

**ACADEMIC COUNCIL  
UNIVERSITY OF NOTRE DAME  
MEETING OF OCTOBER 16, 2001**

**Members Present:** Rev. Edward Malloy, C.S.C., Nathan Hatch, Rev. Timothy Scully, C.S.C., John Affleck-Graves, Maura Ryan, Jeffrey Kantor, Rev. Mark Poorman, C.S.C., Eilleen Kolman, Patricia O'Hara, Mark Roche, Carolyn Woo, Melissa Rauch, Sonia Gernes, J. Robert Wegs, Joan Aldous, Patricia Blanchette, Susan Blum, Cornelius Delaney, Vittorio Hosle, Ikaros Bigi, Umesh Garg, Mitchell Wayne, Robert Bretz, Jay Tidmarsh, Alan Krieger, Ava Preacher, Samantha Schmid

**Members Excused:** Rev. John Jenkins, C.S.C., Francis Castellino, Frank Incropera, Jennifer Younger, Jacqueline Brogan, Teresa Ghilarducci, Joseph Powers (in London Fall semester), Panos Antsaklis, Edward Conlon, Dino Marcantonio, Sonja Mapes, Stephanie Arnett

**Observers Present:** Mary Hendriksen, Dennis Moore, Col. Mark Gehri, Lora Spaulding (for Harold Pace), Dan Saracino, Tom Laughner, Julia Dayton

**Observers Excused:** Harold Pace

**Guests:** Scott Malpass, Vice President for Finance and Chief Investment Officer; Joseph Russo, Director of Financial Aid; John Sejdinaj, Assistant Vice President, Finance and Director, Budgeting and Planning; Gordon Wishon, Chief Information Officer

Fr. Malloy called the meeting to order at 3:05 p.m. Prof. Hatch offered a prayer.

**1. Approval of the minutes of the Academic Council meeting of August 30, 2001.** The minutes of the meeting of August 30, 2001, were approved without amendment.

**2. Information Technologies at the University.** Fr. Malloy said that today's meeting will feature presentations on two subjects – information technologies and financial aid – that have a profound impact on the present and future of the University and its faculty, staff, and students.

Prof. Hatch introduced Gordon Wishon, the University's new Chief Information Officer. Mr. Wishon comes to Notre Dame from Georgia Tech where he held a comparable position. At Georgia Tech he was responsible for reworking that institution's computing systems and developing what is widely recognized as a superb computing environment. During his tenure at Georgia Tech, Mr. Wishon was also involved in setting up the technology infrastructure for the Summer Olympics of 1996,

during which the Georgia Tech campus served as the Olympic Village. Mr. Wishon joined the University in August of this year and has been asked today to present his preliminary assessment of computing systems at Notre Dame.

Mr. Wishon said that he first wanted to thank the University community for the warm welcome he has received. In the few weeks he has been at Notre Dame, he has had an opportunity to meet with all of the deans and some of the faculty. He looks forward to meeting more faculty members and receiving their input on strategic uses of information technologies to support the teaching and learning objectives of each department and to solve the many computing support problems that exist on campus.

Mr. Wishon began his presentation by stating that he believes the university's computing environment is the most challenging Information Technology (IT) environment in existence. The complexity, range, and diversity of requirements in university IT environments present a set of challenges not commonly found in those of corporations or other not-for-profit settings.

Mr. Wishon said that there are some wonderful things happening at Notre Dame in the IT field. He particularly applauds the initiatives taken to establish a set of resources and a funding pool that is applied to capital refreshment of hardware and software in the campus computing environment. This is an issue with which many institutions continue to struggle. The campus workstation program is a second area he finds to be carefully considered and established. The foresight of University administrators in this area will be rewarded in avoiding a number of problems often associated with managing technology at the desktop in both academic and administrative areas.

There are, however, a number of areas that have not received sufficient attention in the past. Many of these relate to issues of the infrastructure in place within the Computing Center/Math Building, now the Information Technology Center (ITC), particularly the legacy Hewlett Packard (HP) platform:

*Business Continuity Planning.* Business continuity planning is insufficient in many regards. There has been insufficient attention paid to disaster preparedness and disaster recovery capabilities – both in terms of computer architecture and Notre Dame's staff. This is an area identified in previous audits as containing many deficiencies and it needs attention so that the campus will have a more reliable, supportable, and survivable underlying infrastructure.

*Security.* A second area pointed out for attention in previous audits is security. The proliferation of recent viruses is a reflection of the fact that, again, the campus has many vulnerabilities in its underlying infrastructure. Vulnerabilities are particularly acute in the area of virus protection. Mr. Wishon emphasized that the campus is also at substantial risk from other kinds of technological intrusions. Researchers, faculty,

administrators – all in the campus community – are now at risk of loss, theft, or corruption of data and sensitive financial information. The University is at risk as well from the possibility of its computing resources being used as a launching pad for attacks on the Internet. Those kinds of attacks present a substantial financial risk to the University if it does not take appropriate and prudent preventative measures.

*Aging Legacy Platform.* Most of the University's administrative computing applications reside on an outdated legacy platform that will reach the end of its useful life within the next two to five years. Thus, very soon the University must begin to develop an approach or strategy for replacing or re-hosting its core administrative and academic support functions.

*Problematic Centralized File System Architecture.* The University has problematic, centralized file system architecture. The AFS system and the NT@ND solutions were really efforts to solve something that may no longer be a problem with some of today's current architectures. Mr. Wishon has asked his staff to take a very close look at this area.

*Staff Qualifications and Salaries.* Mr. Wishon continued that another area of concern for him is the qualifications of OIT staff members, particularly, whether the current staff has a range of skill sets to support a more complex system architecture than exists at the University today. In some cases, because of budgetary constraints, training of staff members – even in some critical technical disciplines – has been withheld. Thus, by the time of the start of the next budget cycle, some of those staff members will not have received training for a period of 18 months. In an environment that is so dynamic that changes in the field can be measured in hours, 18 months is a very long time to elapse without training.

