

SIS Board of Visitors

Meeting Report

October 19-20, 2009

Board Members present were:

Gary D. Byrd *J. Roger Glunt* *Carla Hayden* *David Holtzman*
Bill Isler *Robert Kahn* *Michael Macedonia* *James Matarazzo*
Alfred L. Moyé, Chair *Daniel P. Mulhollan* *Mary Ellen Rodgers* *Barbara Spiegelman*
Robert J. Strauss *Patrick White* *James F. Williams, II*

Andrew Blair, representing the Provost's Office

1. Introduction

The School of Information Sciences' Board of Visitors met on October 19-20, 2009. Materials supporting the meeting are available at <http://www.sis.pitt.edu/~sisbov>. The web site has a user-id (sisbov) and password (sisbov) to prevent it from being harvested by search engines.

The Board convened after a light lunch with new faculty presenting brief overviews of their teaching interests and research areas, a ribbon-cutting for the new Laboratory for Education and Research on Security Assured Information Systems (LERSAIS), and a poster session featuring the work of the School's doctoral students. This was held as an open house for all SIS students, faculty, and Board members.

The formal meeting opened with the Provost issuing his "charge" to the Board.

2. Provost's Charge to the Board

The Provost addressed the Board the evening of October 19, discussing the challenges and opportunities confronting both Pitt and SIS. Provost Maher expressed appreciation for the advice provided by the Board of Visitors over many years. He emphasized his interest in sustained progress in SIS, noting the importance of the BOV's advice in pointing the way.

He expressed the sense that the University was generally doing well, particularly in light of the serious difficulties being encountered by some peer institutions from the current economy. Each school now has plausible plans leading to strategic improvement and an ability to adapt goals and strategies as necessary to reflect changing external conditions. Nonetheless, he did see the University's main

challenges as stemming from the economy, with the worst recession since the great depression and a continuing rise in unemployment. He went on to summarize Pitt's four funding streams:

- The Commonwealth appropriation
- Endowment income
- Tuition revenue
- Federal research funding

With regard to the *Commonwealth appropriation*, he observed that many believe the state recently completed the budgetary process. But the non-preferred category has not been passed yet and this is where the University appropriation is addressed. It requires a two thirds vote of the legislature. Until the non-preferred budget is passed, Pitt won't know its budget or the budget for the school. Already, 5% has been cut from school budgets and the Provost is not expecting to cut more this year. Next year's budget remains uncertain as does the possibility for new taxes. Despite the economic uncertainty, the Provost still plans to invest in Pitt's schools. Proposals have been submitted and will be acted on when the budget is finalized.

The second revenue stream, *endowment income*, is also uncertain. The University's endowment has decreased in value by about 19%, to its current valuation of approximately \$2.1 billion. Given this drop, it will not be possible to sustain the level of payout to schools that was possible over the past few years. The overall impact on the School's budget from endowment is not expected to be extreme, however.

The third revenue stream, *tuition*, has not declined. Enrollment is at a peak, having set another record this year. The quality of the class is slightly better than last year, and banks continue to make loans to our students because Pitt students have a very good record of repaying their student loans.

The fourth revenue stream, *federal research funding*, continues to rise, and is at a very competitive level among our peers.

The Provost noted that the University has made responsible and prudent budgetary decisions and adjustments have already been made.

The Provost then briefly focused on SIS, where he acknowledged the BOV's 2008 report recognizing real progress at SIS. He is committed to helping the School implement its plan and is looking forward to our review this year. He noted the disproportionate enrollment in the MLIS program and suggested a goal of finding ways to distribute instructional responsibilities more evenly. He also opined that the LIS curriculum would benefit from stronger engagement with IS, observing that librarians of the future will increasingly need what IS has to offer.

Provost Maher observed that SIS is in a bit of an unusual situation:

Enrollment in Library Science is high, creating pressure on the faculty and the School's infrastructure. The School is also sufficiently dependent on tuition revenue that a significant reduction in enrollment would hamstring programs. He indicated that he would welcome suggestions to address the legitimate anxiety about enrollment. While the market remains strong for MLIS students, he noted the increasing

role of information technology, suggesting a larger curricular focus in the MLIS program on information technology, in order to prepare students appropriately for the rapidly changing professional requirements of librarianship.

