ANNUAL REPORT

of the

ACM COMMITTEE for COMPUTING EDUCATION in COMMUNITY COLLEGES for the period FY13: July 1, 2012 - June 30, 2013

www.acmccecc.org = www.capspace.org

Dr. Elizabeth K. Hawthorne, CCECC Chair, provides the following report on the activities of the ACM Committee for Computing Education in Community Colleges (CCECC). Annual reports of the CCECC are available online from www.capspace.org/committee/annualreports.aspx.

PURPOSE:

The Committee charter and purpose: The ACM Committee for Computing Education in Community Colleges is the standing committee of the ACM Education Board concerned with computing education at associate-degree granting colleges and similar post-secondary institutions throughout the world. The Committee advises the Education Board as directed on all issues concerning curriculum, pedagogy and assessment, and engages in advocacy and policy for this sector of higher education.

CCECC MEMBERSHIP: www.capspace.org/committee/History.aspx

Members

- Elizabeth K. Hawthorne, CCECC Chair; Senior Professor, Union County College; ehawthorne@acm.org
- Robert D. Campbell, CCECC Vice-Chair; VP for IT, CUNY Graduate Center; rcampbell@gc.cuny.edu
- Cindy Tucker, CCECC member, Associate Professor, Bluegrass Community and Technical College
- Jim Nichols, CCECC member, Division Chair, Estrella Mountain Community College
- Cara Tang, CCECC member, Instructor, Portland Community College

Associate Members

- Becky Grasser, Department Chair, Lakeland Community College, OH
- Melanie Williamson, Program Coordinator, Bluegrass Community and Technical College
- Anita Verno, Associate Professor, Information Technology, Bergen Community College
- Deborah Boisvert, Executive Director, BATEC Center for IT
 University College, University of Massachusetts Boston, MA
- Mandana Ahsani, Assistant Professor of Psychology, Union County College
- Kyle Clubb, Faculty, Austin Community College, Austin, TX
- Mark Conway, Senior Program Lead, NetApp Academic Alliance Program
- David Fritz, End User Computing Strategist, Dell: Education, State & Local Government
- Markus Geissler, Professor, Cosumnes River College, Sacramento, CA
- Amarjit Kaur, Director of Center for Innovation in Teaching and Learning

Bergen Community College

- Andrew Mangle, Assistant Professor, Community College of Baltimore County
- Doug Miller, Associate Professor, Salt Lake Community College
- Raju Natarajan, Systems Architect, Cisco Systems
- Caron Newman, Senior Curriculum Manager, Oracle
- Michael Qaissaunee, Department Chair, Engineering & Technology, Brookdale Community College
- Larry Ray, Department Chair Information Technology, Stark State College
- Alan Rowland, Education Business Development Manager, CompTIA
- Claire Smuga, Instructor, Brookdale Community College
- Barbara Usher, Corporate Engineering Business Systems Integrator, Google
- Karen Woodard, Associate Professor, SUNY Adirondack
- Nicholas Xenos, Global Manager, The Academic Alliance, Juniper Networks
- Kim Yohannan, Academic Alliance Manager, EMC Corporation

Emeriti Members

- Dr. Karl Klee
- Dr. John Impagliazzo
- Dr. Joyce Currie Little
- Dr. Dick Austing

The CCECC achieved the following milestones in FY13 (July 1, 2012 – June 30, 2013):

- Conducted phase 2 of the associate-degree Information Technology (IT) project in accordance with phase 1 findings and phase 2 funding:
 - Assembled team of subject matter experts based around core pillars
 - Assembled team of assessment experts
 - Conducted in-person meeting (January 2013) in NYC
 - Conducted monthly follow-up conference calls
 - Provided a draft of core IT learning outcomes for community review and feedback
 - Presented results of NY meeting and core IT learning outcomes to Ed Council at March meeting (SIGCSE 2013)
 - Conducted follow-up meetings on the East coast (NY) and West coast (CA) with select subject matter experts to process community feedback
 - Produced second draft of core IT learning outcomes for community review and feedback
- Appointment of additional CCECC associate members in support of the associate-degree
 IT project.
 - See list above

