First, let me say that I am delighted to be here today. As I told our new freshmen and their families, I'm a freshman also. Just like they did, I did my homework and liked what I learned about North Dakota State University. Just like they did, I applied and was fortunate enough to be accepted. I want to announce my formal enrollment here this afternoon and thank all of you for the professionalism and openness which characterized the presidential search process. I look forward to learning more about your aspirations for this academic community and about the needs which our various external constituencies expect this land-grant university to address. I hope to be of service to you in facilitating teaching, research, creative work, service, and scholarship practices which meet the needs of our students and the citizens and organizations of North Dakota. My wife Monty, son John, and I already feel at home in Fargo.

The title I have selected for my remarks is, Maintaining Vital Connections: The Life-Line of the Land Grant. I have used the quote of Abraham Lincoln as my guide. "Without popular support, nothing is possible, with popular support anything is possible."

It would be an understatement to say that we are in an era of prioritization of programs and services to make the best use of the revenue diet we are likely to be on for some time to come. The best case scenario we should plan for is one of significantly increasing costs of competition (in technology, personnel, maintenance of facilities and basic equipment) and only modest increases in our traditional revenue sources (appropriations, authorized tuition and fee levels, grants and contracts, and gifts). We are obviously in a period where any enhancement of our quality of academic life will have to be funded by different allocations and uses of our existing resource base. I believe that we can accomplish this re-orientation of our work-lives by a set of cumulative course corrections rather than by some revolutionary change. We will have to be thoughtful, creative, and serious in our attempts to carry-out our mission in a more focused manner, but we should be able to have some fun and work together to do so. I also believe that it is prudent to build upon the historic strengths of an institution and to utilize the good work which has already been done concerning priorities at NDSU, rather than re-creating a process or developing a new template for consideration. I will certainly suggest some modifications to the strategic directions in place, and perhaps tweak the priorities already fashioned by the planning priorities and resources committee (PPRC). The three PPRC priorities for 1995-96 are:

1. Improved relationships between people on campus and their off-campus constituencies.
2. Enhanced quality of student, faculty and staff interaction.
3. Changes in pedagogy and uses of technology to fashion this new university.

There is much wisdom found in these published priorities and many of you have contributed to their emergence as university-wide initiatives. I want to continue the work you have underway to make North Dakota State University a national model of a land-grant university which features six integrated educational components:
1. A value-added and career oriented approach to student academic and social development. (I will speak to this component in some depth today.)

2. Aggressive outreach programming delivered through an extension service which addresses our changing rural culture and agriculture industry coordinated with constituency based programs and services provided by our other major academic units to meet the current needs in North Dakota for quality of life improvement, economic development, manpower training and continuing education.

3. A primary focus on knowledge and technology transfer through applications research and scholarship, undergirded by mission-related basic research in selected disciplinary areas.

4. A diversified portfolio of academic programs which reflect the historic strengths of NDSU, but which, as curricula, can be consolidated and/or modified to allow courseware development to meet emerging market niches, many of which will cross traditional disciplinary boundaries.

5. Workplace policies and practices which are satisfying to faculty and staff, and which promote their continuing professional development, and which create a culture of civility and colleagueship on the campus.

6. An expanded partnership with our host city of Fargo and an openness to regional alliances which maximize available resources and energies which can be brought to bear on the needs of the communities in which we live and work and raise our children.

We have the tradition and the talent to accomplish this six component mission.

We are all part of a land-grant university with a proud tradition of over 100 years of teaching excellence, technology transfer, and public service. We have nearly 60,000 alumni of this great institution. This university has generated hundreds of millions of dollars of economic impact in this state and surrounding region. Through well qualified professionals who complete our academic programs, to more hardy potatoes, better coatings for automobiles, fine arts exhibitions and performances and athletic contests, NDSU serves as a cultural, educational and economic engine for the citizens we serve. NDSU is simply a wonderful investment for the state of North Dakota. We transfer practices, technology and knowledge to multiple users. We provide employment to many people and we help attract and retain others. Investments in pre-school through graduate education provide one of the critical state infrastructures necessary for a vital citizenry with a vision of the future. Like roads and bridges, health care and telecommunications, investment is wise public policy and intelligent citizen behavior; it reflects our stewardship of the younger generation and the historic and heroic contributions earlier generations bestowed upon us. Everyone in this audience can stand proud of the work they do and the university they build and maintain here.

