

Minutes\*

**Faculty Consultative Committee**  
**Thursday, November 6, 2008**  
**1:15 – 3:00**  
**238A Morrill Hall**

Present: Emily Hoover (chair), Gary Balas, Nancy Carpenter, Carol Chomsky, Shawn Curley, Marti Hope Gonzales, Michael Hancher, Caroline Hayes, Brian Isetts, Judith Martin, Michael Oakes, Nelson Rhodus, Martin Sampson, Cathrine Wambach, Becky Yust

Absent: Dan Dahlberg, William Durfee, Janet Fitzakerley, Kathryn Hanna, Jeff Kahn

Guests: President Robert Bruininks, Provost E. Thomas Sullivan

Other: Kathryn Stuckert (Office of the President)

[In these minutes: the intellectual future of the University]

**The Intellectual Future of the University**

Professor Hoover convened the meeting at 1:15 and welcomed the President and Provost to the semi-annual discussion devoted to the intellectual future of the University. The focus of the discussion at the meeting was an article by Kathryn Mohrman, Wanhua Ma and David Baker, "The Research University in Transition: The Emerging Global Model," Higher Education Policy 21 (2008): 5–27 (<http://dx.doi.org/10.1057/palgrave.hep.8300175>). The authors describe eight characteristics of the emerging global university (between the \* \* \* is a direct quote from the article):

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There are a number of specific qualities that define the EGM. Points 1 and 2 are the core values of this newly developing group of institutions, although all eight points are related and mutually reinforcing. In addition, not all EGM institutions display all eight characteristics in the same way and to the same extent. Taken together, however, these characteristics help to distinguish the EGM from the broader range of higher education institutions:

1. EGM universities see their mission as transcending the boundaries of the nation-state, educating for global perspective and advancing the frontiers of knowledge worldwide.
2. EGM institutions are increasingly more research intensive with the use of scientific methods in disciplines outside the sciences.
3. Faculty members, as producers of new knowledge, are assuming new roles, shifting from traditional independent patterns of inquiry to becoming members of team-oriented, cross-disciplinary, and international partnerships, with research directed more often than before toward real-world problems.

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\* 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.

4. The research enterprise is extremely costly. Universities are going beyond government support and student contributions to diversify their financial base with funding from corporations and private donors, competitive grants for technology innovation, and creation of for-profit businesses as spin-offs of research enterprises.
5. New relationships are being created among universities, governments, and corporations to advance economic development and to produce knowledge for the social good.
6. These universities are adopting worldwide recruitment strategies for students, faculty, and administrators.
7. EGM institutions require greater internal complexity directed toward research, such as interdisciplinary centers, integration of research elements in student training programs, and greater technological infrastructure for discovery.
8. Universities participate with international non-governmental organizations and multi-governmental organizations in support of collaborative research, student and faculty mobility, and validation of international stature.

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Professor Hoover noted that Professor Rhodus, in an email to the Committee, had asked if Committee members agreed with these characteristics. Professor Chomsky said that her response is more focused on the consequences of the characteristics: is that where the University wants to go? Provost Sullivan added that the consequences do not necessarily flow from the characteristics. Professor Martin inquired how the characteristics align with the Shanghai rankings of world research universities; both are oblivious to the education of students, Professor Sampson commented, and if an institution is an EGM research university, it should do well on the Shanghai rankings. This set of characteristics, Professor Martin agreed, is all about research and ignores everything else the University must do as a land-grant institution.

That is the dilemma, Professor Hoover said.

This pits prestige against education, Professor Sampson said, and the questions at the end of the paper for policy makers are oddly lacking in concerns about the quality of education

The paper looks forward, Professor Hancher said, but it also looks back to Humboldt. "In the early 19th century, Wilhelm von Humboldt had a vision of a university characterized by the primacy of research, the importance of science, the integration of teaching and research, and all these activities contributing to the development of the German nation. Knowledge production was the top priority, although the University of Berlin and other institutions inspired by von Humboldt's idea still taught students and worried about non-science disciplines. But the balance had changed." This analysis marginalizes two activities—teaching students and non-science disciplines, Professor Hancher commented. It may describe the origins of the research university but it doesn't hold out much for students or non-scientific fields.

Professor Hoover said the argument is that the scientific method should be enlarged. Professor Oakes said that even in the discussion of science, the emphasis is on quantity, not quality.

