure better communication with the university community.

In general faculty meetings and in meetings with the Academic Senators of the Institution, student and/or faculty representation in the Governing Board, Retirement Board, University Board, etc. the university community receives information from the administration. In addition, these boards usually prepare a written report to the university community with agreements made and other information. The Institution also has an ombudsperson whose responsibility is to tend to student grievances. Recently, the Institution developed a web page which contains general information and announcements. There are links to the different divisions of the Institution where the personnel may send e-mails to the administrators.

Although there is a formal communication process, the University community may schedule individual appointments with the Chancellor and Deans to present their concerns. The Chancellor and Deans also schedule periodical staff meetings with representatives of the University community in order to maintain a constant flow of the communication process.

It is recommended that administrative personnel have at least a semester meeting with their respective Deans to express their concerns and particular job situations. In addition, although the Dean of Academic Affairs participates in many of the activities held by the University, the teaching staff expressed that the Chancellor and other Deans should be more visible within the university community. Additional information regarding communication is included in Question 2.

Recommendations:

-More lectures should be incorporated to develop a positive atmosphere. These could include lectures related to interpersonal relations on the job, stress reduction, and time-management.

-More direct communication with administrators could be provided through frequent meetings with individual offices and departments.

-A newsletter from the administrative offices could be sent at least three times a year to the university community. This could be included in the UPRB website.

2. What mechanisms are being used to maintain the internal and external university community informed of all matters concerning the UPRB?

The UPRB uses various mechanisms to maintain the external and internal community informed of all matters concerning the institution. These include a faculty manual (presently under revision) and orientations to new faculty members. A general catalog (UPRB 2000-2002 Catalog is in process) is published to inform students of the academic offerings and the minimum requirements for each degree. These also appear in the University's new vehicle of communication, the UPRB's Web Site (www.cutb.upr.clu.edu).

Meetings are held to maintain the flow of essential information to and from all individuals concerned with the Institution's welfare. A faculty meeting is held every semester. A committee whose members are selected by the faculty prepares the agenda for these meetings. The Dean of Academic Affairs meets periodically with each of the department chairpersons. These chairpersons serve as liaisons between the department faculty and the administration.

Members of the faculty as well as representatives of the University community participate in different Institutional and departmental committees. Each committee has a specific purpose and helps to expand faculty involvement in university life. These committees also contribute to maintain a continuous flow of information (See Annual Reports).

Various campus activities of interest to faculty, non-teaching personnel, students and external community are offered. These include the following: short term courses offered by Continuing Education, workshops, seminars, an Open House for incoming students, Job Fair, concerts, festivals, exhibitions, theater presentations, and athletic activities. These are announced using bulletins, fliers, press releases, calendars listing activities (academic, athletic, and cultural), the University's public address system, and the University's Web Page.

In addition to the above, letters, memos, and bulletins are also sent to the university community. These mechanisms that are used to keep the university community informed of all matters concerning the UPRB have been very effective. Although academic, athletic and cultural activities are announced using a variety of methods, the UPRB should explore the possibility of a university newsletter. It would help to further improve campus communication. In addition, said academic and cultural activities could also be made public in this newsletter.

3. What techniques are being used to develop a healthy and affable environment in the University?

In order to respond to this question, it is necessary to consider the environment as it creates a positive working atmosphere both physically and personally for the University community members.

In regard to the physical aspects, the UPRB has several limitations in terms to space and hygienic conditions. The Maintenance Office (specifically the Health, Security, and Environmental Conservation Division of this office) deals with the situations related to physical hazards, biological and chemical pollution. These problems will be solved with the construction of the new physical facilities (See Charge on Physical Facilities). The construction, on the other hand, brings inconveniencies, such as noise, dust, and parking space reduction. The Quality of Life Office has helped the administration in orienting the

University community in regard to these aspects. Some existing physical facilities have been expanded or relocated so as to provide a more adequate working environment for the employees and the services they offer while the permanent structures are constructed. Examples of these are the Office of the Dean of Academic Affairs, the Division of Continuing Education and Extension, and the Student Association's Office.

In terms of interpersonal relationships among employees and administrators, a questionnaire that was administered to thirty persons (random sample) of the faculty and non-faculty employees was tabulated and analyzed. The findings revealed that the information is usually provided on time and that it was easy to communicate with their immediate supervisors. The findings also demonstrated that a wide variety of communication mechanisms, such as memo, meetings, telephone, and e-mail were used. All of these facilitate and encourage communication among the University community. The inclusion of faculty and non-faculty members in committees and boards of the University is another way of improving the quality of the working and teaching environment. (See Questions 7 under Institutional Integrity for more information on policies and environment.)

Recommendations:

-More seminars and workshops related to interpersonal relationships are needed.

-Maintain an open communication environment so that employees can present their concerns and receive orientation regarding benefits, duties, and responsibilities. In addition this would help to identify problems which can affect the environment.

-An ombudsperson for employees is needed to serve as a liaison between the administration and other employees.

4. How does the administrative work plan respond to the mission, goals and objectives of the university?

The mission of the UPRB is to function as a center for the dissemination and development of technological, scientific, and humanistic knowledge. The objectives of the administrative work plan include the professional improvement and productivity of the personnel, the establishment of a total quality program to improve the administration of the budget, the acquisition of external resources and the improvement of the physical facilities. These objectives are directed to provide the conditions necessary to obtain the goals of the university, which is the function of the Office of the Dean of Administrative Affairs.

In order to improve the administrative processes some changes have been made during the past three years:

Establishment of new departments or offices:

- “Oficina de Finanzas” – Finance Office
- “Oficina fiscal de Asistencia Económica” – Fiscal Office for Financial Aid
- “Departamento de Seguridad y vigilancia” – Security Office
- Relocation of various administrative offices in order to improve the services and facilitate the supervision

Creation or acquisition and use of new processes, programs or equipment:

- New billing process in the Claims and Billings Office
- Computerized system for Attendance Records
- Auction Module for the Purchasing Office
- Thomas Register for the Purchasing Office
- New printing equipment

Appointment of Personnel

- Accounting Assistant in the Accounts Receivable Office
- Secretary in the Bursar's Office
- Creation of 19 positions for non-teaching personnel. .

The Security Office stated that it is in urgent need of a budget and personnel. (Presently, the Security Office has presented its need for a budget and personnel in order to carry out its responsibilities more effectively.)

5. Are there enough available resources and personnel to carry out their tasks in an effective and timely manner?

In order to obtain information to answer this question, the Dean of Administrative Affairs was interviewed and a questionnaire was prepared and sent to 15 office directors of the Office of the Dean of Administrative Affairs. Only four questionnaires were completed. Three directors indicated they didn't have enough personnel to carry out the tasks assigned to the office. Two directors indicated a lack of material resources. To improve the quantity and quality of the work done in the office, they suggested that the Institution needs to do the following:

1. Hire additional personnel.
2. Revise the tasks assigned to the employees.
3. Provide training to personnel.
4. Purchase updated and needed equipment.