I once saw a multiple choice question. It asked “What is a university?” Here are the possible answers:

1) Something held together by a central heating plant and a parking problem. (Some of you have recent experience that might suggest this as the right answer.)
2) A circus that never leaves town. (A few of my corporate colleagues tend to select this one.)

3) A conglomerate that, from the outside, looks like general motors, but is really 162 mom and pop stores. (I kind of like this answer.)

One reality is certain, NDSU is a complex enterprise devoted to learning. The president of a university has some responsibility to provide a reliable and valid view of the reality or context in which we must operate our academic enterprise, and suggest strategies and tactics which can capitalize on the opportunities this context presents for your consideration, modification, and implementation. As someone has suggested, "The major point is not to prod the contemporary university to behave more like a business, but to nudge it to behave like an organization. Or better, to get it to behave like an organism that must feed itself, change, and adapt to its environment" (George Keller). An enterprise of our size, complexity and importance requires a vision that is based on a clear view of external realities, and an objective audit of its internal strengths and weaknesses, so that opportunities at their confluence will be recognized quickly and brought into our intellectual fold. When someone like Tom Plough looks at a university like NDSU, at least four questions are on the table:

1. Why and how do people learn? (A theory of learning.)

2. How do you organize individuals around a collective purpose? (A theory of organizational behavior and practice.)

3. Given what we know about learning and organizational behavior, and the new technologies at hand, how would we fashion a university if we started from scratch?

4. With an end-result that might be available if we started from scratch, how can we move our current university in that direction by providing our faculty and staff adequate time and training to bring about relevant and appropriate changes?

These are the questions we need to address together over the next several years. Whatever we decide to do or not to do at NDSU, we will need extraordinary internal and external support to make it happen. Our ideas will have to be respectful of the fact that we are a part of a higher education system in North Dakota and we need to maximize the complementary assets that all eleven institutions bring to bear on the intellectual environment of the state. But I, and I know you, have no interest in trading off any part of our land-grant mission and heritage in North Dakota to anybody else. That we owe to all who came before us and built this enduring institution.

Today, I want to talk about our philosophy of value added and career oriented education.

I believe that a land-grant university should prepare students for technological professionalism and leadership rather than for technological vocationalism.

Students successfully completing our academic programs should possess a set of applications skills designed for some segment of the employment market, and at the same time a set of transferrable intellectual and communications competencies that minimally include the ability to speak and write clearly, to listen effectively, to use the computer as a tool, to think logically and to be oriented toward team problem solving.
Yet technical and professional knowledge alone are not enough. The ability to speak and write clearly, listen, compute, and think are not enough. An appreciation of the liberal arts and sciences is not enough. Even if all these are enhanced by the ability to carry on a lifetime of learning, they are not enough. If we are to make good on our promise to prepare students "to earn a living and to live a life, not as two separate processes but as one" (George Hoke), we must give them—most certainly the best and the brightest of them—a taste for leadership.

This taste for leadership involves both an appreciation for the intended and unintended consequences of technology and a sense of craftsmanship or pride in the quality of one's performance in the workplace and in the community.

In terms of the professional behavior of faculty and staff, the characteristics of many students should serve as an early warning system that changes will be required in the relationships between faculty, staff and students. Many students in the university are part-time, or full-time students with jobs involving almost full-time hours. They are more interested in outcome than in academic process, and they are seeking a personalized approach to their programs of study. A large number of our students lack traditional readiness for university level study. These students bring a passive and visually oriented learning style which is difficult to accommodate through the standard lecture format which characterizes much of our classroom delivery. While these students are smart and full of energy, many have short attention spans, undisciplined working habits, unreasonable expectations about the ease with which they will master both the social and intellectual environments, little experience with difficult materials and complex ideas that must be learned in a relatively brief period of time. Some are deficient in mathematics, science, and communication skills. At the same time that student qualifications are eroding, expectations about the outcome of a university education are rising and changing. Complaints from both university graduates and their employers about the failure of university study to develop career preparation skills are growing. It is, however, not surprising that graduates of universities have adjustment problems when they enter the workplace. They, in fact, experience a rather severe culture shock. Compare, if you will, the dominant values in the two cultures, that of the university and that of the workplace. University students have been taught in a culture which values studying alone, doing homework alone, being tested alone, producing already known answers, doing closed book exams, studying disciplined bits of knowledge, moving on before getting feedback, seeing results as compartmentalized, and seeing consequences as personal. Contrast these values with those of the workplace which stresses working in groups, conferring with peers, referring to any book or data, tapping consultants, working towards novel answers, seeking management guidance, getting prompt feedback, working on multi-discipline problems, seeing results as interrelated, and seeing consequences as communal. (Abshire, 1991).