In closing, Provost Maher noted plans to renovate instructional laboratories and his commitment to financially supporting these plans.

3. Board Discussion

In the morning session on October 20, the Dean, Associate Dean, SIS Council Chair, and Program Chairs updated the Board on progress and current challenges. Among the Board's reactions and responses were the following:

- A continuing sense that a common introductory graduate course would serve the School well.
- Noting a large and growing market for some specialty areas such as cybersecurity that could become signature strengths of the School
- Observing that all SIS graduates should have a sufficiently deep knowledge of information technologies to (at least) understand what is feasible
- Concluding that the School is going in the right direction and has more yet to do

Fund Raising

Tom Crawford and Joelleen Yerace (Institutional Advancement) discussed the School's fund raising activities and potential. The Board encouraged all faculty and staff to participate (at any level) in the internal campaign, observing that participation is a very important metric that philanthropic organizations look at when considering gifts. They also observed the importance of faculty contact with alumni as they travel to conferences and related events.

Student Services

Wes Lipschultz discussed the current efforts of Student Services to attract students from diverse backgrounds, and Kip Currier and Tonya Briggs discussed the Andrew W. Mellon Foundation-funded planning activities to develop an "iSchool Inclusion Initiative (I3)" designed to attract undergraduate students from underrepresented segments of the population into graduate study in iSchools and subsequently to faculty appointments. Board members suggested recruiting among returning veterans. The possibility of securing "second career grants" from a foundation was also suggested.

Enrollment

There has been a 5-8% increase in applications since last year, with more students seeking financial aid. Overall the School can accommodate about 800 students. In the aggregate, enrollment is strong but the distribution across programs is out of balance. MLIS enrollment is over 400, which is considered too large, resulting in too many large classes. MSIS has been increasing gradually since 2005. It is now over

110 with applications for the fall of 2010 up sharply. MST enrollment has doubled since 2007 to 44. Ph. D. enrollment remains strong at 80. Undergraduate enrollment has climbed to 135 against a target of 150. The Dean noted a decrease in the average age of SIS graduate students.

Now that enrollment is becoming stronger in the undergraduate, IS, and Telecommunications and Networking (TeleNet) programs, it is appropriate to consider reducing the MLIS enrollment. The large enrollment in LIS poses a problem of student/faculty ratio. Fortunately, a cadre of excellent adjunct faculty relieves some of the burden on full time faculty.

Governance

Richard Cox, chair of the SIS Council summarized the primary functions of the Council:

- Act on behalf of faculty, staff and students regarding School decisions
- Review planning and budget policies
- Develop and review policies of governance
- Establish committees as needed
- Coordinate activities among committees
- Advise the Dean on issues

He presented a brief accounting of Council accomplishments:

- 44 separate actions initiated over three years
- 35 actions completed
- 4 actions in progress; 5 actions set aside

He identified five ongoing and two more recent interests of the Council:

- Ongoing
 - Joint appointments to SIS
 - A common introductory course for graduate students
 - Evaluation of classroom space and infrastructure needs
 - Defining personal computing ownership (e.g., laptops) expected of all SIS students
 - Completion of the transition of the School's network infrastructure to CSSD, including provision of broadband wireless in the building
- More recent
 - Learning Outcomes Assessment
 - Streamlining planning and budget processes

Members of the Board suggested the benefits of developing a common introductory graduate course would accrue to the faculty by virtue of the process, as well as to the students in terms of the product.

Undergraduate Studies

Bob Perkoski, the chair of the undergraduate program, discussed strategies for student recruitment. He observed that the current theme (“Build, Design, Secure - One degree, many jobs”) has been used for three years and needs to be updated. The new recruitment campaign will focus more on current trends such as mobility, Web 2.0, and social media, emphasizing how each of these reflects a convergence of people, technology, and information (the particular strength of the iSchools).

Of the 135 students enrolled, 26 are female and 9 are African American. The low proportions of female and African American students is a problem shared by information science and computer science programs across the nation, with only a few exceptions. The Commonwealth of Pennsylvania provides some funding to address issues of diversity, and the School has scholarship funding from a couple local corporations to attract diverse students. The proposed iSchool Inclusion Initiative is also seen as a long-term response to the need to attract students from all segment of the population to careers in the information professions.

