University of Puerto Rico at Humacao (UPRH) ADVANCE Institutional Transformation Project:

UPRH ADVANCE

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**Key Elements of the Overall Change Strategy**

UPRH has a history of success in graduating women STEM students, but the numbers of women faculty are low in four of the eight science programs (physics, mathematics, marine biology, and wildlife management), and their rate of advancement is slow. Thus the team strongly stated the need for institutional self-study in order to clarify the dimensions of gender equity issues at UPRH, arguing that data and results generated through the ADVANCE research would be used to develop activities that effectively promote the recruitment of women and their retention and advancement at UPRH. For example, the UPRH ADVANCE effort set out to review recruitment and retention procedures, which were often “informal” and department-based, and then to define and implement gender-equitable policies. Women faculty members’ professional advancement was seen as tied to their research achievement and status; therefore it would be most effectively enhanced through direct funding of individuals’ research, modeled after prior successful efforts to promote undergraduate women’s success in science.

**Relevant Elements in the Institutional Context**

- UPRH is an exclusively undergraduate institution with an enrollment of ~4500 students. Supporting faculty research was challenged by a lack of equipment, resources, and space for research, but there is a strong commitment to and tradition of undergraduate research.

- UPRH graduates more physics, chemistry, and mathematics majors than any other higher education institution in Puerto Rico. It has one of the highest rates of women’s participation in STEM fields in the U.S. Yet UPRH has very low numbers of women faculty and their rate of advancement is slow.

- UPRH faced difficulties in recruiting and retaining women faculty, and isolation of current faculty, as a Spanish-language dominant university on an island “away from the mainland.”

- Prior to ADVANCE, UPRH had in place full maternity leave for women and a day-care center available to all employees’ children.

- Carnegie: Public, Baccalaureate/Diverse fields, four-year institution.
Scope of the ADVANCE Initiative
The project addressed STEM departments in chemistry, biology, computational mathematics, physics, and electronics, and also included the social sciences.

Project Elements
UPRH’s ADVANCE initiative sought to address issues affecting faculty recruitment and retention by formalizing department policies for advancement. Activities to support women faculty at UPRH directly focused on their professional development. Collectively, these activities engaged what appears to be a large number of faculty members. Major activities included the following:

• Review of recruitment and retention policies. Information about work/life policies was gathered in a toolkit.

• Education of administrators and department chairs on gender equity and on faculty recruitment and retention. Interactive theater presentations were incorporated later in the project; for example, a locally-written play about mathematician Emmy Noether was seen as helping to introduce gender issues in an interesting and non-confrontational way that was well received by faculty.

• Direct support for women faculty members’ scholarly development and career advancement through funding to support research (conference travel, equipment, student researchers, etc.) and released time.

• Faculty development workshops on skills such as searching for research support and writing grant proposals, and on specific areas of research interest to faculty.

• A variety of one-off talks and lunches to share information on gender equity and to promote networking.

• “Faculty-in-training” mentoring program directed at encouraging young women undergraduates to pursue an academic career in the sciences.

• Substantial data-gathering efforts to establish the dimensions of gender equity issues at UPRH.

• Active participation and presence at professional conferences and the annual ADVANCE PI meetings.

Outcomes

• There was no broad change in the overall numbers of women, but over the lifetime of the ADVANCE IT project, the gap in awards of tenure between men and women dropped from 30% to 4%. The number of women in administrative positions increased, and the salaries of full and associate professors showed equity between men and women.

• New guidelines for recruiting and hiring faculty were incorporated into UPRH's Faculty Manual and disseminated to all science departments. The new policies included a dual-career couple hiring policy. Use of these practices was uneven, but leaders saw it as slowly increasing over time.

• Analysis of a climate survey showed an unbalanced work climate at all levels, particularly with regard to gender discrimination and sexual harassment.

• Collection of indicator data found to be useful was institutionalized into the Office of Institutional Research.

• Later reports to the NSF emphasized the spread of the ADVANCE activities to support the advancement of women in more non-science departments as evidence of broader institutionalization of the initiative. Leaders also cited as a lasting success the development of a strong network of research-active women, several of whom also held leadership roles on campus.
Research Team Observations

- ADVANCE was housed in the chancellor’s office but everyday leadership came primarily from the PI and co-PI, who served on and directed ADVANCE administrative committees with broad-based representation. The team was very active in gathering and analyzing data and used these data to redraft recruitment and hiring policies.

- The team’s studies highlighted the challenges for recruitment, retention, or promotion of women at UPRH, pointing to deeply entrenched institutional and cultural practices mediating against change. For example, colleagues responded positively to efforts to strengthen research, but efforts to formalize practices of recruiting and hiring met with some resistance from those who had benefited from prior, less formal practices such as recruiting through personal networks. These challenges remained as the grant ended, but an ADVANCE-like approach was recommended as a way to continue to address them.

For Further Reading

The program website documents the project’s work under the NSF ADVANCE award.  
http://advance.uprh.edu/

To cite this document


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