

**ROCHESTER INSTITUTE OF TECHNOLOGY  
ACADEMIC SENATE  
DECEMBER 13, 2007: 12:05 – 1:50 P.M.  
1829 ROOM OF THE SAU**

Absent: E. Boyd, M-B. Cooper, W. Destler, S. Dianat, J. Diaz-Herrera, D. Tower DuBois, S. Perez-Hardy, L. Reznik, E. Saber, K. Schmitz, L. Wild, E. Wolf [Correction from the December 6, 2007 minutes: Paul Rosenberg was present at the meeting of 12/6/07 as those minutes had reflected he was absent.]

**CALL TO ORDER:** The meeting was called to order at 12:05 p.m.

**COMMUNICATION OFFICER'S REPORT** – Minutes of November 1, 2007 were approved unanimously.

**CHAIR'S REPORT:**

Four Institute Council representatives will be needed to serve on the Nominations Committee later in winter quarter. Volunteers who wish to serve are being asked to contact Vivian Gifford in the Senate Office. An email will also go out to IC representatives asking for volunteers.

Paul Rosenberg, Chair of the Provost Search Committee reported that all is going well with the search and that nominations are still open. Candidates for the position will be on campus during finals week of the Winter Quarter. Open sessions will be held during that week for all interested faculty and staff. The question was asked as to the current number of applicants. P. Rosenberg said that he did not know the exact number as our Search Consultants, Russell Reynolds, are collecting the applications, and they are happy with the numbers.

**REGISTRATION OF THE EMBA PROGRAM**

A handout and the letter of endorsement from Andrew Moore were distributed to all senators today. Don Wilson, Director of the Executive MBA program reported on the registration of the EMBA Program. He stated that the program is not new as it started in 1993 and has now been registered with the State of New York. This means there are now two separate MBA programs registered. The EMBA program was developed at the request of industry and is a 72-quarter-hour cohort program. Classes meet on Fridays and Saturdays every other week and students entering the program must have six or more years of work experience to be eligible for admission. D. Wilson reviewed the student profile, showing that the average age of students in this program is 38 years old and the average years of work experience is 15.4 (ranging from 6 to 27 years). There are many sponsoring companies such as HSBC, Kodak, Xerox, Target, Wegmans, Time Warner Cable, Harris Interactive and Johnson & Johnson. The program focus is cross-functional integration, strategic thinking and teaming and leadership.

Dr. Andrew Moore, Dean of Graduate Studies said that the Graduate Council unanimously endorsed this program. Some minor revisions are proposed but the program remains essentially the same one that has been offered for many years. He invited the Senate to endorse the EMBA program as well.

Q: T. Policano asked how it compares with other MBA programs.

A: Don Wilson said their main competitor would be the Simon School at the U of R. Our EMBA program focuses on leadership and strategic thinking while the Simon school focuses on finance and economics. There are 20 to 30 students in the EMBA program each year and the school wishes to keep the program fairly small. RIT's EMBA program has an excellent reputation and already has five applicants for next year.

Q: Tom Cornell asked that in registering this program does this open the door for the changes to the traditional program? Additionally, he asked if there would be confusion at the state level.

A: D. Wilson responded that yes, it does open the door for changes to the traditional program, but that there will be no confusion at the state level.

The Academic Senate unanimously endorsed the registration of the EMBA program from the E. Philip Saunders College of Business.

## **GOLISANO INSTITUTE FOR SUSTAINABILITY**

[The PowerPoint of this presentation can be viewed in its entirety on the Senate web site.]

