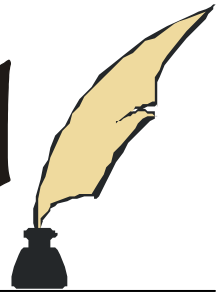


# SCHOLARSHIP at SPSU

an Academic Achievement Support Group Newsletter



Issue 4 • Fall 2005

**T**he purpose of this Newsletter is to share not only what we are pursuing scholastically, but also what problems we have encountered in that pursuit, and how we overcame (or didn't!) them. SPSU faculty members continue to achieve academically. Issue 4 provides evidence of that. In this issue there are some particularly heart-wrenching accounts of frustrations with writing and publishing. I don't seem to have the patience for rejection and re-writing, but it helps me to know that others are going through that dantesque hell, too. Maybe it helps you, too. Let me know.

This fall series began with a presentation right after Labor Day by David Stone, father of our David Stone in IT. He brought an overview of his research and other activities, primarily centered on collaborations. What I hadn't expected, however, was



the list of possibilities for SPSU to collaborate with other entities, such as Harvard University, MIT, and Microsoft. It was exciting to hear about the possibilities. Another stab at collaborative projects will take place on October 18, when Frank Tsui and Orlando Karam, both of CSE, will talk about their joint project at noon in the CTE. And finally, our ubiquitous VPAA, Zvi Szafran, will talk about his take on scholarship on November 15, same time, same place.

Take heart. I just saw a re-broadcast of a William F. Buckley interview on Book TV during which he admitted that he hated to write. If such a writer hates to write, but is nonetheless very prolific, maybe...

We thank Dawn Ramsey, Dean of Extended University for her support of this endeavor. Without her, this would not be possible.

## Brown Bag Highlights

**Ronny Richardson, MGNT**

### Steps

1. Find a journal that publishes articles similar to the one you want to write
2. Get copies of the three or four articles most similar to your article
3. Steal any methodology where appropriate
4. One-word outline each article you found
5. Come up with a consensus outline
  - \* One or two word topical outline
  - \* Rough topical word count
  - \* Rough overall word count
  - \* Average reading difficulty
  - \* Consensus format, e.g. tables, bullets, sidebars, photographs, data
6. Write your article accordingly
  - \* No procrastination, no excuses
7. Submit

### Notes

- Keep your article about the same length as consensus
- If in doubt, shorter is better
- Use same format as consensus
- Check website for other pointers and submission/query guidelines
- Get help, two authors on published article better than one on unpublished

**Dr. David Stone**, Harvard's Outreach Liaison for the Division of Engineering and Applied Sciences and Harvard Fellow in Computer Science, as well as adjunct professor in SIS, presented his work at CTE on September 6th. He talked about collaborations in general, and gave specific ideas for SPSU to collaborate with Harvard, MIT, and Microsoft.

Dr. Stone's research (with Eric Klopfer and Judy Perry of MIT) is focused on implementing real-time location-based simulation games designed to improve the capability of decision makers to manage infectious disease outbreaks. This work will be included in Dr. Stone's new book (with Jan Potter), "In Search of Perfect Performance". Dr. Stone has taught as an adjunct faculty member in several departments (Computer Science, Social and International Studies and Humanities and Technical Communication) at SPSU for the past seven years. He is a licensed psychologist in New York and in Georgia. (<http://blogs.law.harvard.edu/ethics>).

**Bob Harbort** presented on the use of PowerResearcher (<http://www.powerresearcher.com>) in teaching Research Methods. He also talked about the use of Adobe Acrobat in marking and editing student papers.

**Future  
Brown  
Bags**

**October 18, 2005**, 12 noon in CTE  
Frank Tsui and Orlando Karam, CSE

**November 15, 2005**, 12 noon in CTE  
VPAA Zvi Szafran

## Faculty Publications

### **Julie Newell, SIS**

"The Troost Crinoids: Lost, Found, and (Finally) Published," *Earth Sciences History*, 2005, 24(1):15-34. This is the result of a mystery I uncovered when doing NSF supported archive work in 2002 — a story discovered on the way to something else. It was great fun trying to track down all the pieces because it's a sort of intellectual who-dunnit, and many of the key players wrote their own versions of the story at the time, but it's not at all well known in the historical literature. Putting together the various accounts (and the letters and other documents that let me sort out what really happened) is the kind of research I love best. I gave a presentation at the Smithsonian on this work (repeated on campus) in September and October of 2002. (*Earth Sciences History* is a referred journal — I had four reviewers reports and lots of feedback from the editor.)

