

Computer Information Science

SUMMARY OF IDENTIFIED ISSUES:

- ▶ Reaching agreement on the CAN 6 descriptor.
- ▶ The dual role served by community college departments in terms of serving both CIS and computer science students.
- ▶ Determining future courses that should be given updated CAN descriptors.
- ▶ The fact that while the majority of students in the CSU come from community colleges, students intending to go on to a four-year institution make up fewer than 20% of community college students.
- ▶ Development of distance learning courses in information systems.
- ▶ Setting up a process for regional articulation meetings between community colleges

IDENTIFIED TRENDS/FUTURE DIRECTIONS

A number of the four-year universities have moved away from offering a course such as the proposed CAN 6 course at the lower division. Instead these universities are offering a junior level course in information systems available to students who can demonstrate competency in word processing, spreadsheets, and data base systems. Students entering such programs are given a test on basic office skills such as Word, Excel, and Access. If a student cannot pass the exam he/she can either sign up for computer based instruction in the particular area or take a course at a local community college. Some of the four-year schools are continuing to offer such skills courses, but they would be counted towards the major. Fortunately, a number of the four-year institutions that have moved in this direction have agreed to accept successful completion of the proposed CAN 6 course as evidence of proficiency in the Microsoft Word, Excel, and Access

Another trend is the increased use of distance learning for course delivery and the need for a process to assess students who may have mastered material outside of a classroom setting.

COMMENTS FROM STATEWIDE MEETINGS AND THE GENERAL FIELD

The CIS Discipline Group held five meetings during the 2001/2002 academic year. Meetings held in the bay area as well as in Fresno were conducted jointly with computer science faculty, whereas meetings held in Sacramento, Cerritos, and Los Angeles were conducted by having CIS faculty meet separately as well as jointly with computer science and business faculty. In

total, over 20 faculty members from the community colleges, CSU, and UC participated in the discussions.

The focus of the meetings was to reach agreement on the proposed CAN 6 Descriptor for the lower division introduction to information systems course required of business majors. The proposed descriptor (see Appendix A) was presented at the meetings and, following some editorial changes, was accepted by the groups in attendance. The descriptor went to the CAN Board for certification; however the board had objection to putting items in parentheses and to the use of the wording “desirable coverage”. The descriptor appearing as Appendix B has been rewritten to eliminate parentheses and the “desirable coverage” terminology. Consensus for this revised descriptor is now being sought.

The group also looked at other possible lower division courses in information systems for which CAN descriptors would be worthwhile. The lead discipline faculty member prepared a matrix of IS courses taught at CSU and UC campuses. This matrix was discussed at two of the regional meetings as well as the statewide meeting and there was widespread agreement that updated CAN descriptors in the area of programming would be worthwhile. Specifically, there was a desire to develop updated descriptors in VB.Net, JAVA, and C++. This was further discussed at the statewide meeting of the Computer Science and Information Systems Discipline Council meeting held in Monterey Bay in April 2002, and there was agreement on the part of chairs of information systems programs that such an endeavor would be worthwhile.

Another issue discussed at the meetings was whether there needs to be different programming courses taught at community colleges for students who are business majors versus students who wish to study computer science. In the regional discussions, the faculty seemed to be evenly divided on this issue. Some faculty felt that one class would work, however the instructor would have to give different assignments to the two groups of students. Other faculty members felt that the emphasis was different enough that two different courses were warranted. Still undecided was the role a general programming concepts course would play in an information systems program.

An issue touched on at all of the meetings was the differences between CIS and Computer Science. While the two disciplines do have substantial overlap, there seems to be a significant enough difference in emphases so that curriculum would continue to be distinct for the two groups of students.

The group also discussed the difficulties community colleges have in terms of the different desires of students in computer related classes. While the CSU gets approximately 60% of its students as transfers from community colleges, university-bound students typically make up less than 20% of the enrollment at a community college. This is especially challenging in the area of information systems, where students at community colleges may only wish to get specific training in a certain topical area (e.g. databases, programming, telecommunications) or leave with an AA degree or certificate. Hence, while community colleges do offer courses in systems analysis and design, telecommunications, and data base systems, the focus of these courses seems to be more hands on and less theoretical than for those courses typically taught at the four-year universities. As such they do not appear to be appropriate candidates for the CAN process.

The group also discussed the role distance learning was playing in course delivery. Class size for distance learning courses seems to vary between 30 and 50 students with the success rate being generally around 50%.

Another issue discussed at the meetings was how community college instructors from different campuses could share ideas and experiences. All in attendance thought the IMPAC project was quite worthwhile in this respect.

Note: Faculty from CS and CIS generally met together at the onset of IMPAC regional and statewide discussions, then moved to independent discussions as the day progressed. However, because the teaching responsibilities of many community college faculty overlap between these two disciplines, we urge all faculty to review the comments contained in both CS and CS IMPAC reports. Readers will find that content in these summaries of regional meetings may be repeated the CIS Annual Report.

RECOMMENDATIONS FOR THE DISCIPLINE

- › Revise the proposed CAN 6 descriptor and resubmit to the CAN Board.
- › Develop CAN descriptors for courses in VB.Net, C++, and JAVA programming languages.
- › Develop a process by which CAN descriptors can be reviewed on an annual basis.
- › Continue to have a forum in which CSU, UC, and community college faculty can discuss the changing field of information systems.
- › Hold regional articulation meetings among community college faculty. This will also give faculty a chance to share ideas and experiences.

TOPICS FOR FURTHER DISCUSSION

- › Approval of revised CAN 6 course.
- › Determining whether the CAN 6 descriptor can also be used as the CAN CSCI 2 descriptor.
- › Create CAN Descriptors for courses in VB.Net, C++, and JAVA programming languages.
- › Determining a process whereby regular, perhaps annual review of CAN descriptors can be accomplished.
- › Development of a computer competency course within general education.
- › Determining how the success rate of distance learning courses can be improved.

RECOMMENDATIONS FORWARDED/TO BE FORWARDED TO

CAN: Proposed CAN 6 descriptor; in the future, CAN descriptors for VB.Net, C++, and JAVA

OUTREACH PRESENTATIONS MADE BY MEMBERS OF THIS GROUP

ORGANIZATION	DATE/PLACE	PRESENTER'S NAME	ATTENDEES
CSIS Discipline Council	Monterey Bay, April 26, 2002	Barry Pasternack	25