SIS Board of Visitors Meeting Report April 29 – 30, 2013

Board members present included:

Raheem Beyah Roger Glunt Lynette Kvasny Cynthia Richey Patrick White Gary Byrd David Holtzman Michael Macedonia Keith Schaefer Elizabeth Yakel Claudia Gollop Charles Isbell Alfred Moyé, Chair Barbara Spiegelman

Juan Manfredi, representing the Provost's Office

School of Information Sciences faculty present included:

Sheila Corrall Stephen Hirtle Alison Langmead Bob Perkoski Martin Weiss Richard Cox James Joshi Elizabeth Mahoney Michael Spring Daqing Hé Ron Larsen, Dean Paul Munro David Tipper

School of Information Sciences staff present included:

Sharon Bindas Debbie Day Carolyn Loether Sandra Brandon Jeff Lawson Kelly Shaffer Marci Carothers Wes Lipschultz Mark Steggert

Executive Summary

The Provost identified three priorities in Pitt's plans: (1) excellence in education, with a global focus, (2) enhancing the University's academic strengths relating to energy and sustainability, and (3) fostering a culture of innovation and entrepreneurship on campus.

The Board's agenda included the first four of the topics listed below. The additional topics were offered by Board members during the meeting. The following highlights each topic and the findings and recommendations of the Board.

1. Assessment Activities and their Outcomes

Nearly all assessment activities are driven by external requirements of the University, accrediting bodies, and professional associations. Internally, the iSchool uses these to adapt to changing conditions, to refine the curriculum, and to seek greater efficiency and effectiveness in administration. This year we have been heavily engaged with the ALA in the reaccreditation of the MLIS program. In addition, the Telecommunications and Networking curriculum has been totally revised to make it more affordable and more closely aligned with learning outcomes.

Recommendation:

a. Routinely collect comprehensive data on graduates' experiences finding appropriate employment.

2. Building & Facilities

The renovation of the 3rd floor as collaborative workspace for iSchool students has been completed. The ribbon cutting was held in March. Renovation of the 8th floor for use by PhD students is underway and scheduled for completion before the start of the fall term. The 1st floor is currently under review, with the objective of creating an open, information rich space that clearly communicates the iSchool "brand."

Recommendation:

- a. Continue with near-term enhancements while continuing the quest for a new building.
- b. Seek donors who may be in a position to consider major gifts and naming opportunities.

3. Practical Experiences for Students

The iSchool offers an array of opportunities for students to gain practical experience, including internships, field experience, and capstone courses. The LIS program has championed the development of the "Partners Program" that offers MLIS students 3 terms of practical experience. Interest in such experience is growing, both with students and employers, placing increasing demands on current faculty and staff.

Recommendations:

- a. Hire a professional staff member to support iSchool-wide administration and management of internship and field experience programs.
- b. Collaborate with other Pitt schools (e.g., Engineering and Computer Science) to provide employers a single point of contact.

4. Growth in International Student Population

The iSchool is experiencing a proportionately large international enrollment in the graduate IST and TeleNet programs, with a disproportionate number of students coming from China. Pitt is working toward strengthening relationships to international alumni and increasing their sense of connectedness to Pitt.

Recommendations:

- a. Diversify the international enrollment by recruiting in countries such as Brazil, Chile, Argentina, and Saudi Arabia.
- b. Provide more directed opportunities for international students to quickly engage in the iSchool and the University's clubs, the student alumni association, career development, and related programs.

5. Building a Culture of Entrepreneurship

The iSchool should be a natural place to foster innovation, creativity, and entrepreneurship, but those who pursue such directions have historically encountered obstacles rather than incentives. The emergence of mobile apps and social networking make it a lot easier to start a new company, but the University and the iSchool need to have policies, incentives, and support structures in place to nurture such developments.

Recommendations:

- a. Focus on key opportunities in data-intensive areas where Pitt excels as a research university (e.g., data analytics, energy, and health care)
- b. Establish a campus-wide incubator program and, perhaps, even a small incubator in the IS building, that supports entrepreneurial initiatives involving faculty and students.
- c. Capitalize (and commercialize) more fully on faculty/student project innovations (e.g., Prof. Karimi's PAM)... "Mark it and then market."

6. Vision, Marketing, & Communications

The iSchool faculty has engaged in a strategic visioning and long-term planning activity, but has been struggling with a number of issues that relate the traditional strengths of the School to a crisp articulation of its future ambitions.

Recommendation:

a. Conduct an independent expert assessment of internal and external perceptions of the iSchool in order to determine how to communicate key values and position the iSchool brand.

7. <u>Development and Fund Raising</u>

The number of financial contributors to the iSchool is decreasing; although the total amount contributed each year remains relatively constant.

Recommendations:

- a. Encourage undergraduates to join the student alumni association.
- b. Participate in the Pitt Alumni Association's "Dinner with 12 Panthers" program.
- c. Reinforce to all the importance of a culture of giving.

8. <u>Growing the Undergraduate Program</u>

The undergraduate program is consistently viewed as a growth area for the iSchool, and one that is attractive to regional employers. It is also relatively undiscovered by a vast number of students who could excel in an information science career, but do not understand what these careers are all about.