*Classroom Infrastructure, Application Software, Database, and Web Architecture Standards.* Mr. Wishon said he believes that application software standards are being ineffectively applied at the University. While Notre Dame's centralized approach to technology support offers some opportunity for lowering costs through controlling the number of applications, the standards that are in place are applied ineffectively across the institution. Furthermore, there are no comprehensive database standards or common database platforms on which to build administrative and academic applications. While OIT is beginning to take advantage of the emergence of the Web as an effective mechanism for delivering services and support, this is an area in which Notre Dame can do better. The Office of Web Administration has done much for both administrative and academic units in beginning a dialogue about how best to utilize Web technologies. Again, it is Mr. Wishon's sense that the University can improve, particularly through the application of a set of content management tools that would allow the OIT to develop a consistent methodology using the Web to create content and then to place it on line.

*Inadequate Network Capacity.* Mr. Wishon said it will come as no surprise to those who have experienced the periodic loss of access to the Internet that he believes Notre Dame's network capacity is inadequate. There is now a plan in place to deal more effectively with the potential loss or temporary outage of the University's primary Internet service provider. In fact, OIT is pursuing a redundant Internet connection for the campus that should be in place very soon. However, in addition to inadequate Internet connectivity, there are areas on campus in which network capacity is insufficient. It is inadequate as well to sustain the kinds of bandwidth demands necessary to support such technology as streaming video and desktop videoconferencing. In addition, OIT has yet to put together an effective, consistent, and comprehensive approach to utilizing wireless technologies on campus to support a more mobile population of students and faculty.

*Restructuring OIT.* Finally, Mr. Wishon said that he believes a complete restructuring of OIT is necessary. The current structure presents certain barriers to effective performance and communication. He believes a realignment of functions and a re-focus on customer service is necessary for improvement.

Mr. Wishon then presented several issues important for further study and discussion:

*Student Computer Ownership.* This is an issue that has been discussed several times at Notre Dame. Many campuses that have implemented student computer ownership policies have experienced very profound changes. Mr. Wishon said that in his experience effective student computer ownership requirements must be viewed as a single element of a multidimensional educational technology strategy for a campus. He is anxious to engage the faculty and the academic leadership in a conversation about this issue.

*Wireless Networking/Mobile Computing and Associated Issues.* Wireless networking is an area many faculty members have already begun to explore. This does not extend only to laptops; it also includes issues associated with the use of Personal Digital Assistants (PDA's) and other wireless technologies just now beginning to emerge. For instance, Mr. Wishon read today that as early as 2002, Handspring Corporation will offer a device that offers voice transmission (cell phone service), Web access, paging, and e-mail all on a single device. One of the conversations the faculty must have is the extent to which those devices will be permitted in the classroom and, if so, under what conditions. There should also be a conversation about how best to take advantage of the capabilities such a device presents.

Other questions to explore are as follows: To what extent should Notre Dame be pursuing a comprehensive wireless strategy for the campus? To what extent will the campus workstation and cluster environment be influenced by a laptop mandate, potentially with a wireless component? Is it possible, for example, that a laptop

mandate would reduce the number of general-purpose clusters and enable the University to direct resources now earmarked for them to specialized computing needs of individual departments?

Curriculum-Driven Software Acquisition. Mr. Wishon said he believes that the decisions regarding the acquisition of software should be driven by core curriculum decisions. He would like to develop a process for identifying a set of software applications that are more specialized and can meet the needs of the various departments and then develop an acquisition strategy for the software.

The Use of Television as an Educational Adjunct. Mr. Wishon continued that he would like to examine more closely the use of television as an adjunct to the University's educational program. Many campuses have made an effective use of cable or closed circuit television in residence halls to deliver and augment instruction for students. This is also an effective way of distributing current information about campus activities and events. He thinks it is important to have a conversation on this issue.

Convergence of Library and OIT Support Services. Another topic for further study is the convergence of Library and OIT support services. Mr. Wishon said that he has been begun working with Jennifer Younger, Director of University Libraries, and her staff to address ways in which the University can leverage the skills of both its reference librarians and technologists to better support faculty in accessing information and research materials. They plan to continue the collaboration to develop the program and alignment that is most beneficial to the University community.

Technology Planning Standards/Process for New Construction and Renovations. The final area Mr. Wishon said he has identified as requiring further study is developing a set of technology planning standards and a methodology for ensuring that those standards are applied during the course of new construction and renovations, particularly in the campus classrooms.

Mr. Wishon said that combining his initial assessment of the University computing environment with issues he has identified for further study, he has established several priorities for the coming year:

Rebuilding Capacity. First, Mr. Wishon stated he will focus on rebuilding the capacity of our technology infrastructure, including the support staff, or building capacity where none existed. This effort includes several elements:

- (1) *Addressing issues associated with the University's Maintenance, Upgrade, and Replacement (MUR) Fund, which provides for the periodic refreshment of the campus computing infrastructure, including desktop platforms. While he approves of the general outlines of that initiative, there are certain issues with it that need to be addressed. The fund was*

not created with a capacity to accommodate increases in the asset base that have occurred since it was established in 1992. There must be an effort to think about how the University is addressing the growth of technology assets through the use of the MUR fund.

- (2) *Security and Disaster Preparedness:* Security and disaster preparedness will be addressed very early, even within the next few weeks.
- (3) *Underlying Infrastructure Foundations:* A third element is close attention to the underlying foundations of the computing infrastructure. This means addressing the networking infrastructure and the server platforms that exist both in the central OIT facility and those distributed across campus.
- (4) *Reorganizing of OIT:* Mr. Wishon continued that another element of the initial strategy will be reorganizing and restructuring OIT to make it more effective in supporting the needs of the University community. He has heard criticism from faculty members about difficulties in communicating with OIT staff. The reorganization he proposes is intended to deal with that criticism.
- (5) *Increasing the Quantity and Quality of Distributed Support:* Mr. Wishon said that he will be examining ways to increase the quantity and quality of the University's distributed support efforts, particularly across the academic departments. He believes OIT can and must do a much better job in this area. The first step will be engaging many of the faculty in a conversation about how OIT can improve its performance.

*Crafting a Long-Term Strategy for Core Administrative and Academic Support Systems.* While engaged in the effort to rebuild the capacity of the infrastructure, Mr. Wishon said he will also focus on crafting a long-term strategy for core administrative and academic support systems on campus. He will work with academic departments to address some of the current, high-priority issues they have in the computing area. He believes that some effort in this area holds a high probability for quick payback.

Mr. Wishon then asked members for their comments or questions.

Prof. Bigi asked Mr. Wishon's thinking about the future of infrastructure platforms. Is he planning on increasing the homogeneity by limiting the number of platforms allowed or supported?

