

PANEL DISCUSSION

COMPUTER SCIENCE, THE SMALL COLLEGE, AND 2001

Moderator

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In a rapidly advancing field like computer science, faculty in a small college environment are challenged to keep their program current. For the most part, this means that the computer science faculty are focused on where the program "should be today". Rarely is there time to give careful thought and discussion to where the program should be in five to seven years.

Educators in computer science today are faced with a national trend of declining enrollments in computer science programs at all colleges, and with an increasing scarcity of job opportunities in a computer industry which today is downsizing and moving software development overseas. Accordingly, one must ask, "When we reach the year 2001, what will constitute a viable computer science program in a small college?"

It is the belief of the panel organizer that computer science faculty at small colleges must begin to address this question, for there is a high probability that even with the normal evolution, current programs will not be appropriate by the turn of the century. Furthermore, waiting to "follow the leadership" of the larger universities may very well "doom to extinction" the computer science program in a small college.

For this panel discussion, several pointed questions will be posed to serve as a basis for discussion by the panelists and the audience. Questions to be considered by the panel include:

1. Will computer science become for the most part a theoretical discipline with the national need well satisfied by programs in large research-oriented universities?
2. In view of such things as automatic code generation and formal specification techniques, and considering the trend to move traditional programming jobs overseas, what are the critical skills that a computer science major will need in the future?
3. For the future computer science program, what is the role of traditional programming skills and various programming languages?
4. Can current computer science, or software engineering programs be sustained when, for the most part, these programs are targeted to meet the perceived needs of a job market as seen over the past ten years?
5. Is it time for the computer science faculty to begin to reach out to other disciplines in order to consider what kind of interdisciplinary programs may represent the future?
6. Given that a tenure-track opening becomes available in the department, what is the appropriate profile for a person who should serve as a prototype of the computer science educator in the next century?