I spent every minute I could scrounge between the end of classes in May and the start of classes in August revising and cleaning up the manuscript for my book on the formation of the American geological community. The manuscript went in the mail in early August. My revision work was guided by discussions with an editor at the University of Chicago Press who read the original dissertation and wanted minor changes before sending it out to reviewers. So now I wait to see if what I did is what she expected...a process I'm finding more anxiety inducing the longer I wait to hear. I managed to get the work done largely by putting everything else in my life on hold--something I, personally, know I can't do on a regular basis. To work on the manuscript, I really have to have my head in that project all day for days at a time. No committee reports (one of which is now VERY overdue), no class prep (which usually gets done in July, so I'm not happy with the state of my preparation or my web sites), far less family time than I'd like, and very little time for personal recreations like gardening, sewing, or reading trashy novels! That's not a litany of complaint; I'm glad I did it. But it was shocking to me just how much else couldn't get done if the manuscript was going to get finished. And I'm still digging out of the hole that got me into...

### **Tom Wiseman**

I am working on a presentation on "Using Literature to Understand Mass Trauma" to be given September 14, 2005 to the Atlanta Chapter of the American Medical Writers' Association. It will be a 40-minute talk followed by discussion and how medical writers might be able to help victims of Katrina. I had originally planned a presentation of a more general nature on medical writing, but the the presence of mass trauma is the major human concern of the medical community right now.

### **Khalid Siddiqi, Construction, and Kim Thomas**

#### **Benchmarking Adaptive Reuse: A Case Study of Georgia**

Holistic construction approaches are needed to move from Leadership in Energy and Environmental Design (LEED) certified new buildings, to adaptive reuse of existing buildings. Adaptive reuse is an opportunity to recycle and manage Deconstruction process in a more responsible manner with focus towards the new occupancy requirements. The objective of this paper is to benchmark the architectural reuse practices in Georgia and to review three Adaptive Reuse projects. Three case studies, where adaptive reuse was applied to existing buildings, are also included for demonstration purposes. This paper is intended for architects and constructors interested in environment friendly construction practices.

The above paper has been accepted for publication in the International Journal of Environmental Technology and Management to be published by Inderscience Publishers. The paper is a result of collaboration between Kim Thomas, a graduate student in Construction Program, and me.

*The main obstacle we had to overcome was in identifying and approaching the registered Georgia architects who were also interested in Adaptive Reuse of existing Buildings.*

### **Khalid Siddiqi, Construction and Billy Wiggins**

#### **Cement/Fly Ash /Metakaolin Ternary Blends: Effects on Compressive Strengths of Mortars**

The objective of this study is to experiment the possibility of achieving higher compressive strengths and sufficient workability without the use of high range water reducer, in a cement ternary blend containing Metakaolin and fly ash. Metakaolin cement blends provide similar or slightly better hardened concrete properties and better fresh concrete properties as compared to silica fume. Past research indicates that ternary blends of silica fume and fly ash yield a high performance concrete with good early strength age properties and improved workability over concrete containing only silica fume. Concretes containing fly ash and Metakaolin should yield a synergistic ternary system. One important finding was that the most economical blends for strength was a cement/Metakaolin blend with no fly ash. An initial cost was calculated for each mix. The study will benefit concrete mix designers, batching plant owners, and those involved in production and supply of concrete products.

The peer reviewed paper has been accepted for publication in the Proceedings of Construction in 21st Century: Advancing Engineering Management and Technology, organized by National Technical University of Athens, Greece and Florida International University, Miami Florida September 15-17, 2005.