Mr. Wishon replied that there is a fine balance to be struck between cost effectiveness and utility. He is not in the best position to know the computing requirements of each academic discipline. While there must be a provision in the campus computing strategy for diversity, he must also look very closely at the costs associated with supporting a high level of diversity. In connection with Prof. Bigi's

question, he would like to say that he does not anticipate trying to impose any arbitrary standards for hardware or software across campus departments.

Dean Woo offered a comment on the critical importance of communication between the academic departments and OIT.

First, Dean Woo said that the colleges and departments need to have a very clear sense of the outcomes they can expect from the various initiatives Mr. Wishon has outlined today. Some problems are so multifaceted that parts of them will be addressed by one or another of the initiatives but others will not. Many times, technologists will talk to her and tell her what they will do; however, they do not say exactly *which* of her problems will be solved. Thus, the very first thing to communicate with the campus community about the proposed initiatives is their expected outcomes one year from now – or whatever the time frame may be. Is it increased network capacity? Is it reliability of systems? Whatever Mr. Wishon chooses as priorities, clear communication of the expected outcomes allows the academic units both to track progress and to decide what problems not yet on OIT's priority list they may need to address in the short term themselves.

Secondly, said Dean Woo, there should be a system of logging in complaints and problems. When technology fails, users are not in good humor. The technologists may feel defensive because they feel blamed. A log of complaints will enable priorities to be set.

Dean Woo continued that the third area of communication that needs to be addressed by Mr. Wishon is that between the central OIT group and IT support personnel in the various colleges and departments. This relates to the issue of determining how decentralized IT will be on campus. She knows she speaks for all the deans when she says there is no desire to spend money on technology unnecessarily. Money must be spent, however, when there are pressing needs "where the rubber meets the road." Thus, when faculty in the College of Business experience technology failures – with data, e-mail, or with equipment in the classroom – she must respond with her own IT personnel and solutions.

Dean Woo said that it would be helpful to the academic units if they knew what they could count on in terms of the role he wants OIT to play. Does Mr. Wishon want to be in charge of the plumbing? Capacity? Regarding standards, what dimensions does he want to specify? She and the other deans need this information so they can choose how to invest their IT money most appropriately. There also is a need to know in order to maintain coherence in systems. If different people are solving different problems, there is the danger of incoherence.

Mr. Wishon replied that he appreciated Dean Woo's comments but assured her that he, too, understands the critical importance of communication and finding the right balance between centralization and decentralization of IT on campus. When he said a

priority is “increasing the quantity and quality of distributed support,” he means to indicate that he knows OIT can do a much better job here than it is currently doing in providing effective support to the academic units. He believes the deans and department chairs should have more control over decisions made involving their computing environments, as well as some responsibility there. It will be a continuing conversation how the balance will be struck.

Prof. Bretz asked, given Mr. Wishon’s concerns about security, what is some practical, short-term advice on whether confidential or highly sensitive data should be stored locally or on the network?

Mr. Wishon replied that confidential data should never be stored on a network. Doing so subjects it to a wide range of vulnerabilities that may not be apparent even to the system administrator of network platforms. He emphasized that security of campus computing systems is one of his highest priorities. Assuming that budgetary issues can be addressed, he expects to be announcing very soon the establishment of a security department, consisting of a dedicated security officer with a support staff, to bring security up to a higher level. His staff is also pursuing a range of technical solutions he hopes will mitigate some of the security risks to the computing environment, particularly with respect to viruses. There are technologies OIT can place at the border gateway of the campus network to allow it to detect viruses before they reach individual users and infect the machines of other users. While this does not offer a complete level of protection, they can reduce security risks.

Regarding Mr. Wishon’s comments on some extent of convergence of OIT and library staff, Mr. Krieger asked whether he was speaking more of increased communication between the two units or some basic redefinition of the role of each.

Mr. Wishon replied that “redefinition” of roles is an area still under exploration. Certainly, closer coordination can be an effective way to address convergence, and he is now pursuing some initiatives in that area. With regard to reference librarians in particular, it is very clear that they will need to gain a set of skills for accessing resources on the Web and in a variety of databases that often overlap with those of instructional technologists and, to some degree, with those referred to as “help desk” specialists.

Fr. Malloy thanked Mr. Wishon for presenting his judgments about the strengths and weaknesses of Notre Dame’s computing environment and the personnel and resources needed to bring it up to the next level. He said he looked forward to working with him during that process.

Prof. Hatch then introduced four speakers who have been invited to address the Academic Council on the topic of financial aid for students: Scott Malpass, Vice President for Finance and Chief Investment Officer; John Sejdinaj, Assistant Vice

President, Finance and Director, Budgeting and Planning; Joseph Russo, Director of Financial Aid; and Daniel Saracino, Assistant Provost for Enrollment.

Mr. Malpass said that Notre Dame has made tremendous progress in the last decade in its financial aid program for students. For many years, the University was not able to meet the full need of its students. In fact, it has only begun doing so in the last four years – primarily because of the tremendous growth experienced in its endowment funds. The growth of the endowment, both through market returns and the creation of new endowments through fundraising efforts, has enabled Notre Dame to dramatically improve the financial aid packages it offers, giving parents and students a much wider array of tools to employ in paying for the cost of a college education. In fact, Mr. Malpass said, the interest rates of some Notre Dame loan programs rival those of the federal government.

Mr. Malpass explained that students pay only a portion of the cost of their education. Typically, at a private four-year institution, students pay about two-thirds of the cost. At Notre Dame, tuition is approximately 55% of the total operating budget. Thus, students pay, in effect, 55% of the cost of their education. If costs were stripped away so that only the cost of *core* teaching – classroom instruction and costs related to that – were considered, it might be possible to say that students pay as much as 75% of their education. Still, he said, the University gives a major subsidy to students. The difference between tuition receipts and actual costs is made up by other campus revenues – principally, revenues from endowment funds, but also bookstore revenues, other unrestricted revenues, and fundraising revenues.

Mr. Malpass then discussed the topic of “discounting,” which is a common practice at most universities. With it, students who do not qualify for financial aid “subsidize” those who do qualify. Discounts may be as high as 40 or 50%, although the average is probably closer to 30%.

