

# THE UNIVERSITY SENATE OF MICHIGAN TECHNOLOGICAL UNIVERSITY

## Minutes of Meeting 371

1 May 2002

### **Synopsis:** The Senate

- (1) heard that Proposal 20-02, Amendments to Proposal 10-98, Emeritus/Emerita Professor Policy; and Proposal 21-02, Academic Renewal, were approved by the administration.
  - (2) heard that Kelly Strong and Tony Rogers were elected to three-year terms and that Cindy Selfe was elected to a two-year term as at-large senators.
  - (3) heard a report on the university budget.
  - (4) heard an update on health benefits.
  - (5) heard a report on distance learning.
  - (6) heard a report from the Senate Computer Committee.
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### **1. CALL TO ORDER AND ROLL CALL**

President Bob Keen called University Senate Meeting 371 to order at 5:49 p.m. on Wednesday, 1 May 2002, in Room B45 EERC.

Secretary Craig Waddell called roll. Absent were At-large Senator Dieter Adolphs and representatives from Army/Air Force ROTC, Chemistry, Chemical Engineering, Mining and Materials Processing Engineering, Physics, Keweenaw Research Center, Enrollment Management, and Student Affairs and Educational Opportunity. Liaisons in attendance were Becky Christianson (Staff Council) and Karl Haapala (GSC).

### **2. RECOGNITION OF VISITORS**

Visitors included Marty Janners (Vice Provost for Student Affairs), Bruce Rafert (Graduate School/Distance Learning), Ingrid Cheney (Human Resources), Pam Eveland (Planning and Budgeting), Dan Greenlee (Controller/Interim CFO), Jim P. Cross (International Education), Al Baartmans (Mathematical Sciences), Jim Moore (SFWP), and Marcia Goodrich (*Tech Topics*).

### **3. APPROVAL OF AGENDA**

Keen presented the agenda; proposed adding an item to New Business, G. USG Resolution; and asked for additional amendments. There were none. There were no objections to the agenda as amended. [Appendix A. NOTE: Only official senate and library archival copies of the minutes will contain a full complement of appendices.]

### **4. APPROVAL OF MINUTES FROM MEETING 368**

Keen presented the minutes from meeting 368 and asked for corrections. There were none. The minutes were declared approved as presented.

### **5. PRESIDENT'S REPORT**

Keen reported that the senate had forwarded to President Tompkins and Provost Wray for their approval Proposal 18-01, Search Procedure for University Administrators; Proposal 19-01, Search Procedure for College Deans; and Proposal 21-02, Academic Renewal. [Appendices B-D]

The senate has received administrative approval of Proposal 20-02, Amendments to Proposal 10-98, Emeritus/Emerita Professor Policy; and Proposal 21-02, Academic Renewal. [**Appendices E and F**]

The senate has received a memo from the provost indicating his review and reauthorization of half-semester courses. This review is required by Proposal 4-00, Policy on Half-Semester Courses. [**Appendix G**]

Keen said that two hours ago, he received a message on Proposal 18-01, Search Procedure for University Administrators; and Proposal 19-01, Search Procedure for College Deans, which he said he would discuss later in the meeting.

Keen said that, on behalf on one of his constituents, Senator Don Beck had raised a question about a problem with computation, which was subsequently resolved.

President Tompkins has asked for clarification of a phrase in Proposals 18-01, Search Procedure for University Administrators, and 19-01, Search Procedure for College Deans. Hence, these proposals will return to the senate and will be voted on next fall.

The report of the committee considering the proposed merger of the College of Engineering and the School of Technology is available in the senate office. [**Appendix H**]

Keen reported that Kelly Strong (Civil and Environmental Engineering) and Tony Rogers (Chemical Engineering) were elected to three-year terms and that Cindy Selfe (Humanities) was elected to a two-year term as At-large Senators.

The senate will meet informally with President Tompkins on Thursday, 2 May, from 3-5 p.m. in Ballroom B of the Memorial Union Building.

## **6. COMMITTEE BUSINESS/REPORTS**

### **A. Presentation on the University Budget [Appendix I]**

Director of Planning and Budgeting (P&B) Pam Eveland said that the administration would recommend a deficit budget to the Board of Control at the Board's May 10 meeting. The administration had previously proposed a budget that would be \$218,000 in the black. However, the State of Michigan capped tuition increases and did not increase state appropriations. This reduced the university's revenue projections by \$1.9 million.