The curriculum has been restructured to emphasize three specializations:

- Information Systems
 - Educates students in the use of object-oriented design tools to design, build, implement, and test information systems
- User-centered Design
 - Develops understanding of visual perception and human-computer interaction needed to design, build, and evaluate prototypes of interfaces to information systems
- Networks and Security
 - Offers skills needed to design, build, and test LANS, WANS, Wireless, Internet, and Web-based networks

New courses are being offered in IT Management, Web 2.0, and Game Design, as well as a laboratory course supporting the Networks and Security specialization. The program also includes a variety of capstone experiences, including a web programming project, internships with local industry (e.g., PPG, Alcoa, UPMC, FiServ, and Del Monte Foods), and independent case studies.

Graduate Information Science and Technology (GIST) Program

Paul Munro, the chair of the GIST program described the Masters program as a 36-credit professional program organized into six specializations:

- Cognitive Systems
 - Addresses systems-oriented issues based on an understanding of human cognition, focusing on topics that lie at the intersections of technology and human cognition and behavior.
- Human-Centered Computing

- Focuses on developing adaptive interfaces, navigation through information spaces, social computing, and the use of virtual environments in information science.
- Database and Web Systems
 - Develops knowledge and skills to design and develop network-based information systems with a focus on e-business emphasizing systems and technology.
- Geoinformatics
 - Develops specialized knowledge and skills to design, develop and deploy complex systems and applications incorporating geographical and spatial information
- Information Security
 - Prepares students for the development, design, and deployment of secure information systems with an emphasis on networked information systems.
- Telecommunication and Distributed Systems
 - Emphasizes networking protocols, client-server systems, distributed database management systems, and Web services to equip students with the knowledge and skills to deploy, design, manage, and protect distributed applications in networked systems.

Students are not required to take one of the specializations. They can tailor a set of courses to their own needs and interests with the guidance and approval of a faculty advisor. Approximately 2/3 of the Masters students enroll in one of the specializations.

Telecommunications and Network Program

Prashant Krishnamurthy, acting program chair during David Tipper's sabbatical, reported on the shift of the program from being centered on a professional Masters degree to building up an undergraduate specialization, supporting the MSIS specialization, and strengthening the PhD program. He observed that the transition has been smooth, encountering little disruption and attracting no complaints from students. The curriculum has dropped courses focusing on the physical communications layer, added laboratory and seminar courses, reworked the business course, and developed an internship program. He also noted the cross-listing of courses with ECE and with CS.

Last year, 100% of the MST and PhD graduates were employed by industry, government, or academia (both US and international). Essentially all of the recent PhD students have been international. Two 2009 PhD graduates are now faculty members at Syracuse and Ohio University.

Current (and continuing) challenges to the program include:

- Overcoming the absence of a full-time computer network faculty member detailed to NSF
- Increasing alumni giving from a largely international and relatively young alumni base
- Increasing corporate giving during difficult economic times
- Marketing the revised version of the program
- More broadly integrating telecommunications and networking into the iSchool

- Sustaining support to keep laboratories current

Dr. Krishnamurthy noted that Pitt is one of only five US universities that offer a PhD program in Telecommunications and Networking, and is one of only two programs that are certified by the National Security Agency (NSA). He also announced a search for a new faculty member who can provide leadership to the computer networking area and conduct research relating to upper layers of network protocols.

Library and Information Science (LIS) Program

Mary Kay Biagini, chair of the LIS program, offered the following profile of the program:

- Faculty & staff - 13 full time, 12 adjunct faculty, and 4 staff
 - During the 2008-09 academic year there was one unfilled full-time faculty position (the Boyce chair), one retirement (Toni Carbo), and one resignation (Pat Lawton)
- Students - 429 MLIS, 22 PhD and 5 CAS (Certificate of Advanced Study)
 - 44% of MLIS students are enrolled in the online FastTrack program
 - 80 students participated in the Pitt Partners internship program
- Competition - One of 53 LIS programs - many of them, like SIS, have distant education programs
- Governance - To manage workload, a new model of shared governance is in place
- Ranking – Consistently in top 10 (USNWR) in all specializations
- Course composition – every MLIS course is offered in a blended (classroom/online) format
 - Increased financial aid directed toward PhD students as teaching fellows
- New Certificate of Advanced Study (CAS) in Health Sciences Librarianship in collaboration with the Pitt Health Library System to be launched in 2010

