



**SCHOOL OF INFORMATION SCIENCES**  

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**UNIVERSITY OF PITTSBURGH**

James V. Maher  
Provost and Senior Vice Chancellor  
University of Pittsburgh

Via Email:  
**Thursday, February 14, 2008**

Jim,

Once again I am pleased to transmit to you the report of the SIS Board of Visitors. A draft of the report was shared with Dean Larsen and you will note that the School has begun to act on some of our recommendations.

I know I speak for the Board when I express my appreciation for the privilege of serving the University in this important way and to Dean Larsen and his team for making the visit an enjoyable experience. We do believe the School is moving in the right direction and we look forward to returning in 2008 to further assess progress towards goals.

Best regards.

Alfred L. Moye, Chair  
SIS Board of Visitors

**SIS Board of Visitors**  
**Meeting Report**  
**October 9-10, 2007**

**Board Members present were:**

*Gary D. Byrd*

*Daniel P. Mulhollan*

*J. Roger Glunt*

*Mary Ellen Rodgers*

*David H. Holtzman*

*Barbara Spiegelman*

*William Isler*

*Robert J. Strauss*

*Robert Kahn*

*Mary "Clare" Zales*

*Alfred L. Moyé, Chair*

## **1. Introduction**

The School of Information Sciences' Board of Visitors met on October 9 and 10, 2007. Materials supporting the meeting are available at <http://www.sis.pitt.edu/~sisbov/html/agenda.html>. The web site has a user-id (sisbov) and password (sisbov) to exclude it from harvesting by search engines.

The meeting opened with the Provost issuing his “charge” to the Board. A summary of this charge follows (section 2). Two break-out groups addressed the Provost’s charge from different perspectives:

- Reformulating **Telecommunications** education to prepare **iSchool** graduates for careers in consulting and service industries
- Identifying emerging societal needs and faculty strengths that provide strategic opportunities for the **SIS iSchool**

Subsequently, the full board discussed the development of alternative sources of support for **critical infrastructure and experimental initiatives**.

Each of the break-out groups reported to the Provost in an executive session, summarized in section 3 of this report. Section 4 summarizes the SIS Council’s responses to the BOV recommendations.

Section 5 contains summary reports of the discussions of each break-out group. These are provided to enrich the understanding of the background to the discussion with the Provost in executive session.

## 2. Provost’s Charge to the Board

The Provost welcomed the Board and prefaced his remarks by describing his overall assessment of the School’s current status as “half full, half empty.” He re-affirmed his support for the School and its importance to the University, noting that the unified school model introduced last year is an “enormous improvement.” He also noted the improving enrollment situation that is resulting in some of the School’s incentive funds being restored.

The Provost then identified the following challenges for the School:

- A professional school must pay particular attention to the career aspirations of its students, noting that “an arts & sciences mindset is not an ideal one.” He opined that many faculty think of themselves as arts & sciences faculty.
- The School needs to pay greater attention to understanding which programs are attractive to students and the causes for some of them being under-enrolled.
- The quality of research and its relation to external funding needs to improve. He observed that “research funding is down.” (In his update, Dean Larsen stated that the School’s federal funding has risen from \$1M in 2005 to more than \$2.5M in 2007, with a fair amount going directly to students.)

Early discussions among the Board members following the Provost’s charge centered on opportunity areas for SIS, seeking ways to couple more effectively the School’s intellectual capital with regional, State, and federal needs. The aging population around Pittsburgh was viewed as such an opportunity area that could

engage the school in areas such as social & collaborative computing, “ageless interaction,” knowledge capture and management, and partnerships with medicine and healthcare. A focus on changing work models was also suggested, noting that “place” is becoming less important to productive work, as evidenced by the growth of outsourcing and offshoring, particularly in information-intensive jobs.

### **3. Provost’s Executive Session**

Each of the two break-out groups reported to the Provost on their findings, followed by a broader discussion of development and fund-raising.

#### **Telecommunications and Networking Program**

Board members expressed dissatisfaction with the current status of the Telecommunications and Networking Program, particularly in light of the continuing serious enrollment shortfall. They were not satisfied with the answers provided by faculty present regarding understanding what market sector is hiring telecommunications graduates, and concluded that the program was not sufficiently aware of the industry marketplace. They expressed disappointment, for example, with the answers forthcoming to their questions regarding student placement. They observed that the large proportion of Tele graduates working for the university does not serve the program well, in that it does not improve and expand its reputation among key employers.

