## Minutes\*

## Senate Committee on Educational Policy Wednesday, April 7, 2010 2:00 – 4:00 238A Morrill Hall

Present: Cathrine Wambach (chair), LeAnn Alstadt, Tom Brothen, Kaleb Kalinowski, Robert

McMaster, Cody Mikl, Peh Ng, Jane Phillips, Peggy Root, Paul Siliciano, Donna

Spannaus-Martin, Michael Wade

Absent: Joseph Bartolotta, Norman Chervany, James Leger, Kristen Nelson, Henning

Schroeder, Elaine Tarone

Guests: Tina Falkner (Office of the Registrar); Vice Chancellor Claudia Neuhauser

(Rochester)

Other: Suzanne Bardouche, Leslie Zenk (Office of the Vice Provost and Dean of

Undergraduate Education)

[In these minutes: (1) credits required for a degree; (2) update on the University of Minnesota, Rochester]

## 1. Credits Required for Degrees

Professor Wambach convened the meeting at 2:05 and turned to Ms. VanVoorhis to lead a discussion of data on degree progress.

Ms. VanVoorhis recalled that she provided to the Committee last year degree progress information for students who entered as freshmen, who were now juniors, and who should have completed 75% of their degree programs. She is bringing to the Committee this year data on those same students (who should have completed their degrees) plus data on students who are now juniors.

Ms. VanVoorhis explained briefly how she pulled the data and then turned to degree progress summary for this year's juniors. The report, by major, was 51 pages long, and included the number of students (including single-majors and multi-majors), and the percentage of credits completed for those admitted Fall 07 and Fall 06. In the case of students who entered in Fall 06, they will look to see if students have graduated after this spring, and if not, try to learn why not. Professor Brothen inquired if, when a student is no longer in the data, that means he or she has graduated. It does, Ms. VanVoorhis said, or changed majors or left the University. They lose track of the student.

Vice Provost McMaster asked if there were any areas she saw as highly problematic, whether colleges or departments. What is the take-away from the data? They have looked for patterns, Ms. VanVoorhis said, and found, as one would expect, that students with Cs and Ds, students who take time off, and students who get Ws are hindered in their degree progress. Some students are missing

<sup>\*</sup> These minutes reflect discussion and debate at a meeting of a committee of the University of Minnesota Senate; none of the comments, conclusions, or actions reported in these minutes represents the views of, nor are they binding on, the Senate, the Administration, or the Board of Regents.

high-school requirements. Perhaps they can begin to identify students at risk so that advisers can work with them.

Ms. VanVoorhis then turned to degree progress for fourth-year students, a 57-page report with the data mentioned above. This report updates the data on students she reported on last year; she said she would bring to the Committee a report where students "fell out" of the data. In the case of one department, students need an additional 30 credits beyond graduation in order to take the professional test to be admitted to work in their field. Those students may be in the category of those who could be informed by the University that they have graduated, and welcomed back to take additional credits as they need them. Ms. Phillips said that these data are more valuable than last year's because one can now look at areas where students should have made progress and where they did not.

Ms. VanVoorhis highlighted two contrasting departments. In one, students are doing well in terms of progressing to their degree and most in the cohort should graduate this spring. In another, the average for the majors is only 68% completion after Fall 09, so these students are not on track to graduate in four years.

Are they also looking at graduate students, Professor Wambach asked? They are not, Ms. VanVoorhis said, because graduate students do not use APAS (the source of her data), and they would need to enter individual program data in order to provide the corresponding information for graduate students. Dean Schroeder noted that there are groups working on related issues and they could build in such an effort.

Vice Provost McMaster alluded to one particular major in which students had slipped behind between last year and this. Did something decelerate them, he asked? Is it a key course they cannot get, Professor Siliciano asked? If it is the same course, they can identify it, Ms. VanVoorhis said, but if it is different courses, they could not. In the case of a related major, Professor Wambach noted that there is an enormous range and standard deviation; in cases like that, Ms. VanVoorhis responded, it may be that a number of the students did not start in that major but switched to it later, so were behind.

Ms. VanVoorhis reviewed a number of other examples of deviation from expectations. One student in one major had 44 excess credits. In another, a student did a study-abroad semester, but none of the credits transferred, so the student in effect missed an entire term. In another major, a large number of students had switched into it, so were behind. In yet another, several students accumulated a lot of Fs or excess electives. In response to a question from Ms. Alstadt, Ms. VanVoorhis said it is not normal for a student's study-abroad credits not to transfer; usually the program makes sure beforehand.

