



# Intellectual Engagement and Achievement at UNL

**Report from the Blue Sky Committee**

March 28, 2003

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# Intellectual Engagement and Achievement at UNL: Report from the Blue Sky Committee

## *Executive Summary*

The Blue Sky Committee was charged in October 2002 with making a broad assessment of faculty, staff and student experiences at UNL, and with considering how those experiences relate to the goals of *A 2020 Vision*, a report on the future of research and graduate education at UNL. The committee reviewed a number of recent analytical reports offering varied perspectives on the quality of the University's performance, its intellectual climate, and the engagement of its staff and faculty. These reports included the Quality Indicators used by UNL to compare its performance with a set of other AAU institutions and track our progress; the National Survey of Student Engagement, given to UNL undergraduates; the Gallup Climate Survey, given to UNL faculty and staff; plus the UNL Academy of Distinguished Teachers' White Paper. We also met with Dr. Richard Light, author of *Making the Most of College: Students Speak Their Minds*, to deepen our understanding of the undergraduate experience, and examined summary results of exit surveys with employees leaving UNL and initial results reporting on the experience of graduate and post-doctoral research associates at UNL.

Our review and deliberations over a six month period reinforced the main conclusion of the 2020 Task Force that a great university is characterized by **an uncompromising pursuit of excellence** in good times and in difficult times. To this we would add that all of the activities of a great land-grant university are grounded in the generation, comprehension, and communication of knowledge. Therefore, universities that achieve greatness are those in which all of members of the university community are intellectually challenged and engaged.

The central themes that emerged from our deliberations are the fundamental importance of **challenge and engagement** for students, staff and faculty; the need at a land-grant research university to **integrate the generation and mastery of new knowledge with the communication of this knowledge** to students and to the people of Nebraska, the nation, and the world; and the requirement for continuing self-assessment, with a focus on outcomes, so that we **know ourselves and our achievements**.

In order for UNL to become one of the very best people's universities in the United States, as envisioned by the 2020 Task Force and this committee, it must maximize and focus its intellectual resources. We see this occurring in three major ways: (1) by developing a culture at UNL focused more explicitly on intellectual challenge, engagement, and achievement; (2) by creating a university environment in which teaching, scholarship, and outreach form a more integrated whole; and (3) by engaging in a long-term process of reflective self-assessment examining the success of strategies for promoting excellence.

## **Introduction and Guiding Framework**

The University of Nebraska at Lincoln (UNL) is both a land grant and Carnegie Research I university, as well as a member of the American Association of Universities (AAU). It serves many constituencies both on- and off-campus. In 2000, the university produced a report, *A 2020 Vision: The Future of Research and Graduate Education at UNL*, that proposed a broad agenda for advancing those components of UNL’s mission. “The greatness of the best research universities,” writers of *A 2020 Vision* observed, “is grounded in the uncompromising pursuit of excellence” (p. 1).

As a continuing part of the pursuit of excellence identified in *A 2020 Vision*, the Blue Sky Committee was formed in October 2002. Its “Blue Sky” name derives from the committee’s being asked to provide insights into what a set of newly available documents and data might tell us about ourselves at UNL and the opportunities open to us in the future. While *A 2020 Vision* focused primarily on research and graduate education, signaling the importance of these functions for a research university, the Blue Sky committee broadened that focus to incorporate the wider mission of a comprehensive land grant university. Our starting point was to review and analyze three new data sets: the UNL Institutional Indicators of Quality; the National Survey of Student Engagement (NSSE); and the Gallup Climate Survey. The committee also examined other data sources, particularly the UNL Academy of Distinguished Teachers’ White Paper, *Envisioning Education: Teaching and Student Learning at UNL*, and attempted to integrate the information from these data sources with the committee members’ varied experiences and perspectives to formulate a set of recommendations and conclusions.

These deliberations resulted in our extending the context to which *A 2020 Vision* applies. In this wider perspective, each of the functions of a great public land grant research university—teaching, research and scholarship, and outreach—is organized around a shared commitment to inquiry and the communication of the knowledge resulting from that inquiry. We urge a broad definition of each of these functions. The teaching function encompasses instructing, guiding, and mentoring students toward acquiring a comprehensive education with specialized mastery of particular areas of knowledge and technical skills. The research and scholarship function encompasses the generation and mastery of new knowledge in all areas of endeavor, including the humanities, physical and social sciences, arts, and professions. The outreach function makes available the best and most current knowledge for the economic, social and societal benefits it can bring to the citizens of Nebraska, the nation, and the world. All of these activities are knowledge-driven and all members of the university community—faculty, staff, and students—are

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part of a community fully engaged in and committed to the pursuit and sharing of knowledge. In this vision, teaching, scholarship, and outreach merge, becoming part of a seamless whole comprising a great university.

