

MINUTES OF THE ACM EDUCATION BOARD
Boston, Massachusetts
May 14, 2005

ATTENDEES:

Eric Roberts, Co-chair
Andrew McGettrick, Co-chair

Bob Cannon
Corky Cartwright
Boots Cassel
Gordon Davies
Peter Denning
John Gorgone
John Impagliazzo
Marvin Israel
Bruce Klein
Eydie Lawson
Terry Linkletter
Russell Shackelford
Larry Snyder
Chris Stephenson
Paul Vandeyar

INTRODUCTORY TOPIC

Russ was thanked for all his efforts as Chair of the Ed Board. He was presented with a certificate of achievement signed by ACM President Dave Patterson.

SHORT REPORTS

The Overview Volume (Russ Shackelford)

The name of the report has changed from CC2004 to CC2005. The publication date will be 2005, not 2004. The goals, scope, and content of the document remain unchanged. The latest draft is currently available for public review-and comment on the ACM web site at

http://campus.acm.org/public/comments/Draft_5-13-05.pdf

The review-and-comment window is scheduled to close at the end of May. Paul is using various mailing lists to advertise this review-and-comment period. As of now, word has gone to SIGCSE and SIGITE. Paul will be contacting IEEE-CS on potential contacts.

The IT Volume (Eydie Lawson)

The SIGITE Curriculum Committee has finished a complete first draft of the IT Curriculum Volume. This draft is currently available for public review-and-comment on the ACM web site at

http://www.acm.org/education/IT_2005.pdf

This first period of public feedback will continue until June 17, 2005, after which the IT Curriculum Committee will meet again to address the feedback and recommendations. After this review cycle ends, the committee will respond to each comment and revise the report as appropriate. The following are review periods when comments can be posted:

Review cycle 1: May 9 - June 17

Review cycle 2: July 11 - Aug 19

Review cycle 3: Sept 10 - Oct 15

Masters-level IS Volume (John Gorgone)

The IS group under John Gorgone has been working on a Masters-level curriculum document, which is expected to appear in January 2006. John will circulate a chapter summarizing much of the work to Ed Board members.

Other Curriculum Volumes (Andrew McGettrick)

The SE and CE volumes are complete. Publication was being delayed until agreement was reached between ACM and IEEE-CS on publication and copyright issues within the CC2001 effort.

The Java Task Force (Eric Roberts)

The Java Task Force published its preliminary draft on February 1, 2005. That draft is available at the following web site:

<http://cs.stanford.edu/~eroberts/jtf/index.html>

In February and March, we collected feedback on a discussion site, which you can visit at

<http://www.cs.duke.edu/phpbbjtf/>

Traffic on this discussion site was very light. The postings did direct us to some additional resources that we will include in the reference list and made it clear that we need to do a better job of explaining our rationale in a couple of areas,

but there were no clear indications that we need to make substantive changes. In the last couple of months, we have been working on an online tutorial and other supporting materials for teachers. Those will be discussed at our next meeting, which will be held in Chicago on June 4.

The Great Principles Project (Peter Denning)

The idea of listing principles was abandoned. The group decided instead to go straight toward principles-stories. Peter will work with the group to create a collection of principle-stories. They will invite group members and others to review the draft stories and provide comments to their authors.

Peter projects a collection of stories from the current group and a few additional invitees by October 2005. Web site recommendations including the editorial process will be ready by December 2005.

The Ontology Project (Boots Cassel)

The goal of the project is very broad and ambitious:

To produce a representation of the global information and computing disciplines clearly showing all interrelationships among topic areas identifying the topic areas deemed relevant to each of the sub-disciplines organized for easy editing and updating over time.

Feedback from the presentation at SIGCSE was very positive, but the project members were advised to push ahead with the text version of our results and not to wait for a good visualization to be available. Work from the group can be seen at the wiki page:

<http://what.csc.villanova.edu/cgi-bin/wiki.pl?OntologyProjec>

Recent activity involves mining the recent curriculum documents and the current ACM Computing Classification Scheme for topics. The material at the wiki page shows the very beginning of that effort.