In reviewing the 2003 fiscal year budget requests, P&B found several items that had not been in the fiscal year 2002 base, nor had they been in any prior base. They should have been in these prior budgets because the university has been spending money on them. These items amounted to \$586,000.

There are also some non-routine, unavoidable increases related to the September 11 terrorist attacks. The university's property insurance will double next year, adding \$350,000 to the budget; and IT and other computing groups will enhance computer security, partly in response to new federal requirements, adding \$100,000 to the budget. In January 2002, student access fees for departmental basic computing increased by \$8 per student per semester. That \$8 also goes toward this enhanced computer security. Collectively, these increases total \$542,000.

At the Board of Control's March 14 retreat, Graduate School Dean Bruce Rafert proposed an enhanced graduate stipend and health insurance plan as part of the enrollment-and-retention proposal. The Board approved this plan at its March 15 meeting. This plan will cost \$245,000.

Hence, the administration will recommend to the Board of Control a \$3,055,000 budget deficit for fiscal year 2003.

Eveland asked if there were any questions.

Senator Bill Gregg asked what items P&B found that had not been included in the fiscal year 2002 base, nor in any prior base.

Eveland said that almost \$300,000 of that \$586,000 was for the General Education Program.

Gregg asked if that was a surprise.

Eveland said that it was a surprise to those who thought that that budget had already been taken care of. She said that the whole \$300,000 wasn't missing from the budget, but a significant portion of it was.

Eveland said that Dean Max Seel and the General Education Committee had each requested additional funds for the General Education Program, but P&B was approving a lesser amount than either requested. General Education will be funded. The General Education Committee has agreed to work with the budget that has been approved. The administration will work to ensure that the General Education Program gets off the ground and will not destroy something in which people have already invested significant time and effort and that is a good program.

Gregg asked what exactly was the expense for the General Education Program.

Eveland said the expense included compensation to committee chairs and summer review committees. Former Vice Provost for Instruction Steven Bowen had covered such things from his budget; hence, it didn't stand out. Bowen has left Michigan Tech, and his position has not been filled; however, the university has still been spending his budget. Since current university policy prohibits deficit spending, the carry-forward that Bowen had in his account and had been using to fund such expenses is no longer available.

Senator Bruce Pletka asked if the university was still paying for summer review programs for the General Education Program.

Eveland said that the university was still paying for materials, including texts, used to train graduate assistants for the General Education Program. She said that she would get back to the senate with more details on these expenses.

Pletka said that most of this should have been taken care of when the program was first established.

Eveland said that part of the expense was related to the forthcoming North Central Association assessment of the university's General Education Program.

Eveland said that there were several other items that were not in the budget, such as routine commitments to match minority program grants. This has been done historically, but there has never been money budgeted for such expenses. Eveland said she did not want to prepare a budget that doesn't accurately reflect what the university actually plans to spend.

Pletka said that all the senate asks is to know what the money is being spent on.

Senator Mike Roggemann asked what Eveland would propose if the Board of Control rejected the proposed deficit budget.

Eveland said that there are some items under discussion. Provost Wray will convene the Budget Advisory Group on May 2 to develop alternative plans. One thing that is not currently under discussion is another unilateral, across-the-board reduction.

Roggemann said that when faced with potential deficit budgets, many organizations decide to suspend some of their activities until the deficit is eliminated.

Eveland said that the challenge is not to cut off our nose to spite our face. Some of the most controversial programs on campus have been reviewed. For example, there have been several proposals on how the General Education Program might be run more efficiently. Those proposals were analyzed, and the FY 2003 budget provides the General Education Program with \$20,000 less than the lowest amount recommended by these proposals.

Eveland said that there is a list of areas in which the university could reduce expenses. However, when the university proposes to eliminate whole programs, the Board of Control doesn't always approve such proposals. It's difficult to find a list of reductions that everyone can agree upon.

Eveland said that the state-imposed cap on average increases in upper- and lower-division, resident undergraduate tuition and mandatory fees is 8.5%. The state-imposed cap on average increases in resident graduate tuition and mandatory fees is 15.5%. The state-imposed cap on average increases in upper- and lower-division, nonresident undergraduate tuition and mandatory fees is slightly under 10%. The state-imposed cap on average increases in nonresident graduate tuition and mandatory fees is currently proposed to be slightly under 17%, but it could be 15%.

The proposed budget assumes 0% increase in state appropriations and no raises.