Given the incoming characteristics of many of our students and the pressure for more practical academic outcomes, educators are moving to embrace more experientially based components of their instructional systems. Teaching strategies are changing in a way which forces students to address the problems of practice rather early in their programs of study. One educator writes that "Ours is a society that is information rich and experience poor." (Cross, 1993.) Attempts to link theory and practice are expanding to include internships, cooperative work-study programs, study abroad opportunities, clinical rotations, juried shows, community service projects, and involvement of undergraduates in research, not as separate add-on activities, but as assignments that are integral to the courses offered. The classroom dynamic of comparing and contrasting written theory with hands-on experience brings a vitality and reality to subject matter for our new visual learners. Given the nature of our students and the society they must lead, the primary learning environment we provide must be restructured if we are to gain the attention and capture and direct the intellectual energy of our students.
In addition to the learning characteristics of students entering our universities, and the movement towards more practical education, advances in technology, especially information technologies, provide another challenge and opportunity for educators to fashion new instructional approaches. Bruce James has maintained that "Educators must get into the information deletion business rather than the information expansion business." He illustrates this point with the observation that "If you sat down to read all the existing us law for ten hours a day, seven days a week, it would take you 860 years, and every twelve months you would fall another 75 years behind." (James, 1993.) The use of this technology requires a much higher computer software literacy on the part of most teachers, so that, at a minimum, they can introduce their students to the variety of software tools available in areas relevant to the students' career directions and/or major areas of study. The new software allows students to shape the information relevant to the questions at hand rather than be overwhelmed by all the information available. This kind of professorial role is consistent with much of the literature about the changing educational paradigm. "The professor's role must shift from didactic instruction to designing tasks that students perform and then coaching and assessing their performance as it goes along." (Edgerton, 1994.) The possibilities of exciting, full color, real time simulation for science laboratories is only one of the new advances available for instruction. Distance delivery of instruction now allow classes to be offered off site at home or in the workplace rather than on the campus.

However, computer hardware and software and other rapidly developing telecommunications devices are no panacea. They also require a great deal of time and energy to work into an instructional style, as any faculty member who has designed and taught a distance learning course can attest. "Two costly technological sins are to expect technology to make up for a lack of leadership and -- management, and to fail to use the opportunity to use technology to change or update the way we think, work, or do business. Too often we use technology simply to automate old, outdated, comfortable practices and fail to seize the moment to change." (John Southard.) These tools, as wonderful as they are, are only as good as the people who use them. "A computer doesn't substitute for judgment any more than a pencil substitutes for literacy." (Robert McNamara.) Another problem with information technology is the cost, not so much in terms of initial outlay for hardware and software, but the costs of upgrading software and system maintenance. Clearly, the role of the faculty and staff is more complex than ever before in balancing new student characteristics, new and appropriate technology in the classroom, laboratory, office and studio, and the legitimate concerns for practical student outcomes. As David Riesman has noted, "The grave problem with regard to the professorate is how invitational the college experience is for undergraduates." (Riesman, 1989.)

As educators we need to handle the cultural shock students experience when they first come to us, brought on by the gap between their entry level characteristics and the quality thresholds of learning we must insist they meet, and the cultural shock they experience as graduates as they enter the world of work and the professions and take up responsible residence in communities.

I am confident that we are up to this task and can continue to produce the kinds of student outcomes required for a competitive work force, for satisfying careers and for the citizenship requirements of a pluralistic and democratic nation-state. The professional ethic of hard work entailed in the craft of teaching and the art of administration is still a core value of this institution. You keep it that way. The professional work-ethic can be lost, and once lost, very difficult to regain in the ethos of an intellectual community. In a society where articulate nonsense and cool detachment are de rigueur, our dedication to the learning outcomes of our students is a distinguishing bookmark of NDSU. It is, of course, one of our obligations as a land-grant institution as well. We need to celebrate this commitment to the learning outcomes of our students more regularly. We need to talk about it with one another and with our neighbors.
Before I proceed with my little homily much further, I am reminded that my students in my Sociology of Leadership, Education and Work classes - sometimes suggest to me that my lectures contain ambiguities. There's a little humorous story about ambiguity that I'd like to share with you.

