



## ACM SIGITE Newsletter, Vol. 3 No. 2

### Notes and Announcements

Note from the Editor	2
Note from the SIGITE Chair	2
Note from the SIGITE 2006 Conference Chairs	3
Faculty Position Announcement	9
Call for Papers	9

### Article

<i>An Analysis Tool for the Assessment of Student Participation and Implementation Dynamics in Online Discussion Forums</i> By Mark Pendergast, Florida Gulf Coast University	10
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### Editorial Board

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## **Editor's Note, Rob Friedman**

As the spring semester neared its end, and students started their ritual strategies for leniency and deadline extensions, one obviously anxious senior offered me that old false choice of starting points: “do you want the good news or the bad news first?” Did I want to hear first how close he was to completing his work, or how many unforeseen events, all completely out of his control, were keeping him from closure? I found his willingness to adjust his rhetorical strategies to meet his audience’s preferences refreshing, even though we both knew when he offered the choice of means, that the end would be the same.

In a way, the senior’s plea and my note are analogous, but this medium doesn’t offer you the same reply option my student offered me (maybe we should have a blog?), so I’ll give you the good news first: that the Newsletter has reached the end of its third year. In that time, we’ve been able to provide at least two important functions. First, the summer edition serves as a call to meeting, with the SIGITE Conference co-chairs’ report on activities, speakers, and other nuts-and-bolts information, encouraging you to participate in October when, this time around, SIGITE 2006 convenes in Minneapolis. Second, we’re able to provide you with what the editors considered the best of the article submissions. As a peer-reviewed, ACM DL-archived publication, it is incumbent upon the editors to take a critical eye to the articles we receive and limit publication to the very best. That responsibility was clearly demonstrated a few weeks ago when I received a request from an author for a letter to his P&T committee explaining what the Newsletter is and why a publication in it should be considered positively during a tenure review. SIGITE members can take pride in their organization’s providing a vehicle that brings IT education research and case studies to an ever-growing body of readers; that an IT education publication is receiving submissions from instructors in IS, CS and other disciplines; that our acceptance rate is going down, even as the number of submissions is going up; and that our publication is making a positive contribution to the stature of our discipline – we’re keen on quality, and that helps us all. Oh, the bad news: in many ways, collectively we’re still behaving like my anxious senior – cutting deadlines too close (though we’re making them more often than not); sitting in the back of the room (members: your conference registration is available); and we’re not contributing nearly enough to the conversation: keep those articles coming in.

## **SIGITE Chair’s Note, Han Reichgelt**

### **SURVEY OF IT PROGRAMS**

Despite the fact that the Bureau of Labor (2006) includes five IT jobs among the twelve fastest growing jobs in the US between 2004 and 2014, enrollment in traditional computing programs continues to trend downward. Thus, Zweben (2006) reports that the number of undergraduates in Computer Science and Computer Engineering in PhD granting institutions fell by 21% in 2004-2005, following drops of 10% and 23% in the previous years. Similarly, enrollment in Information Systems seems to be down considerably (e.g., Farkas and Murthy, 2004; Lenox et al, 2005, Lomerson and Pollacia, 2005).

At the same time, there is some anecdotal evidence that IT programs are bucking this trend. However, the anecdotal nature of this evidence makes it easy to dismiss, and SIGITE, as the main mouthpiece of IT educators, is therefore committed to determining whether the impression that enrollment in IT programs is growing is indeed correct. To that end, it has initiated a survey of IT programs, which is available at <http://www.surveymonkey.com/s.asp?u=815531837601>. To date, 18 institutions have completed the survey. Unfortunately, this is a miniscule proportion of the institutions offering IT programs at either the associate or baccalaureate level, and in order to increase the usefulness of the data collected from the survey it is imperative that more institutions complete the survey. If you have not yet completed the survey, please do so at your earliest convenience. We hope to be able to report on the results of the survey at the October SIGITE conference in Minneapolis.

## References

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- Zweben, S. (2006) 2004-2005 Taulbee Survey. *Computing Research News*, Vol 18 (3), 7-17.