Senator Kelly Strong asked if the no-raise proposal applied to everyone.

Eveland said that it applied to everyone, including the president.

Strong asked if that meant no raises in salary or no raises in compensation, such as property.

Eveland said that there is nothing in the budget for any additional compensation.

Eveland said that, unfortunately, the university would have to continue position review for another year. Positions that have already gone through position review have been deferred until a specified date and can be filled after that date. The extension of position review applies to positions that become vacant after July 1, when the current position-review program is scheduled to be retired.

The SS&E reduction equal to 10% of travel will also be continued for another year. This does not necessarily have to be applied to travel reductions.

Al Baartmans (Chair, Mathematical Sciences) asked if the 10% was a reduction over the current fiscal year or over the previous fiscal year.

Eveland said that the proposed 2003 budget includes an SS&E reduction equal to 10% of the amount budgeted for travel for the 2002 fiscal year.

Eveland said that also included in the proposed deficit budget for fiscal year 2003 were stipend increases and improved health benefits for graduate students.

The Budget Advisory Group examined the priorities submitted by the various units and asked if the university had already made a commitment to these priorities. If it had not, the group asked if the proposed priorities were things the university must have or would like to have. For those items that were commitments, the group asked if they were or would soon become legal, contractual commitments or if they were only verbal commitments. Eveland said that two requests had been submitted for utility improvements. One is for underground power lines that need to be replaced. That will cost between \$100,000 and \$500,000, which could be spread out over five years. There is also a possibility that the regional utility consortium will increase its electric usage rates; however, the existing budget should be sufficient to cover such an increase.

Senator Bill Gregg asked what P&B had used for an undergraduate enrollment number in computing this budget.

Eveland said that the enrollment goal for next fall is based on enrollment for last fall, which was an increase over the previous fall. However, she didn't use that number in computing the 2003 budget. She assumed that next fall's enrollment would not exceed last fall's enrollment, and then considered how many students have been accepted and how many have begun to pay for housing and other costs. Hence, she considered the numbers the university is actually looking at rather than the numbers the university hopes to see. For graduate enrollment, Eveland considered the effect of the colleges' inability to fund graduate assistant lines beyond those that the Graduate School is able to provide. She said that she is unable to predict how many international students might be unable to get visas to travel to the United States. Only one Michigan Tech graduate student left the country after September 11, and that was a personal decision, not a visa problem.

Roggemann asked if the proposed budget provided opportunities for improvement in Michigan Tech's financial status.

Eveland said that the university is counting on increased enrollment and on other potential revenue sources, such as in-house auxiliaries. The Distance Learning Program is also expected to generate revenues. Senator Jim Gale asked if Eveland expected enrollments not to decline further.

Eveland said that three of the four key enrollment indicators, including paid housing and applications, are up. Hence, she does not expect enrollments to decline below last fall's numbers.

Senator Kelly Strong said that this budget model hits untenured faculty members hard. It includes no raises and no increases in SS&E. This pressures untenured faculty to spend more time writing proposals for larger grants. He asked what decisions had been made by the administration to make the future better.

Eveland said that after the May 10 Board of Control meeting, the administration would work with the Strategic Planning Group and the Budget Advisory Group to allocate resources consistent with the Strategic Plan. She said that the president and the provost have requested raises for the faculty and staff, but the Board of Control has not been agreeable to this.

Eveland said that Board members need to be educated as to how universities operate. Board members come from centralized, autocratic, for-profit companies, and they tend to want the university's budget planning to follow this model. They need to recognize that an institution of higher learning includes many well-educated people who expect to be and should be consulted in forming policies and procedures, including the budget.

Strong said that he had served on a committee that sent five memos to the administration requesting that the administration determine how to pay for the General Education Program, but the administration has a history of not listening well. That's why we have this budget problem.

Eveland said that she hoped that the new administration would listen. She said that she had told the Board of Control members that she would not compose a balanced budget just because that's what they wanted to see. Instead, she would compose a realistic budget. She said that she regrets that people who predate her may have made promises that certain programs, including General Education, would not cost anything, but she is not going to lie and say that the money is there if it's not.

Gale asked if tuition would increase by 8.5%.