Collaboration among iSchools

Martin Weiss (associate dean) reported increasing collaboration among the associate deans of the iSchools to explore opportunities for multi-institutional, multi-disciplinary research and student activities. All of the iSchools are professional schools situated in research universities (www.ischools.org). As the consortium is still young (~5 years as a formal organization), it has succeeded in establishing a national identity and is seeking to build a higher profile at the national level, particularly among the federal funding agencies.

The strategies Dr. Weiss enumerated to establish such recognition include:

- Establish the annual iConference as the known and respected venue to develop strategic partnerships around shared opportunities, for PhD students to present their developing research through papers and posters, and for junior faculty to build their network of professional colleagues.
 - A research track is now part of the iConference program

- The Gordon Conference model is under consideration as another way to expand opportunities for creative examination of research directions
- Develop one collaborative research proposal each year that engages multiple (and potentially all) iSchools

Diversity

SIS has an explicit goal to increase applications, acceptance and graduation of students from diverse backgrounds. Currently, these efforts are funded by the Commonwealth of Pennsylvania, by several corporations (most notably Alcoa), and more recently by the Andrew W. Mellon Foundation. The Student Services Office administers the Commonwealth and corporate funds through the School's recruitment program. The Dean, in collaboration with a faculty co-PI (Dr. Currier) and a project director to be hired, administers the Mellon Foundation funds through the i3 initiative.

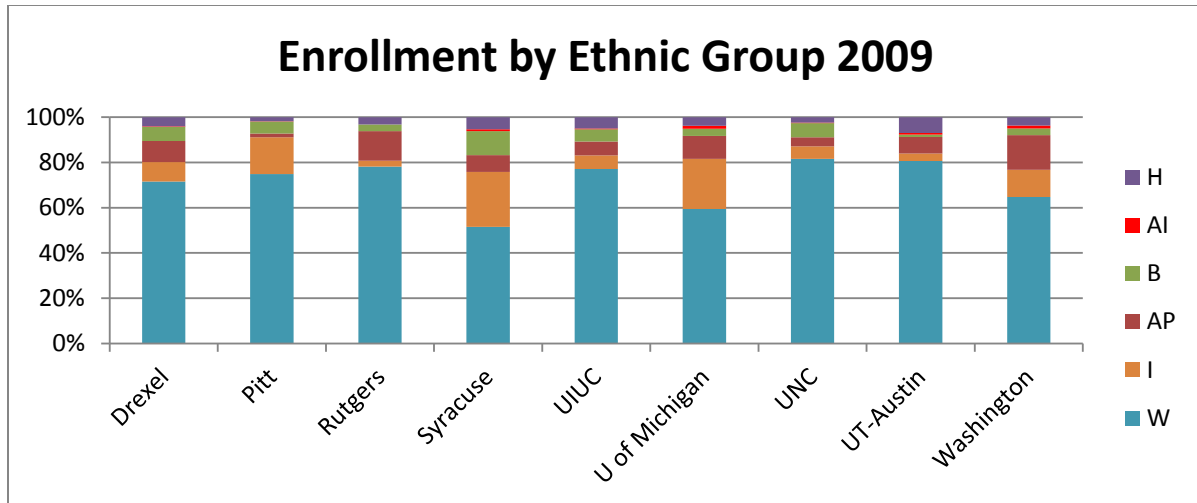
This has long been a challenging area, and our successes are modest. Strategies include:

- Maintaining an up-to-date database of colleges and universities producing large numbers of diverse graduates from which we recruit graduate students
- Attending conferences and workshops focusing on strategies for recruiting diverse students
- Creating opportunities for faculty, staff and graduate assistants to interact with potential students
- Hosting activities designed to appeal to diverse students
- Offering tutoring services to students who may be insufficiently prepared for graduate study

The increasing efforts are currently yielding a small increase in the number of applications, acceptances, and enrollment from diverse candidates. We can also report modest growth in the number of graduates.