Immediate future plans:

Next meeting in Boston, June 12-14.

A working group at ITiCSE, Lisbon, June 25 - 29.

The Legacy Project (Marvin Israel)

The Legacy Project was a proposal that Marvin and Peter made a year and a half ago. Marvin is hoping to work with ACM IS with the hope of developing this project further.

CSTA (Chris Stephenson)

CSTA now has 2067 members from 40 countries. Although over 90% of the members are from the US, a number of countries including Canada, Israel, and South Africa have a good representation. Membership dues had been set at \$30, \$20 for affiliates and \$200 for institutional members.

One of our major accomplishments for this year was the completion of the CSTA Strategic Plan. This plan outlines our goals, objectives, activities and measurable outcomes for the next three year. It will become the basis upon which all of our project decisions will be based.

Our Curriculum Committee has been working on supplementary documents to support the model curriculum. The development and review process has been completed for the Objectives document for the Level II course. A similar document is now in the planning stages for the Level III course.

Problems of uptake of computing in schools were reported. These stemmed from issues associated with the public perception of computing. Teachers themselves had problems associated mainly with the rate of change of technology, but also with resources.

Ed Board members received an update on the NCAA letter. Although not endorsed by IEEE-CS, this had been sent but no response has been received as of yet. CSTA is ready to offer support to NCAA in terms of recognizing core CS programs in high schools.

LOOKING AHEAD: CURRICULUM INITIATIVES

Updating CS 2001 (Russ Shackelford)

It was viewed as a priority that ACM should seek to establish the leadership role in relation to this, and to do so quickly. A group consisting of Eric, Andrew, Boots and Russ will consider how to progress this plan.

IEEE's K-12 Initiative (Lillian Israel)

IEEE has already been meeting on their K-12 initiative with industry leaders and guidance counselors; the IEEE representatives indicated that pre-college educators and guidance counselors need help in promoting careers in engineering. The IEEE K-12 initiative was presented at a meeting of several engineering and computing societies (ACM and IEEE-CS) on Monday, May 2nd at IEEE headquarters; I attended that meeting

IEEE would like to institutionalize their Deans Summit - a meeting of Deans of Engineering and Deans of Education. They're looking at sustainable programs.

IEEE suggested that they concentrate on the following activities along with the other engineering and computing societies:

- o Activities directed at educators and school systems
- o The Deans Summit
- o Outreach to secondary guidance counselors (via a portal, possibly modeled after the NRC website)
- o A web presence

IEEE is also interested in institutionalizing its Teacher In-Service Program. One of the IEEE sections - the Florida West Coast section - develops and presents technology-oriented projects to local pre-college educators.

IEEE will be sending a proposal to the meeting attendees outlining the kind of help desired from the societies and the amount of money requested for the project. Moshe Kam was going to send the attendees a link where all the presentations could be found.

Reaching Closure on the TYC Software Engineering Report (Bob Campbell)

The ACM TYCEC initiated its software engineering project in order to create SE Guidelines that were targeted specifically to the associate- degree granting setting while remaining consistent and compatible with the Software Engineering report recently produced for the baccalaureate setting. This is akin to similar past efforts (e.g., the Computer Science guidelines and the IS guidelines). The resulting associate- degree SE Guidelines have been through a process of multiple drafts and review; the final product was delivered to the Ed Board on March 1, 2005, with a request for feedback and a note that we would soon be asking for adoption.

A number of comments have been made and these will be passed to the group.

Approval was granted, based on addressing these comments, by the Ed Board for ACM's TYCEC Associate-Degree Software Engineering Guidelines.

Working with IEEE-CS (Andrew McGettrick)

Following the last conference call on 7th April 2005 with IEEE-CS, and in particular Murali Varanasi, had been contacted to ascertain the status of the SE and CE volumes. Murali believed the IEEE-CS (or rather the legal entity, IEEE) would be publishing both volumes and consequently acquiring copyright in both cases. Concern was expressed within ACM as to the public perception that

would result in not accurately reflecting the considerable input from ACM members.