They did not dwell on curricular issues, generally opining that it was probably ok and that faculty were attentive to it.

Corporate relations with key industry partners such as Cisco have languished. Cisco has become a very different company over the past five years, and Board members suggested that we need to learn how to deal with them. In general, the Board observed that the employment market has changed and new markets have emerged, but that our knowledge of and outreach to these markets is inadequate.

In response to a brief discussion regarding the location of the program in SIS (rather than Engineering, for example), they observed that the program needed to be in SIS because of its future potential rather than its past record. To achieve its future potential, though, it needs to become more fully integrated into the School and take a more proactive role in understanding the needs of its employers and the changing nature of the information industry.

The recommendations from the break-out group follow.

1. The school should pick a number of corporate targets (20-50) and make a determined effort to bridge into those companies using both departmental and university relationships, including alumni.
2. The school should continue using the name Networking
3. The program should remain part of SIS
4. Management within the school should be responsible for an aggressive outreach program to corporate America and foundations to increase the incidence of job placement, internships, research grants and collaborative efforts.

## **iSchool Development**

The breakout group considering strategic iSchool opportunities identified six opportunity areas for which SIS is potentially well positioned:

- Information services to and for an aging population
- Tailored educational opportunities for career changers
- Partnerships within the University and with the health provider community
- Preservation and conservation
- Social computing
- Economics of information transfer.

Board members in this breakout session identified SIS strengths in knowledge, expertise, and passion that could be brought to bear on one or more of the opportunity areas, but that the School is lacking the time and resources to exploit these opportunity areas effectively. They emphasized the need for greater emphasis on development activities in order to acquire the resources necessary to pursue very real opportunities.

The group observed that the School is doing “ok” in development, but not good enough. One person who is responsible for alumni development and institutional development was viewed as insufficient (and that person has now left SIS for opportunities elsewhere, seriously exacerbating the problem).

## **Fund raising**

All Board members participated in an animated and, at times, passionate discussion of fund-raising opportunities, recommending that the School (with the assistance of Institutional Advancement) increase and focus its efforts toward specific fund-raising objectives. While IA has placed a full time development officer in the School for a number of years, the incumbent has typically been new to institutional development. Coupling a relatively inexperienced development officer with a School with few strong giving prospects has yielded at best a

modest return from alumni. The School can do better, but needs better support from the University and, in particular, from Institutional Advancement. The Board suggests the following steps be taken to improve the School's fund-raising performance:

- When faculty are on travel, conduct research in advance regarding alumni who might be invited to lunch, dinner, or simply visited, in order to build and sustain an active alumni network. Faculty should, likewise, seek corporations and foundations they can easily visit while on travel.
- Encourage alumni to set up meetings between visiting faculty and their respective organizations.
- Do research to understand foundation goals and assessment strategies, in order to better align the School's strengths and interests with those of the foundations.
- Seek relationships with companies who are interested in sponsoring 9-month student projects. Harvey-Mudd College was cited as an exemplar for this type of program. The corporations would pay for the work performed, and a close relationship would need to be sustained with the sponsor throughout the "project course."
- The Library of Congress identifies "capstone problems" that reflect emerging legislative interests and problems that typically have a one year lead time. Through relationships with specific schools (the Maxwell School at Syracuse and the Heinz School at CMU were identified), student teams work on these problems under LC sponsorship. SIS was encouraged to establish a similar relationship with the Library of Congress on capstone problems.
- The School was encouraged to use social networking more effectively in its relationships with students, alumni, and sponsors, including Facebook and LinkedIn.
- Joint doctoral degrees with other campus units should be explored, including an MD / PhD in Information and an LLD / PhD in Information.

The Board encouraged IA to work with SIS on a Development Plan, and then to aggressively pursue the execution of the plan.

