THE UNIVERSITY SENATE OF MICHIGAN TECHNOLOGICAL UNIVERSITY

Minutes of Meeting 395

5 November 2003

Synopsis: The Senate

- 1. elected Gregg Bluth to the Academic Integrity Committee.
- 2. elected Jim Gale to the School of Forest Resources and Environmental Science Dean Review Committee.
- 3. approved Proposal 3-04, Minor in Municipal Engineering.

President Bob Keen called University Senate Meeting 395 to order at 5:35 p.m. on Wednesday, 5 November 2003, in Room B45 EERC.

1. ROLL CALL OF SENATORS

Secretary Craig Waddell called roll. Absent were representatives from Materials Science and Engineering, the Keweenaw Research Center, Auxiliary Enterprises and Research and Graduate School/University Relations/Administrative Offices. Liaisons in attendance were Brandon Richards (USG) and Becky Christianson (Staff Council).

2. RECOGNITION OF VISITORS

Visitors included Bill Bulleit (Civil and Environmental Engineering), Brad Baltensperger (Education), Bruce Rafert (Graduate School), Martha Banks-Sikarskie (Extended University Programs), Brenda Helminen (IT), Kent Wray (Provost) and, Marcia Goodrich (*Tech Topics*).

3. APPROVAL OF AGENDA

Keen presented the agenda and asked for additions or modifications. There were none. There were no objections to the agenda as presented. [**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 393

Keen presented the minutes from meeting 393 and asked for corrections or amendments. An emailed correction from Rosalie Kern was noted. Approval of minutes was delayed until Kern's correction could be made.

5. PRESIDENT'S REPORT

Keen said that Proposal 1-04, 2004-2005 Academic Calendar, has been transmitted to the administration for approval. **[Appendix B]**

Keen said that since the last senate meeting, the senate had not received notices of the disposition of any senate proposals previously forwarded to the administration.

Keen said that the senate needs to identify a new secretary since the current secretary would be on sabbatical during the spring semester.

Keen said that the revised tenure and promotion policies and procedures are ready to be sent from the Senate Ad Hoc Committee on Tenure, Promotion, and Reappointment to the University Academic Tenure Committee. The university committee needs two more members, which will be supplied at the beginning of next week. As soon as the full committee is assembled, it will forward to tenured and tenure-track faculty the proposed revisions to tenure and promotion policies and procedures. The University Academic Tenure Committee will then call a meeting,

probably for Friday, November 21. Voting on the proposed changes will occur at this meeting; there will be no mail ballots.

Senator Dickie Selfe asked if just the committee would vote.

Keen said that the vote would be for all tenured and tenure-track faculty.

D. Selfe asked if the vote would be before Thanksgiving break.

Keen said that it would be. He said that a vote by all tenured and tenure-track faculty at such a meeting is required by the Board of Control's current tenure and promotion policy. He said that this policy could be amended such that changes in promotion and tenure procedures could be voted on in the senate.

D. Selfe asked if there was an absentee ballot system for this vote.

Keen said that there wasn't.

Senator Cindy Selfe asked why the vote was being held the Friday before Thanksgiving break.

Keen said that the vote could be advanced to the Thursday before Thanksgiving break. He said that the reason for conducting the vote during this week was to get the revised policies and procedures on the agenda for the Board of Control's December 9 meeting. He said that he agenda for this meeting would be mailed to BOC members a day or two prior to Thanksgiving. Keen said that this allowed tenured and tenure-track faculty at least 10 days to review and discuss the proposed changes prior to voting on these changes. He said that the senate had seen the proposed changes already.

Keen said that in response to the possibility of Michigan Tech experiencing financial stress, the Senate Finance Committee met with Provost Wray to discuss plans for addressing the budget adjustment that may be coming from Governor Jennifer Granholm.

Keen said that he and Senator Bill Gregg met with the Cross-Functional Planning Group's Subcommittee on Developing Policy. He said that at a follow-up meeting next week, they would try to fit several senate policies into the subcommittee's proposed policy format.

Keen said that the senate has sent three program proposals to the senate's Curricular and Finance Committees: a master of engineering in civil engineering, a master of engineering in environmental engineering, and a graduate certificate in sustainable futures.

Keen said that the Senate Executive Committee would meet on Friday to discuss the three proposals on increasing undergraduate enrollments that were discussed at the last senate meeting. The committee will also consider amendments to the financial emergency policies—Senate Proposals 15-02 and 16-02—in an effort to bring the benefits sections for non-tenured faculty in these proposals into line with the respective benefits sections for professional staff. Keen said that he would also ask the Executive Committee to discuss the election of senate representatives to the Reconfiguration Committee defined in these two proposals. Keen said that based on the experience of the President's Budget Reduction Advisory Committee, the senate's representation on the Reconfiguration Committee should be reconsidered.

