

Department of Computer Science Student Exit Interview Themes – Spring, 2003

The department interviewed 35 of 52 graduates (67%) which met the department's goal of interviewing 60% of the graduates. Interviews were held over a two week period (4/21/03 – 5/2/03). The process used two interviewers, the Department Chair and the Academic Advising Coordinator. Length of the sessions varied from about 15 minutes to 30 minutes, and the 30 minute planning block seemed to work well allowing time to consolidate and make annotations on the individual interview forms as each interview was completed. The shortcoming of the process for this iteration was that no CS/BA students interviewed, a probable function of the volunteer nature of the process and the limited number of BA students in the graduating class (3).

Attachment 1 is the consolidation of all responses; Attachment 2 is the summary of those questions involving numerical response. Following below is the analytical summary of the responses:

1. How long will it have taken you to graduate? Why? (i.e. work, change majors) (Standard IV-1)

The data shows that most students are able to graduate in about 4 years (mean = 4.6; median = 4). There was some variation (SD = 1.2; Sample Variance = 1.2), generally depending on how extensive the student participated in the co-op program. Only three students (6%) indicated that they did not participate in the co-op program or attend summer school. There were a few outliers which involved returning adult students. In general, it did not appear that attendance at summer sessions materially shortened the student's time in the program.

2. Were CS courses offered with sufficient frequency to meet your needs? Comment (Standard II-1)

Overwhelmingly yes. Interesting side mentions were that some co-op students believed that their co-op status helped them avoid any scheduling difficulty, while a few thought their co-op status caused them problems. Over all it was clear that course frequency was not perceived as a problem.

3. Did you have adequate access to instructors and TAs when taking computer science courses? (Standard II-2)

Over all no real access problems. Some few mentions about finding TAs, but no one thought the issue was significant.

4. How many oral presentations in CS courses will you have made before graduating? (Standard IV-15)

Student responses indicated a mean of 3.3, and a median of 3 assignments. The data showed a SD of 2.1 and a sample variance of 4.4, indicating a general inconsistency between their experiences. A couple of students mentioned that this was done more in their other classes. Off-line discussions with students reinforces a desire to have more focused experiences on presentations.

5. How many written assignments in CS courses will you have completed before graduating? (Standard IV-16)

As with the oral assignments the data indicates an inconsistency between courses (mean = 6.1; median = 3; SD = 6.4; and sample variance = 42.2). Obviously there was a wide variation of experiences (ranging from none to 20) among the students.

6. Did your CS instructors discuss the social and ethical implications of computing in any of your courses? (Standard IV-17)

There is evidence that the subject is being broached, although at various levels of intensity. Some classes seem attuned (e.g. 291/491/428) more than others, but the experience is clearly not "across the curriculum" if that is the intention. We may need to set a standard of what we are looking for.

7. Did your program include opportunities to work in teams? How many times did this happen? How well did it work?

Overwhelmingly “yes” – but again some variation. Some mentioned that they felt “discouraged” from working in teams in reaction to academic dishonesty concerns; experience met with varying degrees of like and dislike by the student. Data suggests that our curriculum may need to differentiate more clearly between group/team work and inappropriate sharing of solutions that borders on cheating.

8. Did you use the library to help with your studies? How often did you use library resources for CS courses (Standard VII-2)

Clearly the library is not a major source of material in support of our curriculum. Those student who did use it apparently found what they were looking for; sometimes because the professor put them on the trail of a specific source. No one seemed to support the library as a general research source in direct support of their computer science classes.

9. Did you use systems for obtaining information electronically? (Standard VII-3)

This was the preferred method for substantiating material to support computer science course requirements. Web searches and Google most mentioned. Students felt they were getting good material that directly supported their needs. Links and URLs supplied by professors mentioned on several occasions as being important.

10. What computer science knowledge was not available that you would have liked to take? (Standard IV-5, IV-9)

The data spanned a couple of threads (no priority suggested in list):

- Integration of CS and Business courses in CIS program – The CIS students expressed a disconnect between what they were getting from their CS courses and their business courses. Both had excellent content, but they were never integrated to show the student how they worked together, in relation to their degree program. One expressed it as getting “a watered down CS degree with a watered down business degree.” Related to this was expression of need for project management and systems analysis courses.
- Networking – Large expression of wanting more networking exposure, planning and installation. I felt like there were crossovers between CS and Tech School interests and they (the students) couldn’t tell the difference. May suggest clarity needed about where they do differ. Also call for “hands-on” approach to networking.
- Hardware – Tracks with networking, students indicated that some courses assume a base line knowledge of hardware that they hadn’t been exposed to.
- Internet/Web – Clear call for almost any thing dealing the web environment from page development to e-commerce.
- Language – Interesting comment about the need for a COBOL course based on the student’s experience in job search where every one of the interviewers were looking for that knowledge base. Student convinced that COBOL alive and well in the business world.
- Data Base – One of the more popular responses, felt that more could be done to create better background in data base management, development, etc.