#### **4. SIS Responses**

The Board's criticism of the Telecommunications and Networking Program resulted in rapid and decisive action. Less than two weeks after the BOV meeting, the incumbent program chair (Dr. Richard Thompson) stepped down and a new chair (Dr. David Tipper) was named. In November, Dr. Tipper

conducted an extensive survey of competitor schools and conducted interviews with select alumni. He presented the results of his analysis to the Tele faculty in November, with three key findings:

- SIS's Tele program yield rate on applications submitted is on a par with competitors, but we receive substantially fewer applications. Follow-up on this point identified serious weaknesses in the Tele web site and in our marketing efforts, which have now been identified as priorities. A new Tele web site was launched on December 4, 2007, as an immediate (but intermediate) solution.
- The curriculum offered in the Tele program is substantially more rigorous than that offered by our stiffest competitors. This is considered a strength of the program that should not be compromised.
- Industry is primarily hiring telecommunications professionals with an undergraduate degree. The market for Masters degrees is weak in geographic areas that do not have a major telecommunications industry presence (Pittsburgh does not). In response, the Tele faculty are now considering a major adjustment to the curriculum featuring a strong undergraduate professional track in telecommunications (new) coupled with a strong research track leading to a PhD (existing). Under this plan, the Master's program would be de-emphasized.

Dean Larsen shared the Board's suggestions regarding strategic opportunities and fund raising with the SIS Council at their October meeting. The Board's recommendations are now being considered for inclusion in the School's strategic plan.

He also met with Pittsburgh-based Board members Barbara Spiegelman, J. Roger Glunt, Robert Strauss, and William Isler to follow up on Board recommendations and to begin laying out a strategy.

Subsequent to those conversations, Dean Larsen and BOV member J. Roger Glunt met with Tom Crawford (Institutional Advancement) in December to share the conclusions of the Board with Tom and to recommend greater engagement of IA in alumni development with SIS. Tom supported the recommendations of the Board, developed a position description for a development officer for SIS (in collaboration with Dean Larsen), and is now actively seeking to fill that position.

Andrew Kovalcik (Institutional Advancement, corporate relations) has also been working with Dean Larsen to identify regional clusters of alumni with giving potential and to begin a campaign targetting corporations and foundations. Overall, the level of activity between SIS and IA has increased markedly since the Board meeting.

## 5. Reports of Break-out Sessions

### Report of the Telecomm evaluation group—SISBOV October 10, 2007

On October 10<sup>th</sup>, the SISBOV met at Alumni Hall in Pittsburgh to discuss pressing issues related to the school. We were divided into two groups; our group was tasked with evaluating the Telecommunications part of the IS school. As Dean Larsen had merged the three parts of the IS school into a blended faculty earlier this year, it became especially important to determine the efficacy of the move as well as evaluate what we felt was the appropriate future direction of the school in regards to Telecommunications.

Our discussion can be divided into four topics:

#### 1. Why is the enrollment in Telecom declining?

Partially this is based on what you measure it against. The chart that the school usually shows goes back to 1998 and includes the Dot Com boom, which was a discontinuity point for all kinds of IT enrollment. Still, as the discussion continued, it became apparent that that the school had not been aggressive enough with its outreach program to the business community. Two observations led to this conclusion by (non-faculty) part of the working group:

- Although faculty expressed satisfaction with the placement of graduates, the jobs were almost all Western Pennsylvania regional.
- There was little interaction between the staff and the business community, including internships, collaboration or research

Several reasons for the weak corporate tie-in were suggested, including the possibility that the school's traditionally strong relationship with Cisco was damaged by the University's purchase of non-Cisco routers. Another suggestion was made that the near-100% international makeup of the student body was decreasing the opportunities for corporate networking, since many of the international students left the US after graduation.

#### 2. Should we or should we not rename the Telecom group?

It was suggested that Telecom was an obsolete name and that it might be easier to sell the school by calling it "Networking" or "Datacomm." Most board members felt that the name change would have negligible impact on the success of the school in addition to the belief that the industry changes so fast that the name might be attractive again.

#### 3. How best to position Telecom within the University?

It was suggested that the University did not need a Telecom group at all and the idea was rejected after a short debate. We debated whether Telecom was a better fit in the CS or EE departments. We decided that it was better remaining where it is now within the IS school, mostly because of the possible future



synergy with the rest of the IS department. As information appliances begin to resemble networking equipment, the advantages in the relationship will become more obvious.