In response to this, some workshops and trainings have been offered to the administrative personnel to improve on-the-job performance. These are as the following:

1. Processing Purchase Orders Online
2. Reclassification of Positions
3. The Supervisor and the Application of Corrective Measures
4. Management of HIV Positive Employees

5. Grievance Procedure

An Assessment Committee was appointed to design an evaluation instrument for non-teaching personnel. This instrument will facilitate and standardize the recognition and compensation procedures of their performance.

In addition, the autonomy of the UPRB caused the transfer of both administrative processes and employees from the Regional Colleges Administration (RCA) to UPRB. These changes facilitated the administrative work and gave the Institution more personnel to carry out the tasks.

One of the main problems of the UPRB is that the temporary physical facilities are now 30 years old. Due to bureaucracy and funding, the building of permanent facilities had not been initiated until 1996, when construction of the library began. In order to respond to the need of permanent facilities of the Institution, a master plan for the construction of the UPRB buildings was developed. The library and the basketball court are the most recent additions to the physical plant. Presently the student center and administrative University building is under construction. In addition to the student center, it will have the offices of the deans and the Chancellor's office. However, as pointed out by the Annual Report submitted by the Dean of Administrative Affairs, funding for the maintenance of the present physical facilities is limited.

6. How prepared are the administrative personnel to perform its assigned tasks and what is being done to develop their administrative capacities and effectiveness?

Presently, there are no specific laws or guidelines concerning the qualifications of administrators of the UPR system. Therefore, minimum qualifications have not been established.

At the UPRB most of the high administrative positions are occupied with personnel who have long experience in the academia. The current chancellor and the majority of her staff have

taught and/or occupied different administrative positions for over twenty years. The vast majority of the staff members have developed their careers at the UPRB and/or RCA. This group is quite heterogeneous in relation to their professional background. As a result, it can be concluded that the administrative personnel have both the experience and knowledge to guide the Institution toward the attainment of its goals.

The University of Puerto Rico system and the UPRB offer and/or sponsor activities directed to train and inform the administrative personnel in areas related to their work. Workshops, seminars and conventions are frequently conducted in which topics, such as planning, research, budget, external funding and administrative processes are offered.

Staff members identified three key areas for which further development is needed. These are budget, legal affairs, and administration of personnel. In order to have a pool of resources formally prepared in the area of university administration, one of the surveyed individuals proposed the idea of a “manager’s school” for those interested.

7. How has the Board of Trustees demonstrated its capacity to guide the Institution to the achievement of its mission, goals, and objectives?

In general, the Board of Trustees is responsible for approving the budgets submitted by the chancellors of each campus via the President of the UPR, the allocation of resources, and for the construction and improvement of the facilities. The Board reports annually to the legislature on its actions and on the financial status of the University. Some members of the Board also have academic and administrative experience in the public and/or private higher education systems of Puerto Rico.

In response to the developmental needs shown by a mature Institution, the Board sponsored and backed the autonomy of the former Bayamón Technological University College, now the University of Puerto Rico at Bayamón, along with other colleges under the RCA.

The Board members participated and have been involved in activities or projects, which contributed to the growth and development of the UPRB. Examples of these are the construction of the new library and the master plan for physical improvements, the appointment of the Chancellor, the approval of programs and the academic load reduction granted to the academic senators. (*Refer to the Charge on the Governing Board for more information.*)

Therefore, we can say that without the approval of budget and resource allocations of the Board, the UPRB would not be able to achieve its mission and goals.

8. What criteria are used in the selection and terms of the members of the Administrative Board, Academic Senate, and Auction Board?

The Board of Trustees, with the recommendation of the President of the UPR and the Transition Committee for the Autonomy of the Regional Colleges in accordance with Certification 055-1997-98, established an Academic Senate and an Administrative Board in all the autonomous units.

According to the certification for the creation of the Administrative Board (Certification 152 -1997-98), its members are the following:

- Chancellor
- Dean of Academic Affairs
- Dean of Administrative Affairs
- Dean of Student Affairs
- Four Chairpersons nominated by the Chancellor:
 - Two Chairpersons from Liberal Arts
 - Two Chairpersons from technical areas
- Two Senators
- One Student (elected annually by the Student Council)

- Alternate members

One Senator (Faculty Member)

One Student

In addition, the Chancellor is the President of this Board and the student representative cannot be the President of the Student Council.

The Academic Senate (Certification 114-1998-1999) has the following 27 members:

Six Ex-officio members:

- UPR President
- Chancellor
- Dean of Academic Affairs
- Dean of Administration Affairs
- Dean of Student Affairs
- Director of the Library Resource Center
- 17 Elected members
 - One professor (who is not assigned to administrative tasks) for each of the academic departments (15).
 - One senator who represents Counselors and Psychologists
 - One in representation of the Librarians
- four student members are
 - Student Counsel President
 - University Board Representative
 - Administrative Board Representative
 - Elected Student Senator

The composition of the Auction Board was established by Certification 022 Series 1995-96. The secretary of the Board is the purchasing director; however, this member may not vote. The Board consists of one (1) President nominated by the Chancellor, two (2) members selected among the personnel of the Institution and two (2) alternate members, which are appointed by the Chancellor. Once appointed, all will continue in their duties until a successor is appointed.

The Auction Board for Permanent Facilities (Certification 040 -1994-95) consists of three (3) members and two (2) alternate members. These members are appointed by the Chancellor from among the personnel of the Institution. The members meet and select among themselves the President of the Board. Every Board elects a secretary, which is not necessarily a member of the Board.

9. How do the responsibilities of the Administrative Board, Academic Senate, and Auction Board facilitate the governing process and help to guarantee institutional integrity?

The Administrative Board (See The UPR's General Regulations Handbook, Article 24) examines and approves the general performance norms proposed by the University's legislative and administrative organisms in agreement with the UPR current law, and supervises the general progress of the Institution.

The Academic Senate (See The UPR's General Regulations Handbook, Article 23) has many responsibilities that must be carried out while guaranteeing institutional integrity. It is through this body that the faculty participates in the institutional processes regarding the academic endeavors within the jurisdictions required by law. The Academic Senate is responsible for determining the direction of the academic programs and research; establishing policies for tenure track positions, promotions, sabbaticals, and leaves for faculty; election of representatives to the University and Administrative Boards; and advising and making recommendations to the chancellor regarding the Institution not contemplated in

the UPR General Regulations Manual. The composition of the Academic Senate (See response to Question 8 under this charge.) helps to facilitate the governing process through its representatives from the academic community within the Institution that will be directly involved with decision-making policies related to the academia.