Keen called for questions. There were none.

6. COMMITTEE REPORTS

Elections -- University Committees

Keen reported that Gregg Bluth (Geological and Mining Engineering and Sciences) was a nominee for the Academic Integrity Committee. Keen opened the floor for additional nominees.

There were none. Nominations were closed, and Bluth was elected to a three-year term by acclamation.

Keen said that the senate is still seeking nominees for the Faculty Review Committee, the Inquiry Committee (scientific misconduct), and the College of Sciences and Arts Dean Review Committee.

Keen reported that Jim Gale (School of Business and Economics) was a nominee for the School of Forest Resources and Environmental Science Dean Review Committee. Keen opened the floor for additional nominees. There were none. Nominations were closed, and Gale was elected by acclamation.

7. UNFINISHED BUSINESS

Proposal 3-04, Minor in Municipal Engineering [See minutes, page 10414, for a copy of this proposal.]

Keen said that at the previous senate meeting, discussion of Proposal 3-04 was interrupted by a proposal to delay discussion until the current meeting. Keen said that he would entertain a motion to continue discussion of the motion to approve Proposal 3-04.

Senator Jim Pickens MOVED to continue discussion of the motion to approve Proposal 3-04. Senator Bill Greg seconded the motion.

Keen said that Associate Chair of Civil and Environmental Engineering Bill Bulleit was in attendance and would be able to answer questions about Proposal 3-04 that were not answered at the previous senate meeting.

Bulleit said that he had been sent several of the questions about Proposal 3-04 that had been raised at the previous senate meeting. One question was, "Does the proposed minor require any new courses?" Bulleit said that it did not. Another question was, "Have all of the courses required for this minor been taught as distance learning courses?" Bulleit said that none of these courses have yet been taught as distance learning courses. He said that a goal of the proposal was to begin offering these courses as distance learning courses. Bulleit said that another question was, "The proposers claim that the program won't cost Michigan Tech any money; how will they evaluate this claim?" Bulleit said that the Department of Civil and Environmental Engineering does not plan to offer any of these courses as distance learning courses unless (1) enough students at Northwestern Michigan College (NMC) enroll in the courses to pay the estimated costs; and (2) the courses are already being taught on campus as regular courses. Hence, the faculty load would be the same, but there would be more students in the courses.

D. Selfe asked if Michigan Tech had adequate facilities to offer as distance learning courses all of the courses needed for this minor.

Director of Extended University Programs (distance learning) Martha Banks-Sikarskie said that Michigan Tech currently has two facilities for broadcasting distance learning courses: room B45 EERC, which seats a maximum of 49 students, and room 111 ME-EM, which seats a larger number of students. She said that excess space is currently available in B45 EERC. Space in 111 ME-EM is difficult to schedule on Mondays, Wednesdays, and Fridays, but relatively easy to schedule on Tuesdays and Thursdays. Banks-Sikarskie said that distance-learning broadcast facilities were being planned for additional rooms. She asked Dean of the Graduate School and of Distance Learning Bruce Rafert to comment.

Rafert said that if enrollments at Northwestern Michigan College in Traverse City reach projections, in fall 2004, Michigan Tech would offer as distance learning courses three of the municipal engineering courses that are already offered on campus. In spring 2005, Tech would

offer four such courses. In fall 2005, Tech would offer two such courses; and in spring 2006, Tech would offer one more such course. Through this progression, all of the requisite courses would be offered as distance learning courses. Rafert said that this progression in offering municipal engineering courses as distance learning courses dovetails with two other changes in distance learning at Michigan Tech: (1) a decrease in Michigan Tech's current distance learning certificate program with General Motors, which will free studio space at Michigan Tech; and (2) the construction of the Center for Integrated Learning and Information Technology (CILIT). Rafert said that the CILIT would be completed in the spring of 2005 and would include two rooms with distance-learning broadcast facilities. He said that two additional rooms in the CILIT were high-technology classrooms and could be upgraded for distance learning. Consequently, he said that Michigan Tech had adequate studio space for this program.

Senator Jim Pickens read the last sentence of Proposal 3-04: "The distance education model requires that the courses make money for the University so distance offerings will not increase costs." He said that the Senate Finance Committee didn't know what model this claim was based on. Pickens said that before last year, the apparent model was that 0 percent of the revenues from distance learning programs was returned to upper administration; hence, all such revenues went to the academic units offering the distance learning classes. He said that this was done in order to encourage academic units to participate in distance learning programs. Pickens said that last year distance learning programs returned 29 percent of gross revenues to the upper administration. He asked if this was a full-cost-recovery model and how this model compared with the full-cost-recovery model of 57 percent for research contracts and grants.

