



**UNIVERSITY OF PUERTO RICO AT HUMACAO
UNIVERSITY DEVELOPMENT OFFICE**

**STRATEGIC DEVELOPMENT PLAN
2004-2005 TO 2009-2010**

FEBRUARY 2005

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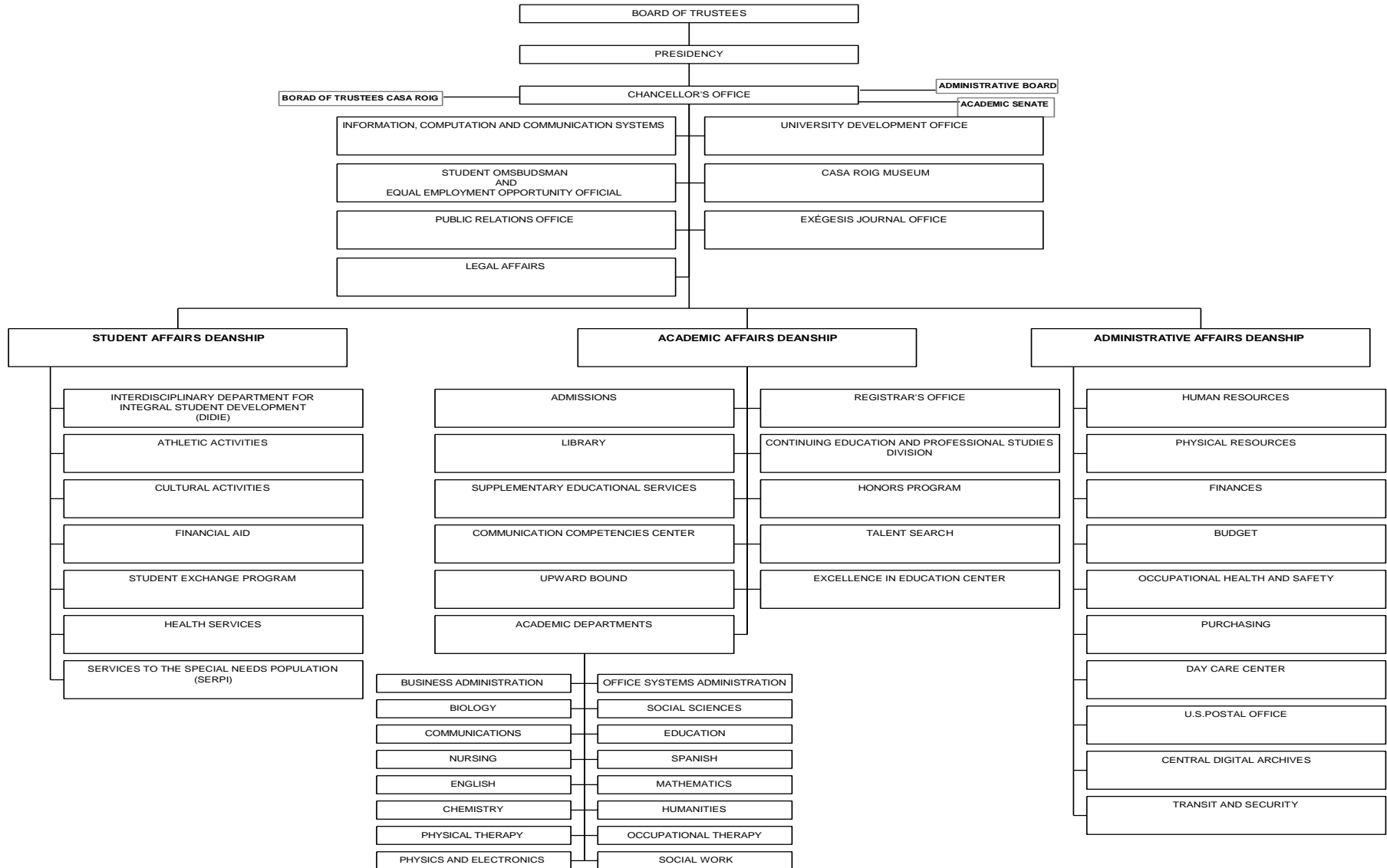
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Table of Contents

I. Conceptual Framework.....	1
A. Principles of Strategic Planning.....	1
B. Strategic Planning Model at the University of Puerto Rico at Humacao (1986-2004).....	3
C. Scenarios	5
Internal	5
External	11
1. UPRH Marketing Area	11
2. Worldwide Tendencies.....	15
II. Literature review on the challenges in higher education	22
III. Philosophy of the University of Puerto Rico at Humacao.....	30
A. Values of the University of Puerto Rico.....	30
B. Values of the University of Puerto Rico at Humacao.....	31
C. Mission of the University of Puerto Rico.....	33
D. Mission of the University of Puerto Rico at Humacao	33
E. Vision of the University of Puerto Rico	34
F. Vision of Puerto Rico 2025.....	34
G. Vision of the University of Puerto Rico at Humacao.....	35
IV. Planning agenda at the University of Puerto Rico	38
V. Strategic Development Plan of UPRH.....	40

I. Conceptual Framework

A. Principles of Strategic Planning

By definition, *strategic planning* is a process of reflection, systematic analysis and integration of information to provide an answer to three basic questions: Where are we? What do we want to achieve? How can we get there? Rowley & Dolence¹ define it as an analytical process that aims to identify and develop an effective relationship between an organization and its external surroundings, that is, to pass judgment on the strengths and weaknesses of the institution or organization, and on the opportunities and demands of the external environment. Recent models focus on the adaptability to change by way of three principles: strategic thinking, strategic learning, and strategic agility².

Strategic thinking is a dichotomy between two dimensions: the individual, which entails the application of judgment based on experience to determine future directions, and the organizational, which includes the coordination of creative minds in a common perspective and which enables the institution to move into the future. *Strategic learning* is the capacity of the organization to achieve the participation of all its constituents in the strategic planning process (to determine the mission, vision, objectives, strategic actions and establishment of priorities). *Strategic agility* has as its objective the focusing of decisions on the analysis, provisions and tendencies that indicate which direction to take.

Peter Drucker³ holds that the survival of institutions or organizations in the 21st century will depend on the creation of policies as the norm for creating change instead of merely reacting to it. This author establishes the following principles to be considered towards having an effective change within and outside of the organization:

- Establishing policy for building the future.
- Establishing a systematic method for looking towards the future and anticipating change.
- Establishing a path for introducing change.
- Establishing policy to provide balance and continuity to change.

Other authors such as Kaufman⁴ define effective educational planning as the adoption of a synergetic focus between strategic planning and assessment. This author asserts that strategic planning allows for defining and justifying where to go. He further adds that the assessment process permits the identification of the

¹ Rowley, D. y Dolence, M. (1997). *Strategic Change in Colleges and Universities*. First Edition. Jossey-Bass.

² Ibid.

³ Drucker, P. (1999). *Management Challenges for the 21st Century*. Harper Business.

⁴ Kaufman, R. (1997). "A Synergetic Focus for Educational Quality Management, Needs Assessment and Strategic Planning". **International Journal of Educational Reform**. 3(2), 174-180.

breach between ongoing results and those desired. The data base specifically developed in an assessment system provides critical information for the strategic planning process.

Kaufman's assertion is that *assessment* and *strategic planning* are more powerful when integrated than when applied independently. The synergy lies in that strategic planning will define the appropriate direction for the educational system, and assessment will be the fundamental mechanism for achieving institutional and educational efficacy.

Within this framework the administration of the University of Puerto Rico at Humacao (UPRH), through the Institutional Planning Committee, has established a balance among the following elements:

What is required by the situations or elements identified as areas of opportunity?

How can the greatest contribution be made using the strengths, performance and institutional values as a starting point?

What results will make the difference?

The Institutional Planning Committee (CPI, by its Spanish acronym) advises the Chancellor in the mission of articulating institutional vision in the areas of academic affairs and service to the university community to direct decision-making and to make viable the effective implementation of public university policy. One of the primary functions of this committee is to prepare and edit the Strategic Development Plan, which sets forth the objectives and strategies for academic, cultural, and research development, as well as for service to the internal and external community.

This committee includes representation from all sectors of the university community (students, faculty, non-teaching and managerial personnel) and of the external community (industrial and civic sectors) of the University of Puerto Rico at Humacao Marketing⁵ Area.

It is essential to include representation from sectors of the community in the curricular revisions of the academic programs and other tasks that may so merit it. The representation of the members of the external community, at the same

⁵ Puerto Rico as a whole has been designated as the University of Puerto Rico at Humacao Service Area, and the Marketing Area has been identified as the geographic area made up of fifteen municipalities, each of which provides at least 5% of the total registration of the institution, according to the historical distribution of total registration for the last ten years. This analysis was supplemented by other characteristics of the municipalities within the marketing area to which services are offered or provided. (Certification of the Administrative Board Number 1999-2000-170).

time, serves as a link with the institution for evaluating tendencies in socioeconomic, cultural and environmental changes.

B. Strategic Planning Model at the University of Puerto Rico at Humacao (1986-2004)

In 1986, the University of Puerto Rico at Humacao adopted the *Strategic Planning Model* with the aim of elaborating a development plan for the Institution. The strategic planning process was also used as the basis for carrying out the self-study and reaccreditation process of the Middle States Commission on Higher Education (MSCHE) in 1989.

For more than a decade, the UPRH has used its Strategic Development Plan (PED, by its Spanish acronym) as a guide for growth and distribution of its resources. The PED has been the object of periodic revision through the years as part of the process of adjusting to the external environment, to the institutional vision and to the Strategic Plan of the University of Puerto Rico (UPR). In the 1995-96 academic year, the Institutional Planning Committee and the UPRH Administrative Board approved the first initial version of the Strategic Development Plan (Certification Number 1995-96-87). This Plan includes the following components:

- goals for attaining the institutional mission
- critical issues as institutional weaknesses to be addressed as a top priority
- strategic decisions that represented the interventions or actions to resolve the critical issues
- evaluation criteria or parameters for measuring each goal

In the 1997-98 academic year, the Institutional Planning Committee worked on the second version of the PED to align it with the requirements of the Planning and Assessment Cycle approved by the Administrative Board (Certification No. 1996-97-138).



In this new Strategic Plan the goals were reduced in number from eleven to five, since some of them were too specific or presented common areas. The majority of these were converted into objectives of the five goals. The goals are:

That graduates possess a general and professional education of excellence that allows them to develop holistically and respond to the demands of a changing and technologically advanced society.

To achieve, through education in the broadest terms, socioeconomic improvement and in the quality of life of the region served by the UPRH in particular and of Puerto Rico in general.

To reaffirm the values of the Puerto Rican culture.

To attain an institutional climate in which the students, faculty and non-teaching personnel can easily share and discuss ideas and mutual interests.

To promote and support pure and applied research, as well as creative work, aimed at advancing knowledge and the arts as well as the solution of Puerto Rico's problems.

In March of the 2001-02 academic year, the term of the aforementioned Strategic Plan expired. As a result, during the 2002-03 and 2003-04 academic years, the reevaluation of this document and preparation of the third version was initiated. The new Strategic Plan which will guide the Institution's development for the next six years was approved and the UPRH has the following necessary documents for continuing the analysis of institutional and educational effectiveness:

1. Strategic Development Plan 2004-05 to 2009-2010
2. Action Plan 2002-03 to 2006-07
3. Institutional Assessment Plan 2002-03 to 2006-07

In this strategic planning model, the characteristics of excellence in higher education as established by the *Middle States Commission on Higher Education* are included, specifically those with respect to the document presented here, Standard Number 2: "Planning, resource allocation and institutional renewal". In the aforementioned, it is emphasized that the institution carry out an ongoing process of planning and resource allocation in accordance with its mission, and use the results of its assessment activities for renewal. The implementation of the strategic plan and the allocation of resources, and the subsequent evaluation

of their success, serve as support for the necessary developments and changes for improving and maintaining the quality of the institution⁶.

C. Scenarios

Internal

As part of the preparation of the *Follow-Up Report to the MSCHE* submitted in February 2002, UPRH developed an Action Plan based on the identification of the strengths, weaknesses, issues and concerns of the university community.

The entire university community participated actively in the evaluation of the strengths and weaknesses and identified which were the most important, and if they would stand up under scrutiny with the evidence presented. The strengths and weaknesses that the university community identified, by areas, are presented below:

STRENGTHS

Academic Area

1. The students graduate with the competencies required for graduate studies and for effective performance in their professions.
2. The retention and graduation rates have increased and compare favorably with other institutions of higher education in Puerto Rico and the United States.
3. The faculty is productive, receptive to innovation, committed toward expanding the academic offerings, strongly committed to the Institution, characterized by having an extraordinary collegiate interaction, consistently involved with curricular revision and renewal, and committed to professional growth and improvement.
4. The faculty is academically and professionally qualified to comply with the mission of teaching-learning and research.
5. Faculty development is primarily focused on strengthening teaching-learning strategies and student development and retention.

⁶ Middle States Commission on Higher Education. (2003). *Characteristics of Excellence in Higher Education: Accreditation Standards*. Page 3.