President Bruininks asked if the trends identified in the article are not valid even if one were to write it to focus on education. For example, the global character of the research university, multiple sources of income, interdisciplinarity are all characteristics of teaching as well as research. The glaring weakness of the article is the focus on research. Professor Isetts followed with a question about the goal of becoming a top-three public research university: the goal has been in place a few years, the University has experience in trying to achieve it; how has that aspiration affected decisions about the core mission? Has education been set aside to achieve the goal?

The goal is about quality, not numbers, President Bruininks said; it is about excellence in all the University does. The goal does not encourage abandoning core aspects of the mission. Over the last 30 or 40 years there has been a steady increase in student satisfaction with their education at the University. He said he does not see the goal as incompatible with education, and the interests of the research mission are advanced through education (and not just of graduate students). Part of the University's mission is to develop and promote knowledge. Provost Sullivan said that strategic positioning is about integrating research and teaching, apropos the quote highlighted by Professor Hancher. The University has put a significant amount of money into undergraduate initiatives: writing, UROP, freshman seminars, honors, advising, and so on. The goal is to provide a strong education in the context of being a research university. Why do students come to the University? Because of its broad and deep curriculum, which is one thing that distinguishes the University from a small liberal arts college.

Professor Yust said she did not see a contradiction between the goal and teaching, but if the University aspires to be part of the "emerging global model," how would that be measured? And, per Professor Chomsky, what would the consequences be? There is a tension between becoming an EGM research university and the University's educational mission, Professor Gonzales said, when one moves from a higher altitude and thinks about what faculty actually do. That is where the rubber meets the road, and because there are limited hours in the day, no one has more than 24, and if faculty do one thing, they can't do another.

There has been improvement in student satisfaction, Professor Sampson agreed, and he wondered what the relationship between satisfaction and tuition paid was: many of those who say they are highly satisfied with their education at the University may have paid much less in tuition. He said it is his sense that the University is near the breaking point either in the cost of undergraduate education or in the public perception about the cost of undergraduate education. Accordingly, pressures are building to cut costs by moving much of the curriculum to online education; or to get rid of parts of the curriculum that some people regard as unnecessary.

Provost Sullivan pointed out that the University has just announced a new initiative in the arts and humanities, both to invest funds in those fields and to send the signal that the University's plans are not only about big science.

Society has decided that undergraduates will pay for their education because it is now seen as a private good, Professor Wambach commented; who pays for the research mission? Grants? Who pays for that large research mission called for in the article? Who should pay for it? President Bruininks said it is still an open question about who should pay for a student's education. It is true that over the last 20 or 30 years the answer has moved in the direction of the students and their families paying, but it is a question the country must face. It may be that the answer will be different in the future.

Professor Isetts pointed out that indirect-cost funds do not cover the cost of research. They do not, Professor Balas agreed; the University loses money on all research—but that should not be the only model of research. Not all should have to be funded from grants and indirect costs.

Professor Chomsky said she appreciated the recognition for the arts and humanities. The article raised the question of whether an institution can remain committed to education and to the arts and humanities and still remain a top research university by the standards of the emerging global model. She suggested it is not clear that it can. She also noted, after Professor Gonzales, that the article points out that "professors in EGM [Emerging Global Model] universities probably have more freedom than their counterparts in less prestigious institutions but the feeling of being employees rather than the heart of the university prevails on many campuses. At the same time, successful faculty on EGM campuses have more money for research, more contacts with colleagues around the world, and more exciting intellectual challenges to pursue." There is the potential that faculty will feel more like cogs in a wheel, not central to the institution, she said.

Also notable, Professor Chomsky added, is the stress on academic freedom noted in the article that can arise when an institution, through its research, is trying to grab the market. "Academic freedom is also affected. Most professors cherish the right to teach what they feel is most appropriate, without external interference, and to pursue research ideas wherever the inquiry takes them. When funding agencies influence research priorities, these freedoms can be compromised. Similarly, proprietary and corporate research influences both the direction of research and the long tradition of open sharing of results. Market pressures can limit the degrees of freedom of professors to follow creative instincts or even the logic of their own findings [citations omitted]."

"Driven to Discover" does not only apply to scientific and technological fields, Professor Rhodus said; it can apply to all disciplines. But the institution must stop to think about what metrics it would use and what it would find out. Should there be increased satisfaction? More work cutting across disciplines? What about academic freedom?

Professor Yust alluded to another comment in the article. "At the present time, knowledge production downplays the importance of older forms of knowledge focused on the social values of traditions, classics, and sacred texts." She commented that certainly new knowledge and interpretations can be gained from the study of older forms of knowledge. However, one sees that increasingly one must identify the impact of scholarship. What are you doing and can you document the impact? Universities have been moving in that direction for some time.

