

ACM Education Council Meeting

Atlanta, GA

12/1/06

Participants:

Alan Apt, ACM Education Manager to-be
Owen Astrachan
Don Bailes
Bob Campbell
Lillian (Boots) Cassell
Jan Cuny
Rob Cutler
Gordon Davies
Eydie Lawson
Sally Fincher
Dan Garcia
Roscoe Giles
Mark Guzdial
John Impagliazzo
Lillian Israel, ACM Director of Membership
Maggie Johnson
Lisa Kaczmarczyk
Deepak Kumar
Rich LeBlanc
Terry Linkletter
Ken Martin
Andrew McGettrick, Ed Board Co-Chair
Barbara Price
Eric Roberts, Ed Board Co-Chair
Stephen Seidman, IEEE-CS Education Activities Board Chair
Bob Sloane, IEEE-CS Representative
Larry Snyder
Carol Spradling
Pradip Srimani, IEEE-CS Representative
Heikki Topi
Joe Turner
Patrick Walsh

Welcome to Alan Apt:

The Education Council welcomed Alan Apt, the soon-to-be ACM Education Manager, who will be officially taking charge in mid-January. Alan's 24+ years in Computer Science publishing is excellent experience for this position as he is familiar with nearly all of the players and issues in the CS arena. Why did Alan switch from Engineering to English Literature? "Engineering was boring."

Welcome to ACM's Sister Society Representatives:

The Education Council was very pleased that three representatives from the IEEE-CS were able to attend this meeting and lend their expertise to the issues at hand - Steve Seidman, the IEEE-CS Education Activities Board Chair, Bob Sloan, and Pradip Srimani.

Welcome to the "Gang of Four":

The "Gang of Four," consisting of Andrew McGettrick, Eric Roberts, Pradip Srimani and Bob Sloane, were the authors of the ACM/IEEE-CS Memo of Understanding for all relevant Curriculum Reports. The "Gang" was able to meet prior to the start of the Ed Council meeting.

Quick Updates:

- **Kati Lovasz**, the previous Education Manager who helped the ACM Education Board through its restructuring period, has left the ACM to complete her doctoral work at Princeton. Alan Apt will become the new Education Manager in mid-January.
- **Careers Brochure:** ~ 250,000 careers brochures were distributed to high school and middle school principals - 61,000 principals were sent 4 brochures to distribute to their math, science, computing (if they have one) departments, and guidance counselors. ACM has just finished a second printing of 50,000 brochures and more than half of this supply has already been distributed as well. The writer who "jazzed up" the brochure text has completed a "jazzed up" version of the website copy; Andrew and Eric and revising his copy. The website is in great need of repair and in need of many more "cool" features. A paragraph about this brochure was placed in ACM's e-newsletter MemberNet and in about a day and a half requests for about 8,000 brochures were received from educators who were desperate for material regarding careers in computing.
- **The CRA-e:** The Computing Research Association (CRA); Though the Snowbird Conference does not happen annually, education must be kept in the minds of all attendees. To this end, CRA has appointed Mark Guzdial to determine whether a CRA-e "Education" committee is necessary for CRA to pursue and what role it would assume. Eric indicated that the more players in the education arena the better chance we have of effecting change. Also, if formed, it is likely that the Ed Council can work on projects with CRA-e. The following questions arise -- 1) Should CRA be engaged in this activity? 2) If this is a "yes," what's CRA-e's mission? and 3) Should both undergraduate and graduate education be addressed? Eric and Andrew will be coming to a CRA meeting on January 3rd and 4th to discuss this along with SIGCSE Chair Henry Walker and IEEE-CS Rep Bob Sloan.