Board members expressed curiosity regarding how SIS compares with other iSchools. The following chart provides a comparison over 9 iSchools for which data is available. In this chart, the following legend applies:

- H = Hispanic
- AI = American Indian
- B = Black
- AP = Asian Pacific (with US citizenship)
- I = International
- W = White



iSchool Inclusion Initiative (i3)

The iSchool Inclusion Initiative (i3) Initiative is being planned in response to a lack of faculty and students from underrepresented populations within academia and the workforce in general, and the Information Schools (iSchools) specifically. To address this critical shortfall, the Initiative’s primary aims are (1) to increase the number of students with a demonstrated commitment to eradicating racial disparities in graduate programs at U.S. iSchools, and (2) to encourage students from underrepresented groups to consider academic career opportunities and achieve successful and satisfying positions as academic faculty members. Research has shown that a diverse faculty encourages students from underrepresented populations to more likely consider advanced educational opportunities. More diverse and inclusive student bodies may in turn yield academic faculties and workforces that are more representative of U.S. societal demographics.

Coordinated by Pitt and in cooperation with Drexel, and Penn State, the proposal is nearing its final stage in consultation with the Andrew W. Mellon Foundation. *Since the time of the BOV meeting, ten iSchools and three corporations have written letters of support and commitment to the program. Earlier this year (2010), the project director (Tonya Briggs) resigned her position. We are now working with the Office of Human Resources to initiate a search for the next director.*

Twenty rising juniors with a demonstrated commitment to eradicating racial disparities will be recruited each year to i3 that kicks off a one-year program of engagement between them and the iSchools. During the Institutes, each cohort will experience a varied but thematically unified array of hands-on modules to orient them to the opportunities (and challenges) available to them in the information professions. These annual Institutes will introduce the students to the fundamental skills they will need and foster familiarity with information-related subjects.

Board members expressed significant interest in the i3 program, with several volunteering to be mentors. The Board suggested looking at other schools that have been successful in attracting minority students – the University of California, Georgia Tech, North Carolina State, the University of Southern California, and the University of Puerto Rico, Mayaguez were mentioned. (It may be worth noting that

the iSchools at the University of California and Georgia Tech are among those who have provided letters of support and commitment. The Board also recommended considering veterans as another source of diverse candidates (the veterans affairs office is situated in the College of General Studies).

The Board recommended that Alex Johnson, president of CCAC, be invited to serve on the Advisory Committee.

Given the difficult economic situation currently, Board members suggested that industrial partners be approached, suggesting they consider giving release time to employees who can serve as adjunct faculty or mentors, in lieu of financial donations. They also suggested looking for ways to creatively use technology to bring minority faculty from other institutions into the classroom

Board members also wondered about how globalization may draw other organizations' interests into initiatives such as this one. Elsevier (Amsterdam) was suggested as one corporation that may have interests sufficiently aligned with those of the iSchools that they might have a role to play. (On the other hand, Elsevier has a reputation for price gouging on scholarly journals.)

Open Discussion

Following the more structured discussions, the Board engaged in an open, wide-ranging discussion. Highlights of topics considered follow.

- Board members wondered whether one result of widespread corporate downsizing might be an increase in 2nd career grants that could be used to attract new students into SIS programs.
- They reaffirmed their sense that a common introductory graduate course could result in increased integration of the school, suggesting that the *process* of creating the course would benefit the School. Recognizing the lack of progress on a core course, despite several determined efforts, they suggested that perhaps it was time to temporarily table the issue, particularly if the goal is to get people to work cross-disciplinarily, allowing the process to take place naturally.
- Board members discussed at some length their interpretation of the Provost's charge as it related to the IT components of LIS education. They understood his statement to suggest that the education of library professionals should include a greater emphasis on the technologies widely employed in their profession, not simply the incorporation of educational technology in the delivery of their curriculum. Bob Strauss strongly affirmed the need for more sophisticated IT management in libraries, questioning whether new (not to mention existing) librarians are equipped to deal proactively with a digital future.
- The Board noted that recent LIS faculty hires (He, Koshman, Bowler, Bowker, and Oh) are clearly technologically savvy.
- The Board considered how the Pitt LIS curriculum compares to that of peer schools in terms of the technological component, citing Michigan and Illinois as good comparators. Board members focused on questions of how an increase in the technological components of the profession could distinguish the Pitt program, suggesting that notable competitors (e.g., U Washington) are already moving in this direction.