Professor Martin noted one point made about the EGM in the article: "The EGM, fully developed, requires significant financial resources. It is no surprise that the institutions listed at the top of most international ranking systems are located in the United States, United Kingdom, and other highly developed countries." What does the State of Minnesota want the University to be? To what extent is it comfortable with the University being in the EGM category? When it measures up in the biosciences, that's fine, but the State picks and chooses what it wants to fund that puts the University in the EGM category.

Professor Balas said that many of the eight characteristics identified in the article are not metrics a university would strive for, rather are characteristic of the way universities are supported. Personally, he would prefer the University have less internal complexity with regard to research (Characteristic 7).

He said he disagreed with almost all of the eight characteristics as metrics for what an EGM university should be. Professor Gonzales said that although she could not say the same, her concern is about the demand to provide it all: professional and graduate training and undergraduate education. If the University wants to provide a liberal education to undergraduates, and also aspires to lead the world in knowledge generation and knowledge transfer, someone has to lose because there is not enough faculty time to deliver it all. She also noted, apropos international collaborations with other universities, that the University will forge links with institutions that are strong in its areas of excellence, or that are excellent in areas where the University wants to improve—whether nanotechnology, energy, or biomedical research—and that would mean concentrating its efforts in some areas at the expense of others. Again, to become an EGM university, there's got to be a trade-off given limited resources, and if someone wins, someone else must lose.

Professor Hoover recalled another point that Professor Rhodus had made: the article provides one set of metrics while Professor Windsor's subcommittee on metrics and measures had provided a different one. If the institution must set priorities, there will be winners and losers, so there will be a need to address the point that Professor Martin raised: What does the State of Minnesota want?

The State does not speak with one voice, Provost Sullivan observed. It speaks through the Board of Regents, elected by the legislature, it speaks through the Governor, and it speaks through the legislative leadership. It is difficult to say that "the State of Minnesota wants X." Professor Martin clarified that she was alluding to the fact that there are different pressures on different parts of the University and it is hard to sort that all out. The Provost said that when there are surveys of opinion leaders in the state, they say they want a world-class medical school, great undergraduate education, and a research university that produces new discoveries and products. Beneath those points, however, it is difficult to quantify what people want of the University. At the same time they are saying they want all these things from the University, Professor Martin added, they are not funding the University the same way it was supported in the past.

President Bruininks said that what the public values most is also something the public leaders agree on: they rank the educational mission highest and the research mission second. They recognize that the University is unique in the state, and the reach of fields, and the impact of its graduates, and that there is a leadership edge in having a place like the University in the state. At the same time, it is unlikely the University is going to hear what it would like to hear from the state, so it is up to the University to distinguish its roles within in the Minnesota "system" of higher education. The eight attributes identified in the article are important and it is "our job to craft the ones that are most important to this University." Provost Sullivan pointed out that it is written in statute that the University will be THE research university of the state. There is considerable pressure to name other institutions to the same category, the President observed, which would not be wise.

Professor Hancher drew the attention of Committee members to two excerpts from the article. First, in line with Professor Wambach's point, "one of the rationales behind the move for cost sharing between students and their universities is the idea that the greatest benefit goes to the individual, not to society, thus transforming a college degree into career investment or individual indulgence rather than a public good. Unless financial aid is included in the package, inequities are likely to result because only students from affluent families can afford to attend college. If benefits are seen to accrue to individuals, not to the nation, then reduced state support is a likely result." That is an arresting analysis, he said; how strong is it? How much guidance does it give to those who are taking money away from public

universities? Second, on the same page, "since the 1980s, however, the model of the national university has steadily lost ground to a more research-based model of the university that provides knowledge for all, not just for elites." Here the knowledge supposedly is for all, Professor Hancher said, and yet the previous quotation explains how the financing of a college education favors elites, unless the inequities are moderated by financial aid; there is a contradiction here. They will educate all, Professor Yust said, but it is for one's own benefit, and education is not seen as a public good.

Professor Sampson said that the public decisions made about university budgets are not always made from such thoughtful perspectives; rather, legislators are often making decisions that have less to do with philosophy than with pressure from some quarters to cut taxes, from others to increase funding, and from others to move funds around to deal with budget shortfalls. (They don't usually have the luxury of making reflective decisions in such an atmosphere.)