6. Professors and students in the academic programs conduct research aimed at the solution of biomedical, social and environmental problems.
7. All of the academic departments have established their curricular revision plans. By academic year 2002-2003, all UPRH departments will have revised their curricula.
8. UPRH has innovative academic programs pertinent to the social and economic needs of Puerto Rico and the region.
9. The departments of the UPRH are broadening their academic offerings with innovative bachelor's degree programs. Proposals for bachelor's degree programs and graduate studies in the areas of the Institution's greatest strengths are being developed.
10. The programs have incorporated innovative strategies to strengthen the teaching-learning process.
11. The Health Sciences programs are very effective.
12. All of the programs have an adequate balance between the general education courses and the specialized courses.
13. The infrastructure for integrating the use of technology in the teaching-learning process has been strengthened.
14. The UPRH library has adequate space, study environment, and professional and technical personnel to comply with its mission of providing academic support.
15. The students and faculty have access to information resources and internal as well as external collections accessed online access and through interlibrary loans.
16. The Library uses computer technology to provide more effective and efficient services.
17. Diverse strategies have been established to encourage the optimal use of instructional resources.

STUDENT SERVICES

1. UPRH attracts a large number of students that meet the admission criteria.

2. The UPRH has created academic programs to prepare pre-university students for university life.
3. The services offered to students satisfy their academic, professional and personal needs.
4. The UPRH offers incentives to its students to participate in co-curricular activities.
5. The UPRH consistently prepares a student profile to identify their needs and plan the services offered.

COMMUNITY SERVICES

1. UPRH has played and will continue to play a key role in the education, socioeconomic development and the cultural life of the region which it serves.
2. UPRH stays in contact with the region's industry, commerce and professionals to identify and respond to their needs, share resources and provide mutual support.
3. The Continuing Education and Professional Studies Division (DECEP, by its Spanish acronym) identifies the needs of the community and prepares a development plan to address those needs.

PHYSICAL FACILITIES

1. UPRH has an articulated physical facilities development plan based on the needs of the university community.
2. UPRH works to maintain and improve the physical facilities.
3. The Institution has worked proactively on the conditioning of sick buildings to address environmental problems and to keep optimal environmental conditions for the health of its human resources.

ADMINISTRATION, GOVERNANCE AND ADMINISTRATIONAL LEADERSHIP

1. The UPRH has an officially constituted governing structure that serves the public interest and oversees that the Institution fulfills the mission and goals that it has set forth.
2. The UPRH provides opportunities for shared government and counsel.

3. The UPRH relies on an administrative team that has the qualities that provide leadership to the Institution.
4. The UPRH has an institutional planning and assessment model and has developed various initiatives for implementing it.
5. The institutional mission has been revised to identify UPRH's purpose and distinguish it from that of other higher education institutions.

FINANCIAL RESOURCES

1. The budget elaboration process is carried out according to guidelines that permit the participation of the Institution's personnel.
2. The UPRH budget is prepared and controlled following clearly defined accounting norms and procedures.
3. There is a budget information system that is accessible to all department and office heads.
4. The source of UPRH budgetary funds is stable.
5. The UPRH has broadened its sources of funding to attend a variety of academic and service activities.

WEAKNESSES

ACADEMIC AREA

1. The incoming freshman students have serious academic deficiencies and UPRH has not developed an institutional program for attending them in an effective way.
2. There are academic programs that award degrees that have not implemented comprehensive and diverse strategies or activities in a systematic way that measure the effectiveness of student learning in the discipline.
3. The Institution has not developed success criteria or standardized instruments to measure and evaluate the effectiveness of General Education.
4. The curricular revision of some programs is not dynamic.

5. The budget assigned for the acquisition of additional information resources and institutional needs does not reflect an appropriate balance.
6. The equipment and materials that the faculty members need to carry out their academic duties are limited.
7. The UPRH still does not have a computational infrastructure that responds to current and future needs.
8. The Library does not have sufficient computers for public use.
9. The UPRH student body does not use the library resources effectively.
10. The Library has not evaluated its services and collections in an ongoing systematic way.
11. A relatively low number of faculty members apply for sabbatical for their professional development.
12. There is not an efficient and coordinated use of the audiovisual resources and materials between the Communications Department and the Library.
13. There is dissatisfaction with the faculty evaluation process.
14. The Library does not offer an extended evening or Sunday schedule.
15. The faculty has a heavy academic load.

STUDENT SERVICES

1. Several of the services that are offered to the students do not fulfill their needs.
2. The majority of the assessment of student services is done sporadically and uses written surveys as the principle source of data-gathering.
3. The services for attending the needs of non-traditional students are limited.
4. The UPRH Student Exchange Program is limited to student exchanges exclusively in the United States and does not attract a significant number of students.

5. The Admissions, Registrar's, Services for Students with Disabilities and Medical Services offices do not have adequate informational and computational technology.
6. UPRH does not have an Employment Placement Office.
7. There is little participation and support from the university community for the athletic and sports activities.
8. The orientation service to incoming students is quite limited and does not impact all students.

COMMUNITY SERVICES

1. The majority of activities and services are not offered in an evening or weekend schedule.
2. The academic and continuing education offerings for the non-traditional student population are limited.
3. There is little participation from members of the external community in institutional bodies.
4. There is a lack of systematic and ongoing information on user satisfaction with the programs and projects that are offered to the community.
5. There is little affirmation in the mission and goals of the academic departments concerning the criteria of ecological equilibrium, inclusion, and diversity as principles of change in a democratic community that aspires to be just.

PHYSICAL FACILITIES

1. The physical facilities are inadequate for academic and institutional development activities.
2. The UPRH does not have an adequate Student Center.
3. There is a lack of adequate lighting in some areas of the institution and an absence of emergency telephones.
4. UPRH has not completed the remodeling projects necessary to reach compliance with the standards of the ADA law, in terms of architectural barriers.

5. There is no recycling program at UPRH.
6. The facilities of the Sports Complex of the Institution are deteriorated.
7. UPRH does not have a Faculty Center.
8. UPRH does not have a crosswalk across the avenue in front of the campus that would provide safe crossing for students, personnel and the general public that visit the Institution.

ADMINISTRATION AND GOVERNANCE

1. UPRH has not achieved a culture of excellence in service.
2. There is no established procedure for evaluating the administrative personnel.
3. There is little student participation in discussion forums and in the decision-making process within the deliberative bodies and the academic departments.
4. The means of communication with the student community are neither diverse nor effective.
5. The non-teaching personnel are dissatisfied with their participation in the institutional decision-making process.

FINANCIAL RESOURCES

1. The UPRH budget is not an effective control and monitoring mechanism of the work plans.
2. Increases in the operational budget are primarily destined to personnel salary increases and fringe benefits.
3. The UPRH has procedural limitations in providing follow-up to the Permanent Improvements Plan.

External

1. UPRH Marketing Area

Any organization or academic institution must pay attention to its external setting, to what occurs outside the organization and determine what part of the events will be important for its future. At the same time, it should set a new orientation,

a vision, and concentrate the attention of all the organization's personnel on it to determine its development, positioning, and its survival.

The definition of "Service Area" was revised in the year 2000 based on diverse reasons: 1) the service area makes up the principle field of action in terms of the functions of research and service responding to specific necessities such as: the existence of a new market, increase in the adult or elderly population, distance education, development of corporations, communities, etc. 2) changes in the structural organization of the Puerto Rico Department of Education in 1999, reordering the educational system into ten regions; changes of an academic-administrative nature in the University of Puerto Rico, such as the unique admissions system, duplicity of academic programs, the elimination of the Regional Colleges System, and, in the case of UPRH, the broadening of its academic offerings.

Therefore, Puerto Rico as a whole was designated as the *UPRH Service Area*, and the *Marketing Area* was identified as the geographic area made up of 15 municipalities, each of which provides at least five percent or more of the total registration of the Institution according to the historical distribution of the total registration of the last ten years.⁷ This analysis was supplemented by other characteristics of the municipalities within the Marketing Area to which services are offered, among them:

- Natural resources and special reserves available (research laboratories)
- Communication channels
- Geographic platform
- Industries as sources of employment
- Internship locations
- Donors/ potential donors of funds
- Strategic alliances

In the 2002-03 academic year, personnel from the Investigation Area of the University Development Office prepared the *Socioeconomic Profile of the University of Puerto Rico at Humacao's (UPRH) Marketing Area 2002-03*. This represents the fourth in a series of analyses that documents the demographic, social and economic panorama of the area served by the University since the 1980's. This report presents a snapshot of the factors, either positive or negative, that can influence the development of the academic, research, and public service roles performed by our institution.

The profile is an essential document in the strategic planning process. The data concerning both the municipalities of the UPRH Marketing Area, as well as of

⁷ University of Puerto Rico at Humacao, University Development Office. (2000). *Restructuring of the Humacao University College Service Area*. Approved by the UPRH Administrative Board, Certification No. 1999-2000-170. (Revised in October 2002).

Puerto Rico as a whole, lead us to draw conclusions that force us as an institution to make the necessary adjustments in offering or revising the academic programs and services that our students require. The conclusions drawn from this analysis are:

1. The country's population is undoubtedly aging while the number of young people is decreasing.
2. Puerto Rico continues to be among the most densely populated countries of the world. This is one of the causes of many of the social problems that afflict the country.
3. The illiteracy rate has not decreased as expected. There are still more than 300,000 Puerto Ricans that cannot read or write.
4. During the last decade, a decrease in the school-age population was registered.
5. At the high school level, more women (55%) graduate than men (45%).
6. Women outnumber men by a wide margin at the university level. The discrepancy which can first be identified at the high school level increases at the university level.
7. Slightly more than two-thirds of the municipalities that make up the UPRH marketing area present higher birth rates for adolescent mothers than does their immediate geographic area or Puerto Rico as a whole.
8. Slightly more than half of the municipalities present the pattern of single-mother birth rates described above.
9. The population diagnosed with mental health conditions, both in minors as well as in adults, continues to increase. The prevalence of these disorders in the UPRH Marketing Area surpasses that of Puerto Rico as a whole.
10. Services for the population with mental health conditions are practically nonexistent. It is estimated that only three percent (3%) of the population with mental conditions receive treatment.
11. This profile does not examine the magnitude of the drugs and alcohol problem; it only looks at the services that are offered to the population affected by these conditions. It can be observed that the services to these populations have reduced in recent years. On the other hand, there is an increase in the number of young people and men between the ages of 25 to 44 who receive treatment for alcoholism.

12. The age group with the highest number of marriages is that of 20-24 year-olds, a time during which many young people are in the process of completing their university career.
13. The focus of the Social Welfare Reform has been to provide education, training and other services that help beneficiaries to obtain and keep a job that promotes their self-sufficiency.
14. Socially unacceptable conduct such as child abuse, domestic violence and criminality have negative repercussions for the social and economic development of any country.
15. Governmental efforts to address these social concerns lead to a high demand for social workers, psychologists, counselors, and special education teachers, among others.
16. Heart disease and cancer continue to be the leading causes of death in Puerto Rico.
17. The population of children and teenagers with special needs represents 7% of Puerto Rico's population. This rate is high and has serious implications for diverse sectors of the country.
18. In terms of housing, the 2000 Census did not gather data related to the need for housing in Puerto Rico. We all recognize the importance of this topic, given that the need for housing is underscored every day by the homeless, by mothers seeking a home for their children, and in the desperation of the elderly that live in inhumane conditions, among other situations.
19. There is consensus among the country's economists and economic analysts that, since 1997, Puerto Rico has suffered the onslaught of an economic slowdown. This economic panorama was aggravated by the impact of a recession that began in March of 2001 in the economy of the United States. At the beginning of 2003, the good news seems to be that, at both the national level as well as in Puerto Rico, there are signs of recovery. Some economists have ventured to predict moderate growth (2 to 3 percent) in our economy.
20. Even though the small size of the territory and high population density are identified as factors that impede Puerto Rico's sustained economic development, in our work we see concrete examples of innumerable countries as small and densely populated as our own that have surpassed us in per capita production and income. We cannot continue to hide

behind these factors to excuse our lack of imagination and diligence in developing an effective economic strategy for the country.

21. The facts presented demonstrate that in those municipalities who have sufficient sources of employment (factories, military bases, banks, commerce), the per capita income of their residents surpasses even that of Puerto Rico as a whole. Examples of these are the towns of Caguas, Culebra, Gurabo and Ceiba. The impact of the Roosevelt Roads Military Base in the economy of Ceiba is noteworthy, since Ceiba has the highest per capita income and the highest average income for full-time workers in the UPRH Marketing Area.
22. Similarly, facts indicate that in those municipalities that lack sources of employment, the standard of living of its inhabitants is affected. This is the case of Vieques and Maunabo. Vieques presents the lowest median family income of the area and the highest percent of families living below the poverty level (those who receive less than \$10,000 income per year); single parent families living below the poverty level, families that depend on public assistance; unemployment (the second highest); pregnant teens and single mothers.