Nabil Nasr, Assistant Provost of Academic Affairs and Director of the Golisano Institute for Sustainability and of CIMS, presented an update on the Golisano Institute for Sustainability. He stated that he has given this presentation to the Trustees. Nabil said that universities have a major role to play in regards to sustainability. He said there was a report in Business Week regarding India and China's ability to save or destroy the world with their environmental practices. We must become innovative to save the world and this presents many challenges which comes at a cost. The major factor is consumption and production. GIS wants to develop a premier Institute on Sustainability, focusing on research, innovation and educational programs focusing on enabling development while managing the environmental and societal impact in a sustainable fashion. It will be a signature program that will give way to opportunities for new research, new ideas etc. N. Nasr said the institute's goal is to have a Ph.D. program that is international in scope with modules delivered by experts and the Sustainability Institute is positioned to lead the way. He said GIS would house many new labs in a proposed green building off of the north side of CIMS. Thomas Golisano gave GIS a major \$10M gift at the birthing of this institute. The Interim Academic Director of GIS is Paul Stiebitz and Ryne Raffaele will be the new Academic Director.

Nabil said according to the World Business Council for Sustainable Development, there is mounting evidence to show that a transition to a sustainable economy, if done wisely, will lead to higher economic growth than business as usual, while at the same time reducing pressures on the environment and enhancing employment.

Smart systems, a product that uses less energy, was discussed and used to emphasize the fact that sustainability involves more than just environmental issues. Highlights of GIS activities as well as Research highlights were also shared.

Overarching program considerations were reviewed. These included:

- Sustainable production
- Sustainable energy systems
- Sustainable transportation systems
- Pollution prevention

The program focuses on optimizing industrial systems, takes a holistic and multidisciplinary view of problems and leverages international alliances.

The Science of Sustainability was presented and N. Nasr said that a lot of work has yet to be done. Other larger universities, visited by RIT faculty, are struggling with many issues regarding sustainability. RIT is positioned to tackle these issues. Additionally, there are tremendous resources for this program here on campus. Elective courses on sustainability are in fact being offered this term. This program here at RIT can be a tremendous help to many both here and abroad.

Courses in sustainability were presented: Distance Learning, a summer workshops series certificate program, K-12 program, and Project Lead the Way activities are also planned. GIS also has a program with the Department of Transportation.

N. Nasr said he has spoken to many companies. The University of Hawaii desires to partner with RIT.

N. Nasr stated that he would be attending the Organization for Economic Co-operation and Development (OECD) expert's meeting on February 20. In July 2008 the group that normally meets in Paris will be coming to Rochester NY.

GIS hosted Sustainable Manufacturing V: A Global Symposium on Sustainable Development and Life Cycle Engineering in September. The Global Congress's next gathering will be in Korea.

The NY State Pollution Prevention Institute was discussed and noted that RIT has been active in this organization for over 12 years. This Institute is sponsoring a project that looks at the use of hydrogen to heat water. Four universities have applied for this program and we have a good chance of winning.

Discussion and Q&A ensued.

Q: Abi Aghayere commended N. Nasr and his team for the great job they are doing and said that there have been a number of partnerships created with many other institutions and organizations. He noted, however, that there is a perception among some RIT faculty that GIS is not cooperating or willing to cooperate with faculty here. He asked if N. Nasr could speak to this concern. A. Aghayere also stated that there are already a number of masters programs in areas related to Sustainability (e.g. MS in Environmental Health and Safety) already established at RIT and asked if there will be pathways created for students of these programs to transition into the Sustainability Ph.D. program.

A: N. Nasr said that it is possible that they have not yet addressed this issue, but that they are interested in creating clearly defined paths between programs. He added that they are a small group working on a considerable amount of program development. Paul Stiebitz, Chair of the Curriculum Committee said he sees a wonderful flow from the masters program to a Ph.D. program. He stated that faculty participation needs to be built up and a synergy needs to flow. He added that the State wants to see this connection established for this program. He said three to four weeks ago the Provost sent out a letter to RIT faculty inviting them to join with the GIS faculty to develop bridges with the rest of the institution. He stated that critical mass is beginning to build.