The Auction Board (See Governing Board Certification # 022 Series 1995-96) deals with the study of proposals presented by bidders for equipment, and services. It is the responsibility of this board to select the bidder that offers the best equipment or service at the lowest price. Since this board is also made up of members from the University community, there is more genuine interest in providing the Institution with quality service and products at the best prices. In addition, the procedures and guidelines for the presentation of proposals are already established and are regulated by the UPR Regulations Manual.

As it is seen, each one of these groups has its particular responsibilities concerning the well functioning of the University. Academic and administrative issues are discussed separately, and decisions or recommendations are made by the appropriate group. These bodies provide for ample participation of the University community in the decision-making processes. As a result, all three, the Academic Board, Academic Senate, and Auction Board help to guarantee the purity of the governing procedures, and consequently, also guarantees institutional integrity.

10. How are administrators and staff evaluated?

The administrators and staff are divided into two main categories: career personnel and those who are in positions of trust. These are evaluated in different ways.

Career personnel (non-teaching) are evaluated by their supervisors, usually the respective Directors or Deans. For this evaluation there is no form or mechanism established; it usually

consists of a narrative of their performance and a revision of their duties. The evaluation is not done regularly, only when the employee is going to be reclassified or recommended for a promotion.

The department directors (position of trust) have three types of evaluations, which are done at least once a year. Two of them correspond to their duties as professors in the classroom. One of these two evaluations evaluates classroom performance and is done by the director's peers. The classroom evaluation is done by the students. The third one is done by the Dean of Academic Affairs, who evaluates the director's performance in administrative responsibilities. All of these evaluations follow formats that were designed by the Senate of the former RCA; the Senate of the recently autonomous UPRB has not modified these formats. It is important to point out that those directors who are full professors only receive two evaluations: the administrative evaluation done yearly and the student evaluation of classroom performance in all the classes offered by the director and done every five years.

The Deans and other office directors respond directly to the Chancellor and there is no formal procedure for their evaluation, although the chancellor evaluates their work informally.

Recommendations

A format and mechanism for the evaluation of career personnel should exist. This evaluation should be done every one or two years. A format must be created that provides for an impartial evaluation of personnel.

In addition, it is recommended that the other members of the University community participate in the evaluation of administrative personnel.

11. Are there professional development opportunities for administrators and staff?

The administrators and staff have opportunities for professional development. There is a money allotment to pay for registration in courses, seminars and workshops. This money is distributed among all the personnel, including the professors. A report that contains the information about how the money is used is prepared annually.

In addition to this, the Human Resources Office organizes conferences and workshops throughout the year to fulfill some needs of the University community. Usually these activities help the employee to develop skills that will be useful in their work. There is also the mechanism of the sabbaticals for studies. However, normally, these are not requested by the administrators and the staff while they hold administrative positions.

Administrative personnel are granted up to six hours per week for educational purposes. Being an educational institution, the UPRB should provide for the constant professional development for both administrators and professors. The Human Resources Office should prepare a standard plan to fulfill this need throughout the academic year.

12. Is the Chancellor evaluated? Is so, by whom? What is the process?

The Chancellor of the UPRB is the academic and administrative authority in our University. She responds directly to the Board of Trustees and to the President of the University of Puerto Rico. Within the UPR system there is no formal process for the evaluation of any of the Chancellors by the University community, although the President and the Board of Trustees evaluate them.

A mechanism should be established, at the level of the UPR system to give the University community the opportunity to evaluate the performance of the Chancellor.

General Recommendations:

- ✓ More lectures should be incorporated to develop a positive atmosphere. These could include lectures related to interpersonal relations on the job, stress reduction, and time-management.
- ✓ More direct communication with administrators could be provided through frequent meetings with individual offices and departments.
- ✓ A newsletter from the administrative offices could be sent at least three times a year to the university community. This could be included in the UPRB website.
- ✓ More seminars and workshops related to interpersonal relationships are needed.
- ✓ Maintain an open communication environment so that employees can present their concerns and receive orientation regarding benefits, duties, and responsibilities. In addition this would help to identify problems which can affect the environment.
- ✓ An ombudsperson for employees is needed to serve as a liaison between the administration and other employees.

GOVERNING BOARD

Introduction

The Governing Board of our Institution is the Board of Trustees of the University of Puerto Rico system. Its composition and responsibilities are outlined by Public Law Number 16 of June 16, 1993. This Board formulates the directives that rule the administration and development of the University. It examines and approves the regulations proposed by the various campuses according to the law as well as new and revised academic programs.

The Governing Board, in consultation with the Academic Senates of all the campuses in the UPR system, appoints the President of the University of Puerto Rico. The President recommends the nominees of the chancellors of the campuses to the Board, who makes the final decision for appointment. The Board is also in charge of evaluating the President of the UPR and all the chancellors of the campuses every three to five years as stated in the law.

The Board reports annually to the governor and legislature on its actions and on the financial status of the University. It also establishes general rules for granting scholarships and any other type of financial assistance to the UPR system. It approves the budgets submitted by the chancellors of each of the campuses via the President, and is responsible for permanent resource allocation and for construction and improvement of facilities.

Through the years the Governing Board has been aware of the physical needs of our Institution and the conditions of the infrastructure. The non-permanent structures are now 30 years old and are presently under the process of being replaced. Presently there is a Master Plan approved by the Governing Board for the construction of new facilities.

The Self-Study Sub-Committee in charge of the Governing Board took the following standard to measure the effectiveness of this area.

- *A governing board actively fulfilling its responsibilities of policy and resource development.*

Upon completion of this part of the report, the questions were answered as follows:

1. What criteria are used for the selection and terms of the Governing Board's members? Who are the Governing Boards members and what impact have they demonstrated in the policy fulfillment and resource development?

As stated in the Senate Law #16 of June 16, 1993, of the Commonwealth of Puerto Rico, the Governing Board consists of 13 members as outlined below:

- Public Interest Representatives – Ten citizens are appointed. One of these must be a UPR alumnus. They are appointed to terms not greater than eight years by the Governor of Puerto Rico with the approval of the State Senate.
- Faculty Representatives – Two tenured faculty members from the UPR system. They are elected by secret vote for a term of one year by and from the faculty members serving at that time as faculty representatives of the University Board.
- Student Body Representatives – One full-time student that must be at least a second year university student. S/He is elected by secret vote for a term of one year by and from the students serving at that time as student body representatives of the University Board.

(See Governing Board Appendix for List of Current Members)

The Board of Trustees reports annually to the governor and the legislature on its actions and on the financial status of the University. The Board also approves the budgets submitted by the chancellors of each campus via the UPR President, and is responsible for resource allocation and for construction and improvement of the infrastructure. It also establishes general rules for granting scholarships and any other type of financial assistance in the UPR system.