Recommendations:

- a. Provide a free mobile app for navigating the campus that is "brought to you by the iSchool."
- b. Establish a "theme floor" in a residence hall that immerses students in an information and technology rich living and learning environment.
- c. Extend residence hall guarantees to transfer students.
- d. Engage high school counselors, informing them of career opportunities offered by iSchools.
- e. Collaborate with industry on events (e.g., "IS Saturdays" or iFest) that showcase career opportunities.
- f. Expand the range of opportunities for 1st and 2nd year undergraduates to participate in iSchool activities.
- g. Offer more service courses and extracurricular events to familiarize students with careers in the information field.

9. Invest the 2012-13 Tuition Surplus Strategically¹

A side-effect of the large international student population is a very substantial tuition surplus. While this surplus does not automatically return to the iSchool, the Board encouraged the Provost to consider this an opportunity to invest significantly and strategically in priority areas for the iSchool.

Recommendations:

- a. Engage an expert consultant to develop a messaging and communications strategy and program for the iSchool.
- b. Hire a communications director to implement the expert consultant's recommendations.
- c. Hire professional staff to administer and manage field experiences and internships.
- d. Manage the recruitment and assimilation of international students.
- e. Continue the near-term facilities improvements.

10. Faculty Diversity

Developing a diverse faculty is important across the University, but is particularly acute in iSchools, where there are very low numbers of African American and Hispanic faculty. The i3 program addresses the long-term issue for iSchools, but near term solutions are also needed.

¹ Subsequent to the Board meeting, it became evident that the tuition surplus was an accounting artifact and not a genuine surplus. The "surplus" was calculated with respect to *projected* tuition, which had been conservatively forecast based on decreasing LIS applications. Pitt extrapolates the operating budget from the prior year's budget, however, rather than from the projected tuition.

Recommendation:

a. The Board encourages the Provost to consider allocating several "open" faculty lines to be used to respond to targets of opportunity in attracting minority faculty.

These findings and recommendations were discussed with Provost Beeson and Vice Provost Manfredi in closed session.

Meeting Narrative

Introduction

The School of Information Sciences' Board of Visitors met on April 29-30, 2013. 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 meeting opened at 8:30 am on April 29 to review progress at the School since the 2011 Board meeting.

Dean Larsen opened the meeting by welcoming members of the Board and, in particular, the new Board members. He indicated that the agenda included topics that are of particular importance to the iSchool at this time, and identified faculty and staff present as a resource for additional information during the course of the meeting.

The 3rd floor space is new to the BOV members (and to the School). This space housed a ULS branch library until last year and has now been repurposed as student collaborative workspace. A goal was to design a space that is very flexible; thus far, it has been rapidly adopted by SIS students and proven very popular for an array of uses.

Today's agenda consists of open sessions. Tuesday is reserved for the closed session. Provost Beeson will deliver a university update and charge to the Board, and will join us again for the closing session.

Chair Alfred Moyé welcomed six new members to the board (Beyah, Gollop, Isbell, Kvasny, Richey, and Yakel) and invited all board members to identify topics they would like to address at the meeting, based on the advance materials provided.

A wide range of topics was volunteered, including:

- Entrepreneurship and, particularly, how to encourage and support students with entrepreneurial ambitions
- Near-term facility enhancements and long-term need for a new building
- Development (fund raising) and, particularly, responding to a declining donor pool
- Curriculum issues,
 - The relationship of SIS programs to informatics education in the medical school
 - Education related to health care and the outcome of the IMLS grant for a certificate of advanced study in health sciences librarianship
 - The mix of practical and theoretical education of students for careers in public libraries
 - Curricula for digital preservation & archiving, data mining & analytics, gaming, practical user interfaces, and mobile computing
- Evaluation & assessment (including a shift from outputs to outcomes)
- Online education, including the transition to PittOnline and the potential opportunities and challenges of massive open online courses, aka MOOCs (e.g., Coursera)
- Benchmark comparisons to other iSchools, and understanding the role of an iSchool in areas that are also populated by CS & EE (e.g., data analytics and data mining)
- Practical questions such as how students are prepared to find a job, develop their knowledge of business, and gain experience through internships, field experiences, and capstone courses
- The mix of tenure stream faculty vs. NTS faculty (e.g., professors of practice)
- Diversity and the iSchool Inclusion Institute (i3)

- Adaptation of the Telecommunications and Networking curriculum to address changing industry needs
- Providing practical experience for students

Provost Beeson's update and charge to the Board

A year ago, bomb threats shook the University and we were fighting massive budget cuts proposed in the Commonwealth appropriation. We are pleased that our appropriation for FY 2014 has not decreased further, although flat funding now places the University's appropriation at a 1995 level. While the University has advanced rapidly in growing its federally funded research (Pitt is now ranked 5th for NIH funding and 10th overall for federal support to research), we are now encountering increased competition for declining public funding. The erosion of federal support for research is a problem that Pitt is working with colleagues at other universities to address in Washington.