In response to the charge to the Blue Sky committee to concentrate on the “big picture,” we have highlighted the major points that emerged from our examination and evaluations of the data sets. As we refined our charge, we chose to focus on the *A 2020 Vision*’s theme of an uncompromising pursuit of excellence by concentrating on two broad questions: What conclusions can we draw about current intellectual engagement and achievement at UNL? What are the implications of these conclusions for the future of UNL? The committee also began and completed its work in two completely different times relative to University funding. As this report was finalized, the blue skies of autumn had given way to the budgetary storms of spring. We believe the University must remain uncompromising in its goals of excellence, however, and committed to marshalling its resources in their pursuit.

In the next two sections of this report, we first describe a general vision for UNL, followed by brief descriptions of the data sets we examined. We then present our findings about the current state of UNL and their implications for UNL’s future in three general areas: (1) the undergraduate experience; (2) the experience of graduate students, professional students, and postdoctoral fellows; and (3) the faculty and staff experience. We then conclude with a set of recommendations.

Five central themes have guided our deliberations throughout our discussion:

- **Challenges**-- Our aspirations as a university and progress towards achieving them.
- **Intellectual Engagement**-- Balancing academic challenge and support to enhance each member’s potential.
- **Outcomes**-- Discipline in monitoring our key climate/performance indicators.
- **Knowing Ourselves**-- A commitment to a reflective process of self assessment.
- **Integration**-- Linking UNL’s resources/mission to achieve the 2020 Vision.

### ***A Vision for UNL***

A recent Kellogg Commission Report, *Renewing the Covenant: Learning, Discovery, And Engagement In A New Age And Different World*, described the ideal future university as a learning community inspiring intellectual growth among learners whether on- or off-campus, and in which every member contributes to and benefits from learning.

Such a community is driven by a sense of intellectual inquiry and purpose, not only among its members but also in its interactions with its constituents.

Intellectual engagement clearly is a crucial component for the institution UNL aspires to be. It must be present at several essential levels. At the individual level, all members of the University community should be involved in some way with learning and rewarded for their role and contributions. At the unit level, the climate should reflect the broader University culture and promote the continued development of individual and collective knowledge and skills. At the administrative level, the leadership of the University must find and sustain support for enhancing the intellectual engagement of individuals and units. Because building a great university is a continuous, often incremental process, UNL must be committed to enhancing everyone's efforts and achievements, with self-assessment procedures to assure progress is being made.

The modern land-grant university embraces a broad and diverse range of functions, but close inspection reveals intense, reciprocal interactions within the tripartite mission of teaching, research, and outreach. Scholarly endeavors produce new knowledge, whether through exploration of new modes of expression in language, music or the arts, or through scientific research, historical study, or literary analysis. Knowledge once created must be acquired by new generations of researchers, teachers, and informed citizens, requiring a faculty constantly upgrading its expertise and technical skills through further research. At the same time, knowledge must be widely shared in order to create societal and economic opportunities and to contribute to the general quality of life of the state, the region, and the world. As this knowledge is applied in new contexts, new challenges arise and new priorities in the ongoing search for knowledge are suggested.

### ***The Data Sets***

The *2002 Institutional Indicators of Quality* report charts the performance and progress of UNL on a number of "quality indicators" and includes comparison data where available. This is a first report card measuring institutional progress towards achieving the goals of *A 2020 Vision*. A set of 13 primary and 30 additional indicators was developed at the request of the Board of Regents in fall 2001. These indicators were selected to be consistent with UNL's vision and, to the greatest extent possible, represented measures used by other major land-grant and AAU universities. The sources for the measures were varied, including UNL's Office of Institutional Research and Planning as well as national sources such as the National Science Foundation, U.S. Department of Education, and *U.S. News and World Report*.

The *National Survey of Student Engagement* (NSSE) is an annual survey of undergraduates at four-year colleges and universities that provides reliable, credible information about the quality of the undergraduate experience. The survey asks students about their involvement in different educational practices, how they spend their time, what they have gained from their classes, and their assessment of the quality of their interactions with faculty and friends.

In spring 2002, the NSSE was administered to a random sample of 500 first-year and 500 senior students at the University of Nebraska-Lincoln. This was the first time this particular survey was used at UNL. The overall response rate of UNL students was 41%, slightly higher than the national average of 40%. UNL participated in a consortium with ten other AAU institutions providing data for comparisons to this group of research universities (see Appendix A). Results from 2002 can provide benchmark data for tracking changes in intellectual engagement.