Eveland said that there are two scenarios. One is for a straight 8.5% increase for both upper-division and lower-division students and both resident and nonresident students; and a 15% increase for graduate students. Students have asked for a utility fee. Since there is a cap on tuition and mandatory fees, this fee would be rolled into tuition. This would help students because most scholarships don't cover student fees. Tuition, as opposed to fees, also provides an honest statement of the cost of education. When fees are assessed by semester, they can have an unfair effect on students who are taking two-week survey courses

or other short courses. Off campus students will not be charged on-campus fees. Fees for summer sessions will also be adjusted to make them more equitable.

Senator Dickie Selfe asked if P&B was leaning away from student fees.

Eveland said that the Undergraduate Student Government wishes to keep student fees separate and spelled out the way they are, but they need to understand that as long as fees aren't included in tuition, they won't be covered by the vast majority of scholarships, and for the vast majority of department-sponsored graduate students, the departments will wind up paying for fees.

Bill Gregg said this might be dealt with by building the endowment for scholarships and then transferring responsibility for fees (rolled into tuition) from the general fund to the endowment.

Eveland said that this would be great. She said that one way to analyze the financial stability of Michigan Tech would be by comparing revenues from research and the spendable donations with revenues from student fees and state appropriations. Many other institutions have a higher level of discretionary funds from foundation accounts.

Senator Larry Sutter asked if research projects already begun during this fiscal year would be budgeted at the old graduate research assistant rate.

Eveland suggested that Sutter check on this with Vice Provost for Research Dave Reed and Graduate School Dean Bruce Rafert.

Roggemann said that most people use the information about graduate research assistant funding that has been on the university's Web site all year.

Eveland said that she does not do research grants, but that she recently found out that the information on the university's Web site had not been updated. Anita Quinn in Research Services is currently working with Eveland to update this information, but, unfortunately, many people have already written their grants based on the old information.

Roggemann asked if existing grants would be grandfathered in with the old GRA tuition rates.

Eveland said that she didn't think so, but that this should be raised through Reed and Rafert. She said that increased graduate stipends and health-care benefits were proposed.

Eveland presented an overhead and handouts indicating the budget reductions for all units of the university. She said that the athletic budget did not include tennis or Nordic skiing because these teams are now operating under different funding. Any more team eliminations would cause Michigan Tech to drop below the minimum number of teams required for our divisions. She said that the administrative units were required to reduce budgets by 10% over two years, and academic units were required to reduce budgets by 5% over two years. Financial aid and health care were budgeted separately.

Senator Debra Bruch asked when this budget reduction began.

Eveland said that the first-year reductions began July 1, 2001. The second-year reductions will begin July 1, 2002.

Senator Carl Vilmann asked why the chart showed two-year targets and future years.

Eveland said that some program's cuts won't be completed until the third year.

Strong asked if the proposed reductions were in General Fund expenditures.

Eveland said that they were.

Strong asked if Advancement had a \$2.6 million budget out of the General Fund.

Eveland said it did and that that budget included Advancement, Marketing, University Relations, and at least one of Pete Radecki's areas.

Gregg asked what effect the semester change had had on the university's budget in the past two years.

Eveland said that she wasn't here before the semester change and was just trying to address the current budget problems. However, she believes that the change had more of an impact on the budget than people had been led to believe it would have.

Gregg asked if this impact had been good or bad.

Controller and Interim CFO Dan Greenlee said that with the change to semesters, the university's low-cash-flow month changed from August to December. The change probably also hurt auxiliary sales, such as book sales. He said that he was not sure what effect the transition had had on enrollments.

Eveland said that she would leave copies of a sheet indicating what percentage of instruction is covered by institutional support and academic support. Institutional support includes the president and the provost, Institutional Analysis, accounting, and most of the rest of the Administration Building except for Student Services. Academic support includes the deans' offices, IT, and technicians. The sheet compares these percentages with those of other institutions in the state and with several of Michigan Tech's benchmark institutions. A separate sheet compares these percentages in 1992 with current percentages. Eveland also left a copy of a presentation she prepared for but did not deliver to the Board of Control, explaining the budgeting process in higher education in general and at Michigan Tech in particular.

Eveland said that she wanted to have the budgets completed by July 1 so that people would know what their budgets would be. She also wants to bring the Budget Advisory Group and the Strategic Planning Working Group into the budget planning and allocation process.

Vilman asked if there was a specific plan to eliminate deficit spending. He said that he thought that people would feel more comfortable if they were presented with a plan with specific targets for eliminating deficit spending.

