

# COMMUNITY COLLEGE CORNER

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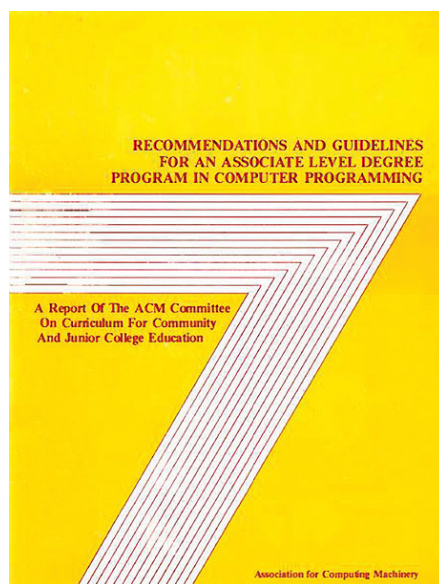
## Celebrating 40 Years of ACM's Commitment to Community Colleges

**THE 2016 SIGCSE TECHNICAL SYMPOSIUM** in Memphis, TN promises to be a special time for the ACM Committee for Computing Education in Community Colleges (CCECC). The Committee will be celebrating its silver anniversary as a standing committee of the ACM Education Board, as well as the ruby anniversary of ACM's commitment to community colleges. Before reflecting upon the 25-year milestone, we must first travel back 40 years to 1975 for the complete historical picture—to the Committee's seminal roots and her passionate champion, ACM Fellow Joyce Currie Little.



### 1975 – 1981, the Seminal Years

In 1975, the ACM Committee on Curriculum for Community and Junior College Education, chaired by Joyce Currie Little from the Community College of Baltimore, Maryland, held its initial meeting, supported by the ACM Special Interest Group on Computer Science Education



(SIGCSE). At this meeting, more than a dozen two-year college educators decided that its highest priority was curriculum work with the aim of improving associate-degree career programs in computer programming. Subsequently, numerous workshops followed to gather ideas and develop a report, a draft version of which appeared in the June 1977 SIGCSE Bulletin [6]. Presentations were given at various computing conferences and a revised draft was sent to hundreds of reviewers for additional comments. The feedback from the reviewers was discussed by the Committee and incorporated into the final report. In

1981 after years of iterative curriculum development work with both educators and industry representatives, the Committee under the auspices of the ACM Education Board published the final report, *Recommendations and Guidelines for an Associate Level Degree Program in Computer Programming: A Report of the ACM Committee on Curriculum for Community and Junior College Education*. According to Joyce Currie Little, this technical report represented “the first effort by a scientific and technical society to provide curriculum recommendations and guidelines for the education of computer programmers at the associate degree level.” [7]

Also instrumental in the seminal years were Richard H. Austing, University of Maryland, College Park, and Gerald L. Engel, Christopher Newport College, Newport News, Virginia. As noted by Joyce Currie Little, “The Committee would like to thank all those who made this report possible. We would especially like to thank Richard H. Austing and Gerald L. Engel for encouragement and support given to the Committee and to this project. Professor Austing was the chairman of SIGCSE and the vice-chairman of the Education Board during most of this time, and Professor Engel was chairman of the Curriculum Committee on Computer Education. Without these two persons, the Committee might not have existed. We also thank William F. Atchison, University of Maryland, College Park, who was chairman of the Education Board during most of this work.” [7] An interesting historical fact is that all four individuals instrumental in the CCECC's seminal years—Currie Little, Austing, Atchison, and Engel—were all granted the status of ACM Fellow in 1994, the inaugural year of this prestigious award [2].

In the fall of 1981, Joyce Currie Little accepted a faculty position at Towson University in Maryland, leaving the Community College of Baltimore with these indelible, passionate words, “You don't ever leave the love of the two-year college level of education. It is the most important aspect of the American dream of being able to better oneself and move up in the world...that major purpose always rang true to my students, and I came to appreciate it more because of them.” [3]

Through its silver years, the Committee [TYCEC] gained the reputation as one of the most prolific units of the ACM Education Board, securing grants through the National Science Foundation for special projects, as well as producing and updating curricular guidance for various associate-degree computing programs.



### 1986 – 1990, the Visionary Years

Now let's move forward five years from 1981 to the 1986 SIGCSE Symposium in Cincinnati, OH where three colleagues met for dinner. At this symposium, the discussions of Joyce Currie Little, Richard Austing, and John Impagliazzo that evening centered on ways in which ACM could continue to address the needs of two-year college computing faculty and their associate-degree programs. These three distinguished visionaries rekindled ACM's commitment to computing education at two-year colleges. They, along with Helene Chlopan of Lexington Community College, Kentucky, comprised the initial Steering Committee of the Two-Year College Computing Curricula Task Force that was an ad hoc Committee of the ACM Education Board and initially chaired by John Impagliazzo [3]. The Steering Committee obtained seed money from the ACM Optional Contribution Fund to initiate the early work of the task force.