Maunabo has the lowest per capita income and the lowest average income for full-time workers. This is one of the five municipalities with the highest unemployment rates for the last three years.
23. There are still gender inequalities in Puerto Rico. Even though a woman may work full-time, her average income continues to be lower than that of a man in similar circumstances in the municipalities of the UPRH Marketing Area and in Puerto Rico as a whole.
24. Though the number of manufacturing industries dropped between 1999 and 2001, it is important to point out that Puerto Rico experienced an increase in the number of mining, construction, services and public administration industries. All factors tend to indicate that the service sector continues to be the pillar of the country's economy. Government is the second-largest source of employment in Puerto Rico.

2. Worldwide Tendencies

The following areas or aspects are strictly aligned with the dynamics of change that characterize the present. Various studies, among them those of specialists in futurism who elaborate tendencies for diverse companies or institutions in charge of establishing public policy and socioeconomic and physical planning, are used as a frame of reference.

Cetron y Davies⁸, prestigious futurists, grouped the tendencies that are changing the world into seven categories. These are summarized below.

1. Technology

- Technology increasingly will dominate the economy as well as society itself: more sophisticated equipment and software programs (wireless technology in telecommunications), artificial intelligence (machines as workforce), and expert systems in manufacturing (medicine).
- Research and development will play a growing role in the economy; that is, new fields of knowledge in health, engineering and biotechnology industries.
- Advances in transportation technology (both ground and air) will become more accelerated: automotive technology will become faster, cheaper, safer and more efficient.
- The rate of technological changes will speed up with each new generation of discoveries or applications: innovations in the designs, competition, and rapid adoption of new products.
- Important medical advances will come to light on almost a daily basis. Genetic illnesses will be preventable (cancer, diabetes, etc.).
- The use of the Internet will grow logarithmically and globally; there will be an increased transference of data, and greater access and connections.

2. Workforce and Work

- Education and training are expanding throughout society.
- Specialization is spreading throughout industry and professions.
- At the global level, the services economy is the sector of greatest growth in the economy.
- Workers will retire later in life according to an improved life expectancy.
- Having two or three careers in a lifetime will become more common given that people experience change along the way in their professional careers.

⁸ Cetron, M & Davies, O. (2001, January/February; March/April). Trends Now Changing the World. **The Futurist.**

- Individuals' sense of work ethic is waning.
- Couples in which both people work will be the norm.
- Generation X and the dot.commers⁹ will have a greater influence in the future.
- Entry-level and low-wage workers will be scarce.

3. Administration

- More entrepreneurs will begin new businesses each year.
- Organizations based on information will rapidly be replacing organizations with obsolete models of control and leadership.
- The typical business on a large scale, for the year 2010, will have less than half of the administrative hierarchies than that which originated in 1990 and will have only one-third of the number of executives.
- Governmental regulations will continue taking a greater degree of administrators' time.

4. Institutional

- Multinational corporations continue merging at a global level, but at the same time they are more exposed to greater risk, such as terrorist attacks, among others.
- Consumers increasingly will demand social responsibility from companies and institutions.
- Institutions will be distributed in a bimodal manner: large institutions get bigger, the small survive, and those of medium size will disappear.

⁹ Generation X are those of the population that are born between 1961 and 1980, after the baby boomers. This generation tolerates diversity, are idealist and individualistic, mobile and seek out change for professional improvement. The "dot.com" generation, "net-generation" or generation "Y" is made up of those born between 1981 and 2000; they are the young people that have full access to information and are characterized by being consumerist.

5. Economy and society

- The economy of developed countries will continue to be exceptional, according to Alan Greenspan¹⁰; low interest rates, low inflation and reducing unemployment will be the norm.
- The world population will double in the next forty years, with the greatest growth in developing countries and the least growth observed in developed countries.
- The population of developed countries will have a longer life expectancy; the elderly population will grow dramatically in developed countries.
- Growth of information industries will create a society dependent on this knowledge.
- Greater acceptance of cultural diversity, brought on in part by the effects of mass communication, will occur. This will promote the growth of a globally integrated society.
- The global economy will grow to be increasingly interdependent.

6. Values and concerns

- Social values are rapidly changing.
- Young people are increasingly assigning greater importance to economic success.
- The culture of physical appearance and personal health holds strong, but is far from being universal.
- The health and wellness movements will expand, improving the health of aging citizens.
- Consumerism will continue to grow rapidly.
- The equality movements between men and women will be less observable, but will be more effective.
- Family structures will become more and more diverse.

¹⁰ President of the Federal Reserve of the United States, who establishes that country's monetary policy.

7. Energies and Environmental Factors

- In spite of the call to develop alternate sources of energy, petroleum consumption will continue to increase.
- An increase in competition from other energy sources will help to control the price of petroleum.
- People around the world will become more and more sensitive to environmental issues as a consequence of past indifference, denial and ignorance.
- Scarcity of water, especially drinking water, will be a worldwide problem.
- Recycling has delayed the impact of the problem of waste management, but the threat is still latent.
- Industrial development is still considered in many parts of the world to be much more important than environmental concerns, so that greater regions of the globe will be subject to problems of pollution, deforestation and other types of environmental deterioration.
- Species in danger of extinction will not disappear as rapidly as in the past, but the real problem will be the loss of biodiversity.

Dr. Elías Gutiérrez¹¹ in his book *El futuro sobre el tapete* (The Future Up For Discussion) presents various scenarios for Puerto Rico in light of tendencies that converge with those previously presented by futurists.

- The macro economy and technological change

During the last two decades, technological change, sparked by the development of microelectronics and cybernetics, has transformed the capacity and speed by which enormous quantities of data to generate information can be handled. The communications industry has been propelled exponentially. As a result of these advances, economic and political relations have been structurally transformed.

On the scientific and technological level, it is likely that the next great shift will occur in the development of genetic engineering and the commercialization of biotechnology. The implications of this new technological wave are

¹¹ Gutiérrez, E. (2000). *El futuro sobre el tapete: Proyecto Delphi*. (The Future Up For Discussion: Project Delphi) Publication of the Center for Research and Public Policy of the Rafael Hernández Colón Library Foundation.

extraordinary. They relate to matters concerning the possibility of finding a cure for catastrophic illnesses such as different types of cancer, Alzheimer's disease, diabetes, etc.

- Polarization and social stratification

The English language has turned into a type of internationally used platform as support for what can be called the new world economy. For example, theory and practice of finances and, consequentially, the flow of capital is carried out in English. In addition, seventy percent of the information that flows on the Internet is in English. Eighty-five percent of the electronic programming applications which manage information on the Internet is written in English. The language has come to be much more than just the language of the United States. English, along with other essential platforms to the new economy such as the dollar and the stock marketing developed in the United States which is open to investors worldwide, is a fundamental element of participation in the new world economic order.

- Social Capital

To some extent, the viability of civic society, with its interventions, is determined by its wealth of social capital. Social capital is the name that has been given to the bond that holds together or gives cohesion to a society. Social capital makes reference to and incorporates in its domain wealth trust, accepted norms, institutions and support networks to which people resort to solve daily problems.

These aspects are to social capital what the infrastructure is to the economy. They are reflected in the degree to which people participate in association. They refer to the sum of the trust or comfort level that is perceived when participating in groups. Trust and participation in groups produce a reciprocal social relation (one of feedback) since one influences the other.

- Technological change and social expectations

At the end of the twentieth century, the reality of what makes available technology feasible has changed radically when compared with what was possible just ten years ago. On the other hand, the worldwide order seems to have turned in a direction that moves away from the divisions set by ideology. The great gap that divides the nations of the world has its roots and foundation in technological development. The greatest danger, therefore, is in establishing patterns that strictly limit the capacity of the poorest societies to incorporate technology. These limitations generally lead the most disadvantaged societies to integrate change only as users and consumers of technological development.

- The present economic structure (Puerto Rico)

Gutiérrez identifies four principle units or active economic sectors in contemporary Puerto Rico.

First sector - the private sector of the economy, a sector somewhat smaller in size than the public sector which exhibits a slightly greater growth rhythm.

Second sector - the public sector, which takes up a relatively greater proportion of the active population than the private sector.

Third sector - the private not-for-profit sector¹²; it is relatively small and exhibits a growth rhythm similar to that of the public sector. The growth potential of the third sector depends on resources whose origins and magnitude have not yet been identified, and are not available, given the fiscal structure of the country.

Fourth sector = an informal sector that evades certain responsibilities or operates right at the edge of what is legal. This sector is relatively comparable in size to the public sector and has a growth rhythm even more rapid than that of the private sector.

Gutiérrez holds that developments observed in the international dimension are spread from agents of change, i.e. those that are identified as centers for the origin of forces which are, in turn, recipients of change.

- | | |
|---------------------------|-------------------------------------|
| • New technology | • Demographics |
| • Difficult governability | • World economy and financial order |
| • Information society | • New global society |
| • Development process | • Future of work |
| • Values | • Environment |
| • Education | |

It can be inferred up to this point that higher education institutions must incorporate the most advanced technologies and pay greater attention to the development of thought, attitudes, sensitivities and values leading to a permanent education of the people. To this effect, an aspect to consider with respect to information technologies is their modernization. This presents a challenge to higher education in terms of the technological development tendencies in this area. Mobile and wireless technology is found within these

¹² It is also known as civic infrastructure, which refers to the network that exists between groups of the closest scale or locale, and to those organizations with a broader domain. These include foundations, other non-profit communitarian and voluntary organizations. Municipal governments, public housing authorities and their relations with private industry are part of the civic infrastructure.

tendencies, with its extensive growth in the marketing of computing and communications equipment. The advantages of this technology are: (1) a telephone line is not needed; (2) a physical connection to the local network is unnecessary; the connection is completed in the air through radio waves; (3) it is established quickly; (4) once introduced, it is easily accessed¹³.

Universities are a good environment for spearheading the creation of a wireless lifestyle. In addition, tendencies point to increasing dependence on the Internet due to greater speed in the transmission of facts and multimedia and greater mobility, among others. There are two situations that make universities the ideal environment for the implementation of mobile or wireless networks. The first is the very nature of the university, where students come and go for an average of over twelve hours a day; the other aspect is the teaching-learning process, the primary function of any university. This tendency in teaching should be considered where information technology is integrated. What these tendencies point out is that it is practically compulsory that every student have his or her own personal computer or he/she will depend on the installations or laboratories that the university has. Academia must consider this situation in providing students the most modern means to learn, such as guaranteed Internet access, a digital or virtual library and the space for accessing this information¹⁴.

In view of the challenges described here, it is important to ask how and to what extent productive and sustained change can be achieved in the university.

II. Literature review on the challenges in higher education

The studies on contemporary social dynamics and the challenges in higher education agree that a transformation in higher education is necessary as a counterpart to the new economic, social, political and cultural development in Puerto Rico and the world.

The tendencies and characteristics of Puerto Rican higher education reflect areas of concern and challenges that need to be faced. In dialogues held between the Council on Higher Education (CES, by its Spanish acronym) and representatives of the public and private university sector, leaders of business and industry and of the general community, in addition to an analysis of tendencies based on statistical data, the following areas of opportunity in Puerto Rican higher education were determined:¹⁵

¹³ Soto, E. (2003). *The technological impact of a wireless network in the library services of the UPRH*. Research project as a requirement for a master's degree in Business Administration with a major in Information Systems.

¹⁴ Ibid.

¹⁵ Council on Higher Education. (2000). *Higher Education in Puerto Rico: Towards a vision of the future*. Base Document.

- The need to update knowledge, programs of study and the services that the universities offer to adapt them to modern times.
- The lack of a vision of higher education as an integrated system placed at the service of society.
- The absence of a general orientation by the sector on public policies, as well as on the indicators of institutional efficacy and the mechanisms to verify them.
- A tense relationship between the State and the public and private sectors of higher education.
- Scant collaboration between the university, government, business and other agents of the economy and culture, to articulate resources and projects that attend social needs.
- The importance of promoting responsible autonomy in the institutions, respecting intellectual freedom within the framework of accountability to society.
- The need to promote research and studies that permit decision-making based on reliable diagnoses and verifiable tendencies.
- The need to think of financing as a function of new parameters (sources, access and distribution mechanisms).

Another conclusion that can be drawn from this document is that, although during the second half of the twentieth century higher education in Puerto Rico expanded and diversified in an accelerated way, the growth has not been articulated and the different institutions have acted in the pursuit of their own interests and well-being. Further, there is a scant vision of an integrated system that acts as a community. Also, it demonstrates that the expansion of higher education has not had sufficient institutional and programmatic diversification that would permit it to faithfully attend to the multiplicity of the country's needs. In other words, in addition to considering the market as a factor in the growth and diversification of higher education institutions, it is also important to attend to the demands of a contemporary society.

In this study it is argued that the pertinence of higher education depends on how well it keeps a dynamic balance between its mission and practices, and social needs. On the other hand, higher education must make a greater contribution in the process of interpreting and channeling the profound and accelerated changes in Puerto Rican society.