- **Security Curriculum:** ACM has been contacted about working with industry leaders to develop a security curriculum; Peter Denning will be contacting selected academic representatives to see if they would like to work on developing a security curriculum for this purpose. The "Gang of Four" also discussed where security might fit in the curricular process.
- **ACM Education Policy Committee:** ACM is interested in creating an Education Policy Committee. ACM is not at the table in the education arena nationally - many more fields are part of the larger national discussion. We need to be able to speak in a timely and informed way regarding the continuum of education that ACM represents - kindergarten through higher education.

Recent Activities of ACM's Education Board:

- Implemented restructuring of the Education Board and created a separate Education Council.
- Held first meeting of Education Council in June 2006.
- Careers Brochure was created/developed and distributed; companion careers website was also created, <http://computingcareers.acm.org>

ACM Council Resolution:

The Council unanimously commends the Education Board under the leadership of Eric & Andrew for developing an excellent brochure and associated website to illustrate degrees and careers.

Recognition to the Careers Brochure/Website Committee: The Education Council recognized the excellent work of the committee that actually developed the careers brochure and website - Andrew, Eric, Eydie, Heikki, Gordon, Bob Sloane, and Kati Lovasz.

- Published 3 curricular volumes - Computer Engineering, Software Engineering & the Overview Volume.
- Released 1.0 of Java Task Force materials.
- Expanded European initiatives.
- 8 papers being presented/panels/tutorials/special sessions on Education Board topics at SIGCSe'07.

Education Board Challenges for FY'07:

- Reversing declining enrollments in computing disciplines.
- Fostering a positive image of computing among young folks.

- Updating the CS curriculum in a timely manner.
- Promoting new curricular themes and strategies.
- Broadening European participation in our activities.
- Enhancing effectiveness of Education Board & Education Council.
- Increasing our visibility within the community.

White Paper [on declining enrollments] Presentation (Eric):

Eric indicated that he wanted to get a draft of the White Paper out by SIGCSE'07; this deadline drives the scope. He has already begun working with Gini Gold, ACM's PR Coordinator, and Widmeyer Communications, ACM's PR/Communications partner, on how best to position this paper to get maximum coverage similar to the kind of received by ACM's Globalization Report [a New York Times editorial was published about this report]. We need to get this info out as widely as possible.

That there is currently a crisis in computing education is not in doubt.

- CRA estimates computing enrollments have fallen between 40 and 50% since 2000 which means decline in quality of the pool and the pool itself. A number of institutions are flat and others that are below 40%.
- At the same time demand is increasing. In the U.S. there are now more jobs in the IT sector than there were at the height of the dot.com boom.
- The developed world economies are training far fewer people than we [or they] will need to fill positions.
- Increasingly, institutions are reacting to bolster short-term enrollments at the expense of long-term employment needs.
- CS is losing ground in H.S. Every field is climbing in AP except for CS. [We need to measure not students in AP too.] No Child Left Behind is bleeding HS since all available teachers are immediately switched to math.

Outline of White Paper -

MANY reasons contribute to the decline in CS enrollments. We must come up with an overarching analysis of what that crisis is. It should be a 50 - 75 page paper that references material that are already out there. The White Paper will [hopefully] use the expertise of Education Council members. We need to identify the solutions that will have the most impact. Lisa recommended that the best way to sway D.C. is with psychological causes, appeal to them on a gut level. And, our appeal should probably focus on the U.S. economic engine and

- Overview of crisis - 1 - 2 page overview, showing decline in CS.
- The importance of computing - WHY we're at the table. Look at NSF's goals - they can't achieve their mission without getting more into CS.