..... Mrs. Chauncey Depew, III was a wealthy society matron, she was anxious to have a family tree and history prepared. She went to an outstanding genealogist to have this done, but told him that there was one stumbling block. Her family, like most, had an ancestor who had blemished a proud tradition. Indeed, his final crime was punished by the electric chair at Sing-Sing. Said the genealogist, "Don't worry, Mrs. Depew, I'll take care of Uncle Charles." He then came up with a masterpiece of ambiguity. He wrote "Charles Depew occupied a chair of applied electricity in one of the government's great institutions. He died in harness, and his death came as an extreme shock."

This afternoon, as you can already ascertain, I am concentrating on the first of the six integrated components of the mission I introduced earlier in my remarks. I am attempting to avoid being ambiguous about this mission component. That is, I am trying to be rather specific about a value-added and career-oriented approach to student academic and social development. I plan to treat each of the other five elements in depth as I learn more about NDSU over time. I feel strongly that our first obligation as a land-grant university is to the effective delivery of learning opportunities for our students. Providing an effective learning environment is our first test and unless we continuously pass it with flying colors, the integrated and multiple mission we must pursue here, will fall apart at its very core. It is our premier vital connection.

If you believe, as I do, that NDSU's niche in higher education is to take good students and give them a great education, we need to think very carefully about our priority concerns in our daily routines. Our goal should be to motivate and assist the largest number of students possible to successful academic performance and graduation. We should surely desist from any now irrelevant and inappropriate behaviors which suggest that our task is to weed out as many students as possible. Most students who leave NDSU do not leave for academic reasons. They leave because they have not connected with anyone or any organization at the university. As the saying goes, they don't care what you say unless they know that you care. We should agree that a good course, in and of itself, is not our objective. That good courses are necessary but not sufficient vehicles for an effective student learning environment. Rather our objective should be a collaborative effort to connect and reinforce learning across a series of coherent educational experiences as embodied in a curriculum, a major, or a set of graduation requirements. This is what I refer to as academic programs with fewer but better working parts.

As a value-added educational institution, we raise academic standards based on workplace demands and requirements rather than from a desire to simply construct more difficult courses and curricula. We do so by resisting the temptation to talk only to ourselves and other university colleagues and by reaching out to our high school and two year college colleagues who send us students; the business, government, agriculture and service sector employers of our graduates, and to our alumni, for advice on educational matters. We must be especially careful that we are preparing our students for careers and jobs which exist and for which they are proving to be highly competitive candidates. In this regard we will have to track our placement record much more closely in the future.

It also follows, as a value-added place, that we be responsive to students. That we respect them. That within reason, we accommodate their schedules, rather than our own. Students expect good service and they should receive it. Just as you or I are not remotely interested in the
organizational problems of K-mart, First Bank, or Hornbachers, we just want good service --
students aren't any different. In this regard I believe strongly in "front loading" the experience of
freshmen and new transfer students. Our new students have occasion to be taught in their
introductory courses by tenured senior professors.

To be effective with our students, we have to be positive around them. In times like these, when
we are all straining a bit due to lack of resources, conditions are sociologically ripe for nit-piking,
focusing on problems, rumors, allusions to the good old days of yesteryear, cynicism about new
ventures, and other excuses to be casually critical about our own university. It is, of course,
perfectly professional and appropriate among ourselves - to discuss, argue, compromise and
decide. It is not professional, appropriate or productive to be negative around students.

Students assume the entire university is botched up if they hear faculty and staff complaining
about some matter at NDSU. If students attitudes are not what we would like, we have only to
listen to ourselves. We can materially assist students in their academic studies by not distracting
them by too casual a sharing of our own ongoing frustrations, turf battles and philosophical tilts.
A simple discipline of our own outbursts around students is helpful to the quality of campus life.
"Example is not the main thing in influencing others, it is the only thing". (Albert Einstein.)