2. What effect, if any, has the change of UPRB to an autonomous university had to the Governing Board?

In the summer of 1998, the Institution became an autonomous unit within the UPR system. With another unit headed by a chancellor, the Board has more direct communication and responsibility with the individual institutions. Chancellors now actively participate in meetings and in the decision-making process. The Board is more aware of the individual needs of the institutions and has had to consider the budget allocation accordingly.

The Board of Trustees does not become involved in the day-to-day management of the

Institution. One of the responsibilities of the Board is to allocate the institutional budget. Other internal affairs are carried out by the Institution or the UPR Office of the President.

3. How has the administration and University community maintained the communication channels open?

The administration and university community maintain communication channels open with the Board of Trustees via the Office of the President of the UPR and through certifications, other written communications, and monthly meetings held by the chancellors, the President, and the Board of Trustees. In addition, all units of the UPR system are informed of actions through the faculty and student representatives.

4. How is information processed?

All issues brought to the attention of the Board are discussed in meetings and are presented to the community through certifications, media, and the web page. The faculty and student members make periodical reports concerning agreements and issues made and/or discussed at the Board meetings. They also present faculty and student concerns to the Board.

5. How are the governing board members evaluated?

There is no process for the evaluation of the board members.

6. Are the board members an active part of the Institutional community?

Of the 13 members, only the two faculty members and the student representative are active members of the institutional community.

As stated in the introduction, the Governing Board of the UPR fulfills its responsibilities towards our Institution, thus complying with the stated standard.

FACILITIES, EQUIPMENT AND OTHER RESOURCES

Introduction

The attainment of the mission, goals, and objectives of any institution will depend on the facilities, equipment, and resources available. Many resources provide support for the institution's instructional program. These resources include: instructional buildings, laboratories, computers, athletics facilities, audio-visual aids and many others. Since the majority of the UPRB structures are 30-year old temporary facilities, the infrastructure is a priority for the Institution and a Master Plan for this purpose has been developed.

The following standard was used to guide the Charge of Facilities, Equipment, and Other Resources:

➤ *physical facilities that meet the needs of the institution's programs and functions.*

1. How is the Master Plan for a new campus developing to comply with the Institutional mission and goals, academic programs and student needs?

The development of the Master Plan (MP) for the UPRB has been strategically planned to comply with the needs of the Institution's population. The MP's main objective is to gather and analyze all relevant information that will help design a university that will fulfill the mission and goals of the Institution. There were a series of visits to the existing structures in order to see the conditions and needs of the University. In addition, meetings were held with the department chairs, non-teaching personnel and students to identify needs and projections of each area and establish the priorities. Also, the demand for admission to our technological programs further justified the priorities established. The development the University's Master Plan would be in accordance with the mission and goal, which states "*...the development, creation, and spread of technological, scientific and humanistic knowledge.*"

The first stage of the development of the MP is the construction of the following: Temporary Parking Facilities, Student Center and Administrative Offices Building, Science and Technology Building, and Natural Sciences Building.

2. Is there a short-term and long-term plan for energy needs and utilization and has the plan considered what future facilities, equipment, and other resources would be needed in order to operate effectively and efficiently?

In order to meet the present energy needs of the Institution, a short-term plan was prepared which included the upgrading of the energy substation. Since the present facilities will be replaced, efforts have been concentrated on maintaining them so as to provide the energy needed for operations. Strategies have been developed to reduce energy consumption, such as, the use of only some of the buildings for evening and Saturday classes when fewer employees are on campus. This is also done during the vacation period. Employees are reassigned to facilities in designated areas in order to save energy. The MP has contemplated the Institution's energy needs and utilization in the design of the new facilities.

3. Is there evidence of careful planning for effective use of facilities and equipment?

The Dean of Academic Affairs has 68 classrooms, 43 laboratories, and 4 meeting facilities. The academic schedule evidences the maximum utilization of the stated facilities for class distribution throughout the day and evenings. This distribution is based upon the design of the programs, demands of students for the courses, and the availability of faculty. The Dean of Academic Affairs keeps control of the facilities assigned for classes, meetings, and laboratories. Meeting facilities are reserved prior to use by the University community. The use of equipment in each department is controlled by the department itself, with the exception of equipment which belongs to the Audio-Visual Department.

With the increased use of the Internet, many students have access to the library through the University's web site. This will help to lessen the amount of students that will be visiting the library and increase the use of the on-line facilities.

Use of the facilities by the internal and external university community is solicited and reserved following the policies developed use. These policies regulate the type of activities that may be held while allowing for their maximum use.

4. Do the existing facilities promote students and faculty to design research?

First of all, it must be clarified that the UPRB is basically a teaching institution. However, the laboratories and areas identified for research for students and faculty in the Institution promote research among the faculty and students.

For example, the University has 43 rooms (laboratory and computer rooms) to be used as a complementary part of the courses. These are also used for the design and development of research. These laboratories are distributed as follows:

<u>Department</u>	<u>Number of Laboratories</u>
Biology	4
Chemistry	3
Physics	2
Computer Sciences	2
Electronics	7
Office Systems	7
Education	2
Physical Education	1
Engineering	7

English	2
Social Sciences	1
Academic Computing	5

Even though these laboratories are used as part of the courses, they are a place where students and faculty can develop research. This year there are 13 research projects in progress from various departments. The University plans to open a Research Center that will deal with every administrative aspect of academic and scientific research. This Center will be located in the Library Resource Center existing facilities in the library for professors that are performing research will be expanded. As evidence of the availability of facilities to promote research, the UPRB has had students and faculty members present the research projects they have developed in the Institution, in and outside of Puerto Rico (Source: Annual Reports). The new facilities proposed in the MP will expand the facilities and equipment that will aid in developing more research by students and faculty.

Recommendations:

- *The Institution should search for other resources or strategies in order to increase and update the existing facilities and expand the operating hours (including weekends) so faculty and students may have access to them. This recommendation may require the hiring of additional personnel to accommodate the increase in hours.*
- *In addition to scientific research, more awareness needs to be instilled among the university community regarding the need for academic research.*

5. Does the University employ resources from public funds, private institutions or community in order to expand the facilities, equipment and other resources?

The University utilizes funds assigned by the government of Puerto Rico to the UPR operational budget. The majority of the costs of the Institution are provided through these public funds.

The University has also received donations from private companies through proposals. An example of this are the Engineering, Electronics, and Computer Sciences Departments which have established new laboratories funded by INTEL. Federal proposals have also contributed to the acquisition of equipment, facilities and other resources. Title V, for example, helped to develop laboratories using technology for the development of skills and teaching techniques in Spanish, Mathematics, and English. This grant provides the University \$2,125,000 for a five-year period and helps to fulfill the needs of a portion of the student body and faculty.