Professor Yust noted the article's observation that "David Ward estimates that it takes an annual operating budget of US\$1.5 billion to support a comprehensive research university with a medical center. In the United States, such institutions receive about 20% of this amount from state tax revenues and another 30-40% from competitive research grants. Approximately 30 American universities have budgets of this size, while no European institutions can match such resources [citations omitted]." One could see where the University stacks up on the eight characteristics, to see if one should call it an EGM university—but does anyone want to? The State has reached out through trade missions, which paves the way for the potential of a lot of activities to follow.

Professor Oakes said that there is a case for the research university, one that Humboldt made: the best researchers make the best teachers. But society is schizophrenic about academics; if one says one is a professor, people ask what you teach, not what you research. The general public does not understand that research university professors are researchers and teachers, and that the former makes the latter better, at least in theory.

These are characteristics, not goals, Professor Balas emphasized. They are how to classify institutions, they are not aspirations. Professor Rhodus agreed but contended that there are external forces to which the University must respond if it wants to be in the fray—and those forces push in the direction of these characteristics. Whether the University chooses to increase, decrease, or balance certain areas, these forces are realities; if the University is to be a player, it must respond to them whether or not they are seen as part of the mission.

Professor Curley said he was torn between realism and idealism. He believes the University is a public good; does the public believe that? He said he was not sure and asked if it is a battle the University can fight. Research is essential to what the University does as a research university; does the public see that? Is this a battle the University can fight and accomplish?

The President said he is confident the public sees education at the University as a public good—but there is no consensus on what that means. These things go in waves. The U.S. has had an egocentric view of the world while China is saving 30-50 cents of every dollar for its children. The U.S. was like that in the past, but not now. Donors are giving the University more money for fellowships and scholarships, so they see education as a public good. It is the legislature the University must deal with on the issue. There is a certain amount of schizophrenia about the University as a public and private good. He related that he uses economic metrics about the value of a college education—he really wants to

inspire families to send their children to college. But he also wants to argue that that is not all that matters or people will not go into careers to do what is of value to everyone, such as public interest law, family practice medicine, and so on. It may be, the President said, that there will be a swing back to revisiting questions of the public good in the notions of service to the community and receiving help for education that has been discussed in the recent presidential campaign. The world view of higher education is narrow, and there is truth in the list of qualities and traits in the article, the President concluded, but the University cannot stop with that list.

Professor Wambach asked about #5 on the list: "New relationships are being created among universities, governments, and corporations to advance economic development and to produce knowledge for the social good." The President said it is appropriate for the University to do those kinds of things. The point gets back to the discussion of what they conceive the land-grant mission to be in the 21st Century, Professor Wambach said. Originally these universities were to be economic engines and lead in workforce development for the states. The liberal arts were important but were not their focus. Is that an even stronger message now than before? Does the University tell the legislature it is special because it does research, invents things, and keeps the state economy going? The President demurred from one of Professor Wambach's statements, saying that the land-grant mission included the liberal arts. Provost Sullivan pointed out that the land-grant language said that these other activities were to be in addition to the liberal arts. Developing countries recognize they must build land-grant universities, the President continued. But there is a need to rethink the land-grant mission; it creates opportunities and brings people together around issues such as education, the environment, and the development of human capital. The problem is that an economic model does not capture all that the University is doing. A lot of centers in the institution are doing a lot of things, and the approach is not particularly coherent, but at the same time the University cannot regulate them too much without losing creativity.

There is a heavy emphasis on technology transfer in the article, Professor Carpenter said, so if research is the be-all and end-all of the University, should not Vice President Mulcahy be part of the discussion? How well developed is the University's technology-transfer function? It functions pretty well, the President said, and it includes things like arts in the community. It should given a different name so it describes the value added outside the University and the improved value of economic life in the state; the view of technology transfer needs to be broadened. The University does capture money from what the faculty invent, but a large majority of what the faculty does does not involve dollars. Most discoveries do not produce a \$5-10 million revenue stream. Ziagen produces about 90% of the University's royalty income but the patent expires in 2013. And even if one measured things differently, such as what the University does in building partnerships to solve problems, such as the Center for Urban and Regional Affairs, the Community-University Health Care Center, and the Center for Transportation Studies, there would still be considerable economic impact. Some of the characteristics of research universities described in the article are valid.

Professor Hayes said that when many of the members of the public think of the ways in which the University contributes to the public good, only half of the University's contributions come to mind—the education half. The other half is research. The public knows that the University does research but may believe professors do it for their own interests and do not understand the degree to which University research fuels the economic engine of the state. In terms of the question raised by Professor Carpenter about technology transfer, one of the challenges in Minnesota is attracting venture capital, particularly for small start-ups.