The Provost commented that we are running several races simultaneously. N. Nasr clearly has a terrific national reputation but that there are many powerhouses across the country that want this program. He stated that we are still in the lead, but do not have the resources available to other institutions. The internal races include the goal of getting academic programs in place and that we are eager for R. Raffaele to become the program's Academic Director. He stated that R. Raffaele would need support because N. Nasr is so busy that he is unable to hire fast enough. The Provost said he is incredibly encouraged by the response of faculty to his letter asking them to consider becoming part of the extended faculty for this program and very pleased that Academic Senate has given N. Nasr this opportunity to report on GIS.

Q: Bob Barbato said he believes this program will succeed but is also concerned with what A. Aghayere had mentioned about the perception many have on campus regarding GIS. He asked how many on the curriculum committee at GIS are from CIMS and how many are outsiders?

A: A. Moore, Director of Graduate Programs said he had gone to the Deans and asked them to nominate someone from each college who is interested in sustainability, to sit on the curriculum committee. R.

Raffaella, incoming Academic Director, said that there are some very strong personalities on the committee and the vast majority are outside of CIMS. The GIS curriculum committee members are: Dr. Jennifer Schneider (CAST), Dr. Jacqueline Mozrall (COE), Dr. Marcos Eastman (COE), Dr. Thomas Seager (GIS), Paul Stiebitz (GIS), Dr. John Albertini (NTID), Dr. Jamie Winebrake (COLA), Dr. Alex Bitterman (CIAS), Dr. Stefi Baum (COS), Dr. Gregor von Lasewski (GCCIS), Dr. William Stevenson (COB), and Dr. Kit Mayberry, V.P. of Academic Affairs. The committee is now looking at the Ph.D. proposal. Nabil added that GIS is a separate entity from CIMS and is leveraging a lot of entities. P. Stiebitz said CIMS would remain as it is after GIS is established and reiterated that GIS is not in CIMS.

Q: Steve Diehl said that the new GIS building may be sustainable but he commented that the rest of RIT is not and that we need to see our entire campus involved in this initiative. He suggested for example that the river nearby us can be tapped for energy and the surrounding wetlands can be used to clean the environment. He said that he is concerned that he does not see the symbols of sustainability that we need at RIT right now.

A: N. Nasr said that they would be looking at the campus as well and desires to try a lot of different initiatives. He reported that trucks at RIT are now running on bio-diesel fuel.

Jim Watters said that a university advisory committee has been formed which endorses green initiatives and that we are making prudent investments. J. Watters added that the HVAC system replacement from 43 boilers to 5 boilers is just one example of initiatives at RIT to help the environment. He said that we are using the guidance of the committee to choose technologies that have established outcomes.

Q: Brian Thorn said he is concerned that there is not a lot of representation from GCCIS and that the GIS Curriculum Committee membership is largely from CIMS.

A: P. Stiebitz responded that the process of developing a committee was not done in a vacuum. The proposal on the table is the result of a significant amount of discussions with faculty across the campus. He returned to A. Aghayere's question about how GIS might dovetail with other masters' programs. He stated that a major consideration in keeping the core courses to a small number (6) is to allow students completing their M.S. in other RIT programs to transfer their coursework into the Ph.D. program as electives.

B. Thorn said he has no doubt that the new proposal is better but said we need to see more dovetailing.

Q: Tom Cornell said that RIT cannot own sustainability and that we need to make strategic decisions that will place us at the top of the field. What we need to make this work here really is a 3<sup>rd</sup> strategic goal and that is getting the right relationship between this program and the faculty on campus.

A: R. Raffaella said that GIS is established at RIT and has many faculty on board. There have been significant negotiations and they have received wonderful support from both the President and the Provost.

K. Waterstram-Rich thanked N. Nasr and his team for coming and said they will have to return to Senate at a future date.

## **LEED CERTIFICATION UPDATE**

[This PowerPoint can be accessed on the Academic Senate web site page.]