Eveland said that the university currently lacks such a plan because the five-year budget model doesn't work. It hasn't been converted to semesters, not has it been converted to GASBY [?] changes. Eveland is in the process of building improved enrollment and budgeting models, but has not yet had time to project those out far enough to describe a deficit-free budget. She will continue working on this through the summer. She invited the senate to suggest improved means of providing input into the budgeting process.

Gale said that if the university was trying to avoid layoffs, all reductions must come out of non wages and salaries budgets.

Eveland said that the university was trying to minimize layoffs. When the budget-reduction proposals were presented, several positions were proposed to be eliminated. However, in one case the person involved has already transferred to another unit on campus. The proposed plan includes no raises, but also no layoffs.

Greenlee said that this presents a real challenge when last year, the university lost \$5.3 million, and during the current year, the university expects to lose about \$4 million, and 70% of General Fund expenditures are salaries, wages, and fringe benefits.

Vilman asked why the university was still hiring.

Eveland said that every position goes through position review.

Self asked if positions that are currently slated to be filled had already been reviewed.

Eveland said that, currently, if positions have already been reviewed, they will not be required to be reviewed again. She said that position review has been hard on staff, but even worse for faculty. We always have to be concerned with whether or not we can teach the students.

Keen thanked Eveland.

## **B. Health Benefits Update [Appendix J]**

Assistant Director for Benefits Ingrid Cheney said that in December 2001, the Benefits Liaison Group promised that in April or May, it would ask the senate to comment on how the new health-benefits options were working. She said that she was here to keep that promise.

Keen said that the mail-order prescription plan was not working well, but that the BLG was working on this problem.

Cheney said that several people had indicated that they wished that they had opted for the Premium Plan rather than the Standard Plan. Several people have also commented on the costs of physical therapy. Other than this, her office has received few comments on the new plan.

Vilman said that he thought the new plan was working well.

Rogers said that people should keep careful track of out-of-pocket expenses and report costs in excess of the maximum to the Benefits Office.

Cheney said that people should carefully monitor what health-care providers are charging because some are charging 20% of the actual office visit, not the actual amount approved by Blue Cross and Blue Shield, or 30% depending on the plan. This should have been fixed by Blue Cross and Blue Shield.

Rogers asked what was being done about excess charges by healthcare providers.

Cheney said that the best thing to do was to call healthcare providers about overcharges.

Marcia Goodrich said that the best practice was not to pay immediately after a visit, but to wait for the bill.

Cheney agreed. She said that unless they have a superb office staff, the healthcare providers really don't know what the approved amount is.

Cheney encouraged senators and their constituents to e-mail her with any questions and/or problems that they might have.

Cheney presented a compilation of handouts on healthcare benefits. The first outlined Michigan Tech's healthcare costs for each year from 1995 through 2001 and included projected costs for 2002.

Rogers asked if the "premiums collected" column represented a combination of the premiums for the payment plan plus whatever co-payments are made.

Cheney said that it did. It includes premiums plus payments for retirees and family riders (F-riders). Cheney explained that family riders are 19-25-year-old children still living at home and going to school. Michigan Tech employees pay \$60 per month for health care for family riders.

Strong said that the charge of the Benefits Liaison Group was to reduce healthcare costs by \$750,000 over two years. He asked if that was a reduction from real costs or a reduction from projected costs.

Rogers said that it was a reduction from projected costs.



Strong said that in that case, the BLG never anticipated that healthcare costs would go down, only that they would increase less rapidly under the new plan.

Cheney indicated that that was correct.

Referring to the handout, Cheney said that in 1995, Michigan Tech's total healthcare costs were \$5.56 million. In 2001, Michigan Tech's total healthcare costs were \$10.5 million--an 89% increase over six years.

Gale asked about the 216% increase in administrative costs (from \$190,000 in 1995 to \$600,000 in 2001).

Cheney said that in 2001, the university went to a specific stop-loss, which applies to each individual employee. The specific stop-loss is set at \$200,000, which is more expensive coverage. The university still maintains an aggregate stop-loss, which means that if health care increases beyond a specified amount, Blue Cross starts covering costs.

The next two handouts tracked weekly payments to Blue Cross and Blue Shield for 2000 and 2001. They indicated a difference of about \$350,000 between payments made to Blue Cross and Blue Shield for 2001 and actual healthcare costs.

Senator Jim Pickens said that if there was a surplus in the fringe-benefits account at the end of the year, the administration has agreed to a BLG proposal to carry that surplus forward.