At most institutions, Mr. Malpass continued, the category of faculty and staff salaries is the largest expense item and financial aid costs are the second. Because Notre Dame has been fortunate both in raising and growing its endowment funds, including the scholarship portion of the endowment, its financial aid program is almost exclusively endowment-based. This puts the University in a good competitive position vis-a-vis its peers.

Notre Dame’s endowment is nearly \$3 billion, which makes it the 18<sup>th</sup> largest endowment in higher education and the largest Catholic university endowment. The scholarship piece of the endowment is its largest component. At the end of the last fiscal year, June 30, 2001, the scholarship endowment alone was \$776 million, making it one of the largest in the country. The value of Princeton’s scholarship endowment is probably equivalent, but many of the Ivy League schools use operating revenues for financial aid and their endowments for other purposes. At Notre Dame, however, a portion of the endowment is used for scholarship purposes because providing full

financial aid for students has been a very high priority for over a decade. The other large components of the endowment funds pool are endowed chairs, library and academic program endowments, some athletic endowment, and the unrestricted part (about 10% of the total). Still, the scholarship piece of the endowment is the largest.

Mr. Malpass explained that, actually, there are about 3,000 endowment funds. While it is often implied that there is just one “endowment,” that is not the case. While the 3,000 funds are pooled for investment purposes, the Controller’s Office tracks every individual endowment with unit accounting very precisely. Units are bought at the prevailing net asset value and each fund participates in its earnings on a pro rata basis.

Prof. Hatch asked if the value of \$776 million is only the undergraduate scholarship endowment.

Mr. Malpass said that was true. The Graduate School has its own scholarship endowment of approximately \$100 million and, combined, the University’s professional schools have an additional \$100 million.

Mr. Malpass gave specific data on the dramatic increase in University-funded undergraduate scholarship aid over the past ten years. In 1992-93, earnings from the endowment provided \$5.3 million of the \$9.4 million in scholarship aid distributed to a little more than 1700 students. An average package was \$5,400. In the 2001-02 academic year, \$30 million in endowment-based scholarship aid out of a total of \$41.5 million was distributed to 3,150 students and an average package was over \$13,000.

Mr. Malpass explained that the non-endowment funds used for scholarship aid include such “expendable funds” as the Sorin Giving Society, which provided \$2.2 million in scholarship funding in 2001-02 and the New Scholars Program (of which the principal component is the University’s contract with NBC), which provided \$5 million in scholarship aid in 2001-02.

Prof. Bretz asked the meaning of the term “meeting full need.”

Mr. Russo explained that a student’s financial need is the difference between the estimated cost of attendance for a school year and the estimated family contribution. [The *Undergraduate Financial Aid Fact Sheet* for 2001-02 estimates the average cost of attendance at Notre Dame as \$33,100: \$24,500 for tuition and fees, \$6,350 for room and board, \$850 for books and supplies, \$900 for personal expenses, and \$500 for transportation. The fact sheet explains that the estimated family contribution is determined by formulas that consider such factors as income, assets, liabilities, family size, number of dependent siblings in college, age of parents, and private school costs for other children.]

Mr. Malpass said that colleges and universities have been deviating from some of the standard formulas quite dramatically in recent years and, in bidding for top students, some have offered scholarship aid that is not always based on need. The financial aid community has tried to “get everybody back in line” by agreeing on new guidelines for determining who is eligible for financial aid.

Prof. Garg asked whether the financial aid numbers Mr. Malpass has provided include the tuition subsidy the University gives to the children of its faculty and staff.

Mr. Sejdinaj replied that 400 faculty and staff children are receiving a tuition subsidy in this academic year, which represents an additional \$5 million not included in the figures provided by Mr. Malpass. The 400 students attend Notre Dame and other schools.

Mr. Malpass continued that looking only at financial aid for first-year students over the past ten years, scholarship aid has risen from \$2.5 million to over \$13 million. The increase from last year to this year was very dramatic – 30% (\$10 million to \$13 million). He said that this was a direct result of tremendous market returns for the past decade, particularly over the past five years, and of several hundred new scholarship endowments provided by the Generations fundraising campaign. Mr. Malpass noted that, as Mr. Saracino will discuss, over the same ten-year period there has been a very high correlation between the quality of first-year students (as measured by SAT scores and rank in class) enrolled at the University and the increase in the amount of financial aid they receive in the aggregate. For example, in 1992-93, the average SAT score was 1210; it was 1351 in 2001-02.

Continuing to look at only at first-year students, Mr. Malpass said that “special” or preferential packaging of financial aid has increased dramatically. He explained that a “special” package is a one-loan package given to students identified by Admissions as “highly desirable” based on their credentials and/or their promise as future Catholic leaders. Just four years ago, in 1997-98, there were 152 applicants who were eligible to be considered for such special packages; in 2001-02, there were 1,525. In 1997-98 only 26 of the students offered a special package enrolled at Notre Dame. That was only 4% of the 610 students enrolled with scholarship money. In 2001-02, 581 of the admitted students offered special packages actually enrolled. Those 581 students represent 65% of the students enrolled with scholarship money. Mr. Malpass added that the University would like to offer *all* its admitted students eligible for financial aid a one-loan package.

Prof. Blanchette asked why a one-loan package is so desirable.

Mr. Russo explained that, essentially, one loan is less loan. There are two major loan programs available through the federal government. One is called a Stafford Loan and is secured through a bank; the other, formerly called a National Defense Loan, is

now named a Perkins Loan. In an effort to meet need, his office begins with the family's estimated contribution, including loans and work. The less loan put in before going to scholarship, the more attractive and competitive the University's aid. A one-loan package usually means a bank loan, as contrasted with a package including a bank loan and Perkins loan. That is what makes it preferential.

Prof. Hatch asked: How much debt does the average Notre Dame student incur in four years?

Mr. Russo replied that students who have one loan could be borrowing as much as \$17,000 over four years. Those who have borrowed from two loans could be as high as \$25,000.

Mr. Malpass returned to the number of first-year students receiving special one-loan packages. The 581 receiving special one-loan packages who enrolled at the University in the 2001-02 academic year is more than the number who enrolled in the previous four years combined [26 in 1997-98, 64 in 1998-99, 101 in 1999-2000 and 320 in 2000-01]. He said that the number of preferential packages may decrease somewhat given the current market environment, but Mr. Russo and his staff monitor the University's scholarship endowment very carefully.