Rafert said that no distance learning courses would be offered that were not already offered on campus. Hence, he said that the additional cost of offering a course as a distance learning course was the cost of the technology needed to deliver such a course. He said that if revenues from the distance learning students were not sufficient to cover the cost of the technology for a given course or program, that course or program would not be offered. He said that Extended University Programs works with a full-cost-recovery model--which includes dozens of variables, including studio rentals, streaming, classroom space at the other end, graders or teaching assistants, and so on--to predict how many students are required to cover the cost of delivering distance learning courses.

Rafert said that he could not make a direct comparison between cost recovery for distance learning and the 57 percent cost-recovery model for research contracts and grants. He said that the cost-recovery model used for distance learning includes many items as direct costs or direct charges, such as studio use and studio amortization.

Rafert said that the municipal engineering courses would be part of a large portfolio of distance learning courses offered by Michigan Tech, and the portfolio as a whole does make a significant amount of money for Michigan Tech, including the 29 percent administrative fee.

Pickens asked how much of this money in the past year went to units of the university other than the department offering the courses.

Rafert said that in fiscal year 2002, there was no 29 percent administrative fee. This was intended as an incentive to departments to develop and offer distance learning programs. In fiscal year 2003, the 29 percent administrative fee totaled \$505,000. About \$200,000 of this was used to pay off part of a loan of about \$400,000 on the ME-EM 111 studio. This year, the administrative fee is expected to generate about \$400,000. This reduction is due in part to the tapering off of the certificate program with General Motors. This program has been successful-students are graduating, and Michigan Tech has improved its relationship with General Motors-but it was designed to last for only a few years. Hence, new programs, such as the minor in municipal engineering, are encouraged.

Senator Bill Gregg said that the proposal fulfilled all of the curricular policy rules for minors; hence, the senate's Curricular Policy Committee had decided to support this proposal six months ago. He said that this minor is not just for distance learning; it is a general minor that is available to any student on campus. He recommended passing the proposal.

Senator Terry Monson asked who at Michigan Tech would be likely to enroll in this minor.

Bulleit said that students pursuing a Bachelor of Science in Engineering (BSE) degree must include a technical emphasis area, one of which is civil engineering. The minor in municipal engineering would be a logical choice for such students.

Gregg said that under the curricular policy rules for minors, any student can attempt to take any minor as long as the minor doesn't have the exact same title as the student's major. Hence, for example, a civil engineering major could take this minor.

Pickens said that the senate's Finance Committee was in support of this minor.

Keen called for further discussion. There was none.

The motion to approve Proposal 3-04, Minor in Municipal Engineering PASSED without objection.

8. NEW BUSINESS

A. Proposal 4-04, BS Program in Psychology [Appendix C]

Keen said that Proposal 4-04, BS Program in Psychology has been favorably reviewed by the senate's Finance and Curricular Policy Committees.

Pickens said that the Finance Committee was inclined to support the proposal; however, the committee had today requested additional information on the proposal from Department of Education Chair Brad Baltensperger. Pickens said that the Finance Committee should be prepared to make its formal recommendation at the next senate meeting.

Baltensperger said that he would not be able to attend the next senate meeting. He asked if he could answer any questions at this time.

Keen said that the senators had just received this proposal on the previous day; however, he asked if senators had any questions for Baltensperger.

Pickens said that demands for new majors are always difficult to predict. He said that Proposal 4-04 predicts 10 new students in each of the first two years of the program and an increase in the number of new students in subsequent years. He asked if Baltensperger had any evidence to support these projections, such as from other schools that have recently added a major in psychology or from students requesting such a major at Michigan Tech.

Baltensperger said that he didn't have any information on enrollments in psychology at other schools that have recently begun offering this major. He said that there is little information about the success of other non science and engineering majors at Michigan Tech because no such majors have been introduced at Michigan Tech since the major in scientific and technical communication was introduced in 1976. Baltensperger said that the enrollment projections were based on psychology enrollments at other universities with overall enrollment numbers similar to those at Michigan Tech. He said that eventually enrolling 20 students per year in this major is a reasonable goal. He said that the program would also help to retain at Michigan Tech students who have decided that they want to move out of more technical areas.

Senator Don Beck asked what Northern Michigan University offers in psychology and what their enrollment numbers are.

Susan Amato-Henderson said that NMU has between 100-125 students majoring in psychology.

Beck asked if the proposers knew how many people from the Houghton area were enrolled in NMU's psychology program and how many of these might be inclined to transfer to Michigan Tech.

