Feedback from ACM Members Regarding SCS Objectives

Prepared by Kip Irvine, 3/29/04
Each paragraph represents a different student's response. Six students responded to all objectives.

1. To provide our graduates with a broad-based education that will form the basis for personal growth and life-long learning.

Computer Science is a challenging discipline. I suggest focusing more on the foundations of successful projects. proper UML for example is key for making any large project -- yet, due to it's recent emergence it was not available as part of my undergraduate studies. As my graduate studies, I would like to see a permanent class on UML at the same rigor as Database class teaching normalization and database design.

Please don't restrict Computer Science Majors from doing courses that qualify for IT; there are a lot of application classes that we can do but are restricted from on the basis of it not counting for the comp. sci. degree

Difficult sense not every student is open to personal growth at this stage. I think those that are usually are more open to internship oppurtunities. Thats where I grew as a student and a computer scientist. Keep promoting the internships.

Use ACM and WICS as a tool to get students involved in extracurricular activities

Create more electives with cutting edge technology or at least technology currently used in the real world. Like a linux course, Webserver management, Distributed systems (clustering), PHP, Perl, etc.

I think the internships, co-ops, club involvement, and interaction with other students and teachers helps them with life-learning and personal growth. I guess the courses taken are pretty broad and more courses cannot be given, unless there is some independent research courses.

2. To provide our graduates with a quality technical education that will equip them for productive careers in the field of Computer Science.

Technology evolves fast and the University should conduct surveys an emerging technologies every semester. For example, when I was doing my undergraduate in 1993-1998, I studied Java on my own and the University had no reference nor course related to Java by the time I graduated. Granted, some technologies come and go, however by aggregating the responses frequently the University should be able to have a better understanding of which technologies are emerging fast/slow and also fading fast/slow.

More vareity needed.. Comp Sci, unlike a lot of other majors, has a strict CORE set which makes it almost impossible to double-major with as most of the classes do not

fulfill dual requirements and a lot of other classes students would like to take but do not as it would prolong their stay at the university...more hands on experience in the labs.....something mirroring the A+ certification needs to be put in place so that students actually have a hardware image of what they do; COP 3402 and CDA 4101 are not good enough.......

Catch up to industry. CS needs a good balance of theoritical and practical courses. On the practical side we are missing a Java Web Services course (J2EE). Also a course covering the wide uses of XML is a must. The theory is there although I'd open an Analysis of Algorithms course for undergrads.

Spend a little time at the beginning of the program, perhaps in intro to programming, to talk about the different career paths and the skills used in each: computer engineer, application developer, hardware and software paths, technical expert, software engineer, etc.

Make innovative clases that uses the most currently used software to teach basic principles. For example a Database class that uses SQL server (if microsoft allows it) or MySQL (free DBMS under Linux) to teach database principles with real world examples. Make the "advance" unix programming focus on commonly used languages like perl, python, etc (shell programming, awd and sed can only get you so far).

Many might start getting worried that people from India and other countries will be preferred to those graduated in the US. What can students do to still obtain jobs and have an edge? I noticed that because The School of Computer Science is part of Arts and Sciences, it does loose opportunities that students from Engineering get. They are not exposed to national organizations, such as SHPE, HENNAAC, IEEE, where they can meet company representatives.

3. To provide our graduates with the communication skills and social and ethical awareness requisite for the effective and responsible practice of their professions.

Communication is very important. Many times in the work force we are faced with playing multiple roles..many of which involve interfacing between departments. Our capacity for effective communication though is limited usually to email by our continual environments of being behind a computer most of the time. A good course in public speaking / communication may be beneficial as a CS-elective.

good enough

Don't know

I think this is already well-handled in the Technical Writing and Ethics courses

I think that you do a good job for this item.

This is very broad to cover all three topics together. Our students have terrible communication skills. Many who are excellent programmers cannot write a letter and are insecure about themselves. Many do not like to talk unless someone approaches them. I did not see anything wrong with it since I think that it is part of most student's personalities. Nonetheless, engineering students are usually outgoing and ready to take leadership roles.

4. To prepare students for BS level careers or continued graduate education.

In light of MS career, BS level careers are mainly practical in nature As a result, some of the "practical" courses mentioned in answer sections should be considered as required near the end of the BS degree so they can better transition to the workforce requiring such skills.

(no answer from 2nd student)

The problem I faced when I looked in to graduate schools was that many required a compiler course and an algorithms (asymptopic analysis). FIU lacks both in the undergrad catalog.

Continue the focus on mathematics to keep grad school an option.

Increase practical programming classes. Teach this classes in a computer lab. Dry programming (paper and pencil) is not very productive. I know that labs are available but if you use the computer while learning the concepts you will usually find things to ask the teacher at that moment, instead of being frustraded when you are on your own at the lab. Maybe, divide the classes into Lectures (just teaching) and recitations (guided practice of learned concepts).

Students do have good BS level and can later make it into graduate school.

One additional student only commented on Objective #4:
Other schools (like Carnegie Mellon) team up CS students with students majoring in engineering to work on certain projects. I think that's a good idea because most of the time you will not solely be working with computer scientists upon graduation, but with people in other disciplines. It's good to be able to have the skills to communicate with others who have expertise in a different area in order to get the job done better (and/or faster).

5. To maintain a diverse student population and actively promote an environment in which students from all groups, including the traditionally under-represented, may successfully pursue the study of Computer Science.

Diversity is key; I do not have a problem with the current mixture of students -- however, I feel the acceptance of foreign students for graduate stipends is high relative to local candidates. In fact, despite being a candidate for stipend, only when there was issues with visas and some candidates couldn't enter the country on time, was I able to get part-time work for computer science. Furthermore, if open requests for available positions are to be announced,everyone who replies should have a random and fair chance of being accepted. In my experience, the list of candidates was already preselected and announcement was simply a formality. If this was the case, then this should improve as it doesn't promote diversity. If this was not the case, then better communication should ensue to avoid these interpretations.

The department really needs to do something about the lack of women in comp sci. It really is pathetic. More knowledge of scholarships should be made available to the general univsersity. At the same time, promotion of women does not mean that the resources that exist for men should be undermined. Equal opportunity for both; just more promotion for women.

No problem here. The program is super diversified already.

The ACM and WICS could develop an e-mentoring program with local high schools. The Women in Engineering group has a great high school outreach program that could be copied. The software engineering course could include a component where students work on a project with a middle or high school, or could make a project to present to schools.

I think that you do a good job for this item.

I think CS is very good at that particularly with Wics.

6. To maintain a qualified and dedicated faculty who actively pursue excellence in teaching.

This by far is the most important question. Faculty must be willing to adapt to current trends. Faculty must be able and prepared to heed questions from students during class for related materials or topics. There are some professors who take pride in being knowledgeable and quite communicative while some others simply dictate notes and can rarely answer questions or even avoids answering them.

(no answer from student #2)

We have an excellent faculty. Not perfect...but excellent.

Reduce class size, and the ACM and WICS can work to create interest groups who can help the faculty in their research and tutor other students. This would benefit the professors and students.

Sorry to say this, but hire teachers that can correctly express themselves in English. It does not matter that a teacher is a world known researcher with more degrees than years, if he can not communicate what he is trying to teach!!!!!!!! I'm an international student and I feel sorry to say this, but the true is that some teachers have a terrible accent and lack the vocabulary and/or fluency in english to explain a course.

I think CS has that. Many faculty members do pursue excellence in teaching.