The *Gallup Climate Survey* was made available to all faculty and staff at UNL in late spring 2002. It included Gallup's Q<sup>12</sup> items (engagement), I<sup>10</sup> items (inclusiveness), and an item on overall satisfaction. The Q<sup>12</sup> and I<sup>10</sup> scales were developed by the Gallup Organization to assess the level of engagement and inclusiveness experienced by people at work. The survey of UNL faculty and staff was the first time the survey was used in an academic institution.

The survey was completed by 5385 UNL employees, an overall response rate of 73%. (Gallup's median response rate is 82%). The Gallup Organization provided results from the survey summarized by ethnicity, gender, sexual orientation, and senior administrative area (e.g., Student Affairs, Academic Affairs, IANR). Though neighborhood-specific results were reported to departmental managers, the Blue Sky committee did not have access to neighborhood-level results and focused on overall trends at the university level.

There were limitations in each of these data sets, and they were not designed to fit together in a systematic way. Although committee members were mindful of the gaps and limits, we nonetheless found their data to be informative, especially when we considered additional sources of information about the current state of the University, such as the Academy of Distinguished Teachers' White Paper.

## ***The Undergraduate Experience***

### WHAT WE LEARNED

**More first-year students at UNL reported having a supportive relationship with faculty and administrative personnel than did first-year students at other AAU institutions.**

The Blue Sky Committee reviewed the data from the Indicators of Institutional Quality and the NSSE study of first-year students and seniors. We also studied *Making the Most of College*, a study reporting findings from many years of systematic interviews mainly with students at Harvard, but also with students from other four-year colleges and universities. We had the opportunity to meet with Dr. Richard Light, the author, when he visited UNL in January, 2003; his insights about the undergraduate experience reinforced our conclusions based on the NSSE survey data.

### ***Quantitative measures***

The Quality Indicators suggest certain encouraging trends. The number of nationally-competitive awards won each year by UNL undergraduate students has increased 64% in the last two years, a larger increase than at our peer institutions. Furthermore, the six-year graduation rate has increased from 47% to 53% in the same time period, an important marker of a successful college experience.

Participation in non-residential educational programs also has grown substantially. In 1999-2000, the University had 1,034 credit and 2,747 non-credit participants in non-residential educational programs. By 2000-2001, those numbers had grown to 1,477 and 3,300, respectively. Thus, the number of students served by UNL outside the Lincoln region is growing. Further, the intensive efforts of the Alumni Association to build stronger networks of support have paid off. From 2001 to 2002, the percentage of alumni involved in the Alumni Association jumped by 6%, implying that more graduates are becoming involved in supporting the missions of the University.

### ***Overall student satisfaction***

The NSSE data allow for comparison of UNL first-year students with UNL seniors, as well as comparisons of UNL students with students at the same levels at AAU universities. Comparisons of UNL first-year students and seniors with students at other AAU universities provide encouragement, enlightenment, and potential goals for UNL. First, UNL was rated by students as the same or at a higher level than other AAU institutions on many aspects of the undergraduate experience. For example, UNL first-year students and seniors were much more satisfied than those at the peer institutions with the size of their classes in lower division courses. First-year students also reported working harder and having more writing assignments. More of the first-year students reported

having a supportive relationship with faculty, as well as with administrative personnel and offices, than did students at other AAU institutions. Our first-year students were also more likely to report that faculty were “available, helpful, and sympathetic,” and that interaction outside of a course involved talking about career plans. More UNL seniors reported a supportive relationship with their fellow students.

Three-fourths of UNL seniors believe that the academic quality at UNL is “*good to excellent*.” Over 80% of UNL students reported they had a positive educational experience, were pleased with the instructional quality of their courses, and would attend UNL again for undergraduate work. Although these latter findings are generally encouraging, the students at the AAU institutions rated some of these items higher, suggesting that there is room for improvement.

### ***Academic and social support***

Considering these results in view of Dr. Light’s findings, we judged that two areas required further attention: examining ways to provide more support for our students (e.g., academic support to incoming students), and simultaneously striving to increase the level of academic challenge for our students, especially upper level students. We felt that a better balance between supporting and challenging our students was desirable and that we needed to identify which experiences and support mechanisms were most successful in intellectually engaging students and helping them develop during their time at UNL.