Cheney said that the healthcare plan runs on a calendar year, not a fiscal year. She said that the university is currently paying about \$196,000 per week for health care. Last year, the university was paying about \$193,000 per week.

Vilmann said that that was only about a 1.5% increase, yet the previous overhead had indicated a projected increase of 11.5%.

Cheney said that she liked to be cautious.

Pickens said that the premiums are included in these projections. The 11.5% increase includes the \$750,000 increase in premiums.

Strong said that the proposal appeared to be pretty much on target.

Cheney said that thus far this year, prescription expenses were a little more than anticipated. Otherwise, the projected expenses are pretty much on target.

Strong said that \$350,000 of the projected \$750,000 was already in the bank. Strong asked if there had been any major, single-event losses, such as organ transplants, and what was being done to address such catastrophic health costs.

Cheney said that the university uses Centers of Excellence, such as the University of Michigan, for organ transplants. These centers have a fixed cost for catastrophic medical procedures.

Rogers said that specific stop-loss would mitigate against catastrophic claims.

Cheney referred the senate to her next handout, which showed Michigan Tech employees' health-plan choices for 2002. Six hundred eighteen employees chose the Premium Plan; 421 employees chose the Standard Plan; 19 employees chose the Deductible Plan; 18 employees chose the Deductible Plan with family riders; 41 fixed-term employees chose the Deductible Plan; and 29 employees opted out of Michigan Tech's plan and enrolled in other healthcare plans (for example, through the armed forces or through a spouse employed in the public school system or at Copper Country Mental Health).

The last handout (three pages) compared healthcare data among the state universities participating in the Michigan Universities Coalition on Health (MUCH). Senator Don Beck asked Cheney if she anticipated any major changes for next year.

Cheney said that she did not.

Strong said that Cheney, Rogers, Pickens, Keen, and others on the Benefits Liaison Group had done an excellent job of listening to what people wanted to see in a healthcare plan.

Keen complemented Bruce Seely, Ingrid Cheney, Ellen Horsch and others who had established the Benefits Liaison Group.

Gregg asked if in the next enrollment period in January, more employees might shift from the Standard Plan to the Premium Plan, and if this would help the plans financially.

Cheney said that it would. She said when vision and dental benefits were offered for just one year with the Premium Plan, vision costs increased by about 19%. Hence, she said that there was some question as to whether the university would continue to offer the vision plan every year rather than every two years.

Keen thanked Cheney.

### **C. Report on Distance Learning**

Graduate School Dean Bruce Rafert said that for the first time in 11 years, graduate applications have increased. Domestic applications have increased by about 60% over last year, and applications have increased by about 20% overall.

Rafert said that Senate Proposal 6-01 requires that Distance Learning administrators periodically report to the senate. He said that a large percentage of Michigan Tech's distance learning community was present and could answer any questions the senate might have: Chair of Mathematical Sciences Al Baartmans, Director of the Center for International Education Jim P. Cross, and Distance Learning Program Advisor Robyn Johnson.

Rafert said that there were two items that the senate might be interested in hearing about. The first was an update on a proposal for establishing a relationship with INTI College in Malaysia. Michigan Tech already has a relationship with INTI through which INTI undergraduate students come to Michigan Tech on a two-plus-two program. A group of faculty and staff is currently investigating the feasibility of offering a large distance learning program to INTI, which has multiple sites throughout Southeast Asia. The specific degree program under consideration is the Bachelor of Science in Engineering. Areas of concentration might include mechanical, electrical, and computer engineering. Degrees in computer science and business have been considered but are unlikely to be included at the outset.

Rafert said that this effort was motivated by a variety of factors, including potential enrollment problems being caused by difficulties involved in securing visas, and safeguarding and improving Michigan Tech's competitive position as Michigan's technological university.

Rafert said that this proposed effort would be on the level of three of four NSF Science and Technology Centers. He said that he would like to solicit volunteers, opinions, concerns, and other input from people at Michigan Tech who have relevant knowledge. The Distance Learning Implementation Committee (DLIC) has a number of subcommittees that are investigating a large number of issues, such as what is required for NCA accreditation of distance-learning programs and what intellectual property rights faculty have in distance-learning programs.

In order to maintain academic quality, financial vitality, and competitiveness with other distance-learning programs, Tech's program with INTI will need to begin with about 180 students and eventually stabilize at approximately 1000 students. Rafert said that the rule of thumb in distance learning is to take whatever

number of students the customer suggests will enroll and divide that number by three and then divide the result by three again. Hence, he said that the DLIC has already compiled a long list of contractual safeguards that should be included in any distance-learning agreement. Thus far, there has been no formal agreement between Michigan Tech and INTI.