- The initial White Paper should be U.S.-centric so as to have great national impact; there can be multiple documents for addressing different constituencies. We need to be sensitive to the fact that different issues shape the debate in different countries. Issuing a general “vanilla” report will just water down the report! For example, for the UK version of this report we would need to involve the British Computer Society (BCS). But the reasons for the decline in enrollments will be different for each constituency.
- **Issues Regarding Declining Enrollment That Need to be Teased Out:**
 - Myths about employment opportunities. This factor includes both worries about the decline in the number of jobs following the dot.com collapse and the widespread fear of outsourcing.
 - Are certification programs like Cisco also dropping off?
 - Have skill sets for consultants changed dramatically making it hard to keep up? [Commodity coding has disappeared].
 - Are the Bureau of Labor Statistics folks convinced of their own statistics?
 - Should we equate CS with IT? Are we are not training IT folks?
 - There’s no single perspective in the case of CS.
 - The abysmal state of HS CS - level of preparation in CS is poor. We need to be sensitive [and highlight] that there are pockets of great work going on in high school CS. ACM is working in this area with CSTA.
 - We don’t know that the decline in AP CS is a cause for declining CS enrollments in higher education. Few people take CS at HS level in the UK. Certification is different for CS teachers in nearly every state. Teachers lack knowledge about certification.
 - A general lack of understanding about the discipline and its subfields - what’s CS, what’s IT, what are computing disciplines? what’s IS?
 - Negative images of work (and workers) in the computing field. This issue is particularly relevant to broadening diversity of participation.
 - Some may have a problem by seeing CS framed more as a business subject - this needs to be addressed; we need to glorify the differences in CS. We need to be inclusive.
 - What kind of students are employers looking for? What skill sets do they need?
 - Students have changed in ways that decrease the appeal of CS. Students in the current generation (sometimes called “millennium students”) have different interests and working styles than their immediate predecessors. As one example, students are always connected with one another through technology, whether that is cell phones, instant messaging, or online communities like MySpace and Facebook. The assurance

that software workers sometimes interact with others is not reassuring to students who never want to work on their own.

- Introductory CS courses have become much more difficult. Teaching new students to develop software has become much more challenging in recent years. Two factors lie at the root of the complexity increase: 1) Programming languages and tools have become much more complex, particularly in the level of detail; and 2) Systems evolve more quickly, leading to rapid obsolescence of teaching materials and strategies. These twin problems - complexity and instability - were the drivers behind the Java Task Force.
- Lack of breadth and flexibility in computing curriculum.
- There appear to be two distinct issues:
 - Workforce issues, off shoring issues -- do existing measures for educating people need to be changed?
 - Declining enrollment in CS Departments
- STEM doesn't include CS! Other teacher groups are lobbying heavily in D.C. and CS educators are not yet at the table.
- We need to know if the "extra" computing jobs are being taken up by non-CS majors.
- We want to show that computing encompasses a global community; for a more global audience, we need to involve more folks. We need to build over time to develop a more globalized view.

Education Council Task Forces:

A lot of thought has been given as to how to empower the four Ed Council task forces - enrollment crisis; curriculum; accreditation; and technology & tools. Coming up with a set of deliverables and a budget will help to empower task force members. The task forces met for ~ 90 minutes on Friday, December 1st, and were asked to report on Saturday, December 2nd, on the following:

- Sub-committee's Successes
- Plans for next six months
- Deliverables
- Resource Needs

Reports from Task Forces can be found as follows:

- **Appendix A:** Enrollment Crisis Task Force
- **Appendix B:** Curriculum Task Force
- **Appendix C:** Accreditation
- **Appendix D:** Technology & Tools

How Can we Keep the Task Forces Energized?

- Provide appropriate websites to members of Education Council
- Task Force Chairs should periodically send reminder emails to members

- Alan will be able to maintain contact with the Task Force Chairs - have conference calls with Task Force Chairs
- Ed Council members also need to “push” the chairs - a “push” is needed from all sides
- Task Force Chairs should let Eric and Andrew know what their Task Force needs are in terms of “enablers”; requests for monies needed Task Forces should be sent to Eric and Andrew by December 15th!

Reports on Educational Activities:

CSTA (Robb)- CSTA is doing a lot of very exciting stuff!