More funds could be obtained if the University had an Office for External Resources. This office would be in charge of finding funding possibilities in federal, local, public and private grants, fellowships, awards, etc. through proposals.

Recommendation:

- *An office for external resources should be established.*
- *More should be done to motivate the university community in the development of proposals for external resources.*

6. Do the existent and projected facilities provide for the development of a competitive physical education program as well as institutional athletic activities?

The development of the new athletic facilities (track, basketball-volleyball court, weight machine room, administrative offices) is an asset not only to the Athletic Department, but also to the development of the physical education curriculum. The new covered sports court can accommodate 550 people, with the possibility of expanding to hold 200 more. There is also

space for two volleyball courts to be used at the same time. The athletic track not only brings life to the University, since the athletes no longer need to go somewhere else to train; but it also serves the whole community aiding in the development of a healthier population.

On the other hand, there are other areas that need improvement. One of these is the Free Weights Room located in the old gymnasium facilities and used by athletes and students. Our inclusion in the NCAA and our continued participation in the Inter-Collegiate Athletic League and intramural activities make it necessary to expand the amount and variety of equipment and space available for our athletes.

The Physical Education Department has a Facilities Committee that prepared a report on the needs and recommended projections for facilities, equipment, and resources in Physical Education (Source: Report by the Facilities Committee of the Physical Education Department). Three of the facilities indicated were the construction of a swimming pool, a ceiling over the old open basketball court and the installation of a special floor appropriate for the Adapted Physical Education Laboratory and teacher preparation courses, and a second tennis court. In addition, once the construction of the facilities is completed, the Summer Camp for the internal and external community which was offered in the past may begin. University students majoring in the Physical Education Department's program benefited economically as well as professionally from the camp. The Physical Education Department has indicated its concerns and has made recommendations to the University administrators and to the architect of the Master Plan.

Recommendation:

- *The University should carefully evaluate the petitions for facilities proposed by the Physical Education Department to establish priorities according to the needs of the program.*

7. Is there a direct relationship between the needs of the students and the laboratories and technical support?

The Institution offers technological (Electronics, Computer Sciences, Business, Engineering Technologies, and Office Systems) and science programs. To satisfy the needs of these courses, there are 37 laboratories (science and computers) to be used as a complement to the courses offered. (Refer to response in Question 4).

Technical support is given by technicians assigned to the laboratories. In some of these laboratories support is given by personnel in the Academic Computing Department. In addition, the Library Resource Center has facilities and technical support for faculty and students to complement courses and facilitate research on the Internet.

Despite the high cost of equipment and the rapid changes in technology, the Institution has concentrated and will continue its efforts in updating and acquiring laboratory equipment and providing the technical support needed.

To satisfy the need of the students in the use of computers, the University has developed “service laboratories.” These are Lab 110B and CAD, where students can use the computers at any time (the open laboratory concept). Also, the laboratories in Rooms 123, 121A, 110A, Multimedia Language Laboratory Center (320), Electronics, Engineering, and Office Systems are equipped with programs and Internet facilities, so the students can use them when the laboratories are not being used for classes.

General Recommendations:

- ✓ The University should carefully evaluate the petitions proposed by the Physical Education Department to establish priorities according to the needs of the program.

- ✓ An office for external resources should be established.
- ✓ More should be done to motivate the university community in the development of proposals for external resources.
- ✓ The University should carefully evaluate the petitions for facilities proposed by the Physical Education Department to establish priorities according to the needs of the program.
- ✓ The Institution should search for other resources or strategies in order to increase and update the existing facilities and expand the operating hours (including weekends) so faculty and students may have access to them. This recommendation may require the hiring of additional personnel to accommodate the increase in hours.
- ✓ In addition to scientific research, more awareness needs to be instilled among the university community regarding the need for academic research.

CATALOGS, PUBLICATIONS AND OTHER PROMOTIONAL MATERIALS

Introduction

Catalogs, publications and promotional materials are primary channels used by institutions to disseminate information to its constituents. The UPRB has a variety of publications that are used for this purpose.

The following MSA's standards of excellence pertain to the catalog and other publications and were included in the self study design:

- *Honesty and accuracy in published materials and in public and media relations,*

- *Integrity in the institution's conduct of all its activities through humane and equitable policies dealing with students, faculty, staff, and other constituencies,*
- *Clearly stated mission and goals appropriate to the institution's resources and the needs of its constituents,*
- *Faculty whose professional qualifications are appropriate to the mission and programs of the institution, who are committed to intellectual and professional development, and who form an adequate core to support the programs offered,*
- *Programs and courses which develop general intellectual skills such as the ability to form independent judgment, to weigh values, to understand fundamental theory, and to interact effectively in a culturally diverse world,*
- *Financial resources sufficient to assure the quality and continuity of the institution's programs and services.*

The Catalogs, Publications and Other Promotional Materials Subcommittee performed interviews, requested publications available and analyzed publications received to determine the extent of compliance with applicable standards of excellence.

1. Which are UPRB's official publications and/or promotional materials used to inform the public of its mission, programs, admission requirements, policies, etc.?

UPR-Bayamón's official publications and or promotional materials are principally its catalog and currently, its WEB SITE (under construction). Its WEB SITE (<http://www.cutb.upr.clu.edu>) is being established in accordance to standards and criteria established and adopted by its Decision-Making Team (Appendix C-3 for its composition). Changes, additions and deletions related to events, activities or academic calendar are strictly monitored by the Web site coordinator in accordance to the established criteria. This will be one of UPR-Bayamón's most valuable resources to inform the general public and its students of the mission, programs,

admission requirements, and policies. (Refer to Appendix C for a listing of major publications and bulletins.)

2. Does the catalog contain all of the information necessary for students to make decisions regarding their educational goals?

Analysis of the catalog revealed that basic information for students to make decisions regarding educational goals is included. However, since the last catalog of the UPRB was in 1995-98, the information provided does not give the student the complete data to make decisions

The subcommittee recommendations are as follows:

- The Institution should provide more administrative support for catalog revisions,
- The Institution should provide more resources (financial and other) for the catalog's publication,
- The catalog should be revised more frequently.

3. How reliable, accurate, and current is the information provided in the catalogs, publications, promotional materials regarding the university?

Insofar as the catalog is concerned, please refer to answers supplied in Question No. 2 and in Appendix C. Many academic departments have published documents which contain departmental missions and objectives and their academic offerings. Subcommittee members found that most of these publications are current and accurate. In addition, as mentioned before the University Web site is one way the University maintains the information current. As indicated in the response to Question 1, the information provided is monitored by the web site coordinator according to the established criteria and policies.