On the other hand, the study *The transformation of higher education in Puerto Rico (2001)* conducted by the Puerto Rico Senate's Education, Science and Culture Commission, supports the arguments presented in the study previously mentioned. It emphasizes the fact that in public, as well as private universities, there is an eagerness to make greater contributions to the country, but they found rigid and uncreative institutional frameworks, and, in some cases, excessive bureaucratization. In spite of allocating abundant resources to education, Puerto Rico has not managed to create a true system that would promote flexible connections between the different levels and types of structures, and between the public and private sectors. This situation reveals a serious lack of internal efficiency and represents a loss of opportunity for the country. Public policy should be aimed at giving potential to the synergy between levels and sectors such that they complement each other through programs specifically designed for this.

In the case of public institutions of higher education, some deficiencies stand out as those that must be overcome: the absence of creative and innovative administrative leadership, problems of institutional management, little capacity for planning and using a prospective vision, a tendency towards bureaucratization, little student and faculty participation in academic life, outdated study plans, excessive academic rigidity, and limited use of new technologies. The University of Puerto Rico shares the bulk of these problems with public universities worldwide.

Other authors have affirmed that new roles are presented in education in the 21st century. Ottavio Castagnera¹⁶ holds that the characteristics of the modern university are:

- Increase endorsements through high quality and prestige.
- Expand the geographic reach through the creation of multiple campuses or the expansion of two-year programs to four years.
- Guide the competition towards a mentality of profitability; for example, the distance education markets.
- Create consortiums of small university colleges and affiliations with large universities.

The viewpoint of this author is that the institutions of higher education should be aimed at becoming *mega universities*. The author further argues that those small and interdependent university colleges could be part of this if there is a sponsorship or affiliation with large consortiums. An important point that Ottavio

¹⁶ Ottavio Castagnera, J. (Sept./Oct., 2001). "The Role of Higher Education in the 21st Century: Collaborator or Counterweight?". **CHANGE**. 39-43 pp.

proposes is that for the success of higher education, institutions of this level should be converted into being *necessary* and survive by being *different*. He understands that all the “morphology” of the university should be aimed at acting like a counterpart of powerful forces such as the government and the market, not as merely a collaborator.

The consortium is an effective strategy that may consist of a series of collaborative agreements between two or more institutions that combine human, financial and structural resources to reach common goals; in our case, in academic areas. A consortium of this type can drive curricular revision, professional development of faculty members, and the acquisition of equipment and materials for teaching or for the development of academic or scientific research. Universities should join to achieve innovative programs that foster exchange of students and faculty in a way that they might achieve a greater opportunity for professional growth. Some universities have already begun these programs. The annual reports of achievements and completed work evidence that the University of Puerto Rico, its campuses and also the private universities are moving in this direction. They have established projects where the institutions of higher education, through alliances, optimize their resources and contribute to improve the quality of the academic programs, the quality of life (areas of health and socioeconomic development) and the development of the scientific community.

Alliances or consortiums should be established not only to co-produce something, but to attain results in difficult areas like research and development; that is, to foster research and the development of intelligence. This was the consensus reached at the forum **Project Puerto Rico 2025**¹⁷ held on February 17, 2004 at the Wyndham Old San Juan Hotel¹⁸, sponsored by the Puerto Rican Planning Society. In this forum, it was concluded that the country’s educational reform should be based on the creation of innovations through the human capital that generates new ideas; in the development of talent in the area of technological research and in being able to transfer it.

Evidence of this is the creation of the Science and Technology Trust between the University of Puerto Rico, the government and private industry for the construction of the Center for Biomolecular Research of the Río Piedras and Medical Sciences campuses, and for a Pilot Plan for Bioindustrial Processes at the Mayagüez campus¹⁹.

¹⁷ This project is developed by the AT Kearney and H. Calero Consulting firm as a planning proposal aimed at consensus, commitment and continuity, to create a vision and development plan for Puerto Rico for the next twenty years. It addresses economic, social, environmental and infrastructure development and integrates diverse sectors of the country to develop a definition of the social and economic future for Puerto Rico.

¹⁸ Pérez, J. (2004, February 18). Llamado a reenfocar el futuro (Call to refocus the future). **El Nuevo Día newspaper**. The Country Section. Page 8.

¹⁹ Roldán, C. & Sosa, O. (2004, February 26). Leve alza para muchas de las agencias. (Slight increase for many agencies) **El Nuevo Día newspaper**. Front page Section. Page 8.

The execution of research and development through consortiums has been backed by all the authors quoted here and can be summarized in one of the conclusions of the previously mentioned study, *The transformation of higher education in Puerto Rico*:

“To give potential to the possibility that higher education may contribute to the economic and social development of Puerto Rico requires strengthening the investment in research and development and harmonizing the public policies of higher education with those of science and technology.”

“The most recent studies in the international domain have demonstrated that investment in higher education has high economic social return rates since the capital of knowledge is replacing physical capital as a source of wealth. As a consequence, this sector should be considered as key in future strategies that we Puerto Ricans develop. Higher education should generate the knowledge that permits us to open new fronts of production, work, and generation of wealth, and its practice should be such that it helps us to promote equal opportunity, reduce poverty, and better integrate our families and communities.”

This study also evidences that novel institutional configurations have arisen, such as associations of universities that have carried forward the task of providing the creation of critical mass of research at the regional level, of establishing standards of excellence and of promoting the exchange of professors and students, among other aspects. Examples are: The Higher Council of Centroamerican Universities (CSUCA, in Spanish), and the Association of Universities of the Caribbean (UNICA, in Spanish). The Senate Commission on Education, Science and Culture’s study asserts the need for the UPR to formulate and adopt a policy of internationalization that would permit our faculty and students to open new horizons, develop a comparative perspective of the problems and approach the construction of critical mass in research on certain topics. The possibility of working in consortium with other universities of the region is evident. The study also mentions the difficulties of moving forward with programs that link the University of Puerto Rico with universities of other countries. Successful efforts have forged ahead, like the collaboration with Haiti National University, ATLANTEA (a network of networks that links some 200 researchers in the area of the Caribbean) and the law program with Barcelona. Through these consortiums, the University has achieved generating exchanges, workshops and publications, but with an effort sustained primarily by the personal support of its members, since the financial resources have not had the stability that the initiatives require.

Similarly, Dr. Carlos Andújar, of the University of Puerto Rico at Arecibo, asserts in his article “Las universidades: socias estratégicas para el desarrollo del capital humano” (Universities: strategic partners for the development of human capital)²⁰ that universities (public and private) should convert into strategic governmental alliances to impact with academic programs, services and research socioeconomic and social sectors. He also indicates that another aspect where the public and private universities can contribute is in providing services. Many institutions have experts in diverse fields that can provide consulting services to government and businesses in the private sector. Andújar concludes that to develop a society of knowledge, there must be alliances to generate new programs, services and research projects.

In the study *La transformación de la educación superior en Puerto Rico (The transformation of higher education in Puerto Rico)* (2001), an examination of the facts on higher education reveals that in Puerto Rico there is a fairly solid base for creating an educational project of greater scope that could offer a variety of programs and careers of high quality and pertinence.

Nevertheless, the diversification and renewal of programs does not seem to have been as dynamic as it could have been. According to the study, the revision of the academic offering submitted to the Puerto Rico Council on Higher Education (CESPRE, by its Spanish acronym) by university institutions reflects a great concentration and uniformity of bachelor degree programs in Business Administration. In general, these programs follow the standard, traditional pattern, with little or no emphasis on aspects such as development of corporate capacity, management for change, organization and steps toward self-owned businesses, goal directed management, and cooperativism, among other topics that have gained validity in recent years. On the other hand, there is a notable shortage of formative programs for new careers arising within the context of an information society (a concept that began to gain hold in the early 1970’s in Europe and the United States, arising from new developments in computer science that hinted at the conceptualization of a society where those with the ability to manage information would have an advantage. For example, there are virtually no programs in the disciplines of Social Communication, Archivology, Library Science, Documentation, Linguistics, or Computer Sciences and Technology, and other emerging fields such as Biotechnology, Biodiversity Management, Management of Non-profit Organizations, or Community Economic Development. However, the greatest concern for Puerto Rico is that the bulk of the Business Administration programs do not focus on the development of new capacities of procedural leadership, nor in generating business acumen, which is precisely what the country needs to revitalize its development strategies.²¹

²⁰ Andújar, C. (2003, November 2). Las universidades socias estratégicas para el desarrollo del capital humano (Universities: strategic partners for the development of human capital) **El Nuevo Día newspaper**. Sunday Employment section. E-1 to E-2.

²¹ Ibid.

Social and educational institutions are in constant change, and they affect and are affected by their social surroundings. As revealed by a study prepared by the Planning Board²², in facing a pluralist society with its focus and demands, it is necessary that higher education institutions contribute to Puerto Rican society through:

- Strategies and curricula in accordance with the economic and social developments of their surroundings, incorporating new technologies and taking into consideration the cognitive processes and the techniques developed to address them.
- More participatory and dynamic planning models based on integration with the community.
- The identification by the University of the sociodemographic characteristics of its community, to allow the integration of the community with the university. This integration will help not only to create new individuals in society, but will facilitate the planning and development needed to face the social changes that are occurring today.
- To elevate research as an activity in all disciplines, as well as to add depth to the quality of university management.
- To stimulate the development of strategic alliances between universities and the collaboration of different campuses of the same system for the purpose of optimizing the university's resources.

In light of the panorama presented and according to this analysis, it can be concluded that the competencies for the 21st century for the professionals who graduate from our universities should be, among others:

- Technological literacy
- The ability to communicate in more than one language, specifically in English
- Appropriate information management
- The ability to do collaborative work
- Leadership sensitive to social inequality and the capacity to innovate.

This notwithstanding, Santos and Vargas²³ argue that for the professionals who graduate from the universities to attain leadership and especially for the

²² Planning Board; Subprogram of Social, Models and Projections Analysis (2003). *Informe Social: La educación en Puerto Rico 1986-2000 (Social Report: Education in Puerto Rico 1986-2000)*.

²³ Santos and Vargas, L. (1992). *Crítica filosófica de la educación: escenario puertorriqueño*. (A philosophical critique of education: Puerto Rican scenario.) University of Puerto Rico, Medical Sciences Campus, College of Health Professionals. Interdisciplinary Publications.

preparation of the Puerto Rican teacher, a model educator who exhibits characteristics such as the following, is required:

- A generally cultured individual with an in-depth knowledge of his/her specialty.
- Militant in pursuit of knowledge, reason, and scientific truth.
- Demonstrated appreciation of ethical and aesthetic values.
- An understanding that a dedication to education is above other considerations, that there is no room for dogmatism or sectarianism. The marvel of human development as it becomes reality before his/her eyes should be the essence towards which the individual strives.
- Thorough and faithful understanding of the Puerto Rican culture: the literary culture accumulated in our history, culture understood as the identity of a people who have slowly forged it and culture as it is understood by the disciplines of the social sciences.
- Awareness and understanding of the gradual globalization of the social life on our planet Earth.

From the information presented here, it can be gathered that the university of the 21st century should develop in four major areas:

1. National and international cooperation (alliances)

The change that the universities should experience in upcoming decades is to utilize the collaboration or alliances based in the merit of each (mutually compensating each other), but functioning as free agents that influence society. If we wish to develop a society of knowledge, universities must focus in a systematic way on working with the government, the communities, and with private industry.

2. Research

The capacity to generate research in the social and economic sectors coming from an integration of a wider community of universities, where the university can adopt a stance promoting the common well-being of the society .

To foster research and the development of intelligence through internal and external collaboration. More than an exchange of materials or equipment, it should be an exchange and dialogue about ideas, projects and innovations.

3. Continuing Education

A country's citizens will enter and exit an educational system various times throughout the course of their professional career. Therefore, one of the changes for higher education will be the flexibility of the system to adapt to these entries and exits. Educational systems should prepare themselves to

provide answers to this demand and take into account the diverse reasons for which an adult may want to return to his/her studies (unemployment, bringing knowledge up to date, change of employment, personal fulfillment, etc.). Learning will be a life-long process.

4. Education in new technologies

The role of higher education is vital in the development of human resources capable of acquiring and utilizing new skills throughout their lives.

We can conclude that higher education institutions should aim their strategies towards the necessary competencies for succeeding in the labor market, without losing sight of the humanist education needed for the development of social capital; that is, the construction of relationships between members of a society that gives force to the structure of values that defines and sustains it.

III. Philosophy of the University of Puerto Rico at Humacao

A. Values of the University of Puerto Rico

The University Law of Puerto Rico, Law No. 1 of January 20 of 1966, as amended, has as its purpose to reorganize the University of Puerto Rico, reaffirm and strengthen its autonomy and facilitate its continuing growth.

