



Special Interest Group for Information Technology Education

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Editor's Note, Rob Friedman

As SIGITE enters its fifth year, we should acknowledge the fact that its maturation as a professional society, as slow as it may seem to some of us, is actually something we can and should take pride in, but it also presents a picture of an organization that could be doing better. As Cheryl Willis indicates, ABET and the CAC are celebrating our 5th birthday with approval of general computing and IT program-specific accreditation criteria – a process that has taken half a decade. The co-chairs of the latest SIGITE conference point out that attendance went up substantially over 2006, which is a good thing. A comprehensive review of conference attendance, however, yields a rather stagnant picture, with numbers modulating between 160 in some of the early years and just double digits recently. As the number of IT programs increases, and the number seeking accreditation follows suit, membership in IT education's professional society should reflect commensurate growth. Our membership fluctuates very little, though, and we're still approximately 450 members strong. What does it take to increase our conference attendance, to increase our membership, to increase the number of accredited programs? As Han Reichgelt explains below, we're counting on the maturation of our publication to raise the profile of IT education and research, and we hope that readers will use the Newsletter and the more frequent Bulletins to discuss the content and form of all our activities, with a goal of strengthening SIGITE through research contributions, conference attendance and more regional activities. The new logo on the first page of this edition derives from an international student competition, one example of local efforts coming together to buttress our general growth.

Turn to the peer-reviewed article in this edition, however, and we see the maturation and sophistication of online learning systems far outpacing the pedagogical change that can make e-learning the dynamic experience (for both instructor and learner) it is capable of becoming. Mark Pendergast provides a solidly researched base of information onto which his case studies and teaching tips are placed. In one sense, the e-learning enterprise mirrors the SIGITE experience: the different speeds and rates of growth in tools and systems development being incommensurate with our ability to employ them in ways that enrich and support the larger IT community. The more things change, the more they stay the same? Not necessarily.

Note from the SIGITE Chair, Han Reichgelt

At its meeting during SIGITE 07 in Sandestin Fl, the SIGITE Executive Board took the decision to turn the bi-annual newsletter into a fully-fledged journal and asked Rob Friedman to spearhead a project to formulate a proposal to the ACM publications board for a new journal tentatively called Journal of Information Technology Integration: Research and Education.

The desire to have our own journal was partly driven by the fact that authors seemed to be reluctant to submit their papers to a publication that carried the words "news letter" in its title. The name "SIGITE Newsletter" might convey the impression that the publication is merely a collection of news items and opinions and not one containing research papers that have gone through a rigorous review process.

The executive committee also had an extensive discussion about the scope and the title of the journal. As some of you know, I have been arguing for a while that IT will only survive as an academically recognized discipline if it is able to establish a research tradition, overlapping with but clearly different from the other computing disciplines such as Information Systems or Computer Science (see e.g. my paper in SIGITE 04). Moreover, as Ekstrom et al. argued in their paper in SIGITE 06, there is in fact a research tradition developing in IT through a growing number of MS theses in the field. However, the papers that result from these theses appear in disparate journals and conferences. There seems to be a need for a single avenue in which IT research can be published.

On the other hand, the executive committee also did not want to lose sight of the fact that SIGITE is a SIG for IT Education. It therefore felt that the journal that the newsletter was to morph into should also publish high-quality educational research.

Finally, the work on the IT model curriculum has also made it clear that the central concept in IT is that of integration. As Ekstrom and Lunt put it in their SIGITE 03 paper, IT education is about teaching students how to stitch systems together primarily from existing components, even though it may sometimes be necessary to create some new components. Similarly, IT, as an academic discipline, is about integration and many of the potential research questions that I raised as possible IT research questions in my SIGITE 04 paper can, with the benefit of hindsight, be analyzed as questions about the integration of components to form a system that provides some value to its user(s).

The provisional title *Journal of Information Technology Integration: Research and Education* is an attempt to reflect these three considerations. It is perhaps not the most eloquent title that I have seen but it does indicate the direction that we see the journal going in.

As is customary, Rob has worked diligently on the proposal. The proposal probably would have been completed some time ago, were it not for the tardiness of the SIGITE chair. In any case, we hope to take the proposal for a new journal to the ACM publication board shortly and we will obviously keep you informed of any developments.

Note from the SIGITE 2007 Conference Chairs, Bob Sweeney and David Feinstein

SIGITE 2007 was held October 18th through the 20th in Destin, Florida, at the sumptuous and very comfortable Hilton Sandestin Beach Resort & Spa. There were 105 conference attendees (editor's note: who gracefully weathered the torrential rain, red tide and tornado sighting), which was a 20% increase in attendance over 2006. At SIGITE 2007, 46 peer-reviewed papers were presented, along with three panel discussions. There were also three workshops on Saturday afternoon after the conclusion of the conference. Mike Jones, COO of CPSI, delivered a very well received keynote address at the conference plenary session. Our thanks to both Microsoft and EMC Publishing, sponsors of SIGITE 2007, who not only provided financial support, but also sent Gus Weber (MS) and Ed Van Sickle (EMC) as active conference participants. J.J. Ekstrom of BYU served as SIGITE 2007 Papers Chair, while Bob Sweeney and David Feinstein, both of the University of South Alabama, the host institution and a conference sponsor, served as Program Co-Chairs.