In response to a question by Prof. Delaney, Mr. Malpass explained that out of the 1,525 students admitted for the 2001-02 academic year *eligible* for a "special" package, 581 out of the 837 who enrolled actually *received* one. That is due to the fact that an applicant is deemed eligible for a one-loan package on the basis of qualifications other than financial aid. The 1,525 eligible admitted applicants are identified by Admissions as the most highly desirable students. *If* they apply for financial aid and *if* they demonstrate financial need, they will receive preferential consideration.

Ms. Schmid asked how packaging differs from year to year for students. In many cases it seems that the work-study component increases and the money the University provides decreases.

Mr. Russo replied that while there are some cases in which the portion of aid the University provides decreases over a student's four years, that is not typical. The University reviews financial aid decisions annually for at least three reasons: costs change (they usually increase), family circumstances can change for either better or worse, and the programs Financial Aid administers may change. Typically, as costs rise over a year's time and a student's family circumstances stay relatively the same, "all the ships rise" and the University awards more aid, self-help increases, and the family contribution increases proportionately as well.

Dean Woo asked how the amount of debt an average student incurs at graduation is changing.

Mr. Malpass replied that the average need-based debt for students (as opposed to money students borrow by choice) has been decreasing over the last five years. As the number of students receiving one loan instead of two increases, the average need-based debt is decreasing. Currently, the average total need-based, *student*-borrowed debt for all undergraduate borrowers is about \$17,000.

Dean Woo asked what the average debt at graduation is if there is no distinction made between need-based and discretionary debt.

Mr. Russo explained that discretionary debt includes debt families choose to have their student incur rather than themselves – for instance, because a family would prefer not to break up an investment earning a good return; possibly they would want the student to take advantage of a lower interest rate; or possibly because the student has expenses that may not fit the traditional profile – for example, a car. If these categories of debt are added to need-based debt, the average student loan debt for graduating seniors would be about \$19,000.

Dean Woo said that there is an ongoing debate in the academic community on the subject of merit-based financial aid. She asked: As the competition increases between the nation's colleges and universities for the very best students, is financial aid at Notre Dame becoming increasingly merit-based?

Mr. Malpass answered that while Notre Dame offers some merit scholarships, the University's philosophy has been that until the full need of its student body is met, merit scholarships should remain a lower priority. Thus, it is only recently that merit scholarships could even be discussed. Some benefactors have come forward to offer money for merit scholarships which have been very productive. In fact, the University's last Marshall Fellow was a recipient of one of the University's merit scholarships.

Mr. Russo replied to Dean Woo's question as well. He said that as Mr. Malpass has pointed out, the University has been improving the quality and diversity of its student body while dramatically increasing its need-based financial aid over the past five years. Thus, working only within a *need* framework, the quality of students at Notre Dame *has* increased. The tension that might continue to exist when faced with the choice of enhancing aid based on need or aid based on merit is that, still, many students leave the University with heavy debt loads. That is a factor the institution must weigh among all other factors when it considers whether to proceed with further enhancement of merit-only scholarships. Nevertheless, Mr. Russo indicated there has been some success with merit-based scholarships, and his staff is looking at innovative ways to further enhance the University's offerings.

Again, Mr. Russo reiterated, need does not exclude merit. The qualifications of students identified as Notre Dame Scholars, and thus eligible for one-loan packaging,

are very high. These students have SAT averages approaching 1500 and are in the top 1% of their high school graduating class. There is no need to apologize for their caliber.

Mr. Saracino commented that the information given today on financial aid does not even include those loans that bypass the Financial Aid office altogether. For example, some families might consider it more favorable financially to pay for a child's college education by refinancing their house. This kind of loan never enters the records of the Financial Aid Office.

Mr. Malpass agreed. Debt that parents incur in financing a child's education is not included in the numbers he gave on average student debt.

Returning to the subject of merit-based aid, Fr. Scully commented that because the University can now meet every student's full need, it can afford to explore ways of becoming even more aggressive in competing for the very best students. It may choose to do so through enhancing merit-based scholarships, but there are other means as well to attract the very top students to Notre Dame. He knows that Mr. Saracino has some proposals on this subject.

Mr. Saracino said yes. Before discussing them, though, he will show how the University's financial aid policies have impacted its ability to attract a higher caliber of student than ever before. With the University now able to meet the full need of applicants, the Admissions Office can go out aggressively with its recruiting materials, tell the Notre Dame story, and then make it become a reality. There is no question that the field is very, very level now – which was not the case for the University five or six years ago. Since Notre Dame has been meeting need and offering very competitive aid packages, Admissions has seen the following:

(1) *A higher academic profile:* The academic profile (SAT scores, grade point averages, rank in class) of the *applicant pool* (10,000 students) now has the academic profile of the enrolling students in 1994. This is a dramatic change.

(2) *Better "won/lost" averages:* With the ability to meet the full financial need of all students, Notre Dame's "won/lost" averages have changed dramatically as well. For example, eight years ago, 67% of students admitted both to Notre Dame and Boston College chose Notre Dame. Now, Mr. Saracino said, he no longer considers Boston College a competitor. In this year's enrolling class, 95% of the students admitted to both schools chose Notre Dame. That statistic demonstrates the existence of a level playing field.

Another legitimate competitor is Northwestern University. Eight years ago, 52% of students admitted both to Notre Dame and Northwestern chose Notre Dame. This year, 83% of students admitted to both chose Notre Dame.

A third example is students admitted both to Notre Dame and Georgetown. Only seven years ago, less than half – 41% – chose Notre Dame. That average has risen in 2001-2002 to 66%.

(3) *More Advanced Placement credit:* The number of Advanced Placement (AP) credits enrolled students bring to the University has changed dramatically. Since 1983, the number of AP exams with a grade of 3 or better has risen over 300%. In the class that entered the University this year, two-thirds of the students have over 11 AP credits.

(4) *Higher SAT scores:* Since 1996, the average SAT score of enrolled students has risen to 1351, an increase of 50 points. In this year's entering class, 27% of the students received a score of more than 700 on the verbal portion of the SAT; 35% received a score of more than 700 in math. Five of this year's first year students had perfect scores on the SAT or ACT. All five applied for financial aid. Four of them received need-based aid – on the average, \$18,000. The one student who was not eligible for need-based aid received the Reilly Scholarship, a merit-based award. Mr. Saracino said that of these five students, two are first-generation college-goers, as are 8% of this year's entering class. Enrolling that many first-generation college students would not be possible without the current policy of meeting applicants' full need.