The University, as an entity of higher education, because of its service obligation to the people of Puerto Rico and based on its due loyalty to the ideals of an integrally democratic society, has as its essential mission to achieve the following objectives, for which the greatest academic freedom and scientific research are of utmost importance:

1. To transmit and increase knowledge through the sciences and the arts, lending itself to the service of the community through the actions of its professors, researchers, students and graduates.
2. To contribute to the cultivation and enjoyment of ethical and aesthetic cultural values.
3. To attain the full development of the student, in light of his/her responsibility as a servant of the community.
4. To fully develop the latent intellectual and spiritual richness of our people, so that the values of intelligence and spirit of exceptional personalities that arise in all social sectors, especially those less favored with economic resources, can put themselves at the service of the Puerto Rican society.
5. To collaborate with other agencies or institutions, within their own spheres of action, in the study of Puerto Rico's problems.
6. To keep in mind that, because of its character as a university and its identification with the ideals of life of Puerto Rico, the university is necessarily tied to the values and interests of all democratic communities.

B. Values of the University of Puerto Rico at Humacao

The values are the statements about what is thought to be desirable, to which an institution's constituents are committed. They are the principles that guide institutional efforts. Our mission and vision gather the fundamental aspects of an education of excellence, arising from the following basic principles and premises.

Principles	Premises
The University as a space for transformation.	Faculty, research and services aimed primarily towards the student as the focal point of university activity.
Reflection	The UPRH works at the forefront to respond assertively to the challenges of a globalized world within an environment where the highest values of the Puerto Rican culture are fomented.
Flexible and innovative academic programs	Holistic development of the student: physical, intellectual and affective.
Respect for diversity	The primary commitment of UPRH is the formation of human beings prepared to perform a mission in society that contributes to a better quality of life.
Solidarity and tolerance	The students will develop not just skills related to their profession, but their values and self-image as well, within the principles of responsibility and solidarity characteristic of the Puerto Rican society.
Participatory democracy (consultation with professors, students, industry and the community)	The UPRH is an innovative center in which democratic and autonomous participation reign, free of all political partisan intervention. It promotes dialogue and the participation of all sectors in decision-making. It respects and promotes freedom of thought, expression, and difference in judgment.
Academic honesty	Commitment to knowledge.

The activities that are carried out in the Institution are rooted in the profound commitment to academic and administrative excellence, and in a vision of the graduate as an agent for change in society.

1. *Education of excellence:* Commitment to an excellent performance is the premise that guides all pedagogical and administrative activities that are carried out in the Institution. In this sense the Institution is profoundly committed to the holistic development of its students through the General Education course offerings that complement those of their major.
 - a. *General Education:* The Institution's curricula is designed in such a way that the student acquires and demonstrates his/her proficiency at the college level in general education and in essential competencies, which include oral and written communication, scientific and

a vision of the transformations that occur at all levels and in all areas of knowledge.

- b. *Service*: As one of its goals, the Institution aspires towards achieving socioeconomic improvement and improvement in the quality of life of the particular region it serves and of Puerto Rico in general. It aspires to lend greater attention to its surroundings and insert itself in this environment as an agent of change. Community service activities include an extensive artistic, social and athletic program that complement the Continuing Education and Professional Studies program, aimed at enriching the quality of life of the regional community. This undertaking also includes a responsibility for the dissemination of the latest technological, scientific and artistic advances among the members that constitute the community.

C. Mission of the University of Puerto Rico

The University of Puerto Rico, as a public institution of higher education, has the mission by law to serve the people of Puerto Rico, consonant with the ideals of a democratic society such as ours.

Its principle mission is to achieve the following objectives:

Transmit and increase knowledge through the sciences and the arts, putting this knowledge at the service of the community through the actions of its professors, researchers, other university personnel, students and graduates.

To contribute to the development, cultivation and enjoyment of the aesthetic and ethical values of the culture.

D. Mission of the University of Puerto Rico at Humacao

On November 17, 2000, the Academic Senate of the University of Puerto Rico at Humacao approved the revision of the institutional mission (Certification Number 2000-01-30):

To effectively contribute to the ethical, cultural and intellectual development of Puerto Rico in general and of the Eastern region in particular, through teaching, aesthetic expression, and scientific and humanistic research, as well as the dissemination of knowledge.

To investigate the principal social, cultural, scientific and environmental problems affecting our society. To affirm ecological balance, diversity and inclusion as principles of change in a democratic society aspiring to be just.

To prepare students as professionals and contributors to the quality of life in Puerto Rico, through the offering of relevant and innovative undergraduate and graduate academic programs.

E. Vision of the University of Puerto Rico

Our reason for existence is the student; unity in diversity is our strength; academic excellence is our commitment.

We reaffirm our commitment to Puerto Rico and the international community.

F. Vision of Puerto Rico 2025²⁴

The long-term vision approved for Puerto Rico incorporates different focuses from economic, social, cultural and environmental perspectives. In 2025, we will be a people who develop their potentialities and aspirations with:

- Healthy, natural systems that have the capacity for sustaining life in all its forms
- An advanced economy, based on knowledge and inserted effectively in the global economy
- A just, responsible, safe, supportive society, where public and private efforts stimulate its development and vigor
- A dynamic culture open to diversity that promotes values of equity and inclusion and the appreciation of intellectual and artistic creation
- Free and democratic participation in fundamental decision-making about its political condition and its relationship with other peoples of the world based on equality, dignity and mutual respect with the intention of strengthening its economic, social, environmental and cultural development, and its productive insertion into global exchanges.

As part of the social vision for Puerto Rico in 2025, the approved vision of education is the following: “In 2025, all have access to a high quality educational system that foments the development of all persons throughout their lifetime because it fosters:

- The confidence and abilities that people need to fully reach their potential;

²⁴ Puerto Rico 2025 Committee. (2004). *Una nueva visión para el futuro de Puerto Rico*. (A new vision for the future of Puerto Rico.)

- The skills, knowledge and enterprising attitude that Puerto Rico needs to be competitive, and, the same time, united in support;
- Ethical values and a culture of peace;
- The professional and vocational abilities that society needs for its maximum development;
- The desire to learn; curiosity and creativity throughout their lifetime.

Students and researchers will choose Puerto Rico as a center of excellence in education and innovation”.

G. Vision of the University of Puerto Rico at Humacao

As defined by Diamond²⁵, the *mission* of an institution describes its *raison d’etre*, its purpose, for what it exists and its social commitment. It should express what distinguishes it from other institutions. On the other hand, the *vision* is a declaration of what the institution aspires to be and its expectations for the future. It describes the image of success expected for the organization, if it accomplishes its mission successfully, in light of an optimal future scenario. It is the source of inspiration for those who share it.

The UPRH Academic Senate approved in principle the document containing the Institution’s vision in the 1994-95 academic year (Certification No. 1994-95-102) for continuing the planning tasks of a strategic development plan.

As a result of the reaccreditation process in the 1999-2000 academic year, the mission of the University of Puerto Rico at Humacao was revised to describe the distinctive nature of the Institution and to reflect the actions and initiatives that were being carried out (Certification No. 2000-01-30 of the Academic Senate). This notwithstanding, the vision remained unchanged.

During the revision work done on the Strategic Development Plan of the UPRH 1997-98 to 2001-02, it became obvious that there was a need to revise what was enunciated in the Institution’s vision since the objectives and strategies proposed in the new plan surpassed the current vision. On the other hand, the current vision is aligned with our current mission and values as the foundation or principles that guide institutional efforts.

The vision of UPRH should guide the actions that motivate the necessary changes to obtain the added value of our institutional mission. Our vision statement should contain the values or principles that guide the future development of the University: academic excellence, social commitment, innovation and internationalization, among others.

²⁵ Diamond, R. (July, 1999). “The Institutional Mission and Vision Statements”. **ADMINISTRATOR: The Source for Practical Ideas and Key Issues in Higher Education.** 18(7), 6-8.

All of this is important if one wishes to adopt a culture that emphasizes cooperation, trust, openness, and continuous improvement. But one should not limit his or her thinking to a business vision analogous to one of a corporate entity; the university should also be present as a promoter of change and as the center which questions society. Training students for a technological society, cultivating humanistic values and contributing to the analysis and formation of solutions for the country's socioeconomic problems must all be balanced. It facilitates access to the job market and promotes space for critique and reflection. University of Puerto Rico professor Carlos Gil supports this vision²⁶, and holds that if the university dedicates itself solely to promoting the disciplines of the sciences and technology, it runs the risk of losing its equilibrium and restraint and the just proportions that should characterize a well-developed human being.

To face the challenges of maintaining academic excellence according to the demands and needs of Puerto Rico's social and economic context and promoting the participation of the university community in search for solutions to the diversity of situations that our current society poses, the University should refocus its vision towards the:

- Elaboration of new policies of growth in the curricular offering and the revision of academic programs, at both the undergraduate and graduate level.
- Preparation of professionals committed to Puerto Rico's development and who contribute to the integral wellbeing of Puerto Rican society, its culture, economy, science and industry.
- Collaboration between educational, governmental, business and community levels or systems.
- Strengthening of the teaching-learning processes through the continuous integration of informational and telecommunications technologies as a means of increasing the graduates' competitiveness.
- Strengthening of scientific research and artistic and literary creation through the setting of new strategies of administrative support.
- Formation of a graduate who is competitive worldwide.

The interrogatives for the critical analysis of the vision were:

²⁶ Gil, C. (1998, enero). *Conocimiento, universidad y economía: paradojas y desafíos en la educación superior*. **DIÁLOGO**. Debate Universitario. Página 34.

How will the Institution look in five or ten years if it is successful in all that it wishes to achieve? For what attributes should it be recognized. In other words, what characteristics should the Institution demonstrate to the community?

What professional competencies will the student body of the Institution exhibit that will be recognized as a high level of excellence?

What fundamental changes will occur in Puerto Rico, primarily in terms of the characteristics of potential students?

Considering these premises as a starting point, the conceptual framework presented, the discussion and the recommendations for this Strategic Plan document submitted by the university community, we have formulated the following stated vision for the University of Puerto Rico at Humacao.

Vision

The University of Puerto Rico at Humacao will aspire to:

Form students committed to excellence and the values that are based on the principles of social, ethical, moral and intellectual responsibility. The institution will focus its teaching, service and research efforts on the student body as the focal point of university activity.

Offer diverse and cutting edge academic programs aimed at the development of a physically, intellectually and emotionally integrated human being.

Prepare leaders that transcend the boundaries of the Institution and of the country through nationally and internationally recognized offerings; recruiting and retaining the best student, faculty and non-faculty talent.

Promote collaboration between all educational levels and public and private sectors.

Empower the creative and research capabilities of the students at the undergraduate and the graduate levels in the arts and in the sciences; contributing to the social, cultural, environmental and economic strengthening of Puerto Rico and to the transference of knowledge to the world.

Be recognized as a promoter of a culture of excellence in research and service, supported by information technologies.

Become an innovative center of democratic life, where freedom of thought and expression and divergent criterion are respected. To foster dialogue and the participation of the different university sectors in all levels of institutional life.

A vision of dynamic and innovative openness is sought, integrated into a system of collaboration, effective in its results and with a high degree of social responsibility.

IV. Planning agenda at the University of Puerto Rico

As a result of the exchanges held and the areas of attention identified as priorities in the different work plans of the campuses and units of the System, the document *Agenda para la planificación en la Universidad de Puerto Rico (Planning agenda at the University of Puerto Rico)* was elaborated. This

attempts to guide planning efforts in the System and define the areas of institutional behavior that will be the object of evaluation in upcoming years²⁷.

The students: more opportunities and a better support system

Goal: The academic units will widen the scope of their relationship with the students.

Internationalization

Goal: The units will provide opportunities to study outside of Puerto Rico to students and teaching personnel.

The alumni

Goal: The units will establish collaborative ties with their alumni, achieving their contribution to institutional development.

The faculty: a new scope in relations

Goal: The units will provide competitive conditions, within which the faculty can carry out their responsibilities.

The programs of study

Goal: The units will develop a tradition of regular revision of the pertinence and modernity of their programs of study, as well as the exploration of alternatives with respect to the curricular structures and to the methodologies followed in their implementation, through the establishment of an evaluation and revision plan.

Research and the creation of knowledge

Goal: The units will strengthen and increase the quality and the quantity of the intellectual production of their academic community and in this way contribute to knowledge in Puerto Rico and in the world.

Administrative frameworks: New understandings in action

Goal: The units will promote intellectual and humanistic growth from their administrative frameworks in such a way that continuity, stability and professionalism of the career administration is strengthened.

²⁷ Vicepresidency in Academic Affairs. (2003-2004). *Agenda para la planificación en la UPR (Planning agenda at the University of Puerto Rico)*.

Traditional and technological support for research and study

Goal: The units will provide an infrastructure of competitive support for creation, research and study through the libraries, laboratories and information technology systems.

The physical facilities

Goal: The units will preserve and protect their architecturally valuable structures, improve the physical facilities, watch out for the best possible use of space and for the good design and construction of new structures.

The University and its urban base

Goal: The units will lend greater attention to their surroundings and they will insert themselves in them as an agent of change.

The institutional regulation

Goal: The units will contribute to the simplification of the processes and the decentralization of the University through the revision of norms and institutional regulations.

Budget and Finances

Goal: The units will define and articulate clear goals as relating to the coefficient to be maintained between the direct investment in teaching, research and service, on one hand, and on the other the investment in the superstructure that governs them.