4. Does the catalog provide information about support services as well as academic programs so as to guide the students in their planning?

The catalog, dated 1995-1996 and 1996-1997, provides information about academic

programs, but it is not current. New academic programs have been added which are not included in the catalog. The catalog does not provide complete information about support services to guide students in their planning. The Counseling Department now has a psychologist available who specializes in youth problems. New services are provided for unwed mothers and students with physical disabilities. Child-care services for students are also provided. None of the aforementioned is listed in the catalog. However, the Web site, has been updated with catalog information and includes these services.

The catalog is in the process of revision with updated and new information. The new edition should be published in the summer 2000. The new catalog will cover the years 2000-2002.

5. Are the university's mission, goals, and objectives compatible with the catalog, publications, and promotional materials developed?

The University's mission, goals, and objectives are compatible with the catalog, publications and promotional materials developed. UPR-Bayamón's mission statement, goals and objectives are clearly stated in all publications analyzed. The web site, which is under construction, has included the university's mission under the Chancellor's Office. According to the evaluation report submitted by the Council of Higher Education in Puerto Rico in 1997, the catalog meets with the requirements according to their accreditation standards.

6. Is there uniformity with the information presented in all the promotional materials, publications, and catalog?

Our findings reveal that information regarding the faculty and the academic offerings included in the catalog may lack uniformity with the updated information published and supplied by the academic departments to aid the students. Information included in the Web site and promotional materials concerning academic programs prepared by the departments

are more complete and updated. Subcommittee members believe that this lack of uniformity will be corrected when the new catalog is issued.

7. What has been the UPRB's advertising policy and how is information about the university disseminated? Do the advertisements aid the UPRB in achieving its mission and vision? Is the information presented in advertisements compatible with that presented in other publications?

An interview with the Chancellor and the Chancellor's assistant revealed that UPR-Bayamón is not allowed by law to pay for advertisements, and therefore, has no advertising policy as such. However, the Division of Continued Education is able to advertise its course offerings since their operational funds are self-generated.

The College can advertise in UPR's newspaper, Diálogo and can advertise activities on radio programs that provide free coverage for public service activities. Cultural activities and athletic events are advertised by flyers, in the WEBSITE, through the media in community service programs and by the UPR-Bayamón's public address system. Dissemination regarding our programs is also done through annual recruitment activities by the Counseling Department.

8. Does the institution provide sufficient financial and administrative support for these publications?

The UPRB publication *Mileno* has had three successful annual publications since it began in 1997. A director and board members have been assigned to coordinate all activities related to the publication. Because of its importance and impact on the academic community, the administration will be assigning permanent facilities with more adequate space and equipment.

Since the Institution began the construction of its Web page, the administration has provided the Web site coordinator with some equipment, software, and technical support for

its construction. In addition, the coordinator has a six-credit time release. Through an interview with the Web site coordinator who initiated the web page, she stated that although verbal response was always given, actual support took too long or often did not materialize. Since the web page is one of the main sources of dissemination, the Institution is committed to continue to strengthen it.

Recommendation:

1. Additional funds and faster administrative processes are needed to provide for the continuous development of the UPRB's web site and publications.

9. Does the information presented in these publications agree with that presented in UPRB's Web site?

As discussed in other questions, the web site includes up-to-date and accurate information. Care is being exercised so that all published information is accurate, and that it is provided to the Web site coordinator by the personnel responsible for the information. Requests for changes must be certified by the personnel who submit the original information. Subcommittee members believe that these procedures will greatly contribute to the accuracy of the information published in the web site.

Recommendations:

Upon analysis of the publications, the Charge of Catalogs, Publications and Other Promotional Materials, the committee found that the publications follow the standards. In regard to the above, the subcommittee recommends the following:

- ✓ The information included in the catalog needs to be updated on a regular basis.
- ✓ Adequate financial resources should be assigned to publish the catalog more frequently.
- ✓ An individual should be assigned to the Catalog on a permanent basis so as to

constantly be making the necessary changes to the document.

- ✓ The Web page should be used to maintain the catalog as updated as possible.
- ✓ More financial and human resources should be assigned for the development, publication, and continuous operations of documents, promotional materials, and web site.

INSTITUTIONAL CHANGE AND RENEWAL

Introduction:

Institutional change and renewal must respond to the needs of a changing society incorporating new policies and areas of study in the teaching-learning process. This must be an ongoing process that periodically must be evaluated to ensure that the Institution is fulfilling its commitment with society and the learner.

During the last five years, the UPRB has faced changes and challenges of both, routine and substantive nature. Since July 1, 1998, the UPRB is an autonomous college of the University of Puerto Rico. There have been innovations in technology-assisted courses, computer aided laboratories, modern information systems, and partnerships with private and public agencies. Also, valuable efforts have been made to incorporate and promote research inside and outside the campus. There is also the need to recommend what may have to be changed or will result best for the students and/or faculty development.

This report was made using the following strategies:

- ✓ Questionnaires
- ✓ Interviews
- ✓ Document analysis (Annual Reports, Assessment Plans, etc.)
- ✓ Internet research
- ✓ Committee meetings

The standard that was used to measure the Institution's effectiveness regarding this charge was the following:

- *responsiveness to the need of Institutional Changes and Renewal according to its mission and goals.*

Following are the questions that guided this part of the study and the findings.

1. To what extent do the already initiated and proposed changes and innovations in the curricula focus on the mission and goals of the institution?

The initiated and proposed changes and innovations in the curriculum deal with two primordial aspects: the **what** and the **how** of the teaching and learning process. New programs of study (General Biology, Biology-Human Approach, Special and Elementary Physical Education), as well as new courses, were scrutinized for approval, using the Institutional vision and goals as the focus. These efforts are innovations principally for the interdisciplinary nature of their design and delivery. These include the integration of faculty from related content areas, counseling resources, and library literacy. Also, the Institution's responsibility of developing students' technological, humanistic, and scientific capabilities is addressed. When considering content (the what) themes, such as, environmental care and responsibility, small business development, accounting for non-profit organizations, recent law requirements for adapted physical education, music and computers, cybernetics, digital communication, human genetics, biostatistics, biosocial topics, and bioethics, we find that the technological, humanistic, and scientific themes stand out in new courses and programs allowing the study of the various careers from a holistic perspective. Early experience in the work environment is promoted by internships and exchange programs and also by the collaboration of the office of the School to Work Program of our Institution.