Our education programs over the last decade have steadily improved, with students developing humanoriented skills that become even more important as technology advances. We take pride in our students becoming innovative, creative thinkers and articulate communicators; and in developing increased global awareness and an ability to work in teams. The university places a high value on experiential learning, encouraging students to supplement what they learn in the classroom with outside, real experiences. We have, thus, focused on internships (Pitt is among the top 10 research universities in terms of the number of graduating seniors who have an internship experience). Pitt offers an "Internship guarantee," assuring that every undergraduate student who desires an internship can get one.

Last summer, approximately 300 staff retired under the Voluntary Early Retirement Program (VERP), resulting in a significant loss of institutional memory, a need for restructuring of staffing, selective hiring of new staff, and additional investment in technology to improve productivity.

The university is continually working to strengthen its academic and research programs and to provide students with the highest value in and out of the classroom. This raises a number of current challenges as the technology supporting education advances. The university's objective is to leverage such technologies, enabling teachers to concentrate on making the classroom experiences of their students more valuable. Pitt joined Coursera in this continuing exploration of the advancing role of technology in education. Pitt considers the *undergraduate residential experience* very important for the traditional student. Our online programs target the needs of professionals who already have the undergraduate experience, although there exists no clear dividing line and hybrid solutions abound.

Pitt has identified three priority areas of interest in its plans:

1. Excellence in education

- a. The Provost was *asking all the deans to strengthen academics* in order to position graduates for success by building human skills of innovation, creativity, communications, teamwork, global awareness, and by taking advantage of outside the classroom experiences, experiential learning, undergraduate research opportunities, and internships.
- b. She encouraged utilizing appropriate technologies to change how we educate our students, in order to take full advantage of faculty time, energy, and scholarship to make the classroom experience more meaningful.

- c. She identified the importance of a **global focus** to produce graduates who are able to operate in a connected world. This can be achieved through a combination of approaches, including study abroad, recruitment of international undergraduates, and strengthening alumni relations overseas to support job placement and recruitment.
- 2. Energy and sustainability
 - a. The Provost noted the growing importance of western Pennsylvania as an energy source and cited Pitt's goal of contributing to the development of these resources in an environmentally conscious and sustainable manner.
- 3. Innovation and entrepreneurship trying to develop a culture of innovation on campus
 - a. Being more nimble in our ability to move innovations out of the university (commercialization of new technologies)
 - b. Reviewing and revising policies and practices for technology transfer
 - c. Attracting industry-funded research (and addressing the constraints of doing this within Commonwealth-funded facilities; she noted that the AAU is drafting legislation in this regard)
 - d. Enhancing the structure of innovation and entrepreneurship on campus. Existing supporting components, such as OTM/OED's academic entrepreneurship course, the Innovation Practice Institute in the Law School, and the Technology, Innovation and Entrepreneurship Certificate in the Business School are not integrated into the university culture. There is a lot going on but the pieces are not well coordinated.

The Outside the Classroom Curriculum (OCC) is the umbrella program for helping undergraduate students to develop 10 characteristics through extra-curricular experiences on campus (leadership, sense of self, career preparation, Pitt pride, communication skills, global & cultural awareness, wellness, service to others, appreciation of the arts, and initiative & drive). Details are available on the OCC website (http://www.studentaffairs.pitt.edu/occ). Undergraduate students are each assigned a counselor to help them, and their progress is tracked through a variety of mechanisms, such as card swipes for attending events. The University truly believes that "the city is our campus."

Industry research & technology transfer in medical research impose constraints unlike those in computing or information science, and Pitt's heavy engagement in medical research has made Pitt more conservative than is desirable for those in computing and information science. The University is currently examining its policies in this area, with the objective of becoming more competitive (e.g., with regard to COI policies). Buildings built with state funds are very limited in terms of their role in industry-supported research. Legislation has been introduced in Harrisburg to address this, recognizing the key role that industry-supported research can play in economic development that benefits the Commonwealth.

University policies that apply to student entrepreneurship are also being revised in order to encourage such activity. In particular, the University's stake in start-up companies is being revisited, especially where the students' activities are not related to their university relationship.

International students have traditionally contributed less as alumni to the university than domestic students. Given the increase in international student enrollment, the University is working to eventually alter this culture by strengthening relationships with international alumni and increasing their sense of connectedness to Pitt. The Provost indicated that she encourages deans on travel to meet with alumni groups in other countries and to use a presentation she has prepared for these events.

SCHOOL UPDATES:

Jeff Lawson – Director of Distance Education, eLearning Partnerships and Outreach.

We are in the early stages of a transition from the FastTrack (Panopto-based) infrastructure to the PittOnline platform for online courses. Lawson described the differences between these two platforms. FastTrack courses use real-time classroom video capture that is subsequently Web-accessible. PittOnline courses use pre-packaged, scripted lecture modules. When FastTrack began (circa 2000), it was positioned at the leading edge of online educational technology. The shift to PittOnline reflects a change in the platform for delivery of the curriculum that has recently been adopted by the university as its standard. CIDDE offers support through PittOnline with course designers, and provides for quality control (Quality Matters). SIS has implemented an incentive program for faculty to move courses to PittOnline. Faculty receive credit for developing an online course (equivalent to what they receive for teaching a course), and when the course is taught online for the first time, they receive a \$5000 fee.