What emerged was the need for a joint agreement on the publication of curricula documents. This would be based on existing agreements that operated in the domain of the publication of conference proceedings. In essence:

- (a) The group investing the greatest effort would inherit responsibility for publication and would acquire copyright privileges
- (b) Although copyright would be held by one society, other societies involved in the activity would have the right to use that material as they wished
- (c) ACM was seeking to acquire publication rights and copyright at the time of publication of the revised CS volume.

Item (c) above is currently in dispute and Andrew McGettrick and Murali Varanasi are seeking to resolve this.

INTERNATIONAL OUTREACH

Proposed Plan for International Development (Russ Shackelford)

If ACM's educational activities are truly international in scope, they will benefit in three important ways: The traditional contributions of ACM-related educational activities (curriculum reports, conferences, etc.) that have been implicitly oriented to serve Americans and Canadians can be expanded to provide greater benefit to constituencies from other nations.

1. Cross-fertilization of ideas and practices across cultural boundaries may lead to more complete perspectives and improved practices for all, including ACM's North American constituency.
2. Increasing the relevance of ACM's educational activities outside of North America can play a crucial role in helping ACM achieve its goal of growing membership. We know that ACM student membership is critical to the development of future ACM professional members. Because ACM student members typically learn of ACM from faculty, it essential that ACM increase awareness of, and involvement in, ACM activities among computing faculty around the world. Increasing the relevance of ACM's educational activities is a way to do this.

The following plans have been underway for some time now:

1. Developing contacts with appropriate faculty across EU nations. Significant progress has been made; work continues with the help of Gordon Davies. To date, we have established relationships with appropriate people in Germany, France, Austria, Netherlands, Denmark, and Switzerland. We intend to expand this list to include Italy, Spain, Hungary, and perhaps others.
2. Assess the value of working through extant Euro-focused organizations (CEPIS, IFIP). We can perhaps utilize CEPIS and IFIP to aid us in contacting appropriate people; however, it is unreasonable to expect that working with the organizations themselves will produce constructive results.

The following steps are the immediate focus for which we now seek approval:

1. Meet with selected contacts to develop/refine an appropriate strategy and pilot plan.
2. Present pilot plan to the Zurich group (a nascent pan-European group with CRA-like ambitions, meeting in October)
3. Create Euro-ACM Task Force by end of calendar 2005.

Approval granted by Ed Board

BUILDING THE EDUCATION COUNCIL

Structure and Mission (Eric Roberts)

Some initial comments were made about the Council

- o Initially it should be for ACM members, but have the possibility of growth
- o It should be a 'wholly owned subsidiary' of Ed Board
- o Decision making should be the role of the Ed Board, but it would be very important for the Board to build trust with the Council; the Council would function as an advisory group to the Board

Mission: The ACM Education Council is responsible for ensuring adequate communication of ACM constituents who have educational interests and activities, facilitating the development of partnerships and initiatives among those constituents, and provide council to the Education Board.

Structure: potential constituencies include

SIGGRAPH	Programming Contest
SIGITE	Student Chapters
SIGCSE	Industry
CSTA	Crossroads
Pubs Board	CRA
Accreditation	Students
Professions Board	ACM-W
E-Learning	SIGARCH (specifically SuperComputing)

A group comprised of Eric, Andrew, Russ, and Peter will go ahead with the planning of the Council. The group will need t

Launching the Professions Board (Eric Roberts)

The background to the launching of the Profession Board was given, but it was unclear how fast this was progressing. The Ed Board members felt that Russ and Terry should be recommended (as representatives of Ed Board) for the Profession Board. Other ways in which the Ed Board might support the development of the Profession Board will be offered as needed.

Annual Report (Eric Roberts)

The Ed Board Annual Report is due on August 31. This face-to-face meeting will be incorporated in the report. The Annual Report will be discussed further on the upcoming conference call.

Planning for Next Meeting

It has been agreed that there would be two meetings of the Ed Board per year. Plans for this will be arranged by e-mail.

Conference calls will be arranged monthly as in the past

-- compiled by Paul Vandeyar