Amato-Henderson said that she had been collaborating with NMU's psychology program. She said that there are many commuter students in this program. She said that she didn't think that Michigan Tech would draw any current psychology majors away from NMU but that in the future, Houghton-area students wishing to major in psychology might choose Michigan Tech over NMU.

Baltensperger said that one of the problems with projecting enrollment numbers is that there is little to base such numbers on other than impressionistic evidence. He said that faculty in the Department of Education regularly talk with students who want to major in psychology and who leave Michigan Tech to do so. He said that Michigan Tech admissions recruiters report that prospective students frequently ask about the availability of a psychology major at Michigan Tech. He said that nationally, 4 percent of high school students intend to major in psychology, and 6 percent of students who complete bachelor's degrees in the United States receive their degrees in psychology. Baltensperger said that this would be the first new non science or engineering major offered at Michigan Tech in 25 years.

Senator Jim Turnquist asked what placement Baltensperger projected for students graduating from Michigan Tech with this major.

Baltensperger said that page 5 of the proposal included data on placement. This data indicates that approximately 20 percent of students graduating with a major in psychology go on to graduate school, and 80 percent of such students enter the job market with a bachelor's degree.

Amato-Henderson said that this was national data. She said that because of the type of psychology program that has been proposed at Michigan Tech, she would expect about 30-35 percent of Michigan Tech psychology graduates to go on to graduate school.

Turnquist asked if Amato-Henderson expected to place about 70 percent of graduates with only a bachelor's degree in psychology.

Amato-Henderson said she did.

Turnquist asked what kinds of jobs these students would be qualified for.

Senator Cindy Selfe said that this information was included on page 5 of the proposal.

Amato-Henderson said that psychology majors have a wide range of career options. Some remain within a narrowly defined realm of psychology; others pursue careers in such fields as human resources, government service, and health services.

Senator Dickie Selfe said that psychology majors also pursue careers in human factors research, such as usability testing.

Amato-Henderson said that this is currently one of the most in-demand areas for psychology graduates.

Turnquist said that health service is currently one of the hottest areas in the job market.

Amato-Henderson said that many psychology graduates go into health services and data gathering and processing.

Senator Jacek Borysow said that the proposal indicates that 14 of Michigan's 15 public universities already have majors in psychology. He asked if there was anything that would make a psychology major at Michigan Tech stand out in this field.

Amato-Henderson said that there is a strong national trend in psychology, as in other fields, toward interdisciplinary collaboration. She said that currently, specialized training in areas such as industrial organizational psychology, environmental psychology, and engineering psychology is generally offered only at the graduate level. There is a growing trend, however, to offer such training at the undergraduate level. Hence, instead of hiring someone with a graduate degree, employers can hire for less money a bachelor's-level person with comparable technical skills. She said that Michigan Tech would begin with a general psychology major, but would be an ideal place at which to develop such undergraduate specialization in the future.

Senator Erik Nordberg asked what Michigan Tech students currently use psychology courses to support.

Baltensperger said that most of the current psychology courses fall within the General Education Distribution Lists and that Michigan Tech also offers a psychology minor, in which about 25 students are enrolled. He said that the Introduction to Psychology typically enrolls about 300-350 students per year, and the other psychology courses are capped at about 40 students.

C. Selfe asked if some of these courses are required for education majors.

Baltensperger said that education certificate students must take Introduction to Psychology and Educational Psychology and may also take additional psychology courses.

Gregg said that the senate's Curricular Policy Committee had reviewed Proposal 4-04. He said that the proposal was very well prepared. Gregg said that Proposal 4-04 includes much information that would be of general interest, and he recommends that all senators read the proposals. He said that the report noted that the Colorado School of Mines was the only one of Michigan Tech's benchmark institutions that doesn't offer a bachelor's degree in psychology. Gregg said that Michigan Tech needed more new degree proposals.

Gregg said that other colleges and universities in Michigan are developing small-scale engineering programs, which they hope will provide new options for their students. He said that Michigan Tech needs to counterbalance this with more proposals for new non-engineering degrees.

Pickens said that the senate's Finance Committee had forwarded several questions to Baltensperger. However, he said that the committee values the following points about this proposal: (1) it diversifies Michigan Tech's financial portfolio, (2) it will help Michigan Tech to retain students, (3) it is not as sensitive to fluctuations in engineering enrollments as are many of Michigan Tech's other degrees, and (4) it will provide for a more diverse student body.

Pickens asked Baltensperger to clarify the relationship between anticipated growth in enrollment and the need for new staff. He said that the proposal suggests that the program would be fully staffed by year two. Pickens said that some of the new students would be transferring into the psychology major from other majors as juniors. He asked if such students would have to complete an additional year at Michigan Tech and thereby allow more time to build the program staff.