Coursera and other approaches to MOOCs are also clearly of interest recently, and, while much uncertainty remains about their future, these types of courses can be viewed (at least) as good marketing for a University.

Board members took specific interest in the rationale for PittOnline taking a different approach from FastTrack, when FastTrack appeared to be the most successful online program in the university. Dean Larsen observed that SIS has had a record of "firsts" on campus, including local area networking, Internet access, and wireless service, in addition to the online graduate degree program. Each of these was leading edge at the time of SIS development, and in some cases was a research activity. At the point where the University implemented campus-wide service and institutional support, these facilities had become commoditized and reflected a second generation of technologies and services, for which it was appropriate for SIS to adopt the centrally managed University infrastructure and service.

Overview of major indicators -

- Enrollment we have noted two major shifts: because of reduced public funding, applications to programs that support public sector employment (e.g., the School Library Certification Program, or SLCP) have declined. In their stead, we have witnessed growth in programs that cross public and private sectors, such as archives and records management. We have also witnessed rapid growth in international enrollment in the Graduate Information Science and Technology (GIST) program and the Telecommunications and Networking (TeleNet) program, and are now trying to understand the phenomenon and respond strategically to it.
- Research funding federal funding to the School through grants has remained fairly stable, although the competition is growing stiffer; we have been successful in growing our grant funding from the A.W. Mellon Foundation (cyberscholarship and i3), but we are not very good yet at acquiring industry funding
- Vision for the school our vision focuses on the signature research areas identified in the School's strategic plan and the supporting curricular foundations for our students.

Suggestions for attracting more students to the undergraduate program (BSIS):

• Engage high school counselors and provide more opportunities for freshmen and sophomores on campus to learn about SIS and to participate in SIS student activities. The School needs to do a better job of **marketing** what we do and who we are.

- Our physical location is on the corner of the campus, out of the primary flow of student traffic. Exacerbating this, prior to renovation of the third floor, students didn't have a place in the building where they could study, relax, or socialize between classes. With the third floor now renovated for informal use by students, a range of events will be hosted or facilitated to introduce students to SIS and to make them feel a part of the iSchool. The objective is to get more students to officially declare IS as their major earlier.
- The service course INFSCI 0010 (Introduction to Information, Systems, and Society) is designed to show students that the information sciences offer a range of career possibilities that are interesting, rewarding, and crucial to society. Too many students think that information science is all about programming and that their careers will be spent in a cubicle in front of a computer screen. INFSCI 0010 is intended to confront and correct this misunderstanding. Board members suggested that we seek additional opportunities through service courses and extra-curricular events to familiarize students with the field. Other suggestions from Board members included:
 - An industry supported program that generates a pipeline of incoming students, such as "IS Saturday" where high school students meet IS students, faculty, and industry representatives in a day of events that showcase career opportunities in information science.
 - Providing a free app for navigating the campus, with a prominent banner reading "brought to you by the iSchool"

New iSchool faculty and staff:

Sheila Corrall, Program Chair LIS, briefly reviewed her professional background and research. She summarized her activities since arriving in August 2012, which have included leading the preparation of

the self-study supporting reaccreditation of the MLIS program, conducting a core curriculum review, designing and teaching a course in research methods, chairing the PhD program, and establishing priorities for the future of the LIS Program. She reported on the key findings of the External Review Panel (ERP) of the American Library Association's (ALA) Committee on Accreditation (COA) after their site visit here in March. In a very positive report from the ERP, the panel noted several challenges, including the migration to PittOnline, assessment of student outcomes at the program level, sustainability of specializations as faculty retire, and "rightsizing" the MLIS program.



Stephen Griffin joined the SIS faculty following a long and distinguished career at the National Science Foundation (NSF). He is currently a visiting Professor and the A.W. Mellon Cyberscholar at SIS. Steve designed and taught a new course in Digital Scholarship last fall, focusing on contemporary trends in data-driven computational research.

Rosta Farzan, a new tenure-stream faculty member in Information Science and Technology, was not present for the meeting. She posted a presentation summarizing her work and accomplishments to the BOV documents site.

Brian Beaton is a new tenure-stream faculty member in LIS, whose research interests include the emergence of a "data culture," the role of Citizen Science in crowdsourcing the analysis of large data

sets ("Crowds and Clouds"), and data management and archiving challenges for "Big Data" projects. Beaton is collaborating with faculty inside and outside of the iSchool. Immediately upon his arrival last August, in collaboration with Rosta Farzan, he launched a social issues and social working group. He is interested in creating a crowdsourcing platform to which faculty can post small tasks (e.g., hours or days of work) for students to contribute to iSchool research projects (including a tracking system that students can use to show potential employers the projects that they have been engaged in).

Elizabeth Mahoney joined the LIS faculty as a lecturer this year. She had been the head of the branch library (3rd floor) that was recently renovated and repurposed. She has taught core and reference courses for the LIS program as an adjunct for many years, and is now leading the new Embedded Librarian Initiative and the new Public Libraries specialization.