Looking at class rank, 43% of this year's enrolled students were one of the top five students in his or her high school class; 85% were in the top 10% of their high school class.

(5) *Increases in international and minority students:* Since Notre Dame has been able to meet full need, there have been increases in international students (2% in 1996; 4.5% in 2001) and more modest increases in minority students (14% in 1996; 17% in 2001). Mr. Saracino said that increasing the number of minority students is an area on which Admissions will continue to focus.

Mr. Saracino continued that while he is grateful he and his staff can now go out and tell the story of Notre Dame and back it up with financial aid, he does have concerns. One is whether Notre Dame is sufficiently challenging its students intellectually. With a rising academic profile – higher SAT's, more AP credits, higher class rank – what can the University do beyond the small honors program for students in the Colleges of Arts and Letters and Science to attract more students to Notre Dame and then challenge them when they are here?

Mr. Saracino said that he thinks Stanford's initiatives in this area are worth studying. That institution has experienced dramatic success with its program to attract top applicants. The program is one of utmost integrity. Stanford is not "buying" students at all. Seven years ago, Stanford began identifying its top 250 admitted students, flying them in, and then matching each student with a mentor – a faculty member in the field in which the student has declared his or her interest. Thus, the student experiences an immediate academic connection. In addition to the first

weekend visit, Stanford tells the students they can visit any time and it will pay their expenses – until May 1, when they must commit to a college. If a student chooses Stanford and demonstrates financial need, his or her full need is met with the very best package: no loan and a job.

Mr. Saracino explained that as part of its initiative to enroll the top 250 admitted students, Stanford also guarantees these candidates admission to a program called Educational Exploration, which gives them \$3,000 to use in their first two years of study for academic enrichment. Many students use their grant in the summer to study a culture or a language either within their own academic discipline or in another. A student's only obligation on the completion of the enrichment project is to make a presentation to the faculty mentor and other members of the academic community. The Educational Exploration grants, along with several special functions throughout the year (for example, lectures, a dinner for the faculty mentor and the student), strengthen the connection between the student and the faculty mentor and have the virtue of showing a student considering Stanford that real opportunities exist there to grow intellectually. Mr. Saracino said Stanford's program is an example of what Notre Dame must be thinking about so that it can continue to attract top students and then challenge them sufficiently when they enroll.

Mr. Saracino concluded his remarks by saying he is not advocating any radical change in programs, for Notre Dame's yield – the percentage of students who accept admission when offered – is the fifth-highest in the country. With a yield of 62%, Notre Dame is ranked behind only Harvard (82%), Yale (73%), Princeton (71%), and Stanford (65%). He does advocate staying the course with financial aid but initiating programs that encourage the nation's very top students to enroll here.

Prof. Delaney asked if Notre Dame has any financial aid in place – even for the top 100 or 200 students – similar to the no-loan, only grants-in-aid financial aid Princeton offers to all its students with demonstrated need.

Mr. Russo replied no. Students at Notre Dame do not receive no-loan packages up front. If an outside scholarship – for example, National Merit, Alumni Club, or Rotary Scholarship – comes in, which it very often does for top students, the scholarship goes first to reduce the loan portion of the student's financial aid package. The net for the student may be a no-loan situation, but Notre Dame does not offer this at the start.

Prof. Delaney said, in that case, it could be as much as \$17,000 less for students to go to Princeton, Harvard or Stanford.

Mr. Russo pointed out that Princeton is the only school in the country that offers exclusively no-loan packages. Harvard has some no-loan packages, but it has not eliminated loans altogether.

Mr. Saracino said that in the last few years a number of schools, such as Princeton, Harvard, Stanford, and Penn, have defined financial need in a non-traditional way by adjusting out home equity and other factors when looking at a family's financial situation. Most institutions still expect that if a student's parents have accrued equity in their home it puts them in a stronger position to finance a college education. Notre Dame could consider looking more aggressively at financial need using such adjustments and currently does exercise such judgments.

Mr. Russo said such measures would be the second step. The first would be, like Princeton, instituting a reduced-loan policy. Such a policy costs money, but the rewards would be great.

Prof. Garg asked if Mr. Russo is aiming for a no-loan policy.

Mr. Russo replied affirmatively and said that Notre Dame is currently producing one of the country's most competitive Freshman financial aid policies among the nation's top twenty institutions.

Prof. Garg asked how far away Notre Dame is from realizing the goal for a no-loan policy.

Prof. Hatch replied that it is fair to say, given the University's endowments and the fact that our undergraduate student numbers are stable, prospects are extremely bright that a no-loan policy could be put into place in the next ten years.

Mr. Malpass added that even with modest endowment growth, given the existing base, the University should still do quite well in the markets over the next ten years.

Prof. Hosle explained that in Germany a proposal much discussed for financing higher education is one in which a student takes out a loan relative to what he or she will earn after graduation.

Mr. Russo said that Great Britain has just proposed the same program. There have been experiments with that kind of program in the United States but with very limited success. Related to that, one route he would like the University to take, if resources allow, is to help students entering certain careers on a permanent basis with loan repayment. This would have the added benefit of encouraging students to consider those careers.

Mr. Russo added that although the average need-based debt at graduation is \$17,000 for those Notre Dame students qualifying for financial aid, the University's default rate is one of the lowest in the country. Notre Dame students graduate in four years, become successful, and feel responsible for their obligation to repay the loans

they incurred during their time here. Some would argue that having a little bit of debt – having to invest at a modest level in one’s own education – is a good idea.

Mr. Russo commented that an income-contingent loan had been tried in the United States in the last forty years with very limited success and much difficulty.

Prof. Preacher addressed Mr. Saracino’s concerns about offering Notre Dame’s top students a sufficiently challenging educational experience. She believes the University does challenge its students; however, she does not think that it mentors them enough, and mentoring seems to be an important part of the programs Mr. Saracino has described. There are many students, though, whose development into outstanding students comes *after* they begin their college studies. They may not be considered the most highly desirable students during the admissions process, but these are the students who develop tremendously once they arrive and they become some of the University’s finest graduates. Prof. Preacher is concerned that there are not enough programs in place to assist these students who also need funding to enhance their educational experiences in a variety of ways, such as exploring research topics in depth, attending conferences, and competing for national fellowships.

