Snowbird 2000 Panel

Best Practices and Future Research: Recruitment and Retention of Women and Minorities in CS&E

Panelists:

Mary Lou Soffa, Chair, University of Pittsburgh

Al Aho, Lucent Technologies

Baine Alexander, LEAD Center, University of Wisconsin

Allan Fisher, Carnegie Mellon University

Caroline Wardle, National Science Foundation

Panel Organization

Mary Lou Soffa - statistics

Allan Fisher - results of research at CMU

Baine Alexander - evaluation of programs

Al Aho - programs in Lucent

Caroline Wardle - virtual workshops & ITW
                                    program

Status of Information Technology

Serious national shortage of information technology workers: not able to meet demands of public or private sector

Shortage expected to continue

- students leaving before B.S.
- students not going for Ph.D.

Great concern to US and state governments

- IT industries account for 1/3 overall growth in production

Under-representation of women and minorities

Focus of Panel

Current best practices for recruiting

and retaining women and minorities

- students, faculty and industrial employees

Future efforts

Status of Women in CS & E

Statistics from 1998-1999 Taulbee Survery (CRN March 2000)

(from Ph.D. degree granting institutions)

B.S. degree: 17%

But % dropping for B.S.degrees

34% in 1984 - about 29% drop

CS only science in which this is true

Advanced degrees (1998-1999)

Master's Degrees: 26% for women

Ph.D. degrees: 15% (increase from 11% in 1990)

Women Faculty:

     16% are assistant professors

     12% are associate professors

     8% are full professors

Status of Women - cont.

Pipeline shrinks at all levels

Girls represent 17% of Computer Science AP test takers

Women are about 20% of IT professionals

High School

Enrollment in CHS (University of Pittsburgh)

Enrollment in CS courses going up since 1996

But number and % girls falling:

> 1996: 147 enrollments - 30%

> 1999: 137 enrollments - 20%

Calculus: 55%; Chemistry: 49%

Minorities

Degrees awarded to African American and Hispanic American in 1998:

4% B.S. to AA and HA (total 8%)

1% M.S. to AA and HA (total 2%)

2% of Ph.D. to AA and HA (total 4%)

Minority Faculty (total AA and HA)

3% Assistant Professors

1% Associate

1% Full

Why girls/women not go into CS

Studies

- **Recent report from AAUW: Tech-Savy "New Report Criticizes Current Computer Culture; Commission calls for Changes in Games, Classrooms and Teacher Education**

Resources

Computing Research Association Committee on Status of Women in Computer Science research (CRA-W)

- http://www.cra.org/Activities/craw
- CRA - report on best practices

ACM: Women's Committee

- http://www.acm.org/women

Institute for Women and Technology

- http://www.iwt.org

AAUW:

- http://www.aauw.org - new report