Afternoon session

Sandra Brandon (Chief of Staff) introduced the staff present, including:

- Sharon Bindas (Manager of Personnel and Administration), who is the primary force behind our facilities upgrades, and
- Wes Lipschultz (Manager of Student Services), who has been developing a "building community" initiative.

Primary Agenda Discussion Topics

1. Taking measure: a culture of assessment

Assessment was the centerpiece of the University's self-study for the Middle States re-accreditation in 2012. The iSchool engages in many assessments every year (listed in the supplementary materials of the BOV website). We are trying to coordinate and articulate the data collection and reporting processes to improve the efficiency of the reporting and the effectiveness of the various reviews in terms of measurable outcomes.

Board members noted that student success was central to most of these assessments, and asked if the school collects a jobs report for the School's graduates. The School has partnered with the University Career Placement services to enhance the tracking of alumni. More detailed information is available for the doctoral graduates, who typically maintain contact with their faculty mentors. Pitt issues a placement information survey to undergraduates, which SIS has adapted to administer to our graduate students as well. This term (Spring 2013) was the first time that it was administered. Most of the assessment activities in which the School engages are mandated by other professional groups and generally beyond local control to modify, although we do try to reuse and adapt data collected for one assessment in other assessments.

In response to Board questions regarding how these assessments influence the curriculum, Associate Dean Martin Weiss responded that the Telecommunications and Networking program provides a good example. The faculty recently focused on examining how this program can become more economically viable given the relatively small enrollment. The result was a review and revision of the entire curriculum, making it both more affordable and more closely tied to learning outcomes.

Dean Larsen shared the School's experience with the IMLS-funded Certificate of Advanced Study in Health Sciences Librarianship. The IMLS grant provided student scholarships to kick off the program, but it was never able to attract a sufficient number of self-funded students to make it viable. An external review of the program concluded that without an employer mandate for such a certificate, there would be insufficient student interest and, hence, insufficient demand. This CAS was recently discontinued and key elements of its curriculum integrated into MLIS courses in the Resources and services: Health specialization.

2. Building upgrades

Sharon Bindas reviewed building improvements, which have included:

- Audio-Visual equipment installations in the 5th floor conference rooms.
- 3rd floor renovations guided by faculty, student, and staff meetings to establish the usage and configuration requirements (primary usage is as dedicated space for undergraduate and Masters' students, plus two video teleconferencing rooms).
- 8th floor renovations scheduled for the summer of 2013, the former computing lab space to be used by iSchool PhD students for their research and study.
- The 1st floor building entrance will be the next project. We are currently seeking design alternatives that will more clearly "brand" us as an iSchool and, thereby, improve the first impression for students, parents, and visitors.

Board members applauded the renovations and upgrades as an appropriate near term "band aid," while reinforcing their sense that the proper long-term solution lies in the quest for a new building.

The Board also inquired about the equipment requirements to support the School's Big Data initiatives. We are considering three approaches: (1) expandable clusters (e.g., a Hadoop cluster) to be installed in the renovated 8th floor, (2) cloud computing (e.g., Amazon), or (3) the Pittsburgh Supercomputer Center. The School has gigabit fiber installed from the campus network operated by CSSD to all wiring closets in the building.

3. Practical Experience for our Students

It is becoming increasingly important for our students to acquire practical experience in the course of their academic studies, and our students reflect this by seeking internships, field experiences, and related activities. The MLIS program has operated a very successful "Partners Program" that provides three terms of part-time work experience in a regional professional setting. Stress in the economy has reduced the number of regional partners and forced others to reduce or eliminate compensation to students participating in the program. As a result, several issues have come to our attention. One is simply providing some level of equity among students participating in the program; a second is a (perhaps unfounded) concern that our students may be perceived as exacerbating the difficulty of those seeking gainful employment; and, perhaps the greatest concern at the moment is the staff support required to manage such a program and other experiential learning opportunities on a School-wide basis. Noting the increasing proportion of international students, Board members suggested tracking new legislation that is being proposed to make it easier for international students to stay and work in the US. Another alternative is to determine whether the schools in China with which we have agreements have internship programs that our Chinese students may be able to take advantage of. The possibility of establishing a "Microsoft-type" relationship (research opportunities) was also suggested, in which more intimate relationships and strategic alliances with industry would be sought. Currently, the responsibility of creating and supporting these opportunities is distributed among several staff and faculty. SIS does not have sufficient staff support to champion internships, practicums, Partners Program placements, etc. Board Chair Alfred Moyé singled out Harvey Mudd's Projects Program as a good exemplar. Claudia Gollop noted that the iSchool at UNC Chapel Hill now has one person dedicated

to managing internships and field placements, calling it a "game changer." Charles Isbell noted that GaTech has received funding from corporations in order to gain priority access to students. Alfred Moyé suggested exploring the feasibility of a joint staff office among CS, Engineering, and SIS to manage internships, providing a single point of contact for corporations and leveraging expertise on campus.