Note from the ABET 2007 Summit, Cheryl Willis

The 2007 Commission Summit was held in Incline Village, Nevada, on October 31, in conjunction with ABET's Annual Meeting of the four commissions of ABET: Applied Science, Computing, Engineering, and Technology. About the time SIGITE first presented its proposal for IT accreditation criteria to CAC, ABET committed to restructuring the accreditation documents used by the four commissions so that each would have a consistent format. SIGITE members have been waiting since 2002 to see the final versions of the Computing Accreditation Commission's (CAC) general criteria, revisions to the IT program criteria, and an updated self-study questionnaire based on the final general and program criteria.

"Harmonization" was the apparent theme for this year's Summit presentations. For IT programs, as well as the other CAC programs, harmonization translates into (1) common ABET definitions, (2) a revision of the CAC criteria that eliminated "Standards," and includes general criteria that are numbered and named similarly to the other commissions, and (3) inclusion of specific program criteria for the IT, IS, and CS programs. The presentations for the Summit sessions may be downloaded at <http://abet.org/summit.shtml>.

The harmonized version of the General Criteria and the approved Program Criteria will be mandatory for program evaluations taking place during 2009-2010 but are voluntary under certain circumstances for the evaluations taking place in 2008-2009. See <http://abet.org/forms.shtml> for the evaluation eligibility guidelines for the

upcoming transitional year. Self-study questionnaires for the new criteria are also available at <http://abet.org/forms.shtml>. These versions are dated November 3, 2007.

The presenters for the Computing programs breakout sessions were Stuart Zweben, Chair of CAC; Gayle Yaverbaum, Chair Elect; Larry Jones, Past Chair; and Doris Lidtke. The new General Criteria place more emphasis on the continuous improvement process by specifying a documented assessment process, assessment of the extent to which a program's educational objectives and program outcomes are being met, and how the results affect the continuous improvement of the program. The sections of the new General Criteria are as follows:

- Criterion 1. Students
- Criterion 2. Program Educational Objectives
- Criterion 3. Program Outcomes (a-i)
- Criterion 4. Continuous Improvement
- Criterion 5. Curriculum
- Criterion 6. Faculty
- Criterion 7. Facilities
- Criterion 8. Support
- Criterion 9. Program Criteria

The Program Criteria for Information Technology computing programs (Criterion 9) include additional program outcomes and specification of the fundamentals of the IT curriculum. The IT program outcomes, as opposed to the general program outcomes specified in Criterion 3 (a-i), are the following:

- (j) An ability to use and apply current technical concepts and practices in the core information technologies.
- (k) An ability to identify and analyze user needs and take them into account in the selection, creation, evaluation and administration of computer-based systems.
- (l) An ability to effectively integrate IT-based solutions into the user environment.
- (m) An understanding of best practices and standards and their application.
- (n) An ability to assist in the creation of an effective project plan.

In addition to the general curriculum criteria for all computing programs in Criterion 5, the Program Criteria for Information Technology computing programs include the following specifications:

- a. Coverage of the fundamentals of
 - 1. the core information technologies of human computer interaction, information management, programming, networking, web systems and technologies.
 - 2. information assurance and security.
 - 3. system administration and maintenance.
 - 4. system integration and architecture.
- b. Advanced course work that builds on the fundamental course work to provide depth.

Questions can be addressed to Doris Lidtke or Maryanne Weiss at ABET headquarters. ABET's website provides resources that can help faculty and administrators understand the implications of the new criteria. The Assessment Planning page (<http://abet.org/assessment.shtml>) provides information for workshops/seminars—both online and face-to-face—covering the many facets of the accreditation and assessment processes. Also, the January Community Matters newsletter lists the upcoming webinars <http://abet.org/Linked%20Documents-UPDATE/Newsletters/08-01-CM.pdf>.

While it's been a long time in coming, the 2008-2009 Accreditation Criteria document represents the culmination of a huge investment of work and time by many of the founding members, committees and working groups of SIGITE. The academic discipline of Information Technology now has its own benchmarks of quality—separate from computer science, engineering technology, and information systems. For another “feel good” moment, turn

to the last page of the November 3, 2007, version of the Criteria for accrediting Computing Programs and bask in the glow of the last sentence of the document—

“There are no proposed criteria changes currently under consideration by the ABET Board of Directors.”

Calls For Papers

SIGITE Newsletter: *It's not too early* to consider contributing an article to the next edition of the SIGITE Newsletter, to be published in June 2008 (unless the new journal gets a green light). We welcome research articles, case studies, industry and academic observations and literature reviews related to information technology education. Prospective authors should send articles to the editor (friedman@njit.edu) no later than April 30, 2008. Position announcements, notice of professional advancement and other news items relevant to SIGITE members' interests are welcome.