4. How to assess the potential demand for telecom graduates?


We decided that we needed some outside help for market analysis and that perhaps the University administration could assist with this. It was generally felt that without measurement, the exercise in improving would be futile, because it would be impossible to determine the degree of success. We felt that five sectors should be examined (at a minimum) including:

- Health care
- Senior Care
- Financial Sector
- Logistics (FedEx, UPS, etc.)
- Computing services

Recommendations:

5. The school should pick a number of corporate targets (20-50) and make a determined effort to bridge into those companies using both departmental and university relationships, including alumni.
6. That the school should continue using the name Networking
7. That Networking should remain part of the IS school
8. That management within the school should be responsible for an aggressive outreach program to corporate America and foundations to increase the incidence of job placement, internships, research grants and collaborative efforts.

Respectfully submitted,



David H. Holtzman

Temporary chair, Telecomm evaluation group, PITT SISBOV

18 Oct 2007

## Notes from the break-out session identifying emerging societal needs for a Pittsburgh-based iSchool

**Topic:** Aging population (over 80)

Linking the School to this market:

- Social Computing – What role should school play? In what settings? This is a more strategic and global issue with many dimensions.
- Gates Foundation Research Interests – forum for exchange of information with aging and younger generation
- Project 2020 with PA state government. Every agency is charged with addressing needs of aging population by 2020.
- Aging professional library community. How to train and re-train graduates who have been in the profession for 2 decades? Target audience for social computing include:
  - Post-masters certificate. Professional development for graduates—both undergrad and grad
  - Retirees or other career changers returning to workforce—need to re-tool
  - Post-masters online education
  - Flexible post-masters educational opportunities
  - Partner with another part of the campus – health information
- Increase in health care reform and health information technology {HIT}
- Consider a formal degree program in health records management (SHRS), Informatics, LIS

**Topic:** Greater integration of the undergraduate program with graduate programs, including using the BSIS degree program as a feeder into graduate tracks

- Not self-evident to population of roles that iSchools play
  - Need to elevate perception of iSchools
  - Enumerate how program adds value to people's lives

**Topic:** Develop greater presence in Social Computing

- Creating community through computing
- Capturing and preserving expertise as people advance through workforce
- Fostering continued peer interaction as individuals move on to new stages in their lives? Building peer networks.
- Social computing affects ALL age groups.
- Adaptive interfaces for aging, individuals with disabilities, young children, ...

**Topic:** Addressing the personal information needs of an aging population.

- Build on the (largely misunderstood) needs regarding providing digital objects to the population – particularly on the role of knowledgeable staff who bring varied skills together- this comes from an iSchool environment
- Personal archiving – helpful for all components of society
- Networked computing systems that provide information to people.  
How to interact with information? How to use social networking tools?

**Topic:** Preservation

- Top two needs of PA Library District Centers were preservation and Human Resources
- Need staff who have a broad understanding of preservation issues, beyond digitizing of artifacts
- UT-Austin has been lead in this area, Pitt should have a stronger presence and get full-time teachers in this area

In discussion, a shift in focus occurred from aging to social computing, particularly around issues of preserving knowledge in an aging workforce. Social computing was seen as a vehicle through which issues of aging could be addressed.

A School-wide course on how society interacts with technology was suggested, including topics such as:

- Using collaboration to add value.
- New approaches to geographically distributed work.
- New ways to achieve economies.
- Transformative effects on work, education and family.
- Emerging work model: Distributed and collaborative

An Honors College Course on Social Computing was also suggested.

**Tactics:** Inject entrepreneurial spirit in school.

- Take some risks.
- Increase entrepreneurial spirit. – Aging faculty may be a detriment.
- Ignore structural inflexibilities
- Keep options open for the Boyce Chair to play a significant role
- Faculty Strengths and Opportunities  
2 vacant positions

Partial funding for Boyce Chair through Buhl endowment

**Targets:**

- Future of iSchools connected to health information and social computing
- Emerging area to explore - economic sensibility

- Understanding the economic issues related to scholarly communication, health information, ... this is a small but growing area of expertise within economics (economic issues in information transfer).
- Explore intellectual property issues.
- Joint doctoral degrees – LLD/IS as a model
- Development
  - Need a serious 5-year plan for development.
  - Ask alumni to recommend foundations.
  - Leverage BOV connections to companies and foundations that can support SIS.
  - Cultivate alumni (SIS is under-staffed in this area).
  - Develop a set of key ideas that bring all units of the School together around a development strategy that can be proactively supported by the BOV and IA.