Vice President Mulcahy has described this challenge as "The Valley of Death." The Valley of Death is the technology transfer gap that can occur between the University and industry. A technology coming out of the University may be proven and have matured beyond the research stage, but at the same time, it may not yet be at a stage of maturity required for large corporations to pick it up. This gap is often filled by small start-up companies, but when venture capital or other necessary elements are missing, the start-up may fail to thrive. Both the start-up and the technology may end up falling into The Valley of Death.

A great deal of technology transfer occurs between the University of Minnesota and industry, and this has been very important to the state economy. However, this transfer could be even greater if the University could find more ways to turn The Valley of Death into "The Valley of Opportunity." The University and State need to work together to find more viable ways to do this. This is particularly important in the current difficult economic climate in which the University needs to find avenues to restore the economic vitality of the state.

In terms of a broader or narrower interpretation of technology transfer, Professor Hancher said, *techne* in Greek means an intellectual discipline. It means art and also science, associated with knowledge (*episteme*) and seriousness. It is a large concept that has been narrowed in U.S. usage.

Professor Martin said that leaders understand that the University is a public good. The conundrum for the University is that the more the business community understands that value, and is supportive, the more it seems the legislature gets off the hook. To the extent the University is successful in raising private funds, the state sees the money as replacement for the funds it has provided. Does the business community understand the public-good nature of the University better than the legislature? Professor Balas disagreed. He said the private support benefits the University and makes the case easier with the legislature. It is a challenge, Professor Martin responded, that the University can make the argument understood in one part of the community but not another.

Anything new leads to unintended consequences, President Bruininks commented. The University raises private money and builds relationships with the private sector, and it also has 8,000 acres in Rosemont that it could capitalize to generate resources that could also lead to a cut in state funding. But the University must try to develop UMore Park because it could be a significant part of the financial future; then the question is how to manage it. The Board of Regents has made a statement that the revenue from UMore Park will fund long-term institutional costs that are not being funded by the state.

The President said he did not agree with much in the article but that it does challenge the University to think about its own culture. If it implements education over the next 20-30 years like it does now, it will not be successful. It has become a lot more specialized than students want. (In this respect, the Morris campus is doing very well in its educational program.) The biggest problem is that Minnesota is over-built in higher education, an issue that no one takes on. If one were to evaluate campuses in the state in terms of viability, none of the University's campuses would be near the top of the list of those that are not viable. And, he said, it is not that the public does not view higher education as a public good, it is just that there are a lot of other things ahead in the line that cost a lot of money. Provost Sullivan pointed out that the University receives \$710-720 million per year from the state, which is very good support compared to other top public universities.

Professor Isetts said it is intriguing to think about redesigning the research infrastructure from technology transfer to putting research discoveries in the public domain. How far down the road might that occur? President Bruininks said that would be an important "intellectual future" discussion and should include the technology-transfer experts and Vice President Mulcahy. Universities get in an arms race in technology transfer but it may be that the return on that investment is not a good one. There probably needs to be some technology transfers and royalty payments, but most of what the faculty do does not have a lot of strictly economic value in the patents/copyright sense of the term. Do others release discoveries into the public domain, Professor Isetts asked? Some do, the President said, but they also do a lot to protect intellectual property and the division of revenue—but in many cases there may never be any money to divide. Some are asking if that is the best way to build relationships and partnerships, a question that goes to the fundamental values of the institution. The discussion should be values-driven because higher education should be driven by its values.

Professor Yust commented, on the subject of value and message, that it is fairly easy to capture money in technology transfer, and the University can capture tuition, and faculty can see that they get money from tuition and grants, but how does the University capture the more intangible impacts from centers across the state? Usually it is just through stories, but that work needs to be counted in a way that has meaning and is consistent. Service learning, the work of the many centers, University people on municipal boards, for example, contribute to the vitality of the state. And money gets back to the state in more ways than technology transfer.

Professor Rhodus said that idealism and realism are not mutually exclusive. The reality is that the University is the economic engine of the state, and one leads to the other. Ziagen helps fund development of new apples. There has been a lot of criticism of the new stadium but it has generated a lot of money to support academic initiatives. Every partnership creates obligations and management problems. Maybe it is not a metric to say it is part of the mission, and perhaps it need not be explicit. Professor Hayes agreed, saying that sports and arts create a context where smart people want to live. She said she sees technology transfer, sports, and arts tied together and the University need not say it is about one or the other. But in the University's game plan, to obtain support from the state, it needs to work not only on how to organize funds for it but also for other things and indirectly help the University and society.