Generation of a culture of institutional evaluation

Goal: The units will promote a culture of evaluation in all components of university activity.

V. Strategic Development Plan of UPRH

The Institutional Planning Committee (CPI, by its Spanish acronym) is an advisory committee for the Chancellor with the mission of articulating institutional vision in the area of academic affairs and in service to the entire university community, with the objective of guiding the decision-making process and making effective implementation of public university policy viable. One of its primary functions is to prepare and revise the Institutional Strategic Development Plan in which the goals, objectives and strategies for academic, cultural, and research development, as well as for service to the internal and external community are shaped. This committee draws on representation from all sectors

of the university community (students, faculty, non-teaching personnel and administration) and from the external community (the industrial and civic sectors of the Marketing Area of the University of Puerto Rico at Humacao).

In the 2003-04 academic year, the CPI was convened with 23 members representing the university and external community. Twenty (20) members participated actively in the mission of revising the Institutional Strategic Development Plan 1997-98 to 2001-02. The resulting product of this process is presented below.

**UNIVERSITY OF PUERTO RICO AT HUMACAO
UNIVERSITY DEVELOPMENT OFFICE
INSTITUTIONAL PLANNING COMMITTEE**

**STRATEGIC DEVELOPMENT PLAN²⁸
2004-2005 TO 2009-2010**

GOALS	OBJECTIVES	ÁREAS OF OPPORTUNITY ²⁹	STRATEGIC DIRECTION
<p>GOAL A</p> <p>That the graduates possess a general and professional education of excellence that allows them to develop holistically and to respond to the demands of a changing and technologically advanced society.</p>	<p>A1. That the students of the UPRH, upon completing their academic degree:</p> <p>a) Possess the abilities, theoretical and practical knowledge of both the general education component as well as of their major, that enables them to perform adequately in their profession. These include:</p> <ul style="list-style-type: none"> • That the students effectively handle oral and written communication in the performance of their academic and professional functions. • That they possess effective skills in the critical management of information arising from different sources, including basic quantitative analysis skills. • That they can handle technology and information technology according to the modern age. 	<p>A1.1 The incoming students have low scores on the achievement tests in the areas of Spanish, English and Mathematics.</p> <p>a) The Institution needs to develop an evaluation mechanism for identifying the difficulties of this population in these areas of achievement.</p>	<p>A1.1.1 The Institution will develop and implement service programs that respond to the academic needs of the incoming students, particularly in the areas of Spanish, English and Mathematics.</p> <p>a) The UPRH will establish a systematic assessment process based on competencies for identifying the academic needs of the student population at the level of their discipline and that of general education.</p> <p>b) The UPRH will develop, implement and offer courses, workshops and experiences that permit the student body to overcome their academic deficiencies.</p> <p>c) The UPRH will create, expand and strengthen programs to facilitate the transition and</p>

²⁸ The Institutional Action and Assessment Plan and those at the level of departments and offices will establish the objectives and specific activities, the success indicators, the expected results, the timeframe and the person(s) responsible for the formative and summative evaluation of this Strategic Plan.

²⁹ The issues that represent high priority areas of attention or development for the Institution are described in this section.

GOALS	OBJECTIVES	ÁREAS OF OPPORTUNITY ²⁹	STRATEGIC DIRECTION
	<ul style="list-style-type: none"> • That they show social and scientific attitudes consistent with their profession and with Western culture and appreciate the influences of other cultures on our own. • That they possess critical thinking skills. • That they use research methods to apply them to problems characteristic of their discipline, with special emphasis on the Puerto Rican reality. • That they demonstrate sensitivity to the ethical and aesthetic values of the human being in all its cultural variety. 		<p>integration of the student body to university and social life.</p> <p>d) The UPRH will create strategic alliances with the Education Department, the private sector, municipalities and the community to strengthen the profile of the student body that is admitted to the UPRH.</p>
		<p>A1.2 The Institution needs to develop a strategy to assess and strengthen the programs that have a profile of low graduation rates.</p> <p>a) A curricular mechanism has not been established to attend those courses considered as: “gatekeepers”³⁰, “bottlenecks”³¹ and the repetition of these courses.</p>	<p>A1.2.1 The Institution will establish the following strategies that have demonstrated success in increasing retention and in improving the academic profile of the students:</p> <p>a) The departments and offices will implement systematic assessment plans, at the classroom, the academic and service programs, and the institutional levels, in relation to the goals and objectives of the</p>

³⁰Entry-level course of a program that, if not passed, blocks the student from being permitted to take the rest of the program’s requirements.

³¹Required course of a program that if not passed prohibits the student from graduating.

GOALS	OBJECTIVES	AREAS OF OPPORTUNITY ²⁹	STRATEGIC DIRECTION
		<p>b) Around 70% of the academic programs report a low rate³² of students that graduate within the time specified by each program.</p>	<p>programs, and the use of the assessment results to improve their effectiveness and efficiency.</p> <p>b) They will develop plans that describe the activities and methods used to evaluate student learning.</p> <p>c) They will periodically evaluate the efficacy of the curricular, cocurricular and extracurricular experiences that are offered to the students. The use of the results of these evaluations will be used as a basis for improving the student development program and for helping the students understand their own educational progress.</p>
			<p>d) They will empower the students to face the personal, socioeconomic and family needs that affect their academic performance with the services that integrate the work of help professionals and academic advisors.</p>
			<p>e) They will establish policies, procedures, and agile and efficient mechanisms to attend psychosocial situations that</p>

³²For each program a low graduation rate is considered to be that that is below the Institutional graduation rate.

GOALS	OBJECTIVES	AREAS OF OPPORTUNITY ²⁹	STRATEGIC DIRECTION
			affect the academic performance of the students.
		<p>A2.1 The teaching-learning contents and methodologies in new and existing academic programs should be continuously updated to fine-tune them to the needs, in terms of the competencies, content and attitudes, of the contemporary world.</p>	<p>f) They will provide opportunities to the student body to practice and improve the skills associated with their area of study, develop collaborative learning skills and analyze the impact and effectiveness of the educational experiences.</p> <p>g) They will train, lend create awareness to and sensitize the administrative and teaching personnel about the students' needs.</p> <p>A2.1.1 The Institution will establish a systematic evaluation program for academic programs, to keep them aligned with the specific needs of the disciplines and with the needs of the university community and its social surroundings.</p> <p>a) Program evaluation will be guided by the appropriate development of the competencies of general education, the disciplines, and the capacity and disposition for lifetime learning, as well as for the development of adequate attitudes for improving the students' quality of life and their possibilities for successful performance in the working world. In addition, it should include the identification of the</p>

GOALS	OBJECTIVES	AREAS OF OPPORTUNITY ²⁹	STRATEGIC DIRECTION
			<p>needs of the graduates which transcend the disciplines and that require interdisciplinary efforts at the course and program level.</p> <p>b) Curricular revision will incorporate innovative teaching strategies, integrating principles of the universal instruction model and technology into courses and classroom research.</p> <p>c) The teaching-learning process will be extended to the internship practice centers, especially in those that can reproduce laboratory conditions in a high technology context.</p> <p>d) The students that have participated in diverse experiences in a work setting within their area of specialization will offer orientations and forums to the students who are in the early stages of their academic studies so as to share their experiences as a type of orientation and direction.</p>
			<p>e) According to the University's mission, activities will be developed for the analysis and systematic reflection of the teaching process and academic, creative and</p>

GOALS	OBJECTIVES	AREAS OF OPPORTUNITY ²⁹	STRATEGIC DIRECTION
			<p>investigative activity within the discipline.</p> <p>f) The Institution will establish institutional support links with the external community, such as industry, commerce, hospitals, government, and other institutions to strengthen the experiences of the faculty as well as those of the students.</p>
		<p>A3.1 The academic programs should identify and develop the necessary mechanisms for evaluating higher level thinking skills (application, analysis, synthesis and evaluation).</p> <p>A4.1 The Institution should develop criteria (formal or informal parameters or standardized tests) and instruments to measure and evaluate the effectiveness of the general education and professional courses.</p>	<p>A3.1.1 The departments will ensure that that the programs and/or courses include measures aimed at fostering and informing the development of critical thinking skills in an environment that promotes respect for differences and diversity of knowledge.</p> <p>They will sponsor get-togethers and chats on open topics in all the disciplines/areas/ groups at the UPRH to foster critical thinking, creativity, oral and written expression, initiative and leadership.</p> <p>A4.1.1 It will develop an institutional policy aimed at measuring and evaluating the effectiveness of the general education courses, skills like outlining, application of the scientific method and other research methods, written and oral expression in Spanish and in English, mathematical reasoning and the use and handling of</p>

GOALS	OBJECTIVES	AREAS OF OPPORTUNITY ²⁹	STRATEGIC DIRECTION
			<p>information.</p> <p>a) It will identify and establish at the institutional level the general education competencies that the students should possess when they graduate.</p> <p>b) There will be assessment of general education results within the Institutional Assessment Plan.</p> <p>c) The Institution will reevaluate the implementation of a writing and composition course in Spanish and English as a graduation requirement for all students.</p> <p>A4.1.2 An institutional policy will be developed aimed at measuring and evaluating specialized competencies in the academic programs.</p>
		<p>A5.1 The UPRH should strengthen the technology infrastructure for professors as well as students in support of the teaching-learning process.</p>	<p>A5.1.1 Information technology will be applied in all the academic programs and service areas through their activities. In particular, the Institution will:</p> <p>a) Prepare, implement, and revise a technology development plan. This will include the design of facilities, equipment acquisition, and application and support programs for teaching and administrative personnel, in addition to</p>

GOALS	OBJECTIVES	AREAS OF OPPORTUNITY ²⁹	STRATEGIC DIRECTION
			<p>service offerings and technical services.</p> <p>b) Train the faculty and empower them to utilize technology productively in the teaching-learning process.</p> <p>c) Provide the necessary resources, create a favorable environment for facilitating this process and develop mechanisms that will lead the faculty to participate in it.</p> <p>d) Provide the necessary training to the student body to use information technology, both local and remote, and through technological assistance in the case of students with special needs.</p> <p>e) Broaden the academic offering through diverse varieties of distance education.</p> <p>f) The Dean of Academic Affairs will establish the coordination of resources between the Library and the academic programs to improve the efficacy and efficiency in the offering of services.</p>
		<p>A6.1 The Institution should develop an institutional plan to train, develop and empower the faculty to address the innovative teaching-learning methodologies in the area</p>	<p>A6.1.1 The Institution will promote and support the development and improvement of the faculty to</p> <p>a) Promote excellence and quality</p>

GOALS	OBJECTIVES	AREAS OF OPPORTUNITY ²⁹	STRATEGIC DIRECTION
		<p>of their specialization.</p>	<p>in the teaching-learning process.</p> <p>b) Maintain a faculty development program at the cutting edge of their professional fields and in their personal development.</p>
		<p>A7.1 The Institution should improve the physical infrastructure and adequacy of equipment (information and telecommunications technology) to offer academic programs of better quality.</p> <p>A8.1 The Institution should diversify its academic activities to include the contribution of other cultures to our institutional development and to the development of our country's cultural projection.</p>	<p>A7.1.1 The Institution will identify the tasks and funds necessary to improve the physical and operational infrastructure to achieve the academic, student and community service objectives for greater productivity.</p> <p>a) The Administrative Dean's Office will develop a system of evaluation, maintenance and use of the physical facilities and for equipment update, based on the needs of the university community as evidenced in the real use that these facilities are given.</p> <p>A8.1.1 The academic programs will revise and develop courses and programs to ensure that they provide an international content and that they respond to the demands of the professional market.</p> <p>A8.1.2 The Institution will design and implement an effective student recruiting program both in and outside of Puerto Rico.</p>

GOALS	OBJECTIVES	ÁREAS OF OPPORTUNITY ²⁹	STRATEGIC DIRECTION
			<ul style="list-style-type: none"> a) It will continue divulging the UPRH's current academic offerings and its most notable achievements in an attractive and innovative way. b) It will intensify the student exchange programs, and will use them as culturally diverse learning laboratories. As an incentive for this exchange, contacts should be made with public and private sectors in support of this activity, as well as with international entities in and outside of Puerto Rico. c) It will participate in existing exchange programs for professors. d) It will diversify the teaching of foreign languages. e) It will ensure that the Cultural Activities Program will include activities that foster international themes. f) It will increase and intensify the program for travel outside of Puerto Rico. g) It will design and offer new courses, such as language, literature, anthropology and history, that broaden the academic offering.