Rafert said that the DLIC is investigating four modes of distance learning delivery: streaming video, taped delay, DVD delay, and the use of adjunct faculty who would teach courses on sight, abroad. At the outset, the DLIC assumes that one-third of the instruction will be delivered by streaming video from Michigan Tech, and two-thirds of the instruction will be delivered by adjunct faculty. However, each department (mechanical, electrical, and computer engineering) will develop its own optimal mix. Selfe said that he had heard concerns that distance learning might deplete human resources from teaching classes at Michigan Tech. He also asked why there was no online component to any of the proposed courses.

Rafert said that the DLIC might eventually develop online courses, but this was not currently a strength of Michigan Tech's distance-learning program. The courses offered to Michigan Tech's corporate customers in Detroit use tape delay. This has been successful. In response to the question about depleting human resources, Rafert said that the proposed distance-learning program should provide a net gain in revenues: with 1000 students, the program should gross about \$12 million per year and cost about \$8 million per year.

Beck asked where the 29% overhead came in.

Rafert said that it was included in the \$8 million pre year projected costs. If the program eventually stabilized at substantially fewer than 1000 students, Michigan Tech probably would not be able to administer it profitably.

Senator Carol MacLennan said that she works extensively with Malaysian, Taiwanese, and Chinese students at the graduate and undergraduate levels and that it is critical to establish a one-on-one relationship with these students for writing and for clarifying cultural differences. Given this constraint, she asked how the Malaysian distance-learning program would work.

Rafert asked Director of the Center for International Education Jim P. Cross to respond.

Cross said that in discussion the program with Michigan Tech's Malaysian partners, he believes that they do not yet have a clear understanding of what video-stream delivery is. They've asked Michigan Tech to deliver a degree by whatever means the university is able to do so. They don't yet know how students will respond to different modes of delivery. There has been concerns about cultural differences. The distance learning program with our corporate clients in Detroit delivers courses; the INTI program will deliver a full curriculum. He said that the questions that MacLennan was asking were questions that the DLIC is very concerned about.

Rafert said that MacLennan's point was well taken and would certainly be considered as the program develops.

Gregg asked if the DLIC had computed a minimum size for a corporate distance-learning program.

Rafert said that it would probably be about 180 students.

Rafert said that the second item he wanted to discuss concerned Michigan Tech's current distance learning program with General Motors. Michigan Tech has a long history of providing distance learning to GM and other corporate clients in the Detroit area. In this capacity, Michigan Tech might be considered subcontractor or supplier. Michigan Tech has a contract with GM, and GM has a clear expectation of zero problems of any type at any time. There are many specifics in the contract concerning the posting of syllabuses, the return of homework, and the grading of examinations. GM and Ford have a considerable

experience in this area, they have a group that is well grounded in contract law, and they are inflexible about delivering exactly what the contract requires. The major programs delivered to GM are the Bachelor of Science in Engineering and the Designing Engineer Certificate.

Rafert said that there was recently a problem in Math 1041D. Homework set 17-18-19, which comes in from multiple sites over a period of time, was returned to GM with some of the homework problems ungraded. There is extensive quality control in this course. Nevertheless, some graded homework was combined and returned with some ungraded homework. Other institutions are competing for the opportunity to deliver this program to GM. However, GM came to Michigan Tech to request this program. The student audience for Math 1041D includes a lot of students who don't want to be taking this course. They're taking it because they need to take it to keep their jobs.

Rafert said that the Department of Mathematical Sciences had made heroic efforts to make Math 1041D a superb course. Forty-seven percent of the students in the class are receiving A's, and only 10 percent are receiving D's or F's. Those receiving poor grades have an incentive to offer any possible excuse for their performance.

There have been no repercussions for the Math 1041D instructor, who is one of the best instructors at Michigan Tech. The Department of Mathematical Sciences has offered to shoulder the brunt of the financial sanction that GM levied on Michigan Tech, but the DLIC is looking for ways to distribute this burden. The ultimatum from GM was to agree to a \$250,000 sanction or accept the cancellation of the program, which brings in \$3 million per year. Other universities involved in distance learning with GM have had sanctions of up to \$1 million.