Now, there is no question that for NDSU to continue its forward momentum as a comprehensive
and uniquely postured land-grant university, we have to accomplish many other objectives
beyond effective instruction of our students. We have to encourage and expand our outreach
and extension activities across all our academic and service units. More importantly, we need to
market the immense array of constructive public service and technology transfer activities the
folks of NDSU are currently providing throughout our state. We must continue our impressive
gains in grantsmanship, which bring exciting research projects for faculty and students, needed
equipment and discretionary indirect cost recovery funds to our departments. We need to
continue our active technology and knowledge transfer activities through our Agriculture
Experiment Stations and our Research Foundation, as well as ongoing scholarship, publication
and the production of creative works which characterize most of our university. And we need to
nurture the unusual collaborative efforts between town and gown that NDSU, Fargo and our
nearby communities currently practice. All of these mission congruent activities elevate our
reputation as a land-grant university worthy of support.

The unique activities of a land-grant like NDSU -- the value-added philosophy of education which
aims at maximum retention of qualified students and our public service functions in extension and
outreach programs which are custom designed for citizens and organizations in North Dakota
have to be delicately balanced with the more traditional and historically status elevating academic
endeavors in scholarship, production of creative work, publication, and research if we are to
succeed and thrive into the next century. To reach our instructional outcomes we must listen
continuously to our students and alumni; to be highly regarded in outreach we must be careful to
ask the citizens of North Dakota and leaders of our various enterprises what they need rather
than tell them about what we have to offer. To approach best in practice levels of research,
scholarship and creative activity, we will have to be attentive to peer review and competitive
standards in the various academic disciplines and the specifications of funding agencies. This
will take the best leadership that the faculty, staff, and administration of NDSU can muster.

As we enter the 1995-96 academic year, I would like to mention a few more specific items and a
few initiatives I plan to take in the near term.

• First, there is no question that NDSU and Fargo will continue to be the most exciting place to
  attend college in this region.
• Second, I encourage you to read the North Central Self Study your colleagues have prepared for our re-accreditation visit. I look forward to showing NDSU off to our visiting team. It's a worthwhile piece of homework reading for everyone at NDSU.

• Third, my review of our progress in our $20,000,000 campaign, in our Research Foundation, and in our grants and contract activities, suggest that we are working hard to raise funds to offset some of the inflationary erosion which has hit our operational budgets so hard over the past several years. While we continue to strain a bit under a bulging enrollment and a declining head count of faculty and staff, NDSU still operated productively, responsibly, and within our means during this past fiscal year. The work ethic at NDSU is alive and well.

My agenda also includes the following initiatives:

• I intend to resist charging new task forces or commissions or committees this academic year, since I would like us all to concentrate on our core activities. Although, the University Senate and the administration will need to prepare to address several questions of interest to the Chancellor and the State Board of Higher Education.

These include:
  a. Tenure
  B. Workload definitions
  C. Transfer credits and articulation with two year colleges

These are appropriate issues for a board to address and I am confident that we can utilize these issues to our advantage if we take them seriously. I do not foresee any doomsday implications contained in these inquiries.

• We will find a way to allocate additional operational support to departments which demonstrate outstanding achievements in distance delivery of instruction, outreach, and teaching effectiveness. These will also be worked into the PPRC discussions on priorities for 96-97.

• We will launch a department head academic leadership workshop series this year.

• We will allocate additional funds for training and continuing professional development for all categories of employees this year.

• We will find expansion space for growing programs by reallocating space no longer needed by programs that are not growing or declining. In this case we have to get use to the concept of university space rather than space owned by any particular unit or program.

• We will explore a variety of means to market the breadth and depth of outreach activities and other good work that you all generate to the wider public of North Dakota. Too much of what we do is a well kept secret.

• We will launch and conclude successfully the several dean searches that are so important to our future success.
We are all part of an enterprise far bigger and grander than any one of us. As Peter Senge has written in the book *The Fifth Discipline* ---"When asked what they do for a living, most people describe the tasks they perform every day, not the purpose of the greater enterprise in which they take part."

We know our purpose and we will be loyal to it.

I appreciate your presence here today and I am proud that you have allowed me to represent the Office of the President of NDSU on your behalf.

I need your support, constructive criticism, talent, and energy as we approach this challenging academic year. Monty and I look forward to chatting with you at the reception to follow.

Thank you.

Dr. Tom Plough
President and Professor
NDSU
September 18, 1995