Professor Wambach observed that a number of majors appear to have very small enrollments, and there will continue to be interest in thinking about the number of undergraduate and graduate students served by a program and its faculty. It may be necessary to think about how programs are related and how they could serve students more efficiently. Vice Provost McMaster commented on one department that has four tracks, with few students in each one, which suggests a need to consolidate the major and degree because at present it may be too complicated. Ms. Phillips reported that in her college the two smallest majors are talking about moving into biology and simply having a track, because there is an element of community that goes missing when majors are very small.

Ms. VanVoorhis turned next to a table of data on the average total credits earned by students at the time of graduation, by Twin Cities college, by degree-year from 2003 to 2009. The data differentiated between students who came to the University directly from high school (NHS) and students who transferred to the University after college-level work at another institution (NAS).

For example, students in one college had the following average number of credits at graduation in that year (NHS, NAS; the University requires 120 credits for a degree):

2003	160.2	143.4
2004	163.6	146.1
2005	161.5	147.7
2006	164.7	149.4
2007	165.7	149.8
2008	163.5	151.2
2009	167.3	150.8

In another college, the numbers were these:

2003	137.6	133.2
2004	138.2	136.6
2005	141.6	135.9
2006	136.8	135.5
2007	138.9	134.0
2008	137.2	133.0
2009	138.3	135.1

And in a third example, the numbers were:

2003	142.0	134.2
2004	147.6	136.8
2005	148.0	138.9
2006	149.3	138.2
2007	149.3	140.5
2008	148.3	139.3
2009	146.8	141.9

Vice Provost McMaster commented that what disturbed him about the numbers on the table is that in nearly every case, from 2003-2009, for both NHS and NAS students, the average number of credits earned at the time of graduation has been creeping upward. Ms. VanVoorhis turned to a summary of common patterns in all majors that affect graduation rates, prepared by a student in her office analyzing degree-progress data.

The student worker reviewed transcripts of students in a wide variety of majors. Ms Van Voorhees presented a list of factors that were present on transcripts of students who graduated on time and those who did not. Among the factors that appeared more often on transcripts of students who took longer to graduate are some that have been documented by institutional research such as excessive withdrawals and repeating courses. Other factors include changing majors after the second

semester, and attempting double majors. Students who take a full credit load, earn Cs or better, and do not change majors after the first year are on track to graduate in 4 years. Careful planning of CLE courses and electives is critical for IT students.

Ms. VanVoorhis next reviewed a list of majors that compares the catalogue and APAS (actual) in terms of what is required for the major. In a number of cases, the actual requirements exceed the catalogue requirements (in one field, 175 credits are required); in a smaller number, there are fewer requirements than the number of credits required for a degree (120, leaving the student options outside the major requirements).

Ms. VanVoorhis reviewed sample plans from two programs and illustrated, with one, how program requirements and pre-requisites, in combination with liberal-education requirements, can end up requiring a student take as many as 30 more credits than the 120 the University requires for a degree. A student could not, therefore, finish in four years. Professor Ng observed that it appears some fields do not program in pre-requisites while others do. Ms VanVoorhis agreed and noted that she had worked with the Morris faculty a number of years ago to program in all prerequisites. They were told they had to count them, Professor Ng recalled; do some not have to? Some do not, Ms. VanVoorhis said. In the case of the second sample, a student can "free up" 28 credits by double-dipping that can be free electives, and still earn a degree with 120 credits. (She affirmed, in response to a question, that to get the 28 freed-up credits, the student must double-dip.)

Professor Wade commented that requiring 175 credits for a degree is an enormous number; do programs have that kind of autonomy? Dr. McMaster said he is working with departments to reduce the numbers. Ms. Bardouche said that this program is the only one in the College of Liberal Arts that requires this level of credits; there are about a dozen programs in IT that explicitly require 124 to 128 credits.

Dean Schroeder asked what the incentive is for a department to create such credit-intensive majors. Is it tuition revenue? Professor Siliciano said that if one looks at the courses, they are apparently what the student must learn. So the argument, Dean Schroeder said, is that all those courses are required if the student is to be competent. Ms. VanVoorhis suggested it might be helpful to look at what other schools require in the same field. Dr. McMaster said the faculty in the program may be overly-ambitious in what they require. Professor Siliciano observed that there are a number of programs that are at 160-170 required credits. That is why it is important to have sample plans that show double-dipping and how students can reduce that number, Ms. VanVoorhis responded. That is also why it is important that departments propose liberal-education courses; if they do not, they hurt students. Ms. Alstadt exclaimed at the number of classes required in the 175-credit major. She said she has 6 courses for 15 credits this semester and "it is killing me." She has had terms with fewer classes but 18 credits that were easier to handle. In the one program example a student would take 7 courses for 15 credits; in the other one would take 4 courses for 15 credits. She would much rather take the latter, she said.

