A Tale of Two High School Computer Science Programs
and
How the ACM Model High School Computer Science Curriculum May Shape their Future

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Abstract

The *ACM Model High School Computer Science Curriculum* formulated by the Task Force of the Pre-College Committee has been released for publication. In previous conferences such as SIGCSE and NECC, the curriculum has been discussed with conference attendees while it was under development. Awareness of this curriculum is spreading and high schools with computer science programs in place as well as those in the process of implementation are beginning to react to this curriculum.

This panel focuses on the programs of two high schools with computer science programs and their reactions to the model curriculum. The Indiana Academy for Science, Mathematics, and Humanities (IASMH), a residential high school for G&T juniors and seniors from throughout Indiana represents the first high school student chapter of the ACM. Two faculty and two students from the IASMH will react to the curriculum's specifications relative to their current and future activities.

Two faculty and two students from Carl Hayden Community High School (CHCH), an urban high school in Phoenix, Arizona will contrast their current program and future goals. In this presentation, recent graduates will discuss the model curriculum from their current university perspective.

The current president of the computer science special interest group (SIGCS) of ISTE will outline ISTE's involvement with the model curriculum. As a research associate at the University of Toronto, perspectives on Ontario's current curriculum compared to the model will be made available.

David W. Brown — Overview of the curriculum at the IASMH and a contrast of curricular strengths and weaknesses compared to the ACM Model High School Curriculum. Comments as to enrichment topics such as CS Research.

Michael A. Sheets — Perspectives on the model curriculum from the viewpoint of a senior preparing for the change to a university environment. Taking advantage of the curricular collaboration with Ball State University to take advanced courses outside of the IASMH. CS as an interdisciplinary model.

Randy L. Myers — Addressing the importance of computer networks and general computing literacy in the IASMH and how this is portrayed in the model curriculum. Concerns about network security issues and ethics considerations.

Jeremy A. Freed — Discussion of student perspectives on telecommunications, apprenticeship experiences, the infusion of student based programs such as the IASMH student 'lab tech' program. How the participation in the ACM aids in developing CS awareness and facility.

Allan Cameron — A description of students, teachers, and courses offered by the computer science department and its relation to the essential concepts presented in the ACM high school curriculum model.

Patricia Amavisca — A critique of the ACM model curriculum and the effects on a college-bound mathematics major.

Theresa Cuprak — A description of the growth and modification of the content, activities, and equipment in the entry level computer science course and its effect on the popularity and relevance to inner city high school students.

Brian Pollack — A critique of the ACM model curriculum and the effects on a college-bound computer science major.

Chris Stephenson — In Ontario, the mandated curriculum has become seriously outdated creating a crisis in CS instruction. ISTE's support of the model curriculum will be examined and the extent to which the model may or may not influence instruction.