

Challenges in recruiting Computer Science Faculty: The Small Department Experience.

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Presentation site with data <http://adel.cs.westga.edu/ccsc03/>

At the SIGCSE '03

- Several items were discussed
 - White Paper
 - Curriculum
 - Survey
 - Panels
 - Showcase of faculty in small colleges work
 - Directory
 - Publicity

The Shortage

- The Shortage is real (*perhaps easing up a little*)!
- Production of PhDs not keeping up with demands
- Faculty have high demands & higher expectations
- Enrollment in Computer Science is soaring
- More Reliance on Technology in Higher Education

The Shortage

- By the numbers:
 - Ph.D Production:
 - 1980- 252 PhD graduates/ 1990- 627 PhD graduates
 - 1997- 894 PhD graduates/ 1998- 933 PhD graduates
 - 1999- 825 PhD graduates/ 2000- 852 PhD graduates
 - 2001- 902 PhD graduates/ 2002- 847 PhD graduates

The Shortage

- Where do they go?
 - most of graduates are hired in Ph.D. granting departments & industry.
 - small colleges compete with the rest of non-Ph.D. granting schools (*compete over 20+ graduates on the average*).

<i>Notes on New Ph.D.s</i>	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002
Total Ph.D.s Granted	933	852	874	933	847
New Ph.D.s Hired into Ph.D. granting departments:	274	293	273	294	351
New Ph.D.s Employment Unknown:	144	78	157	180	167
New Ph.D.s employed in industry/non-academic or non-U.S. positions:	484	454	422	428	316
total:	902	825	852	902	834
Number of New Ph.D.s in the rest of academia (including small departments):	31	27	22	31	13
Professor Walker's Extrapolations to 100%	45	35	45	50	20
Total Ph.D.s Granted	1100	1100	1080	1165	1060

-Source: Taulbee Survey (CRA) <http://www.cra.org/>

- Source: Professor Henry Walker ([link to site](#))

The Competition

- Competitive starting salaries of new Ph.Ds
- Reported mean of salary minimum for a starting salary for 00-02, tenure track position, is \$75,902 (49% increase over 96-97 of \$51,037)
- Table shows the Average of all salaries

Nine-Month Salaries for New Ph.D's, Responding US CS and CE Departments

	96-97	97-98	98-99	99-00	00-01	01 02
Average of all salaries	\$53,011	\$60,735	\$64,283	\$68,915	\$73,979	\$76,595
Rate of Change		15%	6%	7%	7%	4%

-Source: Taulbee Survey (CRA) <http://www.cra.org/>

Our Experience...

- Plenty of Faculty positions, but not enough Faculty...
- Faculty retiring/leaving, but no “suitable” replacement can be found...
- Enrollment is soaring, but no classes for students...
- For the most part Faculty are happy with small departments...

What Can be Done?

- Recruiting...
 - start with the advertisement
 - emphasize “small is good”
 - highlight the Department & the People
 - leverage what your city, community & campus offer
 - strive to attract the best
 - use your students as a recruiting tool

For more Information...

- “*IT Staffing: Will Higher Education Become a Preferred Destination?*”, By Glen McCandless, Syllabus, April 1999, Volume 12, No. 8.
http://www.syllabus.com/apr99_magfea3.html
- *Taulbee Surveys* <http://www.cra.org/statistics/>
- “*Extrapolation of Taulbee Data*”, by Professor Henry Walker, SIGCSE Listserv, March 2003, <http://www.math.grinnell.edu/%7Ewalker/dept/taulbee-97-02.html>
- “*The Incredible Shrinking Pipeline*”, By Tracy Camp, Communications of the ACM, October 1997, Vol. 40, No 10. <http://www.acm.org/>
- “*America’s New Deficit: The Shortage of the Information Technology Workers*”, By US Department of Commerce, Office of Technology Policy, 1998.
<http://www.ta.doc.gov/reports/itsw/itsw.pdf>
- “*The Digital Workforce: Building InfoTech Skills at the Speed of Innovation*”, By Office of Technology Policy, 1999. <http://www.ta.doc.gov/reports/itsw/Digital.pdf>
- “*The Supply of Information Technology Workers in the United States*”, Supported by the National Science Foundation (Grant No. EIA-9812240) and published in 1998 by the Computing Research Association. <http://www.cra.org/>
- “*IT worker availability, skill sets, and hot jobs & technologies*” Information Technology Association of America (ITAA), <http://www.ita.org/>