4. International student population boom

Associate Dean Martin Weiss presented an analysis of international enrollment at SIS over the past seven years (see the Board web site for the presentation materials). He noted that we have a disproportionate international enrollment in our graduate IST and TeleNet programs. Board members wondered if the problem was high international enrollment overall or high international enrollment from one particular country (currently China). To increase and diversify international enrollment, they advised identifying countries of origin that have the resources to support educating their students in the US (i.e., either students self-paying or governments that supporting them). Brazil, Chile, Argentina, and Saudi Arabia were suggested as candidates.

A "matriculation seminar" for incoming international students was suggested. Since the Provost indicated that one of the University's goals is to increase international student enrollment, and SIS already has a large international student population, the School could be considered to be "ahead of the curve." While there are University services available to international students, the large influx SIS has experienced suggests the University services need to grow (ESL classes, for example). Board members suggested that Pitt Online be considered as a platform for delivering ESL classes, with a certificate awarded for successful completion.

International students at SIS tend to form their own local communities within the School rather than engage more fully with the University. iSchool graduate students can benefit from greater involvement in clubs, the alumni association, career development, and related Pitt programs. One suggestion offered was to explore with Vice Provost and Dean of Students Kathy Humphrey opportunities for helping international graduate students develop stronger Pitt linkages during their relatively short time here through mentors, clubs, OCC-types of activities, etc. Board members suggested that Dean Humphrey be invited to the next BOV meeting to discuss the student services available through her office.

In order to diversify our international population, Board members suggested linking our international recruitment to recognized University strengths – e.g., Latin American studies.

Recalling the earlier discussion regarding the improvements made and proposed for the IS building, it was observed that a cyber café on the first floor could attract students from other schools, helping to engage our students with others across the campus.

Other Topics of Interest to the Board

Attracting undergraduate students - Elizabeth Yakel noted that offering information sciences courses that count towards General Education requirements at the University of Michigan have been successful. In particular, she mentioned Introduction to Information Sciences, Information Ethics, and Gaming. About 10% of the students who take these courses become iSchool majors.

The Honors College provides another way of reaching high performing undergraduates. One of our new faculty members arriving in August (Dr. Yu-Ru Lin) has expressed interest in teaching an Honors College course.

Entrepreneurship – David Holtzman reinforced the importance of an environment supportive of innovation that welcomes out-of-the box, creative, unusual ideas and approaches, observing that currently there appear to be obstacles rather than incentives. He suggested establishing a small incubator in the building, perhaps with alumni mentors, which would encourage and support entrepreneurial initiatives involving faculty and students. He suggested inviting Marc Malandro, the Director of the Office of Technology Management (OTM), to the next BOV meeting for a presentation and discussion of these issues. Involvement in start-up opportunities will make SIS students more marketable. With the emergence of mobile apps and social networking, it is no longer necessary to create a complete corporate infrastructure for a start-up.

Suggested areas of regional strength that provide entrepreneurial opportunities include:

- 1. This is the year of **Big Data** Pitt is well positioned to take advantage of opportunities in this area.
- 2. There is an **Energy Boom** underway right now in Southwestern PA how does that fit into Pitt's plans?
- 3. **Health Care** continues to drive much of the regional economy and faces daunting issues and challenging opportunities that are information-driven.

David suggested that the Small Business Administration could be consulted regarding the logistics of pursuing entrepreneurial ventures, and Charles and Raheem recommended reviewing Georgia Tech's TIGER program (<u>tiger.gatech.edu</u>) and the Advanced Technology Development Center (<u>atdc.org</u>).

Constituent Relations - Roger Glunt expressed concern that the number of givers to the School is decreasing (this is going on across the University and all schools) however the dollar amount seems to be remaining relatively constant. Marci Carothers (SIS DCR) noted that donors are becoming more focused in their donations. Roger reinforced the need for undergraduates to become more involved in the student alumni association and accustomed to the practice of contributing to the School after graduation. He indicated that this should start at orientation, perhaps by noting how dependent the School is on its alumni. Jeff Gleim (PAA) or Jana Sestili, who is responsible for membership, should be invited to participate in student orientation to introduce students to the alumni association. He also suggested that Dean Humphrey be invited to the student orientation, and recommended that SIS participate in the Pitt Alumni Association's program of "Dinner with 12 Panthers." He also encouraged faculty to routinely re-connect with graduated students when they travel. He reinforced the need to create a culture of giving back, and not leave it up to Marci to solicit donations.

Tuesday – closed sessions

Undergraduate education

Further growth in the iSchool undergraduate program is desirable but will require creatively leveraging University resources in ways the School has not actively pursued in the past. Understanding Pitt's residence hall strategies and policies plays into this. The school has begun to explore the feasibility of a theme floor in a residence hall centered on the iSchool that would immerse students in an information and technology rich living and learning environment. A collaboration with related programs on campus may also be worth considering, using the residence halls as the focal opportunity. A few data points were noted:

• 98% of all freshmen are expected to live in residence halls this coming year.

- 70% of second year students live in residence halls, 45-50% third year, 10% fourth year
- There are currently 7200 beds on campus, with 500 more coming on line this fall. We will be very close to 8000 at the end of all current renovations.
- A theme floor could be built around communities of students who will be working together when they graduate to reflect the real world work environment they will encounter. This may be a good opportunity to integrate iSchool students with other students on campus.