- CSTA has just published the Second Edition of its *Model Curriculum for K-12 Computer Science* with its new Foreward by Anne Condon, Dan Frost, Mark Guzdial, Klaus Sutner, and Laurie Williams, on important considerations relating to why and how computer science should be taught.
- CSTA has published its White Paper on *The New Educational Imperative: Improving High School Computer Science Education*. This White Paper was based on the International Panel that appeared at the 2005 National Educational Computing Conference discussing the creation of a national CS curriculum in several countries - South Africa, Scotland, Canada, and the U.S. This white paper was sent out to school administrators and we have received a lot of good feedback on it.
- CSTA representatives have worked with IBM to develop three resources for high school computer science teachers. All of the resources adhere to the standards defined in the ACM Model Curriculum for K-12 Computer Science. These resources include:
 - 1) A **Project-Based Learning Module** that provides teachers with an overview of Project-Based Learning (PBL) and is intended for use as a professional development resource;
 - 2) A **Web Site Design Learning Module** that introduces students to the principles of web site design and includes a series of four lesson plans and student activities handouts. It is intended for students with a level 1 or 2 basic understanding of the Web; and
 - 3) A **OO Design Using Pong Learning Module** features an object-oriented implementation of the classic video game, Pong.
- CSTA is working on developing a local chapter infrastructure in order to bring individuals from academia and industry together. A chapter logo has been developed for this purpose.
- Meetings have been held with the board of the CCSC (Consortium for Computing Sciences in Colleges) and it appears that CSTA will be able to make presentations at many of the CCSC’s regional meetings. They are very interested in working with CSTA.
- CSTA has produced an equity poster, *IT is All About Me*, with ACM-W and the American School Counselor Association. The poster was included in the registration bag of all Grace Hopper Conference attendees, it will be included in the NCWIT equity package at 2007 NECC.

- CSTA is working on developing a careers in computing brochure targeted for middle school students that will have the matching graphics of equity poster.
- CSTA has been working with SIGCSE on their H.S. track for their conference.
- CSTA has developed a web repository that will be a members-only benefit; it will be comprised of very useful teaching and learning materials, including materials from JETT and nearly Work on: web repository; members-only. Special taxonomy for web repository for K-1 CS. TECS & JETT Workshops. A special taxonomy was created for this web repository that resonates with K-12 teachers.
- CSTA is working with other organizations - Chris Stephenson, CSTA Executive Director, is Co-Chair of the NCWIT K-12 Alliance.
- CSTA will be mounting an online national certification database providing teachers with information on certification requirements for CS teachers for each state; this too will be for member access only.
- CSTA continues to sponsor its Computer Science & Information Technology Symposium after [or sometimes before] NECC annually. To date, ~ 700 computer science and information technology teachers have benefited from this free-of-charge full-day of professional development.

Initiatives Surrounding Careers Brochure (Lillian) -

- 4 careers brochures and a letter signed by Stu Feldman/ACM and Deborah Cooper/IEEE-CS was sent to 61,000 high school and middle school principals. Some feedback from schools received from that mailing sent out in mid-October.
- Second printing of 50,000 [initial printing of 250,000 brochures] just completed and only about 25,000 brochures are currently left for distribution.
- Paragraph about the availability of brochure appeared in ACM's e-newsletter MemberNet and within two days, ~ 8,000 brochures were requested from both ACM and CSTA members who work with high school students.
- A Press Release is being written by Gini Gold, ACM's PR Coordinator, and will be sent out on the wire service to a variety of reporters. In addition, the brochure will be featured along with the White Paper and Java Task Force materials that are being released at SIGCSE'07.
- Widmeyer Communications, ACM's communications partner, is contacting key organizations, e.g., National Association for Secondary School Principals, National Career Development Association, American Counseling Association, National Parent Teacher Association, Junior Achievement, Boys and Girl Clubs of America, Association for Career and Technical Information, etc., to gauge whether they would be interested in distributing these brochures, having presentations at their meetings about computing careers, having an article in their publications about the brochure and website, etc.