Baltensperger said that he expects that a few students currently enrolled in the minor in psychology will declare a major in psychology as juniors. He said that since course proposals are currently due for the next academic year, the Department of Education has scheduled five psychology courses and several psychology seminars. If funding is available to hire an adjunct professor, these courses will be offered next year. Baltensperger said that the remaining courses would be introduced the following year. Consequently, there will be a full complement of courses for juniors next year and a full complement of courses for seniors the following year.

Baltensperger said that the proposal calls for adding an adjunct faculty member next year. This would allow the Department of Education to increase the number of courses it offers and to free some faculty time for recruiting. In the second year, the proposal calls for adding a new tenure-track position and retaining the adjunct position. In year 3 or 4, if enrollments justify doing so, the adjunct position will be converted to a tenure-track position.

Senator Cindy Selfe said that she would like the senate to think about the tables that are included in new degree proposals that project the number of students that will enroll in the programs and the costs of the programs. She said that these tables are useful and provide a helpful way of thinking about new programs. She said, however, that such tables are only really helpful if the senate follows up on them. For example, she said that the senate might each year conduct a systematic review of every new degree program passed within the previous five years to see if the programs have been given the resources they've been promised and that they have delivered the students that they promised.

C. Selfe MOVED that the senate take responsibility for conducting a five-year review of new degree programs that include such projections so that the senate could get a sense of how the university is spending its money.

Senator Ron Roblee said that what C. Selfe was really asking was, "Is this program a costbenefit to Michigan Tech."

- C. Selfe said that essentially she was but that she wanted to know if this was the right model to use. She said that the university needed to find out if these are the right elements to be looking at, and the only way to do that is to see how they perform. She said that she was calling for a performance review and a resources review.
- D. Selfe said that this was not just a review of the department's ability to draw students; it was also a review of the administration's willingness and ability to actually supply the staff needed to support new degree programs. He said that he was concerned about the university's ability to add two new faculty lines within the next two years.
- C. Selfe said that the senate should review such program proposals to see if promised resources have been delivered and if enrollment projections have been realized.

Roblee said that the enrollment projections in the psychology proposal were comparable to those provided in the proposal for a minor in municipal engineering. He said that he wasn't sure how accurate such projections could be.

C. Selfe said that this is what she wanted to find out.

Roblee said that enrollments should drive faculty positions; faculty positions should not drive enrollments.

Pickens said that the traditional model has been that enrollments drive faculty positions; however, this proposal seems to be different. He asked Provost Wray if lines have been

committed to this program because the Department of Education will need additional faculty to offer this program.

Wray said that there is no advance commitment to any proposal: If enrollments meet projections, the positions will be provided.

Gregg said that there are more than just financial issues involved with new degree proposals, including such issues as gender diversity. He said that whereas only about 20 percent of engineering majors are women, approximately 80 percent of psychology majors are women. Gregg said that reviewing degree programs is an administrative function, not a senate function. He said that accreditation agencies visit Michigan Tech to review such programs and that the senate did not need to duplicate this effort.

Senator Don Beck said that he supported C. Selfe's proposal. He said that we should not remain ignorant. He said that the question is, What does the senate do with the data once it has collected it?

Senator Marilyn Cooper said that she would like to second C. Selfe's motion since the senate was discussing the motion without a second.

Keen said that he was taking the discussion as a general discussion rather than as one following parliamentary procedure because he wasn't sure that the motion was in order at this point.

C. Selfe asked why the motion was not in order.

Keen said that the senate works from proposals. He said that if C. Selfe's motion were seconded and voted on, he would refer it to a senate committee to produce a proposal because the motion proposes that the senate spend its time and resources on this particular project.

C. Selfe asked Keen to clarify.

Keen asked how the senate would keep track of the proposed reviews when the current senators have rotated off the senate. He asked who would keep track of when a proposed program is to be reviewed. Keen said that before committing senate resources to this effort, he would like to see a proposal for undertaking such reviews. He said the appropriate committee would probably be the Senate Finance Committee, and that committee was already charged at the previous senate meeting with producing a document that explains university finances.

Cooper said that she didn't see the issue as conducting program reviews but as the need to determine whether the enrollment projections included in new degree program proposals are accurate. She said that if such projections prove invalid, then they should not be used as part of the argument for new degree programs.

Senator Craig Waddell said that Baltensperger had just pointed out that outside of sciences and engineering, Michigan Tech has not offered a new undergraduate major in 25 years. He said that we begin to see part of the reason why. Waddell said that we should let programs proceed and give them a chance to demonstrate what they can do. If they don't recruit enough students, they won't get the anticipated faculty lines.