Vice Provost McMaster said it would be helpful if the Committee would pass a motion encouraging his office to work with departments to reduce the number of credits required for a degree. Professor Wambach agreed to bring forward such a motion at the next meeting. She said it will also encourage his office to send the data to departments; they might spark discussions. Professor Root pointed out that in professional programs there is not a lot of "wiggle room" because of accreditation

requirements; are these examples from accredited programs or are they just out of control? Engineering programs are accredited, Professor Wambach said, but none in Biological Sciences are, and certain education programs also have to meet requirements, Ms. VanVoorhis said.

Ms. VanVoorhis explained what her office is doing in the way of data analysis and identifying issues and common patterns. Professor Wambach said the effort could require ongoing implementation and there could be a recommendation to back off some of the liberal-education requirements in order to reduce the number of problems. They are also always looking at what peer institutions are doing, Dr. Falkner reported.

## 2. Update on the University of Minnesota, Rochester

Professor Wambach welcomed (back) Vice Chancellor Claudia Neuhauser from Rochester, who served on the Committee several years ago as a faculty member from the College of Biological Sciences.

Dr. Neuhauser began with a brief history of the Rochester campus. It became a campus in 2006 and Chancellor Lehmkuhle arrived in 2007. Its creation was precipitated by a report by the Rochester Higher Education Development Committee, which indicated that Rochester needed a University campus. In a city of 100,000, there are 30,000 Mayo employees and 3,000 IMB employees, so the campus was directed to focus on the health sciences and technology.

They started their first graduate program in 2008, Biomedical Informatics and Computational Biology; it is multi-disciplinary and has about 20 students. In 2009 they began offering the Bachelor of Science in Health Sciences (BSHS); it has at present 49 students in a degree program that requires 120 credits (she emphasized, having heard the end of the previous discussion about programs that require many more than 120 credits for a degree). And one credit equals three hours of work per week, as the Senate policy requires. They have adopted the same liberal-education core and theme requirements as the Twin Cities campus. The University had had a presence in Rochester for over 40 years before the campus was founded, Dr. Neuhauser said, in the form of continuing education partnership programs.

They are also planning an additional program, Bachelor of Science in Health Professions, to which they would admit juniors, who will complete one of five academic health professions programs at Mayo.

The BSHS program admitted 49 freshmen in 2009. They operate as a single academic unit and are not divided into academic departments. They have five tenure-track faculty and will add five more this year; they also have instructors who are not tenure-track and not expected to do research. It is a more project-based curriculum, with short lectures and then work on projects. The model is that students work on projects in class, so they do not need the tenure-track faculty there every minute; they merge lecture and discussion into a seamless session but are still experimenting with class times. They teach everything that is needed for the full four-year program, including an organic chemistry lab. The goal is to increase the freshman class by 50 per year, to a total of 250.

Professor Siliciano asked about the number of applications. Dr. Neuhauser reported that 80 students paid to enroll. Professor Wambach asked if they do their own admissions. They work

closely with central offices on the Twin Cities campus, Dr. Neuhauser replied; they do not wish to duplicate services that are already central, such as the Office of Information Technology.

The BSHS is the only major they offer, Dr. Neuhauser said, but they want to educate students broadly. These students are not just future doctors; many come in pre-med but change their minds. They tell students not to decide on their career during the first two years. The students have a common curriculum during that period during which they receive a science education, statistics, and social sciences, and must learn to transfer knowledge across disciplines. After two years, students start to separate by career path (they offer a seminar on career options during the second year). By the fourth year students will have completed the requirements so engage in a personal experience, a capstone experience, that may relate to what the student intends to do after earning the degree. They cannot tell yet what students will do, Dr. Neuhauser observed, since they just admitted their first class last fall.

They decided to use the same themes and core liberal-education requirements as the Twin Cities campus, Dr. Neuhauser related, because they liked the document that recommended them, did not believe they needed to reinvent the requirements, and doing so made it easier for students to transfer. The faculty thought about this and converged on that solution. What they want to do differently is to infuse the core and themes so that students see them throughout the curriculum, not check them off a list. They are building an assessment system to track students based on concepts-how well are students doing in understanding and using them. They also want the humanities and social sciences integrated into their curriculum because they seem the as core, rather than something to be taken and then done with it. They are part of the development of analytical and reasoning skills; their work in the humanities is health-sciences related.

The Rochester educational policies are the same as the Twin Cities campus. Their student-learning outcomes are different from those on the Twin Cities campus but are mapped to them. Since they have only one degree program that is more specialized, the learning outcomes are more focused on the program. Their student-development outcomes are still under development but will not differ much from the Twin Cities campus outcomes. The latter are hard to measure and they are not promising that all students will achieve them. Professor Wambach said that with its small cohorts, Rochester could be in a position to develop innovative ways to track student-development outcomes.

