

Understanding Gendered Attrition in Departments of Information Technology

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How is IT Different?

- Increased focus on the “soft skills”
- Prioritizes technology as a tool for solving problems
- Students manage and integrate existing technologies, rather than inventing new ones
- All these things seem to point to a more “female-friendly” environment

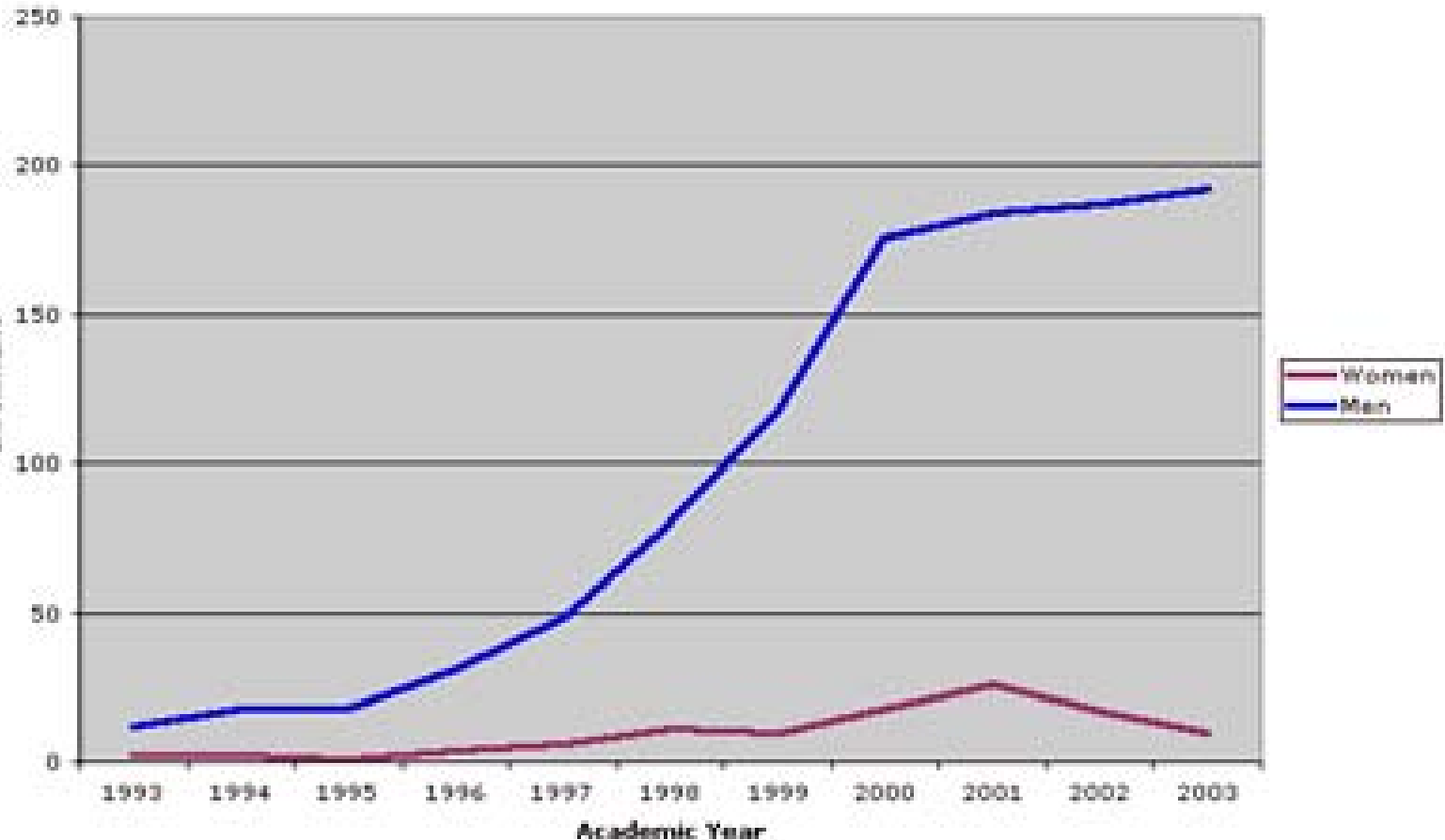
RIT's IT Faculty, 2003

- 51 total tenure-track faculty
 - 16 women (33%)
- 20 tenured
 - 5 women (25%)
- 31 untenured
 - 11 women (36%)
- Women in administrative positions
 - Associate dean

RIT's IT Students

- Entering RIT freshmen (all programs)
 - 402 of 2155 were women (19%)
- Entering IT freshmen
 - Fall 2001: 34 of 318 (11%)
 - Fall 2002: 17 of 205 (8%)
 - Fall 2003: 11 of 202 (5%)
- Transfers
 - 2002 Total: 15 of 120 (12.5%)

A Ten Year Decline



Research Plan

- Use qualitative methodology to elicit independent variables at RIT, then survey nationwide to validate that information in a larger context
- First year
 - Survey entering women in IT and CS
 - Three interviews throughout year (2 in person, 1 email)
 - Develop survey instrument based on results
- Second year
 - Identify other IT programs
 - Administer survey
 - Analyze survey results

Research Reality

- First year
 - Surveyed entering women in IT and CS (and a random sample of men), 3 interviews throughout year
 - Analyzed qualitative data
- Second year
 - Failed attempt to develop in-house web-based instrument (finally moved to SurveyMonkey)
 - Identified 75 “IT programs” (a 3 month process)
 - Contacted IT programs, with limited results
- Third year
 - Continuing problems getting agreements with schools
 - PI on sabbatical!

Institutional Survey Process

- Schools identified as meeting proposed ACM IT draft curriculum requirements: 75
- Schools responding favorably to request to participate: 22
- Schools actually completing the institutional survey: 9

Results To Date: Interviews

- Clear differences in level of commitment to computing as a career between CS & IT women, and between IT men & women
- Higher level of frustration with relevancy of programming coursework from IT women

Attrition Differences

Status after sophomore year

- IT women
 - 3/10 left program; one into CS (and then out of RIT), one into Int'l Business, one into Travel & Tourism
- CS women
 - 4/11 left program; two into IT, one into Biotechnology, one into Sign Language
- IT men
 - No changes of program; two leaves of absence, one academic suspension