C. Selfe said that her motion had nothing to do with the proposed major in psychology. She said that she supports that proposal but that she also wanted to be responsible about looking at enrollment projections.

Senator Debra Bruch said that accountability is already built into new degree proposals: if they don't reach projected enrollments, they don't get the anticipated faculty positions. In any case, she said that she questioned the value of the enrollment predictions.

Borysow said that a review of proposals might find that enrollment projections have been accurate.

C. Selfe asked Provost Wray why he wanted enrollment projections and whether he thought the senate should determine whether these rough estimates bear fruit.

Wray said that he has no way of checking the enrollment projections in new degree proposals but must trust the professional judgment of the group that proposes a new degree. He said that he would be able to tell, however, if the projections were grossly inflated.

Selfe said that Wray didn't know whether this was the right way to estimate enrollments.

Wray agreed but said that if the enrollment projections were either grossly inflated or minuscule, the proposal wouldn't pass. He said that there were various ways in which the general accuracy of enrollment projections can be assessed. For example, the departmental advisory boards generally have a good sense of the state of the field; the same goes for colleagues at other institutions. Wray said that many variables--such as changes in the economy, state funding, and student interests--could undermine even the best enrollment projections.

D. Selfe said he thought that what C. Selfe was asking for was for the senate to examine enrollment projections in new degree proposals over a three- or five-year period to determine whether and how things were changing. He said that this would not necessarily be an evaluation of the programs themselves, but a look at what was proposed and what has happened in terms of both enrollment projections and resources anticipated.

Roblee said that programs are continually evaluated now based on changing enrollments, lack of resources, additional resources needed, and so on. He said that the additional program evaluation suggested would be an unnecessary duplication of efforts.

Gregg said that the senate is a policy-making body and that it should try as much as possible to stick with making policy and not undertake administrative chores.

C. Selfe said that if the senate is a policy-making body, it needs the information to make wise policy. She said that she didn't want to evaluate programs, just the accuracy of enrollment projections.

Rafert said that each college or school in collaboration with the Graduate School has a regular sequence of program reviews every five years. He said that what C. Selfe had suggested might be, and probably would be, included in this process.

Bruch said that the use of such evaluations concerned her because if enrollment projections proved overly optimistic in one case, this might bias the reception of enrollment projections in future proposals. Keen called for further comments. There were none. Keen proposed that this matter be addressed by the Senate Executive Committee on the following Friday. He said that if the idea appears to the Executive Committee to be worth pursuing, the Executive Committee would ask a committee to coordinate such a review with Bruce Rafert. Keen said that if this was not acceptable to the senate, he would seek advice now as to how best to proceed.

Monson said that one alternative might be to ask Rafert to report to the senate the results of the periodic evaluations he had described.

C. Selfe agreed.

Rafert said that this would be a joint presentation with the respective college or school dean. He said that the Graduate School is the single common participant in these periodic, program reviews, but that the Graduate School doesn't unilaterally conduct any of the school or department reviews.

Beck said that the senate, especially the Finance Committee, might want to establish a template for new degree program proposals so that all proposals would provide the same data.

Keen agreed that this would be helpful.

Gregg said that to some extent, this happens already because the senate receives very few new degree proposals, and those that the senate does receive tend to copy the format of earlier proposals.

Senator Erik Nordberg said that if there were to be a standard format for new degree proposals, it would be appropriate to include in that format an assessment request.

Gregg said that the senate had passed a policy on half-semester courses that included a three-year deadline with an extension clause such that if the half-semester courses didn't pass a review after three years, there would be no more half-semester courses. He asked if this was what the senate wanted to do with new degree proposals. Gregg said that he didn't understand why a new degree proposal was being singled out for such a review. He asked why not look at every program on campus.

C. Selfe said that that was what was being suggested.

Gregg said that departments getting ready for North Central Association (NCA) and Accreditation Board for Engineering and Technology (ABET) evaluations have to prepare self-study manuals. He said that if all of the senators had to read these self-study manuals and the follow-ups, that would keep the senate very busy. And five years later, there would have been a complete turnover in the senate, and the new senators would wonder why they were being required to do all of this.

Keen said that no one in the senate had remembered the three-year review for half-semester courses. Only when the provost's office asked what the senate proposed to do with all of the half-semester courses that were being canceled did senators remember the need for the three-year review.

Baltensperger said that if the senate would put such a report on the agenda for its November 2008 meeting, then he would compare for the senate the enrollment projections in the psychology proposal with actual enrollments.

Gregg said that the senate might as well also ask for reports on the degree programs that have been canceled in the past three years to see if these cancellations have saved the money they were expected to save.

Wray said that the Presidents' Council [the council of the presidents of Michigan's 15 public universities] has a standard format for new degree program proposals when those proposals are forwarded down state.