- Lillian mentioned several distribution ideas:
 - **Clearinghouse for Careers in Computing Speakers/Info:** Chris Stephenson suggested inviting the key players involved in outreach to high school students regarding careers in computing. Gathering these individuals would help us determine best practices for training mentors [ACM student chapter members, for example] to go into high schools and talk about careers in computing. In addition, if a cadre of these folks were interested, a grant could be written to have ACM become a clearinghouse materials and for speakers on careers in computing information.
 - **Training Video:** A training video could be developed that would illustrate how to use the material in the careers brochure and website when talking about careers in computing with high school students. This video could be used by ACM professional and student members interested in making presentations in schools. Naturally, this video would be available online.

CPATH Initiative (Rich) -

Rich indicated that ACM needed to make a decision as to whether it wanted to be part of the CPATH Program. CPATH is important because it's all about integrative education - getting other disciplines to work with computing. We really need a model template - How does computing work with biology? We need to answer the question whether the ACM Education Council should play a leadership role in terms of a community-building within projects?

Java Task Force Report (Eric) -

JTF cannot serve as a title. Chris Stephenson said that a jazzier title to attract teachers is needed. So from now on, the material produced by the Java Task Force will be known as the *ACM Java Libraries*. The materials were unanimously endorsed by the Education Board. A textbook, written by Eric, will be out at SIGCSE'07 using these materials [royalties from the book are given to ACM for the seed money given to the JTF]. There is a 90-page tutorial that is free to the world - sample programs for interactivity and an object-oriented graphics library.

Why the JTF? Introductory CS courses have become much more difficult. Teaching new students to develop software has become much more challenging in recent years. Two factors lie at the root of the complexity increase: 1) Programming languages and tools have become much more complex, particularly in the level of detail; and 2) Systems evolve more quickly, leading to rapid obsolescence of teaching materials and strategies. These twin

problems - complexity and instability - were the drivers behind the Java Task Force.

- The pace of change in computing is leaving people in dust
- Individual universities have a hard time keep up with changes in computing
- CSTA teachers said the pace of change couldn't be kept up with
- Students don't understand the tools they're building

There will be a session at SIGCSE'07 on the JTF materials.

International Activities (Gordon) -

Gordon reported on the Montpellier Informatics Education Europe Conference; 60 people attended and there was a sufficiently wide spectrum of folks from Eastern and Western Europe. There was a lot of debate and discussion, and the Montpellier organizers were very grateful for ACM's support. Gordon will be trying to organize Informatics Education Europe II, a similar conference in Greece as many of the universities there are in dire shape. Curricula is a key issue for these educators.

Informatics Europe is attempting to become the European version of CRA and Bertrand Meyer is its leading light. What is likely to be problematical is that it would cost ~ 2,500 or 3,500 Euros to join. Gordon, who is the ACM representative for this group, indicated that a wait and see attitude was best now rather than committing to it. The group, he said, has a dual research/education focus.

CSAB (John) -

CSAB is composed of ACM, IEEE-CS, and AIS, and it is responsible for developing and training program evaluators for ABET. There now is an international committee that will consider accreditation of programs outside the U.S. IEEE has made a large monetary commitment, ~ \$750k to do accrediting of international programs; CSAB has been listening to IEEE.

In addition, there is exploration going on of a Computer Department Head Association (CDHA) that is being led by a Committee of three - John, Heikki, and Pradip. A survey will be sent to department heads (CS/CE/IS/IT/SE) nationally asking them about the need for such an organization. The Committee will move ahead depending on what survey says. In terms of department heads, the SIGCSE Conference runs a Department Head Workshop, and CRA has its Department Chairs group that is Snowbird. Steve Seidman indicated that CSAB is doing this because no one has stepped up to the plate. Academics don't have that one conference they could go to. The group would not be a CSAB group but an independent one.

The Education Board has been struggling with the take over [of CSAB] by ABET, and the model needs to be corrected. Heikki indicated that AIS has been working with ABET to change this model.