For example, 40% of the UNL first-year students reported that the University rarely “provided the support needed for academic success,” and 49% said that UNL is not responsive “to student academic problems”. This group also reported not getting enough help in coping with “non-academic responsibilities,” which may relate to the fact that many more UNL students reported their biggest obstacle to academic success to be “money, work, finances,” compared to peer institutions (e.g. for first-year students, 60% at UNL versus 42% at other AAU universities). These survey data results should be closely examined to find out exactly what students mean by “needed support,” being “not responsive,” and “coping with non-academic responsibilities.” Having a deeper understanding of what these statements mean to our students will help us better determine what solutions will best address these concerns.

### ***Academic challenge***

Our review of the NSSE data also identified academic challenge as an important area for further inquiry—and also as a problem for other AAU institutions. UNL students look quite good in comparison to the other

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AAU institutions in saying they work hard to meet expectations. In our view, however, the numbers are still too low (hovering near 50%). The fact that UNL first-year students report doing more writing of both short and long papers than students at the other AAU institutions is encouraging, but UNL seniors report having fewer reading assignments and are less likely to say they are frequently challenged to do their best work than seniors at the other AAU schools.

A more detailed analysis of the NSSE data indicated that students who worked harder and felt more challenged rated their experience at UNL better than those who felt less challenged. The 2002 Quality Indicators Report finds that already one-third of graduating students say that they had a meaningful research or creative activity experience at UNL, one-third participated in an internship or service learning experience, and almost 20% participated in an international experience. These encouraging findings should strengthen our resolve to challenge all of our students more deeply!

**Incoming students at many schools tend to view their role in the educational process as being passive. There is a need to explore strategies for challenging students to become more actively engaged in their education.**

In his interviews with Harvard students, Dr. Light asked graduating college seniors to identify a crucially important experience that enriched their academic experience. Most often, students reported that an event involving challenge, such as writing a major paper on which they had received detailed critiques or preparing an article for publication with a faculty member, was that experience. Students also made clear the benefits of studying in collaborative groups. Similar strategies for providing high quality challenges to all of the students attending UNL should be explored. Better support for students' academic and non-academic problems also is likely to improve students' experiences as well as their perceptions of those experiences. It will better equip them to handle more rigorous intellectual challenges, which will, in turn, provide the crucial educational experiences of their undergraduate careers. Each of these issues should be examined in an integrated, holistic manner.

#### WHAT ARE THE IMPLICATIONS?

##### *Increased focus on academics during orientation*

According to Dr. Light's findings, students' experiences during their first-year (indeed, during their first few weeks on campus) are crucial to their overall satisfaction and engagement. We believe there is often a significant disparity between what incoming students believe the university experience will be and what it actually turns out to be. For example, incoming students at many schools tend to view their role in the educational process as being passive—a matter of listening, receiving, and incorporating, rather than thinking, participating, and constructing. A carefully structured orientation period can begin to break this mindset in

students by exposing them immediately to intellectually engaging activities. It also can empower them to seek out personal contacts with peers and faculty and use their advisors effectively to find out what courses will set them on their own particular pathways. We believe that it would be productive to review the systems by which the University introduces incoming students to the intellectual opportunities and demands that lie ahead, as well as to the resources available for supporting them. What happens early in the first year (including new student orientation) will establish the baseline for subsequent levels of student engagement and commitment to the academic enterprise.

### *A reexamination of course offerings*

Reexamining our lower- and upper-level offerings also may prove beneficial. Faculty may need to rethink the level of developmental and cognitive skills required in their courses to insure that there is an appropriate increase in complexity from introductory through advanced courses. This may involve examining when and how the University teaches students the importance of being engaged and proactive learners. Focus groups might help faculty develop specific plans in these areas. For example, we could ask second semester students, "What did you think college would be like?" "What is it really like for you?" "How can we improve the experience?" At the same time, we could ask groups of faculty and/or staff how they perceive student support needs and the quality of student experiences. Comparing where these perspectives agree and where they disagree should lead to strategies for enhancing the overall experience of students at UNL from orientation to graduation.

### *Development of graduate teaching assistant skills*

Since many graduate teaching assistants are heavily involved in first-year courses, the University should attend closely to their training, supervision, and evaluation. The University should determine whether existing development programs for beginning GTAs adequately address not only teaching skills but also the issues, needs, and challenges for UNL first-year students. For example, are GTAs aware of the backgrounds and expectations of incoming first-year students? How are GTAs trained to address those expectations and academic issues once they are identified? Do they have strategies for actively engaging and challenging students in the learning process?