Mr. Russo replied that an easy spin-off of the program at Stanford that Mr. Saracino outlined is to provide stipends for students who demonstrate intellectual curiosity, including students who prove themselves as “outstanding” during their time at Notre Dame. Mr. Russo believes they, too, should be nurtured, mentored, and assisted in applying for fellowships; however, additional resources and some organizational effort would be required. The Colleges of Arts and Letters and Science have honors programs that fulfill that function but they are fairly restricted. It was noted that Prof. Bradley Gibson in the Psychology Department has been assigned by the Provost to help develop a program for students eager for intellectual challenges beyond those offered by the standard curriculum.

Prof. Hatch commented that a recent initiative, Endowments for Excellence, provides discretionary funds for departments to use in a variety of ways, including enrichment of the undergraduate experience. Approximately 50 of these endowments have been distributed to date.

Returning to the subject of financial aid, Prof. Aldous asked if “legacy” students, the offspring of Notre Dame graduates, receive any special packages or consideration in the financial aid process.

Mr. Russo answered that legacy students do receive special consideration in the admissions process. Then, depending where they fall in the Admissions Office’s ranking, they compete equally with all other admitted students for financial aid. If a legacy student is identified as a Notre Dame Scholar, one of the top students eligible for a one-loan package, he or she will be offered one. Mr. Russo added that in the

admissions process the target number for alumni children is approximately one-quarter of the class.

Mr. Saracino added that while Notre Dame admits legacy students at almost twice the rate as non-alumni children, they are not weak students. Children of alumni admitted to the University are very competitive students, as witnessed by this year's entering class which had an average high school rank in the top 7% and average composite SAT scores of 1329 (the overall composite SAT average was 1351).

Mr. Russo reiterated that legacy students are treated equally with all other students for financial aid consideration.

Dean Roche said he welcomed Mr. Saracino's comments on attracting the nation's top students to Notre Dame and challenging them when they are here. Given Mr. Saracino's description of Stanford's Educational Exploration program and Prof. Preacher's comments on the importance of challenging students who mature into outstanding students while at the University, he would like to highlight two programs currently existing at Notre Dame. The first is a program of summer language grants, funded partly by the College of Arts and Letters and partly by International Studies. It sends a good number of students abroad during the summers to study lesser-taught languages. The second program is the Undergraduate Research Opportunities Program in the College of Arts and Letters and is administered by the Institute of Scholarship in the Liberal Arts. In recent years, the number of students participating in this program has risen dramatically, partly because of faculty members initiating the contact with students. Dean Roche believes that perhaps there is a need for more programs like these, but he has told the College Council on two occasions that the fund for the Undergraduate Research Opportunities Program is basically inexhaustible. Donors would replenish its funding if necessary because they feel it is a high priority for the College to engage undergraduates in research projects and intellectual enrichment that challenge them in ways not available during the regular course of study. Thus, programs to challenge students outside of the classroom *are* available at Notre Dame; perhaps they must be marketed more aggressively.

Mr. Saracino said it is important that the University's enrichment programs develop a cross-disciplinary character and not be open solely for students in the College of Arts and Letters. Stanford's program, and those of other institutions with high success rates, are operated out of a provost's office, thus giving all students at the institution the opportunity to participate.

Prof. Garg asked how many students participate in the Honors Program.

Dean Roche answered that about 60 students are admitted every year. The number was 40 for many years, but the yield has been so favorable recently that it has risen to 60.

Prof. Garg asked if the number of Honors Program students could be even higher – 60 seems rather small.

Prof. Delaney said that the Honors Program is very expensive to operate, primarily because of its small classes. The burden of the program rests on the Dean of the College of Arts and Letters because a great number of his faculty are teaching the small seminars that the program features.

Dean Roche said that expanding the program has been discussed but it would involve a serious investment in faculty resources. Size *does* affect intellectual environment. Discussions have occurred as well about moving the program to a different space with more room for expansion, perhaps Crowley Hall.

Dean Roche continued that it may be that further expansion of the Honors Program should be a goal of the next strategic plan. Some students are turning down Harvard and Yale to attend Notre Dame. They would not be doing so if Notre Dame did not have its Honors Program.

Prof. Delaney said that with Princeton's no-loan policy, though, it will cost students up to \$17,000 in need-based student loans to turn down Princeton. Previously, Notre Dame and Princeton were on a more even financial aid playing field.

Dean Kolman said it concerns her that so many resources are spent on financial aid and special programs for students who score well on the SAT and perform well in high school when the benefits to these students cause fewer resources to be spent on other Notre Dame students. It costs the University a fortune to give every first year student just one seminar; yet, Honors Program students receive four seminars a year. How should doing great things for a relatively small number of students be balanced against doing better things for a larger number? Once a certain level is reached in the various predictors, like the SAT or rank in high school class, the predictors become less useful. There will be many students who will graduate from Notre Dame with honors but who will never turn into superstars because the predictors have only a certain value. It is definitely a policy question how the University chooses to value what students do before they arrive on campus versus how it values what they do when they are here.

Ms. Rauch asked for more explanation of the Honors Program. Why must it be limited to students enrolled only in the Colleges of Arts and Letters and Science? The seminars are separate from students' majors, so many students may have an interest in them.

Prof. Delaney explained that the four seminars Honors Program participants take in the first year are all in courses that are University requirements. Most of the Honors Program students complete one major in the College of Science and one major in the College of Arts and Letters, but these majors are totally independent of the Honors Program. In their senior year, Honors Program students write a thesis if they

are in the College of Arts and Letters or write up a culminating research project if they are in the College of Science.

Ms. Rauch asked if seniors in other colleges might be eligible to participate.

Prof. Delaney replied that the College of Engineering has such a tightly scripted program that students do not have the flexibility to take Honors Program seminars. Engineering has been discussing initiating its own honors program. Prof. Affleck-Graves worked on developing an honors program for the College of Business. There is no reason why the different colleges could not have their own honors programs.

Dean Woo offered two comments. First, it is important to recognize that when students choose to come to Notre Dame it is not only a matter of curriculum or sorting out rankings and ratios. They must, of course, perceive the University as a very good institution academically, but the final choice has to do with something more – character development, whole-person development, and Notre Dame's Catholic heritage. Thus, she does not want the discussion about what Notre Dame can do to attract gifted students to focus only on curriculum.

