Update on the IS Model Curriculum Revision Project

Heikki Topi, Bentley College

In my previous *inroads* IS Education column I described the first steps that had been taken toward the launch of a process to revise the undergraduate Information Systems model curriculum. The main purpose of this follow-up column is to give you an update of the status of the project and discuss the next steps.

The ACM/AIS joint task force that was established to lead the curriculum revision process in early 2007 worked several months in a stealth mode until it launched the project to the IS community in August 2007. The reason underlying the long quiet period was the time the task force required to prepare the infrastructure for the project. As will be discussed at a more detailed level later in this column, one of the key goals of the revision process is to engage the broad IS community as actively as possible. The task force decided to create a wiki-based infrastructure that will serve as the key on-line forum for this and future IS curriculum revision processes. This wiki is currently available at blogsandwikis.bentley.edu/iscurriculum, and we invite all members of the IS community to participate in the discussion regarding the curriculum on the wiki.

In its first meeting, the curriculum task force established four major goals for the project. First, the task force believes that it is time for the information systems community to consider structuring the model curriculum so that it can be applied to application domains beyond business. Even though there are excellent information systems programs outside business schools and many domains outside business need and utilize information systems concepts, the current model curriculum is closely linked to the business domain. The task force is not proposing that the information systems community should sever its traditionally close ties to the business schools, but it believes that the core expertise of the IS community can be applied to many other domains. This is particularly clear in the recent proliferation of the various disciplines under the “informatics” title. We believe that Information Systems as a discipline has a number of areas of expertise that are applicable always when computing is applied to solve organizational problems. The most visible of these include the general topics related to the application of technology to a specific problem domain (such as business, government, non-profit organizations, health care, etc.), systems analysis and design (particularly at higher levels of abstraction), and data and information management.

Second, the task force firmly believes that the current model of relatively infrequent, very comprehensive curriculum revision projects is outdated. The curriculum revision processes have to be redesigned so that the Information Systems model curriculum can be a living document that can adapt, when appropriate, more quickly to the changes in the environment and technology. Also, it is important that a larger number of members of the IS community can become actively involved in the ongoing curriculum revision process than has been possible under the old model. We have to be able to better tap into the deep expertise that IS faculty members have on all of the topics covered in the model curriculum in a way that does not require heavy bureaucratic structures or travel to meetings. Fortunately, the recent developments in Web technologies have made this a feasible goal. As mentioned earlier, the task force has created a wiki to be the main platform for ongoing, continuous collaboration on IS curriculum issues. The task force fully acknowledges the importance of community approval processes and high editorial standards and, therefore, there will always be a formally approved version of the curriculum, which forms the foundation for ongoing development. The task force will propose an editorial structure for the curriculum development environment.

Third, the task force is proposing a new content structure for the curriculum. The current IS model curriculum consists of 10 required courses and no electives, leaving little room for curriculum innovation within the model curriculum structure or adaptation based on local needs. The task force is
proposing a new structure that will consist of six core topics (not courses) and, at least in theory, an unlimited number of elective topics. A career track consists of appropriate coverage of the core topics and a selection of the elective topics, again covered at a level that is appropriate for the career track. In the current draft, the core topics are as follows: Foundations and Role of Information Systems, Data & Information, Systems Analysis & Design, IT Infrastructure, Project Management, and Application Development. Examples of career tracks could be, for example, Application Developer, Database Analyst, IT Consultant, or IT Security and Risk Manager. These career tracks could include elective topics, such as IT Audit and Controls, IT Security and Risk Management, Business Intelligence, or Information Search and Retrieval. The current status of the draft is available on the wiki (see above for the address).

Finally, the task force believes that the IS curriculum revision process has to be an international effort that takes into account the globally distributed nature of both IT work and IS education. The model curriculum cannot any more be primarily targeted to North American business schools that have been accredited by the AACSB International. Both the new, significantly more flexible structure and the use of Web technologies to encourage collaboration are structural changes that support the internationalization of the curriculum development process.

I am finalizing this column at the 2007 Americas Conference for Information Systems (AMCIS), and I feel encouraged by the fact that issues related to IS education were prominently present at the conference in the form of seven panels (on issues such as systems analysis and design, the IS curriculum revision project, IS accreditation, the enrollment crisis, and IT service management), several workshops and tutorials, and a reasonably large number of papers. I encourage all of us together continue this trend and bring the best of our work on IS education to the mainstream conferences so that it is visible and easily available to the entire community. I also want to repeat my invitation to all of you: please become active participants in the IS curriculum development process. Together we can build the best possible curriculum and maintain it so that it will continue to address the needs of our students, the organizations that will employ them, and the application domains that are transformed by the use of technology.