## Note from the SIGITE 2006 Conference Chairs, Jack Krichen and Keith Morneau

SIGITE conference chairs, Jack Krichen and Keith Morneau, are planning an outstanding 2006 conference for October 18-21, 2006. Members are encouraged to attend and participate in the vast array of activities framed within this year's theme: IT Education --The Engine of Innovation. Hosted by Capella University in vibrant, downtown Minneapolis, SIGITE 2006 is igniting the Engine of Innovation with a stellar line up of workshops, presentations, and activities.

This year's dynamic conference will deliver the promise of SIGITE membership goals.

- A forum for the interaction of practitioners, educators and others in the field of Information Technology Education
- An exchange of ideas, engagement, and activities to advance the knowledge of its members, the latest in curriculum and teaching of Information Technology
- The development and transfer of innovative concepts and applications applicable to teaching and learning

Our [Conference Website](#) has session details, registration, cost, and hotel information. To keep abreast of the latest developments for our conference, review the Website often.

## Keynote Presentations

### **Title: Essential Education for Business Innovation and Optimization**

Date: Thursday, 10/19 12:30 pm

Sponsored by Trissential

Presenter: Michael Vinje, Principal, Trissential, LLC

In this session, Michael Vinje, Managing Partner of Trissential LLC, a business improvement organization, will share insights from what he has learned and experienced over his 23 years of helping Fortune 500 companies innovate and optimize their business capabilities. These insights, focused on improving people, processes and tools, will provide the audience with a no-nonsense real world view of what is really going on today in large companies and what those companies desperately need from their employees to compete in today's flattening global economy.

### **Title: Cinderella and the IT Education Manifesto: Together We Stand, Divided We Fall"**

Date: Friday, 10/19 12:30 pm

Presenter: Dr. Eli Cohen

Our isolation through failure-to-cooperate leaves all IT education SIGs like the unwanted step-daughter in the Cinderella story without full understanding our importance and potential. This talk suggests that by tearing down the artificial walls that separate us from other IT education SIGs, we can all benefit. [[see complete abstract](#)]

## Highlighted Sessions

Friday 10/20 7:45-8:30 AM

Presenter: Chris Stephenson

Sponsored by: ACM Computer Science Teaching Association

Title: Introducing the Computer Science Teaching Association

Saturday 10/21 8:30-10:00 AM

Presenters: Panel Florence Appel, Keith Miller, and Michael Quinn

Sponsored by: ACM Special Interest Group on Computers and Society

Title: Introducing Ethical Issues into to IT Curriculum

Description: The ACM SIGITE Curriculum Committee 2005 has recently published recommendations paying significant attention to the coverage of societal and ethical issues and professional responsibility. It is expected that a growing number of IT departments and schools will seek to address these curricular issues. This panel will examine a variety of approaches to integrating ethics across the IT curriculum, the development and delivery of an online computer ethics course, and techniques for improving students' critical thinking abilities in the context of addressing computer ethics issues. Each panelist will focus on one of these topics, and then the floor will be opened for questions and general discussion.

**And More to be Announced! Check our [Website](#) for Conference updates.**

## Wednesday 10/20 Pre-Conference Computer Workshops

**Title: Strategic Value of an Enterprise IT Capability Model for Educators and Senior IT Professionals**

Computer Workshop 2 hours 8-10 AM

Presenter: Vladan Jovanovic, Georgia Southern University

Description: Presentation of an emerging Enterprise IT Capability Model (EITCM) and its potential for guiding educational as well as organizational efforts in systematic IT capability development. This capstone model from the standpoint of a global IT organization may be one of the most significant for IT in recent years, and given that IT education community may largely be unaware of it, makes for a valuable subject for exploration. [[see details](#)]

**Title: Developing an Interdisciplinary IT Curriculum in Biomedical and Health Informatics**

Computer Workshop 2 hours 8-10 AM

Presenters: Michael Kane, Ph.D., Jeffrey Brewer, MS, and Khalid Moidu, MD., Ph.D.