SIS has a rather transient undergraduate student body -

- They come to SIS as juniors.
- They come from other campuses.
- They live off campus and socialize off campus so it is a challenge to build community among those students.
- They mostly come for classes.

Designating a residence hall space to iSchool undergrads would help build a sense of community among them.

Entrepreneurship and Marketing

Prof. Karimi's demonstration of his personalized navigation system for mobile devices was well received, prompting Board discussion of how the School can get more visibility to and mileage out of such projects. David Holtzman observed that it is this type of work that can build a connection to the private sector, but doing so requires better university support for technology transfer and entrepreneurship in order for SIS to be an appealing partner to industry.

Patrick White expressed concern about the emphasis on patents for software, opining that patents limit one's ability to publish, and software is pretty dynamic. Patents require a legal team to enforce them. Patents make sense for medicine, where devices and drugs are clearly defined and packaged (and valuable). This is not the case for software. Board discussion revealed substantial differences regarding appropriate approaches to protecting software intellectual property rights. David Holtzman suggested that instead of patents, Pitt should consider commercialization (or licensing). The objective is to make the school "more appealing to the private sector" and to do this through its own "brand differentiation." Or, as Cynthia Richey suggested... "Mark it and then market."

Charles Isbell noted that the GaTech College of Computing employs 5-6 staff working in branding, communications, and marketing. This team "influences how we see ourselves in addition to how others see us." SIS needs to figure out what others really think of the School (e.g., students, employers, ...). GaTech spent \$60-100K to figure this out under contract to a professional marketing firm. The deliverables:

- Real understanding of how constituents see the school.
- A reality-check of what you think you are vs. how others perceive you.
- Recommendation of how to change messaging, web site, etc. (key values, brand positioning).

Energy, financial services, health care are the 3 emerging large data-intensive industries. There has been a 62% increase in energy output in Pennsylvania over the last year, with 250K new jobs in industry in energy in PA projected over the next 10 years. The School would be well-advised to position itself in such a way as to take advantage of opportunities in these three fields.

Investing Tuition Surplus Strategically

The Board noted the significant amount by which the School exceeded its tuition target this year and recommended investing this surplus in (1) a messaging & communications program, (2) staff support for field experiences and internships, (3) managing the recruitment and assimilation of international students, and (4) continuing the near-term facilities improvements.

Provost closed session

Chair Moyé reiterated the Provost's charge to recommend improvements to the programs, its research, its classroom experiences, and use of technology, enabling faculty to focus on what they do best and were hired to do. He observed that Prof. Hassan Karimi's demonstration "jazzed the group" and SIS needs to find ways to leverage such advances to the advantage of the developers, the School, and the University. This is consistent with Pitt's aspirations to support faculty and student entrepreneurship, and will be facilitated by a proactive OTM.

Vision

Charles Isbell (GaTech) observed that the SIS faculty is engaging in strategic visioning, but struggling with a number of questions, like trying to understand trends in international enrollment. He indicated that ten years ago GaTech's College of Computing, facing a similar situation, hired an outside consultant to assess how those inside perceive the school, and also how outsiders perceive it. This provided insight into some of the "whys" and helped lay the groundwork for subsequent planning and discussions of mission, vision, and values. The Board recommends that SIS go through such an exercise, providing a solid foundation for future planning, marketing, and messaging.

David Holtzman noted that conducting surveys is not sufficient, since too many things are changing too rapidly. He observed that Charles's proposal could result in messaging that is consistent and reflects the essence of the reality of the school. It might also provide insight into why international students come here and help to improve relationships with the regional industry community.

Keith Schaefer agreed that the research is necessary to build appropriate messaging targeted to various constituencies, including undergraduates and international students. Messaging would be tailored to these various audiences, taking advantage of the reality that many of the international students come from wealthy families who could afford to contribute in a sustained pattern, if they understood the culture of giving to an alma mater.

Cynthia Richey expanded on the messaging campaign, recommending that the School build and support more coherent programs of field experiences and internships. The messaging activity would contribute to the awareness, growth, and success of the field programs, with the additional potential of further expanding alumni support.

Roger Glunt praised the work on the 3rd floor and thanked the Provost for her support, noting that it is a big improvement, and applauded the plans for the 8th floor. He welcomed further consideration of

improvements to the entrance and the 1st floor to clearly identify the building as the iSchool, and noted that students have expressed an interest in having a cyber café included in plans for the first floor. The Board continues to believe that the building is inadequate for the type of environment that would make it competitive with the better iSchools, however, and that SIS deserves a higher priority in the 10-year capital improvements budget. The Board would like to see SIS on the list for capital improvement or as the projected beneficiary of an acquired building that could be better suited to an iSchool. The Board also encouraged Institutional Advancement to work with the School to nurture potential donors who could be positioned for major contributions and naming opportunities (e.g., conference rooms or the 3rd floor collaborative student workspaces).

Alfred Moyé addressed the housing issues for SIS students, endorsing the concept of a theme floor in the new Nordenberg Hall. The floor should be modeled after the high tech concepts on display in workplaces like Google. He also elaborated on the difficulty resulting from the current transfer student policy, indicating it is an impediment because IS transfer students come as juniors and do not receive the residence hall guarantee.