Professor Sampson suggested the country is at a very important threshold. The mantra that things work best if markets are as free as possible and if taxes are minimized has been the country's first response to the new circumstances of globalization and a service-sector dominated economy. That overall approach has failed. There is a need to reassert a different argument that recognizes how crucial investment in the future is and how important it is to focus on investment. This state risks becoming the Ohio of the future unless it puts enough resources into its research university. Many people may not recognize that the research university is at the heart of an effective investment strategy. The focus must be on investment and how crucial the research university is.

There is a tension in the way faculty see themselves and the way others see them, Professor Wambach said. Many see themselves as part of an international discipline and location at a university is fluid; they can do their work in various places. But the state and the University want people to invest in the community and be a part of the place. It is important to talk about what the University must do to keep the former group here, Professor Sampson said. That people see themselves in this way is intrinsic

to the 21<sup>st</sup>-Century research university, and it is important that the state understand what the University must do to keep those faculty here in Minnesota.

Professor Martin commented that in thinking about the emerging global model of a research university, Minnesota is a cold place far away from everyone else. There is a question of whether Minnesota is in a position vis-à-vis the 49 other states with universities that have similar aspirations. This state used to have a leg up on the others because all understood the need to invest in the future of the state; to the extent Minnesota that has moved away from that view, there ought to be an opportunity to reconsider it now.

In terms of research in the public domain, Professor Martin also pointed out that the course materials for all MIT courses are now online for anyone's use—while Minnesota is arguing about copyright. The University needs to be more creative about innovation, how it is shared, and how the University receives recognition for it.

In terms of strategic direction, Professor Curley said, one must start with the fact that this is the state university, and it is a land-grant institution, so the first consideration should be the state and what the University can provide to it. One priority is the research done at the University and protected by academic freedom; this is a unique contribution to society—having all research done by companies would NOT be in the best interests of the state. A second priority is making available a liberal education, which is required in a global environment. The ability to get a liberal education is not specific to the University, but having a broad and deep curriculum is a distinction. A third priority would be to make a mark in specific areas of specialization. Here the University can provide leadership; the question is: Where are Minnesota's contributions able to be unique, say over the next 100 years? Here, the University must make strategic choices because it cannot do everything. How can it package the contributions of its faculty into themes that resonate and advance unique contributions to be made by the state into the future?

When he is asked to talk about the unique responsibilities of the University to the state, President Bruininks said, he points to strengthening the quality of life and the economy in a global world, so he can join the two concepts. There is much that can be argued about the idea that the University has a special role in keeping Minnesota competitive, a role that no other institution can play. Those who have graduated from college elsewhere but who are now in Minnesota say that the University is the most important institution in the state. The question is how to convey that point, the President said. There is need for reflective conversations, especially now with a financial crisis, to figure what the University needs to do and take control of decisions (e.g., give away intellectual property). It is important to emphasize what is unique about the University and its position in higher education in the state and how it helps Minnesota be a strong part of the global economy. Provost Sullivan noted that when corporate leaders are surveyed about what they believe most important, they say education; taxes are fifth or sixth on the list. Professor Martin said the question is how to make these points known vis-à-vis other institutions in the state; it is the University's mission to serve as an economic engine.

Professor Balas expressed skepticism that honing the message would be particularly useful because there is only so much public money. The University did well in the last bonding bill and it is generally doing well, given the state's financial constraints. That is why it is important to partner with the legislature to leverage other funds, Professor Yust said.

Provost Sullivan said that it is important to invest during the bad times. According to Goldman-Sachs, 3M is one of the best companies in the U.S. because it makes a deep and sustained investment in research and development. He endorsed Professor Sampson's theme of the University as the best long-term investment vehicle for the state. Professor Hancher agreed and said the mistake is to make the intellectual argument because people do not understand on a visceral level the University's research role. That is one way the University differentiates itself, the Provost said: it provides a first-rate education in the context of a research university.

The University also needs to think more about how to broaden access, the President said, and needs to think more as a system. Students receive a University of Minnesota degree, not a Morris or Duluth or Twin Cities degree. The University has not branded itself well in that regard, which hurts the other campuses.

Professor Hoover thanked everyone for attending and adjourned the meeting at 3:10.

-- Gary Engstrand

University of Minnesota