GOALS	OBJECTIVES	ÁREAS OF OPPORTUNITY ²⁹	STRATEGIC DIRECTION
		<p>A9.1 The Institution should diversify and broaden the academic offering and the services related with the offering.</p>	<p>A9.1.1 It will develop activities that promote professional improvement in and outside of Puerto Rico such as graduate and postdoctoral studies, certifications, courses, continuing education seminars and faculty internships in health-allied professions.</p> <p>A9.1.2 It will develop courses, academic offerings and services in an extended schedule, in addition to provide for the creation of courses and on-line academic experiences with synchronized³³ and asynchronous³⁴ activities on the Internet.</p>
		<p>A10.1 The Institution needs to develop a formative faculty evaluation process that considers assessment activities as a measure of efficacy of the faculty's teaching activity.</p> <p>A11.1 The Institution needs to update the system for student evaluation of the faculty as part of the Faculty Evaluation System.</p>	<p>A10.1.1 The Institution will design and approve a formative evaluation system that includes assessment of activities as a measure of efficacy.</p> <p>A11.1.1 The Institution will update and approve a Student Evaluation System of Faculty Performance. This system will form part of the Faculty Evaluation System.</p>

³³ Synchronized- high-speed data transmission through circuits synchronized by electronic watch signals. For example, chat and telephone conversations. These are activities where the student enters into contact with the system in specific moments.

³⁴ Asynchronized- method of communication of data in which the transmission of bits is not synchronized by a watch signal but is instead carried out by sending it bit by bit, for example, e-mail. The activities will be available in a server where the students have access at any time.

GOALS	OBJECTIVES	ÁREAS OF OPPORTUNITY ²⁹	STRATEGIC DIRECTION
GOAL B			
<p>To contribute through education to the improvement of the quality of life, the cultural environment and to the socioeconomic development of the area served by the UPRH in particular and of Puerto Rico in general.</p>	<p>B1. The UPRH will contribute to the improvement of the quality of life, the cultural environment and the socioeconomic development of the area served by UPRH through programs and educational activities, informational services, and other activities in tune with its mission and goals.</p>	<p>B1.1 The UPRH has a physical and programmatic infrastructure (including equipment) that is insufficient for providing a higher quality service to the external community.</p>	<p>B1.1.1 The Institution will create a Community Advisory Committee or Consulting Board to work in conjunction with key personnel of the UPRH administration and the directive bodies to incorporate policies and procedures that will guide the implementation of community services. This group should include a component of the distinct sectors of the community and of the UPRH Alumni Association.</p> <p>B1.1.2 The UPRH will increase and diversify the use of:</p> <ul style="list-style-type: none"> a) its physical infrastructure b) its operational area, the acquisition and management of technological equipment. <p>B1.1.3 The Institution will explore the advisability and need for planning programs aimed at:</p> <ul style="list-style-type: none"> a) Diversifying the educational and service offerings of the Continuing Education and Professional Studies Division (DECEP, in Spanish) in a flexible schedule and alternate locations, such as: UPRH facilities, schools in the UPRH

GOALS	OBJECTIVES	ÁREAS OF OPPORTUNITY ²⁹	STRATEGIC DIRECTION
			<p>area, industry, work centers, industry, areas close to the different community components, community centers, activity halls and other similar facilities.</p>
	<p>B2. To consider the opinion and sense of the Marketing Area community³⁵ of the UPRH</p>	<p>B1.2 The Institution should develop an articulated formative training plan for its personnel.</p> <p>B2.1 The UPRH should develop mechanisms for gathering the</p>	<p>b) Supporting the teaching-learning process through on-line and virtual courses and other distance education modalities.</p> <p>c) Attending the educational demands at the graduate level.</p> <p>B1.2.1 Preparation of personnel for offering quality service to the external community.</p> <p>a) It will incorporate community service in the institutional formative personnel preparation program.</p> <p>b) The Institution will promote the participation of personnel in generating new alternatives in the search for external funds that help to subsidize service projects for the community.</p> <p>B2.1.1 The UPRH will sponsor the participation of the external</p>

³⁵ Puerto Rico as a whole has been designated as the University of Puerto Rico at Humacao Service Area, and the Marketing Area has been identified as the geographic area made up of fifteen municipalities, each of which provides at least 5% of the total registration of the institution according to the historical distribution of total registration for the last ten years. This analysis was supplemented by other characteristics of the municipalities within the marketing area to which services are offered or provided. (Administrative Board Certification Number 1999-2000-170).

GOALS	OBJECTIVES	ÁREAS OF OPPORTUNITY ²⁹	STRATEGIC DIRECTION
	<p>as a fundamental part in the development of action plans, programs and educational activities aimed at the community's well-being.</p>	<p>opinion of the UPRH marketing area community in those improvement programs and activities aimed at increasing the quality of life in this component.</p>	<p>community as an essential part of the educational efforts for the development of this aspect.</p> <p>The Institution will collaborate closely with local community organizations and the Alumni Association to help them resolve the problems of the community and improve the quality of life.</p> <p>It will stay in constant communication and will provide feedback on the plans as they are established and the results that have been achieved.</p>
	<p>B3. To contribute to the continuous professional, intellectual, cultural, emotional and physical growth and development of the citizens through regular and special courses and other educational activities.</p>	<p>B3.1 The UPRH should increase the level of participation and cooperation of the community in the processes of identifying those needs that are not addressed.</p>	<p>B3.1.1 The UPRH will develop and keep current a study of the community that indicates which needs are not being addressed. This study should be updated every five (5) years.</p> <p>B3.1.2 It will promote participation of the community in the meetings of the different committees that develop initiatives for addressing its needs.</p> <p>B3.1.3 The faculty, student body and the administrative personnel will dedicate time to external community service activities such as:</p> <p>a) The UPRH will celebrate cultural and educational activities throughout the year through the academic and</p>

GOALS	OBJECTIVES	ÁREAS OF OPPORTUNITY ²⁹	STRATEGIC DIRECTION
			<p>student programs, the Cultural Activities Office and the Alumni Office.</p>
	<p>B4. To contribute to the improvement of pre-university education of the UPRH Service Area through projects and educational activities offered to students and school teachers.</p>	<p>B4.1 The UPRH should institutionalize a project for strengthening pre-university education.</p> <p>B4.2 The Institution has not adequately identified the talented students at the pre-university level to guide them towards university careers.</p>	<p>b) The student body and the faculty of the different academic programs offered by the Institution will participate in strategic community centers to share ideas, suggestions, support proposals, do volunteer work and work on shared initiatives.</p> <p>c) To offer a variety of training courses and programs through the Continuing Education and Professional Studies Division (DECEP, in Spanish) aimed at attending the needs of a diverse population.</p> <p>d) Each office, department or dependency will document the activities, services provided and population served in its annual reports.</p> <p>B4.1.1 The Institution will strengthen the educational projects aimed at students and school teachers to improve the academic profile of those students.</p> <p>B4.2.1 The Institution will establish programs for seeking out talent and attracting these students to the UPRH.</p>

GOALS	OBJECTIVES	ÁREAS OF OPPORTUNITY ²⁹	STRATEGIC DIRECTION
	<p>B5. To develop awareness in the community of the importance of establishing and maintaining a balance between Puerto Rico's ecosystems.</p>	<p>B5.1 The Institution should establish an effective program aimed at educating the internal and external community about the environment.</p>	<p>B5.1.1 The Institution will develop an environmental policy aimed at establishing an institutional environmental education program that includes resources, promotion and education, specifically regarding reforestation programs, toxic and dangerous waste management, recycling plan, seminars, workshops, course and course outline revision relating to environmental protection.</p> <p>a) The UPRH will develop and establish an effective Recycling Plan that guarantees the sustainable management of the solid wastes and the maintenance of the campus's green areas. This Plan will become part of the UPRH's service plan which signifies that the fiscal, human and physical resources shall be provided for the implementation of the Plan.</p> <p>B5.1.2 The Institution shall designate a human resource to implement the policy approved for these purposes.</p> <p>B5.1.3 The Institution will develop, update and disseminate a report which summarizes the community's needs in terms of</p>

GOALS	OBJECTIVES	ÁREAS OF OPPORTUNITY ²⁹	STRATEGIC DIRECTION
			environmental impact.
	B6. To systematically document the participation and satisfaction of the external community with the services provided.	B6.1 The offices and departments should gather systematic information on user satisfaction with the services of the programs and projects they offer.	<p>B5.1.4 UPRH will establish collaborative and institutional resource exchange agreements with public and private agencies and community entities.</p> <p>B6.1.1 All the offices and departments will include activities in their operational and assessment plans that include systematic evaluation of their services. The results of these evaluations will be used for their improvement.</p>
GOAL C			
To reaffirm the values of the Puerto Rican culture.	<p>C1. That the UPRH student body know and demonstrate appreciation for the values of Puerto Rican culture.</p> <p>C2. To promote, preserve and disseminate the characteristic values and traits of Puerto Rican culture of the past and the present.</p>	<p>C1.1 The students have limited knowledge and skills in their mother tongue as a vehicle for the understanding, appreciation and enrichment of Puerto Rican culture.</p> <p>C2.1 The Institution should establish a mechanism to measure knowledge of the Puerto Rican culture among the student body.</p>	<p>C1.1.1 The Institution will intensify its efforts to improve the teaching of the vernacular throughout the entire curriculum.</p> <p>C1.1.2 It will strengthen reading and the use of books that have a Puerto Rican setting for promoting mastery of the vernacular and for facilitating academic mastery.</p> <p>C1.1.3 It will promote the development of oral and written communication skills in the curriculum and through culturally diverse activities.</p> <p>C2.1.1 The Institution will strengthen the following strategies:</p> <p>a) A proposal for a Bachelors of Arts degree with a major in</p>

GOALS	OBJECTIVES	ÁREAS OF OPPORTUNITY ²⁹	STRATEGIC DIRECTION
			<p>Puerto Rican and Caribbean Studies.</p> <p>b) Elective courses in Puerto Rican Literature.</p>
			<p>c) Increase the annual Library acquisitions that are dedicated to learning resources that are published or produced in or about Puerto Rico.</p> <p>d) The use among the students of the learning resources made available by means of agreements between libraries.</p> <p>e) A high number of educational and cultural activities that reaffirm and promote the values of Puerto Rican culture that are attuned to the students' interests.</p> <p>f) The promotion of culturally and educationally enriching activities sponsored by the UPRH through available means of communication. It will divulge the campus's activities through all available means of communication and will diversify the schedule in which they are offered.</p> <p>g) The publication of texts, writings, research studies, special collections and other publications related to the preservation and enrichment of</p>

GOALS	OBJECTIVES	ÁREAS OF OPPORTUNITY ²⁹	STRATEGIC DIRECTION
			the Puerto Rican culture.
		<p>C2.2 The University should fortify the structure of the cultural activities program, so that it impacts upon and strengthens ties with the community outside of the Institution.</p> <p>C2.3 The focus used in teaching has resulted in the absence of Puerto Rican culture from certain disciplines, adversely affecting the presence of Puerto Rican thought in the University curriculum.</p>	<p>C2.2.1 The University will use mass communication means to divulge or present cultural activities to the community, such as: classical music concerts, opera, theater events, documentaries, artistic appreciation workshops, etc., as well as take these activities out into the neighborhoods and to area schools to help remedy the cultural need suffered by some sectors of the population.</p> <p>C2.2.2 To develop and maintain, through Casa Roig Museum, the Cultural Activities Office, along with other offices, programs and projects aimed at rescuing and divulging our cultural past and the history of the region.</p> <p>C2.2.3 To utilize organizations such as the UPRH Choir and Band with greater frequency in the diffusion of culture.</p> <p>C2.2.4 To establish agreements between the UPRH and cultural groups from the region to promote and sponsor joint activities.</p> <p>C2.3.1 Through curricular revision, the UPRH will promote the values of Puerto Rican culture as a means to make the students aware of their civic and patriotic responsibility. This will provoke</p>

GOALS	OBJECTIVES	ÁREAS OF OPPORTUNITY ²⁹	STRATEGIC DIRECTION
			<p>an analysis of the role that Puerto Rico plays in the wider Caribbean, Hispanic-American and worldwide geographic surroundings.</p> <p>C2.3.2 To promote artistic exhibitions of work done by students, faculty, university personnel and members of the external community, in the buildings, halls, sidewalks, libraries and other structures of UPRH.</p>
		<p>C2.4 The Cultural Activities Office has few resources for adequately providing its services.</p>	<p>C2.4.1 The Institution will strengthen the Cultural Activities Office by providing the necessary support.</p> <p>C2.4.2 It will include a group of students in the planning of cultural activities.</p> <p>C2.4.3 It will establish an electronic system for promoting daily cultural activities.</p> <p>C2.4.4 It will establish incentives to stimulate attendance at cultural events.</p> <p>C2.4.5 It will motivate the creation of university cultural organizations under the guidance of the Dean of Students' Office.</p> <p>C2.4.6 It will establish an evaluation and assessment system to determine if the activities are effective for promoting Puerto Rican culture.</p>