Joint ACM/IEEE-CS Curriculum Initiatives (Andrew) -

The "Gang of Four," Andrew, Eric, Pradip and Bob Sloane, who originated the Memorandum of Understanding on the Publication and Coordination of Curriculum Volumes, met on Friday morning, December 1st, prior to the Education Council meeting. The "Gang" wants to make their activities more visible and new ideas on developing curriculum need to come forward.

Update on CC2001:

Larry Snyder was recommending that suggestions for changes to the guidelines be submitted online by the community. With this kind of process in place, the guidelines could far more easily be updated on a five year cycle. A second edition of this volume is needed ASAP. Online support is needed from ACM ASAP.

Ontology Project (Boots) -

The project consists of the following folks: Rich, Vicki, Gordon, Bob, Eydie, and Andrew. Two meetings have been held recently, and the group has consulted with over 30 academics. A presentation about the ontology project will be presented at SIGCSE'07. The Education Board gave some direction on this project.

There was a lot more to this project than the committee anticipated. Having an interactive structure has been an important part of the vision for this project. The committee realized it needed to have a way to categorize/conceptualize creative programs that show relationships between topics. It also needs to support interdisciplinary programs, areas where experts outside the ACM community will be needed.

Lessons Being Learned [from Education Board Meeting Notes]:

- Understanding how areas fit into the business environment
- Applied context affects how you use terms
- Social context is another lens/filter
- Outcomes and topic relationships need to be studied
- You can use the ontology to look at underrepresented areas, emerging areas but those not being addressed
- Computing is part of everything!

What's the Next Step?

The next step should be working on a real project, updating CC200 for example, to help gauge the usefulness [and missing pieces] of the current ontology.

Report on the IT Volume (Eydie):

It was mentioned that a more comprehensive discussion of what defines IT is needed; what are the principles of IT? What should it be compared to? How should IT be positioned in terms of the computing education continuum?

Also mentioned were the relatively few “required” courses; it appears that most material falls into the “elective” list. If so few courses are required, it was asked, how comfortable do you feel matching up against the expected skill sets?

Eydie indicated that the IT Volume would be ready for publication by the end of January. Andrew said that he would like all the curricular volumes in the same cycle published.

Report on the IS Volume (Heikki):

Heikki has contacted the Association for Information Systems (AIS) about moving ahead with a new IS Curriculum Volume; there should be a complete review of the current volume. Heikki drafted a document on how to move ahead. This summer the AIS nominated two members to be on a task force with ACM regarding IS curriculum (similar to the ACM/IEEE-CS committee), Heikki and Joe Valis (from Washington State). Also, Heikki indicated that he thought AIS would be willing to sign a Memorandum of Understanding similar to the one signed by ACM and IEEE-CS. He presented his proposal with a timetable and will hope to have approval from both societies this month so work can begin in January.

Action Items:

- **Draft Ed Bd/Council Budget:** Andrew & Eric (A & E) need to draft the Education Board & Council budget for FY'08 shortly. The Task Force Chairs need to submit their budget requests to A & E by Friday, December 15th.
- **CPATH:** Rich and Ann Sobel need to have a conference call with the ACM Ed Board IEEE-CS **chairs** regarding participation of the two societies in CPATH. Submission of a response is due in January.
- **White Paper:** Eric needs to finish the White Paper, fix it up according to the reorganization talked about within the Task Force groups. Also, he needs to add the bibliography onto the wiki. First draft of text should be done by the end of January; a few weeks should be permitted for review by the Enrollment Crisis Task Force and the

larger Education Council. It needs to be [designed] and printed for SIGCSE'07.