11. How often did you talk with an advisor? Was he/she accessible? What was good about the process? What was not-so-good? Did you use the on-line advising materials? Why or why not? What could be done to improve the advising process?

Clearest thread here was student preference for the option to engage an advisor. Most expressed satisfaction in their ability to “do it themselves” as opposed as being required to meet with an advisor to get advising materials. Mentioned this as a positive compared to other departments. Also clear we need to advertise the on-line materials more and keep them updated, those who used the materials liked them, especially the

curriculum worksheets and appointment calendars. On down side, little expression of dissatisfaction, and often in the context that the student could have done more to help their own situation. Most mentioned negative was sense of being “alone” or that “no one cared.” Most suggested for improvement were to 1) keep the system as it is, and 2) assign “permanent” advisor for entire college career.

12. What are your plans after graduation? Did you use the Michelin Career Center? How was the experience? How’s it going with job interviews? Do you feel adequately prepared to face job interviews?

Mixed bag here...many already are employed and common among this group were contacts made through co-op or internships. Also clear that those who begin the search process early are in much better shape than those who wait until last semester to begin. Michelin center mentioned often as being very helpful, if not for the contact, for the resources available; mock interview sessions mentioned as very good. Most felt they were prepared for interviews and there appeared to be a relationship between those who felt this way and their use of the Michelin Center. Grad school a planned option for many, about split between immediate entry and doing it after working for a period.

13. What do you perceive to be the strengths of the computer science program?

Most common responses were the strength of faculty and progression of programming languages within the curriculum. Most felt program “well-rounded” and liked the variety.

14. What do you perceive to be the weaknesses of the computer science program?

As with question 10, there were several threads (no-priority suggested in list order):

- Real World – As earlier, students felt there could be more use of “real world” problems and examples rather than “theoretical” constructs; more emphasis on team skills.
- Aloneness – Echoed earlier comments on confusion between “team” and “cheating.” Particularly in the lower level classes students sometimes didn’t know where it was proper to get help. Felt discouraged from talking to classmates.
- Dated Skills – Some minor worries about their language and other skills being dated by graduation, acknowledgement of fast-moving nature of the field.
- CIS Integration – Relates somewhat to “real world” issue; re-expression of disconnect between CS and business classes within CIS realm.
- Internet Knowledge – Again echoing question 10.

For CS Majors:

1. Do you feel that your courses prepared you to apply theoretical foundations, principles of software engineering, and software tools to solve real world problems?

Majority say yes, and that 428 was the place where it happened.

2. Do you think that you are adequately prepared to be competitive in a rapidly changing technical field?

Yes – many felt had good grasp of foundations, but more training will be needed from employer; also acknowledged personal responsibility to keep current.

For CIS majors:

1. Did you gain experience about producing computer solutions for solving business problems?

About split between “yes” and “no” – clear linkage to integration of CS and business issues already mentioned.

2. Did you gain an understanding of the broader business context in which you can apply your computing skills and knowledge?

Mostly “yes” but some concern expressed that relates again to the integration issue.

For BA majors:

1. Did you gain an appreciation for the broad aspects of computing in the arts and humanities?
2. Did you gain an understanding of the extensive implications of computing in the global society?

Other Comments:

- “They should change programming assignments in labs between terms...students still using previous code” (101/102/212)
- “Wish I could do Pargas’ studio 212 course”
- “Overall positive experience”
- “Specify language in course description”
- “Would like to see more specialized majors if it could be done at UG level, e-commerce, VR, etc.
- “Happy with my education; not too many loans, good value; will consider coming back for grad school; consistency of teacher quality”
- “Not enough ‘other things’ to do other than programming; students turned off when they got to 360 because the class required them to do something other than write code.”
- “Would like exposure to newer software packages and environments”
- “Never involved in ACM, wish I had; tell freshman and sophomores about it sooner”
- “I’m peer tutor, students do not have logic skills from high school for programming, makes 101 a ‘weed out’ course; 360 should be split into two courses; should be course on game programming”