GOALS	OBJECTIVES	AREAS OF OPPORTUNITY ²⁹	STRATEGIC DIRECTION
<p>Goal D</p> <p>To attain an institutional climate in which the students, faculty and non-teaching personnel can easily share and discuss ideas and mutual interests.</p>	<p>D1. To foster active participation by students and faculty in making decisions regarding academic issues at all levels of institutional life, from the classroom to the deliberative bodies.</p>	<p>D1.1 There is little student participation in discussion forums and in the decision-making process within the deliberative bodies and the academic departments.</p> <p>D1.2 The faculty and non-teaching personnel wish to obtain greater satisfaction with their participation</p>	<p>D1.1.1 The Institution will foster greater student participation in the academic decision-making processes through:</p> <ul style="list-style-type: none"> a) An agile and flexible Student Regulation, tempered to the needs of the students and of the Institution. b) Increasing the incentives for students so that they participate in the deliberative bodies, discussion forums and in the academic departments. c) Dissemination of the approved student incentives. d) Facilitating resources (time, budget, materials and equipment, physical space, etc.) for supporting the Student Council and representatives in the institutional deliberative bodies. These resources will serve to provide follow-up and support to the processes which correspond to the student body. e) The integration of diverse activities in the curricula for the development and formation of student leadership. <p>D1.2.1 The Institution will foster a greater participation of the faculty and the non-teaching personnel in the</p>

GOALS	OBJECTIVES	AREAS OF OPPORTUNITY ²⁹	STRATEGIC DIRECTION
		and efficacy in making decisions within the institutional environment.	<p>decision-making processes through:</p> <ul style="list-style-type: none"> a) The establishment of institutional policies, fostering the simplification and decentralization of the university regulations and of the administrative processes. b) Ongoing dialogues with the university management through forums, hearings and assemblies. The institutional management will meet with the faculty and non-teaching personnel at least once per semester during the academic year. c) Representation in all the institutional committees that are of their concern.
			<p>D1.2.2 The University management will divulge and orient the university community on the established institutional policies.</p> <p>D1.2.3 The University Development Office will evaluate the satisfaction of the faculty, non-teaching personnel and students with their participation and its efficacy in making institutional decisions.</p>

GOALS	OBJECTIVES	ÁREAS OF OPPORTUNITY ²⁹	STRATEGIC DIRECTION
	<p>D2. That the students, faculty and non-teaching personnel have the physical facilities, time and necessary financial support, in the best conditions, for the development of teaching, innovation and research, among other activities related to the work of the University.</p> <p>D3. That all of the University's work be framed in an institutional culture of excellence in service, understood as the ongoing measure and improvement of processes.</p>	<p>D2.1 The diverse sectors that make up the university community in our Institution report a high degree of dissatisfaction with the physical facilities assigned by the administration for facilitating the work of the University.</p> <p>D3.1 UPRH needs to systematically apply the Planning and Assessment model for excellence in service to all the University work.</p>	<p>D2.1.1 The UPRH will promote and lobby for proposals towards developing and maintaining the Institution's physical facilities for fortifying teaching, innovation and research. This will include the removal of architectural barriers.</p> <p>D2.1.2 The Institution will perform more effective planning and programming in the use of available space for diverse activities of university work, in accordance with established university policies and for determining the assignment of resources.</p> <p>D3.1.1 The Institution should develop an organizational culture of excellence in service of all University work.</p> <p>D3.1.2 Design and establish a training and development plan for all faculty and non-teaching personnel in their corresponding areas. In addition, a training cycle will be designed to attend the development of skills for those personnel who execute supervisory functions.</p>
			<p>D3.1.3 Design and establish an assessment plan for services by the departments and offices, taking into account the opinions and criteria of the students, faculty and non-teaching</p>

GOALS	OBJECTIVES	AREAS OF OPPORTUNITY ²⁹	STRATEGIC DIRECTION
			<p>personnel in light of the services received. The results or findings of these plans will be utilized for the purpose of improvement.</p>
	<p>D4. That the communication between the university administration, the student body, the faculty and the non-teaching personnel be more effective through the use of participatory consultation.</p>	<p>D3.2 The UPRH needs to develop a procedure to evaluate the managerial personnel.</p> <p>D4.1 The Institution should intensify the efforts to achieve an effective communication between the administration and all other components of the university community.</p>	<p>D3.1.4 Disseminate and evaluate the implementation of the institutional planning and assessment cycle in support of the developments and changes which improve and maintain institutional and educational efficacy.</p> <p>D3.2.1 Design and establish a formative evaluation system for managerial personnel.</p> <p>D3.2.2 Design and establish a system of incentives and recognition for the personnel's excellent work that will stimulate them to perform quality work, in light of standards of excellence established by national, state and professional accreditation agencies.</p> <p>D4.1.1 The University administration will foster a greater participation of the student body, the faculty and the non-teaching personnel in the decision-making process, in all levels of institutional life, through:</p> <ul style="list-style-type: none"> a) Faculty meetings b) Meetings called by the Deans' offices c) Meetings in the administrative offices d) Meetings with students

GOALS	OBJECTIVES	AREAS OF OPPORTUNITY ²⁹	STRATEGIC DIRECTION
			<p>D4.1.2 The offices, academic departments, and the Student Council will establish internal policies for meetings and assemblies so that their representatives report on institutional matters.</p> <p>D4.1.3 The Institution will periodically divulge and publish the relevant matters and decisions through internal and external means of communication:</p> <ul style="list-style-type: none"> a) Institutional webpage on the Internet b) Electronic Bulletin Boards c) Regional newspapers d) Radio Web e) Television program f) Circulars g) Fliers h) Bulletins <p>D4.1.4 The Dean of Students and the Student Council will create an official communication mechanism for the entire student community (bulletin, newspaper, magazine)</p>

GOALS	OBJECTIVES	AREAS OF OPPORTUNITY ²⁹	STRATEGIC DIRECTION
GOAL E			
To foster and support research and artistic and literary creation in a way that it contributes to the advancement of knowledge and the solution of problems of the Eastern region, Puerto Rico and abroad.	E1. The UPRH will establish an Institutional Research, Artistic and Literary Creation Policy to enrich the work of teaching and promote the development of an integral education.	E1.1 The UPRH should write an Institutional Research, Artistic and Literary Creation Policy.	E1.1.1 The Academic Senate will approve an Institutional Research, Artistic and Literary Creation Policy.
		E1.2 The Institution should constitute an institutional committee that will evaluate the viability of the proposed research projects and watch over the rights and protection of the human subjects that participate in research projects.	E1.2.1 The UPRH will constitute an institutional committee with expertise in the area of specialization of the projects to evaluate their viability as they relate to the protection of humans in the research.
	E2. The faculty will conduct research and create artistic and literary work that contribute to the solution of social, cultural, economic, educational, environmental, and scientific and health problems.	E2.1 The research policy of the University of Puerto Rico is not backed up by financial support that permits it to systematically develop new research projects. E2.2 The institutional funds that are assigned for research and artistic and literary creation are limited and in general come from the Research Projects Fund (FOPI, by its Spanish acronym) that depends on the recovery of indirect costs of externally funded proposals. In addition, there is a system-wide policy of not assigning matching funds to the campuses that have undergraduate offerings.	E2.1.1 The Institution will establish a policy for the assignment of recurring funds from the operational budget to sponsor research, artistic and literary creation and will provide the necessary infrastructure and incentives to develop them. E2.2.1 The Institution will create collaborative alliances with industry, government agencies and community entities for obtaining resources that support research.

GOALS	OBJECTIVES	AREAS OF OPPORTUNITY ²⁹	STRATEGIC DIRECTION
		<p>E2.3 The faculty wants greater administrative support and institutional incentives in terms of necessary resources (physical facilities and maintenance, equipment and specialized materials purchases, translation of proposals to other languages, library resources, protection and maintenance of instruments and equipment, secretarial services) to be assigned to research and artistic and literary creation.</p>	<p>E2.3.1 The Institution will increase the administrative support for necessary resources: secretarial services, requisitions and purchase of specialized materials and equipment, library resources, protection and maintenance of instruments and equipment, and the space for the development of the research and artistic and literary creation.</p> <p>E2.3.2 The Institution will maintain and increase the current incentives system (academic release time, sabbatical leaves, equipment, facilities, bonuses) for promoting and supporting research and artistic and literary creation.</p> <p>E2.3.3 The Dean of Academic Affairs will be responsible for assigning the task of making research and literary and artistic creation viable to the Associate Deans.</p> <p>E2.3.4 The Institution will perform more effective planning and programming for the use of assigned space in such a way that physical spaces can be identified for supporting research and artistic and literary creation.</p>

GOALS	OBJECTIVES	AREAS OF OPPORTUNITY ²⁹	STRATEGIC DIRECTION
	<p>E3. Research work and artistic and literary creation will be disseminated in an effective way so that it will have an impact at the institutional, national and international levels.</p> <p>E4. To foster the search for external funds for sponsoring research and artistic and literary creation so that they have an impact at the institutional, national and international levels.</p>	<p>E2.4 A relatively low number of the eligible faculty applies for sabbatical leave for their professional development.</p> <p>E2.5 The absence of an institutional infrastructure for the recruitment of personnel specializing in identifying and bringing in external funds.</p> <p>E3.1 There are academic areas that should improve in reporting on and documenting research work and artistic and literary creation in their dissemination and publication.</p> <p>E4.1 There is a certain lack of knowledge on the part of the faculty about the sources or opportunities for doing research and for artistic and literary creation.</p>	<p>E2.3.5 The Institution will assign specialized personnel to the External Resources Office for the translation of proposals and other research and artistic and literary creation.</p> <p>E2.4.1 Arrange for the search for more financial resources so that there will be more possibilities for sabbatical leaves.</p> <p>E2.5.1 The Institution will offer training activities to the faculty and the indicated administrative personnel to facilitate obtaining external and internal funds that will permit their financing.</p> <p>E2.5.2 The Institution will hire personnel specializing in the preparation of proposals to strengthen the area of External Resources.</p> <p>E3.2.1 The UPRH will sponsor and promote participation in dissemination activities and publication of the results of the research work and artistic and literary creation produced by the students and the faculty.</p> <p>E4.1.1 The External Resources Office will identify and disseminate the sources and opportunities that the professors may use to do their research and artistic and literary creation.</p>

GOALS	OBJECTIVES	AREAS OF OPPORTUNITY ²⁹	STRATEGIC DIRECTION
	<p>E5. The students, through their academic and professional development, will learn and apply the skills of research, artistic and literary creation, and of community service characteristic of their respective disciplines.</p>	<p>E5.1 The UPRH should create an institutional mechanism that will corroborate the graduating students' mastery of research skills and their ability to apply them in the solution of problems of their discipline and in the community.</p> <p>E5.2 There are academic programs that need to improve in documenting and disseminating the services they provide to the community resulting from the research and creative work that they do.</p>	<p>E5.1.1 The Institution will develop an institutional policy that requires each academic program to create a measure or a mechanism that validates the students' competency in these areas (research project, creation or service, among others).</p> <p>E5.1.2 The academic programs will design mentoring activities with students and research assistants.</p> <p>E5.1.3 The UPRH will promote the development of courses in research and artistic and literary creation.</p> <p>E5.2.1 The academic programs that perform community service activities will identify and evidence the possible research activities/strategies that they are doing through their services.</p>



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ACADEMIC SENATE


CERTIFICATION NUMBER 2004-05-23

I, Irving Ortega Díaz, Executive Secretary of the Academic Senate of the University of Puerto Rico at Humacao, CERTIFY THAT:

The Academic Senate, in its extraordinary meeting held on Tuesday, the 16th of November of 2004 and continued on Thursday, the 18th of 2004, approved unanimously the STRATEGIC DEVELOPMENT PLAN 2004-2005 TO 2009-2010, that was submitted by the Institutional Planning Committee and the University Development Office, with the amendments suggested.

The aforementioned Plan forms part of this Certification. The amendments stand out in red letters.

AND SO THAT IT BE KNOWN, and be submitted to the corresponding University authorities, the above is presented in Humacao, Puerto Rico, on December 20, 2004.


 Dra. Hilda M. Colón Plumey
 Chancellor and President


 Irving Ortega Díaz
 Executive Secretary

Appendix



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ADMINISTRATIVE BOARD

CERTIFICATION NUMBER 2004-05-36

I, Irving Ortega Díaz, Executive Secretary of the Administrative Board of the University of Puerto Rico at Humacao, CERTIFY THAT:

The Academic Senate, in its ordinary meeting held on Tuesday, the 8th of February of 2004 approved unanimously the STRATEGIC DEVELOPMENT PLAN 2004-2005 TO 2009-2010, with the following amendments:

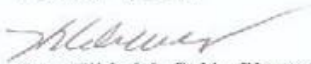
Page 52 - Goal A – Strategic Direction A11.1.1 should read:

A11.2.2 The Institution will update and approve a Student Evaluation of Faculty Performance system. This system will form part of the Faculty Evaluation System.

Page 62 – Goal D – Strategic Direction D1.1.1 – should read:

d) Facilitating resources (time, budget, materials and equipment, physical space, etc.) for supporting the Student Council and representatives in the institutional deliberative bodies. These resources will serve to provide follow-up and support to the processes which correspond to the student body.

AND SO THAT IT BE KNOWN, and be submitted to the corresponding University authorities, the above is presented in Humacao, Puerto Rico, on February 9, 2005.


 Dra. Hilda M. Colón Plumey
 Chancellor and President


 Irving Ortega Díaz
 Executive Secretary

Appendix