These are issues that impact directly on the quality of the experience that SIS students acquire at Pitt. The Board senses that students don't seem as connected with the broader university as might be desirable. Housing seems to contribute to this problem.

The Board would like to see the School continue to expand its engagement throughout the University. It could be more involved in the energy initiative housed in the Engineering School, for example. In addition, the Board advises SIS to get more engaged in the "ground floor" emergence of new industries in energy, finance, and health care.

A coherent effort to build these relationships will require additional staff support. The Board recommends that the additional tuition revenue the School brought in this year due to its large international enrollment be partially directed to this effort. The Board also endorses investing in an enhanced communications activity along the lines of that described by Charles Isbell.

Diversity

The international component of SIS's student body would benefit from greater diversity (e.g., recruiting students from countries like Brazil, Argentina, and Chile). But faculty diversity is also an issue and needs more creative approaches when a potential faculty member (minority) is identified, for which there is no existing, direct line. The Board suggests that the Provost consider allocating a few "open" lines for opportunistically attracting minority faculty. These would be "target of opportunity" resources held by the Provost to respond flexibly to strategic needs (such as attracting a diversity candidate or a top scholar whose spouse or partner is also a strong faculty candidate, but for whom there is no current search). A school would go to the Provost with a request for a target of opportunity position to respond to unanticipated but serendipitous events. The nature and intended use of such positions would need to be well established and communicated clearly and consistently by the Provost, particularly to avoid people trying to game it.

The Provost noted the existence of a Council of Deans task force on diversity (Dean Larsen is a member) and suggested that the Board's recommendations be brought forward to that task force. She also responded favorably to the Board's suggestions regarding industrial relations, citing the Engineering

School's co-op program as a model for providing a single point of contact at Pitt. She encouraged SIS to build a synergistic relationship with the Swanson School to coordinate these activities and relationships.

The Provost indicated that revisiting the policy regarding priorities for transfer students' access to residence halls is a distinct possibility, particularly now that Nordenberg Hall is about to come online. This is a topic to be discussed with student affairs. "Learning communities" are designed for 2nd & 3rd year students, suggesting that such a residence hall program could influence students to affiliate with SIS earlier in their undergraduate program.

The Provost also observed that both Engineering and the Business School have conducted consultantbased communications projects along the lines that GaTech describes. This should be a good time for SIS, since faculty and staff have invested substantial time and effort in assessing strengths, establishing priorities, and reflecting them in their long-term plans.

The Provost expressed pleasure with the quality of new faculty hires, and confirmed that the faculty has done a good job reaching out to other components of the campus community and engaging in regional projects such as the recent big data initiative (Pittsburgh DataWorks).

Roger Glunt reiterated his recommendation that faculty should be more actively engaged in development activities, and that this should be included in their definition of service and rewarded as such.

The closed session with the Provost ended at this point.

Closing Considerations among the Board Members

Charles Isbell noted that the University of Michigan is considered the national leader in diversity issues for faculty (citing, more specifically, the "STRIDE" program), and that its success has been a result of strong commitments by both the Provost and the Dean.

Cynthia Richey indicated that her brother (at Dartmouth) is an expert on brand marketing and offered to provide an introduction and contact information.

The Board suggested completing the marketing/messaging study by October and then reviewing the results at a one-day Board meeting to be held in November 2013. The Provost would be invited to participate, but would not be essential to the work of the Board at this meeting.

Chair Alfred Moyé's Closing Summary

Housing issues for transfer students need to be addressed by a change in University policy. Since SIS is an upper division school, our transfer students should be given the same priority as freshmen in order to integrate them into campus life.

Development of an information & technology theme floor is recommended as one component of an enhanced student recruitment program for SIS.

The School should immediately initiate a marketing/messaging study by contracting with an expert consultant to examine how the School is perceived and perceives itself. This should be reflected in

revised messaging and a clearer articulation of identity. The results are to be reviewed in November by this Board.

The Board recommends adding staff to address several needs:

- A communications director to follow up on the consultant's recommendations.
- A manager of field experiences, internships, and industrial relations, in cooperation with staff in the School of Engineering, to provide a single point of contact (within the University) to interact with external constituents.

There are also a few topics that will be of continuing interest to the School and the Board:

- Identifying high potential growth areas (e.g., energy, health care, financial services) to which the School can productively contribute, and establishing a plan of action to address them.
- Establishment of a University-wide incubator program that fosters integration of technologies and collaboration across disciplines.
- Fostering stronger engagement of SIS graduate students in the Graduate Professional Student Association (GPSA).
- Including alumni relations and diversity activities among the service activities recognized for faculty awards and rewards.

The Board's discussion of diversity issues yielded a rare "ah-ha!" moment: the Provost holding a small pool of centrally managed open lines that don't count against school lines to address a variety of issues that arise spontaneously and are often difficult to address, including trailing spouse issues, diversity faculty who are excellent in their own right but slightly outside the specifications of a specific faculty search (i.e., they may be unresponsive to the specific terms of an advertised position but meet another meritorious need).