## Faculty Publications (continued)

A lot of testing was done at SPSU Campus (CET Labs) and at Thiele Kaolin Company, Sandersville, Georgia. Billy Wiggins completed his BS from SPSU CET and did his Masters from Construction Department of SPSU.

*The main obstacle we had to overcome was to satisfy the industry users that Metakaolin, found in abundance in Georgia, can be used as a cement additive that would result in improving hardened concrete properties.*

### Ken Rainey, HTC

- Chapter titled "Technical Documentation in the United States of America," printed in the volume *Technical Communication--International: Today and in the Future*. Eds. Jörg Hennig and Marita Tjarks-Sobhani. Volume 9 of *tekomp Schriften zur Technisches Kommunikation* (Stuttgart: *Gesellschaft für technische Kommunikation*). Lübeck: Verlag Schmidt-Römhild, 2005, pp. 200-218.

The volume contains chapters on the technical communication profession and practice in 17 countries around the world. Because the topics intended to be included went far beyond my own knowledge (or time to research), I enlisted 6 co-authors who contributed various sections on research in technical communication, cost of a technical documentation project, tools in technical documentation, salaries of technical communicators, etc. I wrote the parts on history, education, current situation, and future trends in technical documentation in the US. The biggest problem – aside from content expertise – was satisfying the editors and the publisher about length. Because the publisher had specified a maximum page limit for the entire volume, the editors slashed several genuinely useful parts of this article. (The entire original can be had through course reserves, if anyone is interested.) Coordinating the work of six other people also presented some challenge, but I must say that they all met their deadlines and I had little editing to do to make it seem like one article.

- Article [co-authored with Kirk Turner and David Dayton] titled "Do Curricula Correspond to Managerial Expectations: Core Competencies for Technical Communicators?" *Technical Communication*, 52(3), pp. 323-352.

This article developed in a particularly serendipitous way. Kirk Turner, one of my graduate students who was doing his master's thesis with me on professionalization of technical communication, wanted to include some survey data about how closely academic curricula correspond to the expectations of managers. He analyzed the curricula of the 10 largest technical communication programs in the US, extracted what appeared to be the core competencies contained in those curricula, constructed a web survey, and invited members of the STC management special interest group and the members of TECHWR-L listserv who were managers to take the survey. He got 67 useful

responses, 3 of whom agreed to be interviewed about the topic. We asked for a \$500 research grant from the Council for Programs in Technical and Scientific Communication; and, using this money, David Dayton interviewed them in Baltimore at the 2004 STC Annual Conference. It fell to me to analyze Kirk's data which yielded some very interesting results and to write up the results and the implications. Because we were submitting this to a special issue of the journal on the future of the profession, the editor asked us to conclude the article by discussing what our data might mean for the future technical communicator. The surprising thing to us all was that the editor of the journal decided to print all 5 Appendices to the article (listing the 10 tech comm programs, 141 competencies extracted from the curricula of these programs, 63 competencies derived by editing the list of 141, non-industry-specific core competencies derived from an STC research study, and the compete web survey). This record validates the methodology of the article (something that does not always find the public eye). However, because of the non-randomized population surveyed, we disclaim that our data represent the consensus of managers as a whole.

- Project which I am now working on: Research into the ethical responsibilities of professional organizations, which is intended to support my argument that for technical communication to be a profession it must have a clear pathway into, through, and out of the profession (i.e., some form of standardization or certification). My thesis is controversial: A professional organization must by its nature be responsible for the work that its members perform; and any professional organization that shuns this obligation is ignoring its ethical responsibility to the profession and to the society which it serves. I intend to support this hypothesis by analyzing the mission statements of major professional organizations to discover their own views of their ethical responsibilities. And, then, by implication apply those to the technical communication profession. The paper is to be presented at the Annual Meeting of the Council for Programs in Technical and Scientific Communication at Texas Tech in October. I've been trying my damndest to make professionals mad at me about this issue, but, so far, I have been a colossal failure.