Roblee said that he didn't necessarily agree that there should be a standard format for new degree proposals. However, he said that if there were to be a standard format, the psychology proposal might serve as a model since it is an excellent proposal.

Keen called for further discussion. There was none. Keen said that the matter would be discussed further in the Senate Executive Committee meeting on Friday.

C. Selfe asked why the senate couldn't vote on this motion now.

Keen said that he would leave it up to the senate. He said that the chair had ruled that the matter would be addressed by the Executive Committee on Friday. He asked if there was a challenge to the ruling of the chair.

C. Selfe said that she thought that the senate should vote on the motion.

Keen said that the ruling of the chair had been challenged. He said that the senate would vote on the ruling of the chair. He asked if there was any discussion of the vote.

C. Selfe said that a vote by the senate would give the Executive Committee some indication of how the senate feels about this matter.

Keen said that the ruling of the chair to take this matter to the Senate Executive Committee on Friday has been challenged. He said that the vote would be to determine whether or not this ruling was proper. Keen said that if senators vote Aye, they agree that the Executive Committee will address this matter on Friday; if senators vote Nay, the Executive Committee will not address this matter on Friday, and the senate will continue to discuss the matter or will take the motion to a vote.

Keen asked all in favor of the ruling of the chair that the Executive Committee address this matter on Friday to so signify by saying Aye. Keen asked those opposed to so signify by saying Nay. The ruling of the chair passed without objection.

Keen said that the Executive Committee would address this matter on Friday

C. Selfe said she had voted on the wrong issue.

Keen said that this was a vote on the ruling of the chair that the senate would end discussion of this matter and refer the matter to the Executive Committee.

C. Selfe said that she was sorry and that she must not have understood.

Keen asked if the vote had generally been misunderstood.

Several senators indicated that it had not been.

B. Proposal 5-04, Master of Science Degree in Mathematical Sciences [Appendix D]

Keen said that Proposal 5-04 was a proposal to bring the name of the master's degree title in line with the titles of the bachelor's and doctoral degrees in mathematical sciences. He said that the senate would address this proposal at its next meeting.

C. Proposal 6-04, Wireless Lan Strategy and Policies [Appendix E]

Keen said that this Proposal 6-04 had received a positive recommendation from the senate's Computer Committee. He said that unless there were comments on this proposal, the senate would vote on it at its next meeting.

Nordberg said that several members of the Computer Committee were present and asked if this would be a good time for them to comment on the proposal.

D. Selfe said that he could provide a brief history. He said that the Senate Computer Committee had requested a proposal on wireless strategies from Michigan Tech Information Technology.

He said that Chris Williams had initiated this effort and had sent the request to Director of Telecommunications Engineering Brenda Helminen. He said that Helminen had drafted a proposal, and the Senate Computer Committee then met with Helminen to discuss this proposal. D. Selfe said that Senate Computer Committee Chair John Pilling had revised Helminen's original proposal.

Keen said that this proposal would be eligible for approval at the next meeting of the senate.

Senator Chris Williams said that the original request to IT was to develop a document that would specify standards that would be implemented for wireless networks on campus so that if an individual department or unit wanted to implement a wireless network, they could follow standards set by Telecommunications Engineering.

D. Selfe said that he thought Proposal 6-04 provided such standards.

Borysow asked if this would eliminate the need for static addresses; he asked if a visitor on campus with a wireless-ready laptop computer would be able to use the wireless network without asking permission.

Director of Telecommunications Engineering Brenda Helminen said that in order to comply with the Computer Committee's request for wireless network standards, Michigan Tech needs not only a policy but also a strategy. Hence, she went beyond the committee's request for a policy and also proposed a strategy that would facilitate many uses of wireless networks. She said since Michigan Tech cannot control where RF (radio frequency) goes, the university has to accommodate as many wireless uses as possible.

Williams said that the short answer to Borysow's question is that Michigan Tech wants to be able to provide this kind of access to visiting faculty or students or other visitors who have their own wireless devices.

Borysow said that he thought that Michigan Tech was the last place in the universe to use static addresses in a university environment.

Williams said that this was not the case.

D. Selfe said that certain security issues were difficult to control over a wireless network. Hence, users wouldn't necessarily have the same kind of access they would have at a hard-wired computer.

Senator Debra Bruch asked if wireless connections could be shut off in a classroom.

Helminen said that the only way to do this would be to line the walls in the classroom. She said that this was one of the key issues with wireless networks: RF goes where it goes; it doesn't necessarily go where people want it to go. Hence, one of the things Proposal 6-04 asks is a commitment to make wireless access broadly available on campus.