Vice Chancellor Neuhauser said that their 7.12 statement emphasizes learning first and the discipline second. Learning and health care have parallel concepts. The idea of preventing, diagnosing, and treating disease can be translated into learning, which is the basis for building a database to do long-term research to identify when students do not do well in one part of the curriculum and how that performance affects how they do in other parts of the curriculum. They want to catch students before they get an F in a course.

Ms. Alstadt inquired about their humanities and liberal-education courses. In the freshman year they have courses taught by a philosopher, a sociologist, and psychologist; students have statistics, algebra/calculus, arts and humanities, ethics, biology, and organic chemistry. It is a writing-enriched curriculum with a writing studio attached to the courses. The second year includes literature, history, and building on the first-year experience. The junior year includes bioethics. They are waiting to see what student interest are; if they want more psychology or public health, they will offer the necessary courses. They are waiting on hiring the full faculty complement to build the curriculum.

Dr. Neuhauser explained that on the Twin Cities campus, faculty build a course and hope it connects with other courses. At Rochester they are building a four-year curriculum to make sure they cover what is needed, and that may not always be in a specialized course. Faculty work across fields to determine what they should do. It is exciting because the disciplines are talking to each other and finding commonalities (e.g., analytical thinking).

Ms. Phillips asked what plans they have to provide ways for faculty to stay up to date in their fields when there might be, for example, only one physicist? What do they plan for leaves? Dr. Neuhauser said faculty members are obligated to stay current in their field, according to the Rochester 7.12 statement, and they are trying to find mentors in the discipline and in learning at Mayo. Faculty will go to disciplinary conferences and start research experiments with undergraduates. They want to be sure faculty can teach multiple courses, and they have more flexibility with multiple instructors in the classroom. Redundancy is built into the system, and faculty can teach more than one course so they can rotate around. The teaching load is based on number of credits, number of students, and percentage of the semester they participate in a course, and the load is evened out across the faculty. They will build a postdoc program where postdocs will take responsibility for course modules, which will provide new Ph.D.s with the opportunity to get both research and teaching experience (although they are not ready with this program yet).

Mr. Mikl inquired about their vision for undergraduate enrollment, majors, and faculty/departments. They plan on enrolling 250 freshmen per year Dr. Neuhauser said. The only undergraduate degree now is the BSHS, although they are constructing a second one. They are accredited through the Twin Cities and do not want to spread themselves too thinly; they have no plans to split into departments. The faculty hired appreciate being in one department, a situation that may not be desirable for every faculty member outside of UMR. They are fairly small and always will be, so there is no reason to split into smaller units, especially when faculty members talk together about the curriculum.

Professor Wambach asked about student services. They have Student Services at UMR and are working with Academic Support Resources on the Twin Cities campus, Dr. Neuhauser said. UMR also hired a student coach who works with students directly when they have problems, and who provides the link between Student Services and the academic side.

What happens when a student who enters the BSHS program decides, after two years, that he or she wants to transfer to an entirely different program on the Twin Cities campus, Professor Siliciano asked? They have had students who have decided that the program is not for them, Dr. Neuhauser said, and they advise them on where they might go. The students will need to transfer. Does everything at Rochester transfer to the Twin Cities, Professor Siliciano inquired? UMR has mapped their courses to those on the Twin Cities campus.

Students live in housing near the campus, in a public-private partnership. They do not have dorms or athletic facilities and students live in the community.

Do they teach courses online, Professor Wade asked? Not at the lower-division level, Dr. Neuhauser said. They want to develop hybrid courses at the upper-division level. Students must come to class every day because they work on projects.

Ms. Phillips asked about their eventual demographics. There will probably be more women, Dr. Neuhauser said, and they are seeking to increase the diversity of their classes. They are cautious about international students because of the increased student-affairs obligations, ESL requirements, and so on.

Professor Wambach thanked Vice Chancellor Neuhauser for joining the meeting and making her report. Dr. Neuhauser said she would be glad to return to the Committee with an update. She asked that it consider the abbreviations used for courses in ECAS because the categories that units must use to describe courses such as Lecture or Lab makes them have to lie about courses. One Committee member observed that other colleges have to lie as well. Ms. VanVoorhis said her office would take a look because it is time to update the descriptors.

Dr. Neuhauser also reported that they are thinking about the policy requiring that one credit equals three hours of work per week. They are finding it is better to do more in class, and are looking carefully at the workload to be sure that one credit does equal three hours of work.

Professor Wambach adjourned the meeting at 3:55.

-- Gary Engstrand

University of Minnesota