### Larry Wang, Math

#### PCM Quantization Errors and the White Noise Hypothesis

This is a joint work with David Jimenez and Yang Wang at Georgia Institute of Technology. We completed the project and submitted to SIAM for publication. The White Noise Hypothesis (WNH), introduced by Bennett half century ago, assumes that in the pulse code modulation (PCM) quantization scheme the errors in individual channels behave like white noise, i.e. they are independent and identically distributed random variables. The WNH is the key to estimating the mean

## Faculty Publications (continued)

square quantization error. But is the WNH valid? Surprisingly, we proved that the WNH is not valid in general. We also showed that with fine quantization the WNH is essentially valid, in which the errors from individual channels become asymptotically pair wise independent, each uniformly distributed. The main result of the project ensures the accuracy of error estimates in PCM quantization scheme.

### **Rich Bennett**

In writing "The Role of Culture in International Management," I had the opportunity to draw upon the continuing studies in culture and society in which I have been engaged, and about which I have been teaching for the last several years. I have, in fact, taught the basic idea behind this article as a graduate course in Germany at the Bernburg campus of our partner Anhalt University. Since I was asked to prepare the article, publication itself was not really the issue in this case. The main hurdle I had to overcome, however, in writing this article, and another one on prospects in international education later this year, was finding the time to focus my thoughts and actually produce the first draft of the article. What I finally had to do as the deadline began to approach was to simply put other things aside and give it a higher priority than many other things. For me, this meant sequestering myself at home where I could concentrate, refusing the urge to check e-mails, let the answering system handle the phone, and forcibly dedicate a block of time to organizing my thoughts and writing the article.

### **Andy Wang, Math, and Kai Qian, Software Engineering**

Published a software engineering graduate textbook "Component-Oriented Programming" with Wiley publishing in May 2005.

**Kai Qian** and his colleagues also have completed the manuscripts of the book "Java Web Development" with Jones & Bartlett publisher, which is expected to be published spring, 2006.

### **Al Churella, SIS**

I'm still working on "*The Standard Railroad of the World: A History of the Pennsylvania Railroad, 1846-1986*" for the University of Pennsylvania Press. I am current at 217,000 words, of a projected 250,000-word draft (although it will probably be more on the order of 300,000 words / 1,000 manuscript pages by the time the initial draft is complete. The research is typically the most difficult part, since I have to be away from home for weeks at a time, at archives in Maryland, Delaware, and Pennsylvania. Now that that phase is essentially complete, the biggest challenge is simply finding enough time to write. If I have a day "off" where I don't come into the office,

I can produce as much as 4,000 words, although 2,000 words a day is more typical. The other challenge involves putting off other research projects — the editor of *Enterprise and Society* has asked me to submit an article manuscript, for example — so I can plow ahead with the book.

### **Mark Stevens, HTC**

A couple of years ago, I submitted a short article (about 6 pages) on Christopher Marlowe's *Tamburlaine to Renaissance Drama*, but the article was rejected as being too short for them. I resubmitted it to a well-known, peer-review literature journal called *The Explicator* that specialized in shorter literary articles. I quickly got a note back saying that it was being sent out to readers for review, but then waited for months and months and months. I was just about to tell *The Explicator* to forget it and resubmit the article somewhere else, when I got a note from the editor apologizing for the long delay and saying that he had apparently put my manuscript and about 15 others into a wayward pile. I also received some reviewer's comments to read two articles that came close to my point, but didn't hit it.

So I ordered the articles through ILL, but the Library didn't tell me they were in. A month later, I reordered them, and shortly after that, I found that they'd been sitting in the ILL office for a while. So I read 'em, revised my manuscript, and sent it back. That was at the end of June. So I'm hoping any day for a letter informing me that my article is publishable. Time marches on!

### **Tom Rotnem, SIS**

Received a grant from the Kennan Institute for Advanced Russian Studies to conduct archival research on "Corporate Governance in Post-Communist Eurasia" in Washington, D.C.

**Orlando Karam, CS and Frank Tsui, SWE** have finished their first draft of the Book in Software Engineering. It is in review and revision status. The book is targeted for spring 2006 publication by Jones and Bartlett Publishers.

**Frank Tsui, SWE** is working on a paper on characterizing communications activities during the development of software. He has collected data on more than ten projects and is collecting more data. Some early patterns are starting to emerge. The paper is probably six months to a year away from completion.