Williams said that some people assume that wireless access doesn't have much to do with academics. However, this is not the case. People need to consider what it means for students to have wireless devices in classrooms and what possibilities and problems there might be for teaching in a classroom with wireless access.

C. Selfe said that when wireless access was recently discussed in a Department of Humanities meeting, someone mentioned that someone from IT had walked from the Memorial Union Building to the Walker Arts and Humanities Building with a device that detects wireless networks and found approximately 18 wireless hubs currently in place without any policy regulating their

use. She said that a policy was needed to provide order to what people were already doing on their own.

Pickens said that Proposal 6-04 is identified as policy, but it includes many specifics, such as hardware. He asked what the financial implications of Proposal 6-04 were.

D. Selfe said that there were two procedures for funding wireless networks. He said that the Computer Committee recommends that general fund monies pay for the wireless umbrella network, which would be available everywhere on campus and would be less secure since it's outside the MTU firewalls. The committee recommends that smaller networks controlled by individual units be funded by those units. D. Selfe said that these smaller networks are already rapidly being put into place.

Pickens said that he didn't see a dollar sign in the entire proposal.

Helminen said that her general intent was to get some policies in place before a campus-wide wireless network was established. Hence, the goal of Proposal 6-04 was to define the commitment of the senate to establishing a campus-wide wireless network. Helminen said that if there is a clear commitment to establishing such a network, she would follow up with a general fund proposal for funding. In general, she said that a campus-wide wireless network would cost several hundred thousand dollars to establish and \$30,000-\$40,000 to maintain.

D. Selfe said that at the previous day's Department of Humanities meeting, he asked how many people wanted wireless access at Michigan Tech. He said that almost everyone in attendance indicated that they wanted such access. He said that most of our students are using wireless devices, and faculty can use such devices effectively in their teaching and in other work. D. Selfe said that Michigan Tech should provide campus-wide wireless access and is one of the last universities that is not to do so. He said that he suspects that this is one of Michigan Tech's recruitment problems.

Gregg said that proposal 6-04 indicates that Michigan Tech will have the authority to power off any device found on campus that is disrupting university-wide or registered services or is transmitting illegally. He asked if this included such power over wireless devices used by students.

Helminen said that it did.

Gregg asked if the university would have such power over wireless networks that were physically based off campus but whose RF network overlapped with campus networks.

Helminen said that the university probably wouldn't have authority to regulate such networks but that they could request that owners of such networks reduce the power of their transmissions.

Gregg asked how much interference from privately owned wireless networks currently exists on Michigan Tech's campus.

Helminen said that there are wireless transmitters all over the community. She said that Michigan Tech has no jurisdiction over these networks, but the farther away they are, the less problem they cause. She said that the purpose of Proposal 6-04 is to establish policy over those areas that Michigan Tech can control.

Gregg said that this was an attempt to federalize the system on campus.

Helminen agreed.

Gregg asked if there is currently a serious interference problem.

Helminen said that there is, but that it tends to be localized. For example, the new 2.4 gigahertz cordless phones will take out a wireless access point. Some video games can do the same.

Gregg asked what the policy would be on cordless phones.

Helminen said that Proposal 6-04 recommends establishing an executive committee to review such issues. Currently, the policy says that 2.4 gigahertz cordless phones can be used until an interference problem is identified; at that point, the matter would be referred to the executive committee, which might recommend reverting to 900 megahertz cordless phones.

Gregg asked how many 2.4 gigahertz phones were on campus.

Helminen said that there were probably several hundred.

Gregg said that most of these phones were privately owned and, hence, raised another jurisdictional problem.

Helminen agreed.

D. Selfe said that other universities have had to address the same problems.

Helminen said the Carnegie Mellon University has had an expansive wireless network for years, and their wireless policies seem to be working.

Roblee asked why wireless hot spots had been established in the Memorial Union Building, the library, and the residence halls.

Helminen said that Telecommunication Services doesn't have any general fund money; hence, they offer new services that can be paid for by fees. They currently have several hundred people paying for wireless access in these locations.

Roblee asked if that meant that users had to open an account to use these wireless services.

Helminen said that it did.

Borysow asked if that meant that users had to have a static ID address.

Helminen said that they did not; they just had to pay their bills. Users have to log in with an ID and password.

D. Selfe said that this meant that visitors would not automatically have access to the wireless network. He said that this needed to be addressed.

Keen asked Helminen if she would be able to attend the next senate meeting.

Helminen said that she would be.

Keen asked senators to refer Proposal 6-04 to their constituents for their consideration.

8. ADJOURNMENT

Senator Bruch MOVED and Senator Pollins seconded the motion to adjourn. The meeting adjourned at 7:01 p.m.

Respectfully submitted by Craig Waddell Secretary of the University Senate