In terms of the **how** of the already initiated new courses and programs, the teaching-learning process has been revolutionized. Changes and innovations derive from a constructivist view of learning, one that emphasizes the acquisition of meaningful learning (active, relevant and permanent). The responsibility of learning resides in the learner. Modalities of cooperative learning are used by faculty members of all Departments, but the professors of Biology, Chemistry, Electronics, Mathematics and Computer Sciences are the most enthusiastic as evidenced by their attendance to conferences and workshops, innovations in courses and programs, meetings, and publications in pamphlets such as “*Signos de Motivacion para la Enseñanza Tecnológica*,” (Motivation Signs in Technological Education). Internet applications for research, individualized instruction, drill and practice, and statistical analysis are part of the curricular innovations that have been initiated.

The necessary administrative support for instruction and research, which is in our mission statement, has been provided. Since 1998, the Office of the Dean of Academic Affairs established the Center for Professional Development that coordinates an orientation activity for new faculty members and the organization of three to four teaching and learning-related activities per semester for all teaching personnel. In addition, an expert in assessment modalities at institutional level is available to address departmental needs. The assessment coordinator has contributed greatly to institutional change and renewal through orientations and trainings with faculty and non-faculty personnel.

The Institutional has coordinated with other universities to broaden opportunities for research for both faculty and students. This responds to the part of our mission related to research promotion. Our active participation in the Louis Stoke Alliance for Minority Participation (LS-AMP) has allowed students and faculty from the Electronics, Biology and

Chemistry Departments to develop undergraduate research projects. Their subsequent participation in scientific meetings, such as, the Junior Technical Meeting in Puerto Rico (for the last three consecutive years) and the Convention 2000 of Honors Programs in Orlando, Florida, also demonstrate the Institution's commitment to develop undergraduates in research. In addition, the Transition to Research Careers Program and the laboratory offered at the Medical Sciences School at the UPR and at the School of Medicine of the Central Caribbean University, were also available for undergraduate research experiences. The Office of the Dean of Academic Affairs, through the Committee of Institutional Research and Development, assigned funds for research (\$58,234 for 13 projects for year 1999-2000). Two of these projects include student collaborations as research assistants. In addition, the re-initiation in 1997 of the Honors Program of our Institution has stimulated the continuous offerings of honors courses in Spanish, English, biological sciences and physics, in which 20 percent of their content is dedicated to research, independent or collaborative studies, and development. Community service is required to receive the Honors Program Certification. This consideration is common to all new programs of study. Also, the new Bachelor's Degree Program in General Biology provides the option of having research as its focus.

The evaluation process of this "how" of learning has broadened its options, as is favored by constructivism. Alternative assessment, such as portfolios, which allow the analysis of the learning process, is being practiced by professors of six departments. Seminar presentations are part of the evaluation criteria in the courses of Business Administration, Biology, Education, Physics and Office Systems. Non-traditional evaluation methods, such as, creative writing production, collaborative test taking, computer-assisted evaluations, (including Internet applications) are practiced by our faculty, especially in the sciences, mathematics, engineering

and technological (“SMET”) courses. Our faculty as a whole has stimulated and considered participation in contests at institutional or systemic level for student evaluations. Winners of the “Biolimpiadas,” “Oquimpiadas,” “Olimpiadas de Matemática,” Computer Programming, and the Student Competitions of the Puerto Rican Business Teachers Association (*APEC-Asociación de Profesores de Educación Comercial*) are recognized as outstanding in their respective areas and students themselves use these recognitions as part of their resume.

To support the instructional process, peer-based alternatives have been successful. Students from Electronics, Biology, Mathematics and Chemistry have received tutoring, mentoring and practice in skills for independent study (*TaDDEI-Talleres para el Desarrollo de Destrezas de Estudio Independiente*). During the last four years the LS-AMP has sponsored 63 students to serve this purpose. Evidence of the contribution of these AMP related efforts is included in the Liaison Officer Reports. Although the tutoring services of the Educational Service Program of our Institution is not an innovation, its increasing and effective attention to Mathematics and English students complement other efforts.

In regard to internships and student exchange programs, participation has increased during the last four years. In accounting, 154 students participated in an internship program during the past four years. (See Business Administration Annual Reports 96-97, 97-98, 98-99, 99-00). Last year students from Computer Sciences, Business Administration, Office Systems, Engineering, Electronics and Natural Sciences lived the internship experience in private industries and in federal and local government agencies (See College Placement Office’s Annual Report, June 2000).

The availability of technical support for the curriculum evidences collaborative efforts. These are the Auto-tutorial Center of the Biology Department where mentoring and tutoring is

offered with LS-AMP assistance; the Chemistry Laboratory where AMP sponsored undergraduate research; the Multimedia Language Laboratory Center where multimedia English modules provide support to learning, and the laboratories donated by INTEL of Puerto Rico and Hewlett-Packard. All these evidence the collaboration at the local, systemic, and industrial level to enhance curricular pertinence.

The identified needs have led our University to propose innovations and changes that stressed our mission and goals. In terms of technological literacy, there is interest in broadening the availability of the Internet in ADEM Laboratories that simultaneously will allow the establishment of discussion groups both locally and globally. The Social Sciences Department has proposed the establishment of Group Dynamics and Geography Laboratories. Meanwhile, the Electronics faculty proposed the availability of technological resources to the community including training in computer repair.

In terms of course content and relevancy of program sequence, the Education faculty has considered changes in their in-service course separating it into two semesters and expanding in content background and the English Department is considering the formal diagnosis of previous knowledge of freshman students. Additionally, team teaching will be practiced by the Biology and Mathematics Departments in the third year of the new Bachelor's Degree in Biology.

Analysis of the information gathered evidences that the aspect most influenced by changes and innovations is the **how** of learning. The emphasis on innovating the how of teaching will contribute to students' meaningful acquisition of new content and skills. In terms of proposed innovations, they derived from needs assessed and, as such, should be considered for their validity and relevancy.

2. Is there evidence that innovative tendencies in the teaching-learning process have been incorporated into programs, curricula and courses?

The departments' chairpersons have reported several activities as innovative tendencies adopted in their programs, curriculum, and courses. These activities include:

- Incorporation of personal computers in the laboratories for the use of special programming or for the assistance in the instruction (CAI). This is the case in the Electronics and Biology Departments.
- The use of the Internet as a means of communication and a source of investigation. Professors encourage the use of electronic mailing for teacher-student conferences, messages, and remittance of assignments. This is the case of the English, Biology, and Office Systems Departments.
- Revision of the existing courses and/or creation of courses in order to incorporate new technology (online searches, email, and Power Point presentations), educational tendencies an/or more pertinent topics. This is the case of the Electronics Department, where these activities originated the proposal for the revision of their program. It is also the case of the Chemistry, Biology and Mathematics Departments.
- The creation of new undergraduate programs in the Biology Department focused on the development of research.
- Computerized modules to support students on the requirements of their basic first year English course established in the English Department.
- The use of graphic calculators, as well as the use of the CBL (Computer Based Laboratory), as a technological tool in some of their courses have been incorporated by the Mathematics Department .