Mark Coleman, senior project manager of CIMS and At Large Member of the Campus Environment Committee presented an overview of the LEED Green Building Certification Program and potential opportunities for RIT. M. Coleman reported that LEED certification is a market-based program and that the building sector has a tremendous impact on the environment. A pie chart was shown giving an overview of how commercial buildings use energy. A typical LEED commercial building reduces energy use by 32%, which is a tremendous energy saving.

Statistics of RIT's total energy costs was given. This is included on the PowerPoint posted on the Academic Senate website.

M. Coleman explained that LEED (The Leadership in Energy and Environmental Design) Green Building Rating System is the nationally accepted benchmark for the design, construction and operation of high performance green buildings. LEED is third party verification and is the only building certification available in the USA and Canada. All certified projects receive a LEED plaque, which is the nationally recognized symbol demonstrating that a building is environmentally responsible, profitable and a healthy place to live and work. It gives building owners and operators the tools they need to have an immediate and measurable impact on their buildings' performance and promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health. Rick Fedrizzi, founding chair of the U.S. Green Building Council helped champion the development of the LEED system in 1998. Currently LEED certification has been growing in 16 states and in more than 46 cities in the U.S. The five key LEED areas are: sustainable site development; water savings; energy efficiency; materials selection and indoor environmental quality. NY has now gone Green with LEED for State Financed buildings. John Hopkins Hospital is looking to have a LEED building. M. Coleman said that Arizona State University has a very strong vision and goal for sustainability and that this is starting to spread among many other universities, schools, businesses and government buildings. A list of colleges that are adopting LEED was shared. The U.S. Department of Energy supported the development of the standards. Examples were given of LEED buildings (i.e. Auburn University Science Building, Arizona State University, and Harvard University).

M. Coleman shared the energy impact, the social impact, and the economic impact of LEED certification. He reported that energy use reductions of LEED certified buildings are significant compared to conventionally built buildings. These details of LEED impacts can be seen in the PowerPoint presentation on the Senate web site.

M. Coleman addressed LEED certification as a viable policy option for RIT. He stated that LEED certification should be considered for all new buildings at RIT. The advantages include better-designed, higher performance buildings to reduced waste, lower operating costs and healthy and more comfortable buildings to enhancing recruitment efforts. The new RIT CAST building built in 2003 is LEED silver rated building. Pertinent issues regarding LEED were discussed covering the initial (upfront) and Life-Cycle costs, alignment with RIT strategic elements, campus wide differentiation and the "Living Laboratory" concept.

Additional slides were presented of other LEED buildings in America and additional "Green" certifications/partnerships embraced by universities nationwide.

Discussion and Q&A ensued.

Q: Warren Koontz asked if there is anything else out there besides LEED?

A: M. Coleman responded that in the U.S. there is not any alternative certification. He stated that the USDOE and the highly respected U.S. Green Building Council are championing LEED certification. He added that as a flexible and market-based system for rating buildings on their energy, environmental and social performance, LEED has been widely accepted as a useful system. Other rating systems exist for buildings in Canada, but in the U.S. LEED is the primary market-based certification program.

Q: A. Aghayere asked that since LEED came into being in 1998, has research been done to see if this is the best way to go?

A: M. Coleman responded that more work has to be done on the measurement and verification of the energy, environmental, economic and social impacts of LEED certified buildings. He stated that

Universities are well suited, due to their rich research and academic environment, to be a “test bed” for LEED buildings. The CAST building can be just one data point for RIT to study, monitor and determine if future LEED buildings should be constructed.

Q: K. Waterstram-Rich asked if there is an annual fee involved with being LEED certified?

A: M. Coleman responded that there is a nominal annual fee and said he will inquire about its cost.

K. Waterstram-Rich thanked M. Coleman of the Campus Environment Committee for the LEED presentation today.

ADJOURNMENT: 1:50 p.m.

Respectfully submitted,

Eileen Feeney Bushnell

Vivian Gifford

12/17/2007