Rethinking Student Needs: How International and U.S. Women Students in IT Educational Programs Compare

Christine Ogan
Debbie Goh

Summary of Study
This study examined the web-based survey responses from undergraduate and graduate students in IT higher education at five research one institutions to determine whether international students and particularly international women came to our programs with a different set of aspirations, backgrounds, levels of efficacy, and needs than U.S.-born students. We also analyzed the extended interview data collected on the various campuses for comments about international students and for articulation of issues unique to international students. We know that in computer science at least half of the graduate students are not U.S. citizens and that a similar distribution may exist in some of the applied I.T. programs in higher education. However the women-in-computing organizations on U.S. campuses may be designing their programs based on experiences of American students. International students in this study were divided according to their geographic origin—As European or Asian. Most of the analysis was devoted to responses from Asian students who made up the largest group.

Results
European and Asian women students began using computers later than Americans, but had higher levels of confidence related to their computer skills and reported higher levels of achievement in the classroom than did American women.

• International women students placed less emphasis on being good with computers when selecting a major than did American women students.
• American women have more interest in finding a career where they can help others than international women do.
• International women students value “belonging” to their academic units more highly than do American women.
• Misunderstandings result from misperceptions of units’ support for international and U.S. students.
• Asian women students decide much earlier in life to major in an IT field.

Take Home Findings
The study revealed that international students may have trouble adjusting to their new environments. Though comfortable with their technical and academic ability, they want to feel valued. They point to experiences of working in research teams and belonging to organizations as helping them integrate into their departments. Faculty and administrators should provide more opportunities for international students to mix with American students to avoid discrimination and growing misperceptions or even hostility.