Second, while it is wonderful to increase the academic profile of Notre Dame's students, Dean Woo said that she does not believe it is good to focus to a high degree on the superstar students, who essentially occupy the top of the highest half a percentile. Life is easier for that group. Many institutions are bidding for them and there are many packages available to them. In the end, she is not convinced at all that people in this category are the ones who make the world work. Many times it is the person in the 80<sup>th</sup> to 85<sup>th</sup> range percentile who really gets the work done.

Fr. Malloy asked if there were any more specific questions for the presenters.

Dean O'Hara asked what was the University's won/lost average with Duke. She likes to use Duke as a benchmark because it seems to attract a high percentage of Catholic students.

Mr. Saracino replied that this year 68% of applicants admitted both to Notre Dame and Duke chose Notre Dame. That is a very big change from four years ago. Over the past four years Notre Dame's won/lost average with Duke has been 35%, 45%, 50%, and now 68%. With a 57% return on the survey, he thinks the numbers are statistically valid.

Prof. Blum asked that given the financial realities of the world this fall, does Mr. Malpass anticipate any kind of reduction in aid to students?

Mr. Malpass replied that Notre Dame has the luxury of having its financial aid primarily endowment-based thereby giving the University the flexibility to continue to be competitive in awarding financial aid packages. The endowment spending rate is still

well within the range that the University has set, and there remains the flexibility to increase that even another double-digit rate. His staff is in the process of analyzing that now. Knowing the volatility of the markets, when the endowment realized a 59% gain in one year, it was not all spent that year. Of course, the other piece of the endowment fund is unrestricted giving. The levels of unrestricted giving have remained fairly constant over the years. Thus, he does not foresee any problems there.

Mr. Saracino said that as the endowment piece grows, even if its returns are more modest, that will allow the University to take some of the unrestricted pieces away and use them over time for other kinds of activities. The University wants to spend the restricted endowments first.

Mr. Saracino added that the economy is undergoing a very interesting period. Notre Dame is sound financially, but he could not say that of all institutions. Georgetown, for instance, has been offering one loan to every one of their admitted students with need for years and has not funded those financial aid packages through its endowment. Thus, given the economy, he has a strong feeling that over the next few years it and other schools will need to reduce their financial aid to students. Like Notre Dame, some schools Mr. Saracino would consider very safe – Princeton, Yale, Stanford, to name a few. Others, however, have been living beyond their means in terms of financial aid, and given the present economy, he suspects that there will be some kind of change to the financial aid packages they can offer students.

Fr. Malloy said that one of the secrets of many schools' "funding" of financial aid packages is the 30% to 50% discounting they employ. Basically, without the discounts, these institutions do not have the money to offer financial aid packages to students who need them. And to remain competitive some of the schools continue to increase the percentage of those discounted dollars. Fr. Malloy believes that practice will haunt them in the years to come, as the whole process has an exponential effect. They must raise tuition every year to continue to offer the same level of institutionally-based scholarships.

Fr. Malloy continued that it is uncertain how long the current recessionary economy will last. He senses not only a mood of fear but one of pessimism about the future development of the economy in this country and around the world. Just in the newspaper today was an article about India and Pakistan assuming a more aggressive relationship on disputed territories. That type of development has a large impact potentially on the sense of stability in the international order. Thus, even though what has been stated about the future of financial aid at the University is accurate within the bounds of present financial realities, the unknown and the sense of confidence – or absence of it – in the overall state of the economy will be the challenge for the University in the coming year or years.

Fr. Malloy continued that families make an investment in private education because they feel it will result in benefits, both personal and long-range career benefits.

The University must recognize that. As families face unemployment or lose large investments, they may become more wary about financing a private education. There has been tremendous progress with the growth of the endowment for which Mr. Malpass and his staff deserve a huge amount of credit. The amount of the endowment gives the University a flexibility and a control over its future not possible before. Nevertheless, there is much looming on the horizon that none at the University can control. There may very well begin to be indicators in the second semester that the economy is affecting the University at such points as admission rates for next year and we must be alert to what those signals are suggesting.

Dean Roche asked Mr. Saracino if he could speak to the potential for merit scholarships in the fine arts. In the coming years the University's new performing arts center will be filled with activity. He knows that the Music Department has listed merit scholarships for undergraduates as its number one development priority. Does the competition offer merit scholarships in the arts? Is Notre Dame behind in this? Will it be ahead if it begins to do so?

Mr. Saracino replied that if the Music Department targets merit scholarships as a high priority, surely, the University can recognize prospective students in a generous way. It is not his decision to make whether students should be offered, for example, an \$18,000 scholarship with no demonstrated financial need.

Mr. Russo added that in the same way the University would recognize a top academic prospect, a top cellist would be considered for preferential treatment by the Financial Aid Office.

Mr. Saracino pointed out that a problem with targeted scholarships based purely on merit is the status of the scholarship when, after completing a year at the University, the student decides to enter a different field. Should the University then take away the student's package?

Dean Roche responded that the Music Department is considering work/study opportunities for scholarship recipients. That provides a mechanism for accountability.

Prof. Aldous asked what of a student who enters the University and muddles along for a few years and then, through developing a mentor relationship or finding a course tremendously interesting, experiences an intellectual flowering? What are the rewards for this student in the realm of financial aid? It is important to offer him or her *some* reward, for a spirit that is not nurtured may very well go back to sleep.

Fr. Scully replied that one of the many attractions of the University's various institutes and centers is the opportunity they offer for internships, summer programs, and research grants and activities – and that decisions for these opportunities are made by departments. Prof. Hatch has also highlighted (and previously referred to) the existence at the University of the departmental funds for excellence named

Endowments for Excellence. These are the kinds of programs at the University in which both late-blooming and early-blooming students can participate to take their interests and scholarship to a very high level.

Prof. Hatch said that perhaps there should be an effort to more effectively communicate what kinds of opportunities outside of the University's standard curriculum are available for students. Over the last decade immense opportunities have arisen. The Nanovic Institute's summer programs for undergraduates interested in European Studies are particularly noteworthy in this regard. Perhaps a listing of all these opportunities needs to be gathered in one place.

Fr. Malloy thanked the presenters at the meeting today for their hard work on behalf of the University. Fr. Malloy adjourned the meeting at 4:55 p.m.

Respectfully submitted,

John Affleck-Graves  
Secretary