In 1989, Karl Klee of Jamestown Community College, New York joined

the Steering Committee. Also that year, the Steering Committee received significant funding from the Discretionary Fund of the ACM SIG Governing Board with the expressed intent of creating a comprehensive set of curriculum guidelines for associate-degree programs in five computing areas: Computer Support Services, Computing Sciences, Computing for Information Processing, Computing and Engineering Technology, and Computing for Other Disciplines. Like Joyce Currie Little before them, both John Impagliazzo and Helene Chlopan accepted positions at four-year institutions, Hofstra University and University of Kentucky, respectively.



### 1991 – 2016, the Silver Years

In 1991, the ACM Education Board, chaired by Joe Turner, chartered the Two-Year College Education Committee (TYCEC) as an official standing committee and appointed Karl J. Klee as its first chair. Accordingly, 1991 marks the official birth

of the Committee—no longer an ad hoc task force, bringing us to its 25th anniversary in 2016. Through its silver years, the Committee gained the reputation as one of the most prolific units of the ACM Education Board, securing grants through the National Science Foundation (NSF) for special projects, as well as producing and updating curricular guidance for various associate-degree computing programs. In addition to numerous conference presentations, workshops, and special sessions throughout the decades, a summary of key accomplishments and publications is listed below.

**1993**—*Computing Curricula Guidelines for Associate Degree Programs* [5]

- *Computer Support Services* volume
- *Computing Sciences* volume
- *Computing for Information Processing* volume
- *Computing and Engineering Technology* volume
- *Computing for Other Disciplines* (report integrated into each of the four volumes)

**1994**—*NSF UFE award, Workshop to Enhance Computing Faculty at Two-Year Colleges Serving Native Americans (held at Laramie County Community College in Cheyenne, WY)* [1]

**1997**—*NSF UFE award, A Series of Workshops on Instructional Computing: Current Issues and Solutions (held at four different locations)* [1]

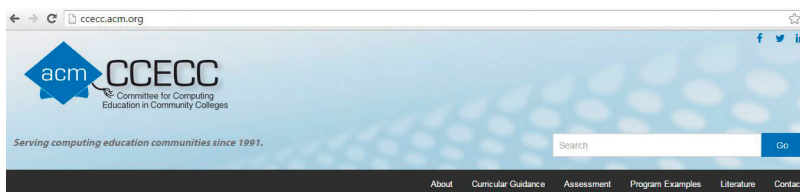
**2000**—*NSF ATE award, An NPR Teleconference on a National Model for Curriculum Adaptation and Implementation (broadcast from the PBS studio in Denver, CO)* [1]

**2000**—*Guidelines for Associate Degree Programs to Support Computing in a Networked Environment* [1]

**2003**—*Computing Curricula 2003: Guidelines for Associate-Degree Curricula in Computer Science* [1]

**2004**—*Guidelines for Associate Degree Programs in Information Systems* [1]

**2005**—*Computing Curricula 2005: Guidelines for Associate-Degree Transfer Curriculum in Software Engineering* [1]



**2007**—*Computing Curricula 2007: Guidelines for Associate-Degree Transfer Curriculum in Computer Engineering [1]*

**2009**—*Computing Curricula 2009: Guidelines for Associate-Degree Transfer Curriculum in Computer Science [1]*

**2010**—*NSF ATE award: A Strategic Summit on Digitally Enhancing America's Community Colleges: Opportunities for Computing Education [1]*

**2014**—*Information Technology Competency Model of Core Learning Outcomes and Assessment for Associate-Degree Curriculum [4]*

To date, there have been three chairs of the Two-Year College Education Committee (TYCEC). Karl J. Klee of Jamestown Community College, New York and Alfred State College, New York served as chair of the TYCEC from 1991 to 2001. Robert D. Campbell of Manatee Community College, Florida, Rock Valley College, Illinois, and the City University of New York Graduate Center served as chair from 2001 to 2007. July 1, 2007 marked the beginning of the TYCEC's current chair, Elizabeth K. Hawthorne of Union County College, New Jersey. The Committee revised its name in 2011 to the palindromic *Committee for Computing Education in Community Colleges* (CCECC), which now emphasizes computing education.

For the CCECC's silver and ruby anniversaries, the current members of the Committee will be unveiling a contemporary website (see image for sneak preview), complete with a new logo designed through a student contest at Bluegrass Community and Technical College in Lexington, Kentucky. While attending SIGCSE 2016, be sure to stop by our exhibitor booth to pick up some anniversary swag and enter to win one of several cool tech prizes. Also, the Committee will be organizing another Dutch treat community college lunch, where all are invited to attend. We look forward to seeing you there!

## 2016 and beyond, the Exciting Years Ahead

The Committee is planning its next curricular development project, integrating cybersecurity and secure coding learning outcomes throughout associate-level computer science programs. If you are interested in helping the CCECC with this exciting curricular initiative send a request to join our Google Group entitled cc-ed-computing to become plugged into the computing education pulse at community colleges throughout the world. The ACM CCECC Google Group is open to anyone interested in computing education at community colleges, and is a forum for educators to connect with each other, share ideas, and discuss common issues. **IR**

### References

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