Description: This workshop will discuss the curriculum planning, rationale, course development, laboratory requirements and exercises, subject matter relevant to IT education, student audience, funding needs and opportunities, and learning objectives involved in implementing an interdisciplinary curriculum in biomedical and health informatics. [[see details](#)]

### **Title: Software Systems Assurance and IT Education**

Computer Workshop 2 hours 10:15 AM-12:15 PM

Presenters: V. Jovanovic and J. Harris, Georgia Southern University, vladan@georgiasouthern.edu; J. Ekstrom, Bingham Young University, jekstrom@byu.edu

Description: Moderated experience exchange; workshop attendees will be invited in a round robin manner to relate their experiences, questions, and expectations as well as identify gaps in their corresponding educational program offerings and/or curricula recommendations (from the Computing Curricula 2000 series) relative to their selected areas of interest and the presented common framework. [\[see details\]](#)

### **Title: Active learning in Introductory Programming Courses**

Computer Workshop 2 hours 1:15-3:15 PM

Presenter: Keith Whittington RIT, kjw@it.rit.edu

Description: Active learning has consistently been shown to deepen student understanding, and increase student retention and satisfaction. This workshop provides specific materials and instructions on how to infuse active learning into an introductory programming course. These materials and techniques have been used and tested for several years with a high level of success and is currently under evaluation and assessment funded by an NSF CCLI grant.

### **Title: Competency-Based Learning Content Management**

Computer Workshop 2 hours 3:30-5:30 PM

Presenter: Guenther Weydauer, Capella University

Description: With the creation of more and more learning content comes the need to be able to find and hopefully reuse content that already exists. This workshop will demonstrate the value in having your learning content objects align with a collection of associated competencies and offer an overview of the systems and solutions used at Capella University to map competencies to learning content. [\[see details\]](#)

### **Title; Accreditation I: Program Educational Objectives and Program Outcomes (Part one of a two part series)**

Computer Workshop 4 hours

Presenters: Art Gowan, Georgia Southern University; Han Reichgelt, Georgia Southern University; Diane Hamilton, Rowan University; Jim Leone, Rochester Institute of Technology

Description: The objective of the workshop is two-fold. First, the workshop discusses the new ABET CAC accreditation criteria. Second, the workshop will discuss how to formulate program educational objectives and program outcomes. The workshop presenters are thoroughly familiar with the ABET CAC Accreditation Criteria and have served either as team chair or program evaluators of programs in Information Systems, or as chairs of programs that have sought accreditation under the new ABET CAC Accreditation Criteria. [\[see details\]](#)

### **Title: Get in the Game: Introducing Game Design and Development Using DirectX 9.0 and C#**

Computer Workshop 4 hours AM

Presenter: Johnny L. Hopkins, University of North Carolina at Charlotte

Description: A growing number of colleges and universities are offering courses and majors in game development and design. Many of these programs have been implemented in the last few years in response to declining enrollments in CS and IT degree programs. This workshop presents a case for including game development in an IT degree program. The workshop also introduces participants to the DirectX platform, one of many tools used in the game development field, with a special emphasis on Managed DirectX. A component of the workshop is a step through the creation of a small game using DirectX, with C#.NET being the implementation language. A small portion of the workshop will be devoted to introducing StormHaven, an Unreal Tournament 2004 mod UNC Charlotte is developing to teach introductory computer science through programming in a virtual environment. [[see details](#)]

### **Title: Using Open Source Software to Teach Web Technology**

Computer Workshop 4 hours

Presenters: Larry Gottschalk and Jigang Liu, Metropolitan State University, Minneapolis, Minnesota

Description: Since the Internet applications entered our daily life in the early 1990s, Web technology has become a popular subject for the students in the computing related fields. However, due to the vast topics involved in Web technology, various vendors with different products, and the limited university's resources, many instructors are frustrated in determining what to cover, which to purchase or install, and how to start it. On the other hand, the rapid development and increasing recognition of open source software provides us a fantastic opportunity to incorporate the state-of-the art Web technology without any significant financial investment. In this workshop, we will share our experience in how to embed open source software in our courses. No prior experience in Web technology is required for taking the workshop. [[see details](#)]