Rafert said that corporate expectations test and challenge Michigan Tech and drive the university to develop courses to a high standard. He said that he was initially skeptical about distance learning but has come to recognize that Michigan Tech does well in distance learning in the engineering curriculum.

Rafert said that he made the point to GM that when they have a recall, they fix the problem; they don't offer their customers a free car. He said that he and Provost Wray and President Tompkins plan to speak with GM representatives about this sanction. He asked if others involved in distance learning cared to make any comments.

Baartmans said that the demands on distance-learning courses are much greater than the demands on on-campus courses.

Senator Bruce Pletka said that when he taught in this program last summer, he found that GM students did not always turn their homework assignments in on schedule. Some of these students did perfect work on their homework but failed their examinations. He assumed that this was because they were waiting to complete and submit their homework until the tapes showing homework solutions had been shown. Also, the e-mail addresses provided for some of these students didn't work.

Rafert said that in the instance under consideration, students complained that they would be taking an examination for which they had not yet received graded homework. However, the homework solutions were posted on the program's Web CT site, and a video conference for the practice examination had been held. Only 41% of the students in the class have ever gone to the Web CT site to review the homework solutions.

Baartmans said that responsibility for quality control rests only with Michigan Tech.

Pletka said that there also needs to be quality control on GM's part.

#### **D. Computer Committee**

Chair of the Senate Computer Committee Dickie Selfe said that the committee is developing a proposal for an Educational Technology Center (ETC). They will meet with Vice President for Advancement Fred

Hensley on May 3 to discuss an endowment for this center. The full text of Selfe's overheads is available at <http://www.hu.mtu.edu/~rselfe/senate/computing/index.html>.

The purpose of ETC would be to centralize instructional technology, which is currently distributed among the various departments. The committee has received support from system administrators, Information Technology, and almost everyone else with whom they have discussed this proposal. The only concern has been funding the proposal.

The proposal would increase the number of smart classrooms and improve the support that faculty receive to develop and deliver technology-rich instruction. The proposal would also create a centralized system that would allow faculty to access their instructional files and programs from any classroom on campus. This is somewhat possible now, but the university's distributed computing system makes this difficult.

Selfe said that Michigan Tech has a national and an international reputation for doing cutting-edge research and teaching with technologies. He said that he does research on computer-rich instruction in English studies around the United States and internationally. Tech is rich in technology at the student level, but not at the level of instructional support: it's excellent in some areas and virtually nonexistent in others.

Selfe presented the goals of the proposal. He said that the committee believes that Michigan Tech needs to do some basic classroom infrastructure development; no donor will want to pay for this. Facilities Management could do most of this with support from the proposed Educational Technology Center.

The core of the ETC proposal is to develop smart classrooms. The proposal would also develop a Student Technology Assistant Program.

Seidel said that one of the most constraining things he encounters as a teacher is the use of armchairs (chairs with attached writing surfaces) as opposed to chairs and full tables. Armchairs do not allow students to open a book and still have sufficient space for a writing surface. The proposed addition of technology to the classroom is great, but if the classrooms are only equipped with armchairs, it will be useless.

Selfe agreed. He said that the proposal would include instructional designers and that the ETC would reach out to faculty to find out how they really want classrooms to operate.

Selfe said that all of the rooms and equipment included in the proposal were intended to be available to faculty, staff, and students. Students do presentations and need access to such rooms and equipment.

Strong asked if the proposal would also centralize computing such that students as well as faculty would have access their files and programs from any classroom on campus.

Selfe said that this was a more difficult problem. The way it is addressed in the current proposal is by developing a Virtual Large-Area Network (VLAN) that will allow students, faculty, and staff to put files and programs on a central serving system which they could access.

Selfe presented the ETC funding model, which includes a substantial endowment effort. He said that the proposal would not work unless it enjoyed broad support across campus.

Senator Scott Pollins asked if existing high-technology classrooms would be absorbed into the proposed Educational Technology Center.

Selfe said that they would be and that that was one reason why IT supported this proposal. He said that lecture halls developed as smart classrooms have a live expectancy of about three years. Hence, the proposal would develop a certain number of smart classrooms each year and rotate through the

classrooms such that each room is redeveloped every three years. He said that this effort should also tie into distance learning efforts.

## **9. ADJOURNMENT**

Vilman MOVED and Sutter seconded the motion to adjourn. The meeting adjourned at 7:50 p.m.

Respectfully submitted by Craig Waddell  
Secretary of the University Senate