- Incorporation of tutors and mentors and of innovative methodologies such as cooperative learning, portfolios, debates, simulations, and constructivism. These are evident in the Biology, Mathematics, Office Systems and Chemistry Departments.

Recommendations

- The effectiveness of the use of these new tendencies should be measured. Statistics should be provided on quantitative measures such as the percentage of withdrawals, the percentage of incompletes, grade distribution, and the number of times students repeat a given course under the different teaching modalities in which it is given. Questions such as *Is there statistical evidence of differences in student performance under the different teaching modalities?* should be considered.
- Another aspect that should be evaluated is the level of satisfaction of the students and professors regarding these innovations and tendencies.

3. What incentives have been promoted by the Institution in order to stimulate research in new tendencies related to education, laboratory development, and support services?

The institution has used many strategies to promote research. Among these are the Policy for Academic Research and Development and the Institutional Research and Development Committee. Both of these emphasize and promote faculty involvement in the development of proposals to do research in their respective areas of study. These proposals are evaluated according to established criteria. Institutional support and funds are provided for approved proposals. Research Projects are presented at the Annual Academic Research and Development Congress, a professional activity which is coordinated by the Institutional Research and Development Committee.

Proposals that request the alliance and sponsorship of public and private agencies are also promoted by the Institution. Some of these have been established with the Authority for Waste Management and Disposal and with the Federal Government (Title V). Private companies such as Hewlett Packard and INTEL have joined this effort resulting in the acquisition of modern computer laboratories for the Institution.

The University budget includes funds for professional development of the faculty and non-teaching personnel. These funds are used for attendance to professional meetings, conferences, seminars, and courses. Students of the Honors Program have also had the opportunity to present their research projects at professional meetings and conferences. Computer Sciences, Natural Sciences, and Engineering students participate at the Junior Technical Meeting sponsored by the American Chemistry Association.

Presently, the University provides the students and faculty the following facilities to complement research and academic development:

- Tutorial Center for Biology (200 Building)
- Support Services for students in the Student Support Services Program (SSSP) (600 Building)
- Honors Program (Room in front of Academic Building IV)
- Computer Laboratories (Electronics, Engineering, Multimedia Language Laboratory Center, Computer Sciences)
- Traditional and Electronic Library Resources

4. What policies and procedures have been established to evaluate the effectiveness of institutional changes?

The UPRB has been working as an autonomous college since July 1998. This has been considered a substantial change. As is established in this report, as an autonomous university, financial and administrative aspects are now considered as in-campus work. The Governing Board and the UPR President delegate their command to the officer in charge of the specific unit, who is the Chancellor. Policies and procedures available to assess administrative changes must

be provided by higher components of the University. The Academic Senate and the Administrative Board have their own rules and procedures based on the UPR system-wide laws and regulations.

In the second semester of the 2000-2001 academic year, a committee established by the Office of the President of the UPR will evaluate the effectiveness of the institutional changes related to autonomy. The University community will participate in this process.

Recommendations:

Institutional Policies and Procedures should be established and revised properly on an annual basis. They must be used to assess and evaluate the effectiveness of routine and substantial changes.

5. Does the incorporated innovation in curriculum and teaching meet the challenges of emerging fields and new technologies?

In regard to the new technologies, curricular innovations foster: the use of personal computers and software programs to enhance the quality of teaching; the use of computerized modules for the development of skills; and laboratories connected to the Internet allowing both professors and students to make searches as well as send and receive e-mails. These activities give students the opportunity to relate to the technology of their future workplace and develop competence for a constant changing world and a global perspective.

The Office of the Dean of Academic Affairs has established a committee for the development of a Distance Learning Education Program coordinated by the director of the Continuing Education and Extension Division. This educational modality will expand learning opportunities to a larger population.

Teaching techniques such as cooperative learning, portfolios, reflexive diaries, pair work, simulations, study trips, and publications have been incorporated as assessments tools. Some of

these promote teamwork, development of content area, and interpersonal skills as well as job-related skills. These give students experience in decision-making situations.

6. How effective have been curricular changes and innovation in raising the quality of the student learning?

- The distribution of grades for two teaching modalities (cooperative learning and traditional learning) of CIBI 3001 and BIOL 3011 during the fall semester 1998, shows a higher percent of A's and B's under the modality of cooperative learning and lesser D's, F's, Incompletes and Withdrawals than traditional learning.
- The Chemistry Department offers, in some of its courses, a pre-test at the beginning of the semester and a post-test at the end of the semester. Those students under the modality of cooperative learning showed a better academic performance than those in the traditional modality.

7. How have the institutional changes and renewal affect the community near the campus?

Institutional changes affect the needy community of the campus in many ways. Through the years the university has been developing services and programs considering the needs of the community. Some of them are:

- a. *Short term education sponsored by the Division of Continued Education and Extension (DECE).* Technical and general courses have been offered to a varied population including children, youths, and adults.
- b. *Long term education sponsored by an extension of university offerings for Adults (Evening Program), known by its Spanish acronym UNA (Universidad Nocturna para Adultos).* This program has given adults the opportunity to fulfill requirements to complete an associate or bachelor's degree.

- c. *Alliances with public and private agencies.* Special arrangements have been made with local public and private agencies to respond to the needs of education and skill development related to new tendencies and technologies
- d. *Pre-school and Kindergarten Laboratory.* As part of the Education Program at the Pre-school and Elementary Level, the Laboratory for pre-school children has served the needs of the College and nearby community. The program, consisting of three years (including kindergarten), constitutes a model for the ideal environment of the teaching-learning process in the early childhood years. Children from the community can take advantage of this opportunity based on the space available.
- e. *Adapted Physical Education Laboratory.* As part of the Physical Education Program for the Elementary School and Special Education, the students in this program offer a dynamic and active routine of physical exercise to students with disabilities children from the nearby community. This is a highly specialized and individualized process that results in a one-to-one student-child ratio.
- F. *Internships/Practicums.* Several programs include practical experiences and internships in diverse areas of study. The Business Administration, Office Systems, Physical Education, and Education Departments have programs with these requisites. The College Placement Office coordinates internship programs in Puerto Rico and continental USA. Students from such areas experience the real working environment with employers in and out of campus as required by their curriculum. These agencies, schools and/or offices near the campus obtain the benefit of excellent services while giving students the opportunity to work.

General Recommendations:

- ✓ The institution should evaluate the impact of the seminars offered to the community near the campus to include short-term and long-term education, pre-school and adapted physical education laboratories.
- ✓ There is a need to coordinate and improve services and opportunities available for the nearby community on a regular basis.