- Prof. Cindy Tucker, Associate Professor, Bluegrass Community and Technical College
- o Prof. Jim Nichols, Division Director, Estrella Mountain Community College
- o Dr. Cara Tang, Instructor, Portland Community College
- Ongoing development and maintenance of CAP Space, an online repository of curricula, assessment and pedagogy resources www.capspace.org.
 - Populated Affiliate Database with nearly 5,000 confirmed computing educators in two-year college institutions; created a variety of associated electronic processes to maintain and utilize this database effectively
 - Developed zip code radius searching and retrieval of affiliate database records in support of ACM-W regional computing celebrations
 - Established project collaboration environment utilizing Microsoft Office 365 services
 - o Populated Computer Engineering curricular framework
 - Modified the representation of the relationships among program outcomes,
 courses and course learning outcomes to facilitate use by educators
 - o Modified the integration of social media (Facebook, Twitter) with CAP Space
- Continuation on CS2013 steering committee curricular development project
 - Received service award from SIGCAS for work on Social & Professional KA
- Continuation of our representation on and collaboration with the ACM Education Policy Committee
 - Provided valuable community college input into the Pathways report: 2+2+2
 articulation model from the state of Kentucky
- Continuation of our representation on and collaboration with the ACM-W council.
- Continued collaboration with CSTA www.csta.org (Chris Stephenson, Exec. Dir.)
 - o Attended CSTA annual conference; shared core IT learning outcomes for feedback
- Continued serving as a Security Ambassador under NSF award #1241738 through the Federal Cyber Service, Scholarship for Service (SFS) program "Security Injections: Promoting Responsible Coding and Building a Community of Security Ambassadors."
 ACM headquarters received funding as a subaward under this NSF grant (9/1/2012 8/31/2015)
- Participated in NSF Cybersecurity Curriculum workshop and provided feedback on both drafts of the workshop report (February 2013 in Atlanta, GA)
- Engaged in a variety of advocacy efforts on behalf of computing education in the community college sector including SIGITE 2012 (October), Grace Hopper conference 2012 (October), CSWeek 2012 (December), MPICT Winter Conference 2013 (January), SIGCSE 2013 (March), ITiCSE 2013 (June), and the first ever community college Women in Computing Celebration 2013 (March) http://kycc-wic.com

- Continued communication with colleagues via a featured quarterly column in the ACM Inroads publication, Community College Corner – columns available through CAP Space at www.capspace.org/committee/projects.aspx
- Continuation of dissemination and outreach activities, including mailings, website enhancements, conference sessions and exchanges with colleagues
- Continued support for the ACM Education Council and Education Board goals and objectives

The CCECC plans to pursue the following activities in FY14 (July 1, 2013 – June 30, 2014):

- Conclude phase 2 of the associate-degree Information Technology (IT) project in accordance with phase 1 findings and phase 2 funding:
 - Produce second (Ironman) version of IT guidelines for community review and comment
 - o Produce final associate-degree curricular guidelines for IT
 - o Disseminate guidelines via CAP Space, conferences and perhaps the ACM DL
- Begin associate-degree Computer Science curricular guidelines
 - o Based on CS2013 guidelines: www.cs2013.org
- On-going development and maintenance of CAP Space committee site and resources to the computing education community
- Appointment of additional CCECC members (associate and full) depending upon expertise needed
- Conclude serving on CS2013 steering committee when CS curricular guidelines are completed and approved by the ACM Ed Board
- Continue collaborating with and serving on ACM-W Council
- Continuation of our representation on and collaboration with the ACM Education Policy Committee
- Continue serving as a Security Ambassador under NSF award #1241738 through the Federal Cyber Service, Scholarship for Service (SFS) program - "Security Injections: Promoting Responsible Coding and Building a Community of Security Ambassadors." ACM headquarters received funding as a sub-award under this NSF grant (9/1/2012 – 8/31/2015).
- Continue a variety of advocacy efforts on behalf of computing education in the community college sector, such as various conferences, meetings, and workshops
- Continue communication with colleagues via a featured quarterly column in the ACM Inroads publication, Community College Corner – columns available through CAP Space at www.capspace.org/committee/projects.aspx
- Continue collaboration with CSTA, <u>www.csta.org</u>, (Chris Stephenson, Executive Director
- Continuation of dissemination and outreach activities, including mailings, website enhancements, conference sessions and exchanges with colleagues
- Continue support for the ACM Education Council and Education Board goals and objectives