### **Title: Accreditation II: Assessment and Continuous Improvement (Part 2 of a two-part series)**

Computer Workshop 4 hours

Presenters: Art Gowan, Georgia Southern University, Diane Hamilton, Rowan University, Jim Leone, Rochester Institute of Technology, Han Reichgelt, Georgia Southern University

Description: This is the second part of the series. The workshop presenters are thoroughly familiar with the ABET CAC Accreditation Criteria and have served either as team chair or program evaluators of programs in Information Systems, or as chairs of programs that have sought accreditation under the new ABET CAC Accreditation Criteria.

Workshop Outcomes:

- On completion of the workshop, participants will be able to
- Map program to program outcomes;
- Describe a range of different assessment instruments;
- Discuss some of the factors that need to be taken into account when selecting or creating an assessment instrument;
- Explain how to use the results of the assessment to effect program improvement;
- Explain the importance of documentation of the assessment and continuous improvement process, and of the results of the implementation of the process. [[see details](#)]

### **Title: What's New and Nifty in ASP .NET 2.0** (Note: Please check computer requirements below)

Computer Workshop 4 hours

Presenter: Annu Prabhakar, University of Cincinnati

Description: This session will be a hands-on session featuring the new and improved features of ASP.NET 2.0 for the attendees. The session will provide a brief introduction to ASP.NET web development to accommodate anyone who is not familiar with ASP.NET web development. Some of the features that will be included in the session are master pages, login controls, data access controls, validation controls, navigation controls and web parts.

**Computer Requirements:**

Anyone with a computer/laptop with Visual Studio 2005 or Visual Web Developer 2005 installed will be able to actively participate in the workshop. Knowledge of a .NET language is preferred. [[see details](#)]

## **Conference Presentations October 19, 20, and 21**

Four tracks with 32 presentations include the following categories:

Track 1: IT Education (General)

Online Education

Faculty Development

Curriculum Development

Track 2: Information Security

Track 3: Research/Case Studies

Track 4: Tools/Systems

## **Meet our 2006 Conference Contributors**

A substantial part of each conference is the extensive participation of our contributors and the benefits they offer our conference attendees.

A partial list of contributors to date is below. It is not too late to get involved at one of our four contributor levels. Contact Margaret Pidge at [Margaret.Pidge@Capella.Edu](mailto:Margaret.Pidge@Capella.Edu) or Jack Krichen at [Jack.Krichen@Capella.Edu](mailto:Jack.Krichen@Capella.Edu) for details.

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## **Help Promote our Conference and Membership**

Please forward this newsletter to potential-SIGITE members with an invitation to join SIGITE and rev up their engines with us. Don't forget – with membership comes a discount on conference registration fees.

Non-members: Here is "[how to join](#)"

[Conference Registration and Cost Information](#)

### **Position Announcement**

#### **Faculty Director, Capella University, IT #5098**

The Faculty Director is a full-time management position, responsible for leading the development, delivery, and enhancement of the Undergraduate Program, ensuring that courses and curriculum reflect current knowledge in the field, are relevant to the professional and are delivered by subject matter experts. Faculty Director will lead the process of curriculum planning, development, evaluation and improvement; ensure the overall quality of the content of the course; work with School staff and faculty to conduct quarterly evaluations of courses and faculty to comply with the University's AQIP assessment goals; and ensure the quality of the learner experience and delivery of the Capella Brand Promise through effective management of faculty and curriculum. Teaching and related instruction activities will be limited. Faculty Directors may serve as liaison and academic representative on University committees charged with policy development, accreditation, AQIP and other important initiatives.

[Details ...](#)

### **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 January 2007. 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](mailto:friedman@njit.edu)) no later than October 15, 2006. Position announcements, notice of professional advancement and other news items relevant to SIGITE members' interests are welcome.