

Catherine Baker Lipe

Professional Preparation

VANDERBILT UNIVERSITY, School of Engineering
B.S., Computer Science

B.S., 1983

UNIVERSITY OF PENNSYLVANIA, Wharton Graduate School of Business
Fellow, Lauder Institute of Management and International Studies
M.B.A., Marketing
M.A., International Studies with a concentration in French

M.B.A., 1987
M.A., 1987

Fellow, Kellogg National Fellowship Program, W.K. Kellogg Foundation

1993-1996

Learning Plan: Public education strategies that better serve youth in communities undergoing rapid changes due to immigration. Critical Pedagogy Seminar with Paulo Freire, São Paulo, Brazil

Appointments

Math, Engineering and Science Achievement (MESA) Program Director and Assistant Professor, Cañada College, Redwood City, CA 2007 – present

Manager of HP Education Programs, Corporate Philanthropy Department, Hewlett-Packard, Palo Alto, CA 2000 – 2007

HP Scholars Program Manager, Corporate Philanthropy Department, Hewlett-Packard, Palo Alto, CA 1998 – 2000

K-12 Hands-on Science Education Program Manager, Government and Education Relations Department, Hewlett-Packard, Palo Alto, CA 1996 – 1998

Customer Reference Program Manager, Marketing Department, Commercial Systems Division, Hewlett-Packard, Cupertino, CA 1991 – 1996

European Manufacturing Industry Marketing, Commercial Systems Division, Hewlett-Packard, Böblingen, Germany 1991

Future Product Manager, Marketing Department, Commercial Systems Division, Hewlett-Packard, Cupertino, CA 1987 – 1991

Manufacturing Capacity Planning Systems Engineer, Network Systems Division, Hewlett-Packard, Grenoble, France Summer 1986

Software Development Engineer, Research and Development, Computer Support Division, Hewlett-Packard, Cupertino, CA 1983 – 1985

Publications

None

Synergistic Activities

1. Focused HP's educational philanthropy initiatives on transforming teaching & learning through technology, increasing underrepresented students in high-tech careers and enhancing student success in math, science & engineering.
2. Managed team of five program managers responsible for K-12, community college and university education partnerships. (annual education program budget approx. \$20M)
3. Developed HP's first community college philanthropy initiatives focused on supporting underrepresented students to excel and transfer to engineering majors at 4-year universities. Incorporated community colleges into HP's Technology for Teaching initiative to infuse technology into science, technology engineering and math classrooms. Created workshops to convene 4-year engineering schools with community college pre-engineering program leaders. Expanded the California MESA community college program to reach six additional states.
4. Developed & managed HP Scholars program awarding scholarships and internships to low-income Latino, African American and Native American high school seniors and community college transfer students studying computer science or engineering.
 - a. 120+ active HP Scholars at six US universities
 - b. 80% retention rate in engineering majors (vs. 35% national average)
 - c. 100% of HP Scholars hired in paid summer internships and partnered with HP mentors
 - d. 70-90% of HP GEM Fellows pursuing master degrees are HP Scholar graduates
 - e. 80-100% of HP Scholars identified as "must-hire" received full-time job offers from HP
 - f. Designed and taught HP Scholar workshops on resume writing, professional networking, interviewing, making the most of your mentor, etc. Developed and taught a 4-day, residential HP Scholar Orientation to Your First Corporate Internship (each summer at an HP site location in the US)

Collaborators & Other Affiliations

- a) Collaborators and Co-Editors: None
- b) Graduate and Postdoctoral Advisors: None
- c) Thesis Advisor and Postgraduate-Scholar Sponsor: Not applicable

Grant Award Information

Awarded:

MESA California Community College Program funded by California Community Colleges Chancellor's Office, Fund for Student Success

PI: Catherine B. Lipe

Awarded: \$73,033 for 2008/09 academic year, renewable annually

Pending:

"Math, Science and Engineering Transfer Scholarships (M-SETS)" submitted to the National Science Foundation Scholarships in Science, Technology, Engineering and Math (NSF S-STEM) program
If funded, total \$599,100 over five years.

Co-PI: Catherine B. Lipe

PI: Dr. Amelito Enriquez

"Creating Opportunities for Math, Engineering, Technology and Science (COMETS)" submitted to US Department of Education CCRAA for Hispanic-Serving Institutions Program

If funded, 10/1/2008 to 9/30/2010 total \$765,000 for both years.

PI: Catherine B. Lipe

This project focuses on development of curriculum to accelerate skills in mathematics to improve retention of students, particularly Hispanic students, in STEM fields. The focus is on students who have not yet achieved the skill level required to enroll in majors-level science or engineering classes.