- Following on this line of thinking, the Board questioned the overlap between the IS curriculum and ECE and CS, suggesting that SIS should distinguish more clearly its programs from both those of other schools at Pitt and those at other iSchools. This discussion led in a rather natural progression to raise the same issue for the Telecommunications and Networking program... suggesting the need to more clearly distinguish Pitt's program.
- Online education attracted some cautionary consideration, noting the temptation to leap into online education in other programs while observing that Syracuse's online telecommunications program has apparently not benefited their enrollment.
- The Board was complimentary toward Bob Perkoski's success at galvanizing the undergraduate program, affirming his positive attitude and proactive efforts.
- The Board noted that the attitude toward development has changed dramatically, with Joelleen bringing fresh (yet pragmatic) perspectives and an understanding of advancement that the School had not previously had.
- Regarding fund-raising, the Board commended the School for reaching 81% of its capital campaign goal. They also observed that faculty/staff participation in the internal campaign is 55%, which they viewed as being relatively low.
- Cultivation of foreign graduates remains a significant challenge. It is difficult to establish a strong bond with international students, but with the increasing use of electronic resources (SIS now has roughly 5,000 confirmed email addresses of alumni), the School may have untapped opportunities to connect with international graduates. Board members suggested also cultivating the international corporations that hire our graduates.
- The Board responded very favorably to the new SIS alumni newsletter, observing that it has "curb appeal", inviting recipients by implicitly saying, "read me". This was viewed as a fundamental advance in the cultivation of donors.
- The Board also suggested the Dean should be given discretion to reward faculty who keep in touch with grads/program officers at foundations, etc.
- Board members also suggested that the School might consider being more proactive in the use of social networking (e.g., FaceBook, Twitter, ...) to sustain a sense of connection with alumni.

4. Provost's Executive Session

In the closed session with the Provost, the Board was very supportive of the School, the progress that has been made, and the directions it is going. The Provost was, likewise, supportive. *During the remainder of the week, the Dean had two additional informal opportunities to meet with the Provost, and at each of those events the Provost reportedly spoke very favorably about the outcome of the Board meeting.*

In his introduction to the Provost's Executive Session, Chair Alfred Moyé acknowledged the leadership of Dean Larsen in bringing the School as far as it has come. Chair Moyé noted and affirmed the Provost's recommendation that SIS's Master's programs should consider themselves a professional school as opposed to an "Arts and Sciences" school. He noted that the attitude of faculty continues to improve, that enrollment gains are strong, and that the research presentations and posters provided evidence to

the intellectual vitality of the School. Board members collectively endorsed Moyer's assessment, and endorsed the move toward classrooms equipped to support distance learning. The Board further urged the Provost to support recruitment actions for the two proposed SIS faculty positions (one for the LIS program and one in Telecommunications and Networking), with an emphasis on strategic hires that can bridge several areas within the School.

The Board observed that the SIS Council continues to be successful in developing ways to execute its mandate as the primary governance vehicle for the School. Faculty are coming together to solve problems across the School, as evidenced by the hiring of two senior scholars who span the disciplinary interests of the School, the success of the restructured undergraduate program, the development of formal specializations in the GIST program, and the continuing growth in demand for the LIS program.

The Board is pleased with the direction of the undergraduate program and by the developments in the Telecommunications and Networking program, which is now focusing more on undergraduate education and on applications of telecommunications and networking in the iSchool context.

The Board also noted that the blended MLIS degree program, under the leadership of Mary Kay Biagini and others, is cohesive and seems to be "clicking on all cylinders."

Responding to the Provost's statement of sustained interest in strategic investment, even in economically challenging times, Board members summarized their discussion of the progress and potential of reconceived instructional labs as a vital component contributing to an integrated iSchool's academic programs.

The Provost endorsed the separation of curricular needs associated with professional education from the School's research agenda, and noted the positive results that could follow by making adjuncts more valued members of the faculty.

The Board adjourned at 4:00 pm.