- **Alan:** Continue working with enrollment crisis group; contact appropriate Congressmen about issues around states, CS being part of the STEM [CSTEM] discussion.
- **Mark:** Evaluate the implications and approaches to be adopted if the Ed Council is to provide a forum for guidance on **pedagogies for the curriculum** issues
- **Deepak:** Continue working with Enrollment Crisis Task Force; comment on White Paper, Bibliography. Help to generate ideas for initiatives coming out of white paper.
- **Joe:** **Review questionnaire for Accreditation Task Force.**
- **Robb:** Review White Paper when ready; work with CSTA.
- **Carol:** Work on possible **recommendations for social knowledge units** - review IT volume. Look at how people are using the CC2001 report. Makes sure Andrew keeps us going.
- **Terry:** Look to see if Microsoft has ways of promoting **this** effort. Talk with Jane Prey about sharing archived demos on recursion. **Keep on top of the ICCP issue and whether ACM and IEEE-CS are still interested in supporting it.**
- **Heikki:** Review Enrollment Crisis Task Force notes. Make sure this Task Force has the infrastructure it needs; finds time for conference call in January to inform IS community on relevant issues; Keep IS Curriculum revisions going; Development and implementation of CSAB survey.
- **Boots:** Provide budget for Technology & Tools Task Force to A & E. Create pilot Ontology project, demo at SIGCSE '07. Create Technology & Tools website.
- **Gordon:** Work on organizing Informatics Europe Conference in Greece; **have special session on liaising with Conference**; Work on Accreditation brochure (work of Task Force); organize special session on accreditation at SIGCSE'07 and careers brochure.
- **Andrew:** **CPATH, produce report on Curriculum Task Force with resources needed; Gang of Four needs direction on how to proceed; IS Curriculum Review with Heikki; work with ACM IS staff on Education Board/Council support; Set up Ed Board meeting to synthesize work of this meeting. Work with Carol on knowledge units.**
- **John:** Keep Accreditation Task Force deliverable - brochure - on schedule; Initiate a communications plan for the Task Force; Need to plan for second publication to proceed guidance to parents on importance of accreditation.
- **Barbara:** Continue work with Enrollment Crisis Task Force, review White Paper to make sure it includes IS/IT; email to IT community about what's needed to strengthen IT Curriculum volume.
- **Don:** Work with Accreditation Task Force on brochure; CSAB.

- **Bob:** Two Year Committee Computer Engineering transfer curriculum report flier to mail to all TYCs promoting ACM and the curriculum reports; TYC computing overview detailing sub-disciplines and student decision paths; TYC IT curriculum report(s); **Wants Ed Council to send them names of colleagues in 2-year college arena who are outstanding in their field.**
- **Steve:** **Work with ACM on whether to support ICCP.**
- **Owen:** Keep playing devil's advocate on White Paper; **look into interdisciplinary?? Eric will talk with him**
- **Dan:** Finish top-30 survey of Introductory Curricula (SIGCSE 2007 special session); Help with Technology & tools web site -- Put online all technology for lecture, Be the 'video guy' for collecting video resources, Coordinate with Mark Guzdial about linking Best Practices; Investigate who uses Nifty and how; Help coordinate task force summit in June in NorCal
- **Lisa:** Continue to work with Enrollment Crisis Task Force, review White Paper; find out everything in the works for SIGCSE'07, talk with Eric and Lillian. Find out about distributing relevant materials at the conference.
- **Maggie:** getting more universities to participate in Google CS Curriculum search; connecting CS Curriculum search to existing digital libraries; integrating creative commons information into CS Curriculum search; adding video to CS Educators website; enhance courseware currently under development and publicize
- **Roscoe:** [Modest] member of Enrollment Crisis Task Force, review White Paper with diversity in mind, review Bibliography; Connect ACM with other communities he's involved with.
- **Ken:** Development a list of benefits for Accreditation brochure.
- **Lillian:** Draft Ed Council Notes; Work with Lisa on SIGCSE'07 possibilities in terms of distributing materials; Work with ACM IS to get "comments" website created for use on updating CC2001; Work on distributing careers brochure and projects