

COMMUNITY COLLEGE CORNER

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Computing Education Curricula, Assessment, and Pedagogy: A CAP Space Update

THE JANUARY 2009 EDITION of the *inroads SIGCSE Bulletin* announced the forthcoming launch of *CAP Space*, an online information environment founded on the Web 2.0 philosophy of collaboration, contribution, and community. In direct service to a variety of user communities, the ACM Two-Year College Education Committee (TYCEC) designed *CAP Space* as an interactive repository of Curricula, Assessment, and Pedagogy for associate-degree programs in computing. *CAP Space* is available at www.capspace.org with an online discussion forum to collect constructive feedback on this initial release.

This integrated web-based repository is specifically designed to provide multiple-user communities, including, but not limited to faculty, administrators, academic advisors, students, and parents with resources and tools to pursue and explore the different disciplines of computing holistically. In the past, associate-degree curricular guidelines were produced and distributed as linearly-crafted narratives documenting the two-year college environment, describing a specific curriculum and detailing course content. *CAP Space* provides a new paradigm that overcomes the typical presentation of computing curricula as independent silos. *CAP Space* users now have access to course topics, program outcomes, core and elective courses, assessment rubrics and pedagogical strategies in a manner that provides important insights into commonalities and distinc-



CAP Space, a resource for the first national Computer Science Education Week, 6-12 December 2009

tions across single or multiple computing curricula. Users can select topics of interest and generate custom reports eliminating the need to thumb through large documents.

The interactive and integrated nature of *CAP Space* enables educators to customize computing programs efficiently and effectively, to undertake curricular revisions systematically, to identify and track pedagogy and assessment techniques, and to update and maintain computing degree programs with great facility. For too long curricular reports have overlooked detailed assessment of student learning and program outcomes, and have under-emphasized specific teaching and learning strategies. *CAP Space* addresses these pursuits and interweaves them with course content and program curricula.

Another feature of *CAP Space* is the ability to update and maintain computing curricula more easily. In January 2009, the TYCEC completed a major revision to its computer science transfer guidelines and adapted the recommendations to the *CAP Space* paradigm. As the remaining TYCEC computing reports are updated, these guidelines also will be converted into dynamic *CAP Space* resources, being fully integrated one to the other with strong mechanisms for facilitating and safeguarding the updating.

In the next phase of *CAP Space*, computing educators will be able to contribute and participate in online moderated discussions for specific computing programs, such as computer science, information technology, information assurance, computer engineering, software engineer-

ing, and information systems. Separate from the ACM-endorsed content in *CAP Space*, opinions and materials from active participants in the diverse user communities will provide a meaningful process of ongoing review that will readily support periodic updates. Once this phase is ready, we hope you will contribute your valuable thoughts and insights at *CAP Space*. **lr**



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