### *Expanded involvement of undergraduates in research and other activities*

Another set of implications relates to UNL's drive to improve as a comprehensive research university. As Jaroslav Pelikan of Yale University

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**Involving more undergraduates in research and other opportunities to apply their knowledge could help increase their level of intellectual activity, feelings of being challenged, and satisfaction while at UNL.**

put it, “The learning process does not mean only learning the What of existing knowledge, but learning the How for as yet undiscovered knowledge” (Pelikan, 1992, p. 93). Involving more undergraduates in research experiences and other opportunities to apply their knowledge likely will increase their level of intellectual activity, feelings of being challenged, and satisfaction levels while at UNL.

There are a variety of steps that UNL can take to maximize the positive impact that research and scholarship have on the undergraduate experience. Possibilities include involving more undergraduates in primary research and scholarship (e.g., UCARE); greater numbers of students participating with faculty and peers in activities involving application of new knowledge (e.g., community projects, clubs); encouraging faculty to submit proposals for undergraduate research scholarships; and developing additional summer programs that place undergraduates in small, highly interactive classes with productive research faculty, like those in the geosciences and anthropology field schools or at Cedar Point Biological Station.

#### COMMENTS ON THE UNDERGRADUATE DATA

The NSSE data for UNL could be strengthened by some combination of increasing sample size and over-sampling selected target groups. The goal for any sampled data set should be to collect large enough sample sizes to allow for some breakdown by majors or types of residence, for example. UNL also would benefit from a longitudinal study following a representative sample of students from their first to senior years and from systematic experimentation in selected academic units with approaches aimed at increasing engagement. The findings could help clarify which facets of the UNL undergraduate experience have the most positive effect.

Our sense is that the University needs a better understanding of “academic challenge.” For example, do faculty and students hold the same perceptions of an academically challenging learning environment? How much of the challenge should occur inside and how much outside of the classroom? What type of support is needed to balance the academic challenge? This process might be facilitated by adding in-depth interviews to our measures of the undergraduate experience. The work of Dr. Light demonstrates how such interviews can provide insights beyond those readily achieved with questionnaires and help in the design of techniques for better monitoring engagement and the quality of student support services.

## ***The Graduate, Professional, and Postdoctoral Experience***

### WHAT WE LEARNED

#### ***Quantitative measures***

A comprehensive research university engaged in the pursuit of excellence must provide high-quality masters, doctoral, and postdoctoral programs that encourage high academic achievement. It also must prepare its professional students at the highest level. The Quality Indicators data show that UNL's preparation of graduate and professional students is steady and comparable to that of our peer institutions. For example, the number of nationally-competitive awards won by UNL graduate and professional students has remained fairly constant over recent years and compares favorably to our peers. The number of doctorates granted, adjusted for size of university, also is comparable to these institutions.

UNL proportionally has about 60% of the number of postdoctoral associates as our peer institutions. Although we fall below the peer average, the number of post-doctoral appointees in science, engineering, and health sciences has increased by 26% between 1997-98 and 1999-00. A continued upward trend is expected, largely due to recent successes in increasing external funding at UNL.

#### ***Additional reports in progress***

In examining the issue of intellectual engagement among graduate and professional students and postdoctoral employees, the committee found that a number of useful studies have been recently completed (e.g., the Office of Graduate Studies' exit surveys of graduating graduate students; the 2002 Graduate Student Survey of Academic and Professional Needs and Interests) or are in progress (e.g., the Quality Indicators index of success on professional examinations and graduate student publications, presentations, and performances). The survey on graduate student needs, for example, highlighted the potential benefits of campus-wide interdisciplinary workshops or internet sessions on topics related to career, professional, and instructional development. Until these reports are digested, it is difficult to draw definitive conclusions. The fact these data are being collected and analyzed, however, indicates institutional commitment to better understand engagement and achievement for this segment of the University. It also presents a unique opportunity to integrate future data collection and analyses with data collected through the Quality Indicators, NSSE, and Gallup survey toward the goal of better understanding how the knowledge, goals, and activities of graduate students affect the undergraduate experience.

**We need to emphasize teaching and career development as essential parts of graduate training.**

### *Difference among units*

Our sense is that there is considerable variation across UNL in strategies used for developing graduate teaching and research assistants (GTAs and GRAs). While some units have strong GTA mentoring programs and only advanced graduate students are involved in teaching undergraduates, other units may use less experienced GTAs without sufficient mentoring. It would be important to know which units have become most dependent on GTA instruction of undergraduates to better understand whether they have sufficient resources to develop mentoring in their units and what campus-wide resources might augment these programs. It also would be important to know how differences in GTA and GRA utilization and support are linked to the undergraduate experience and whether units are providing balanced opportunities for professional development in these dimensions equitably for all of their graduate students

### WHAT ARE THE IMPLICATIONS?

#### *A more integrated view of graduate education*

UNL should explore more deeply how different units portray the teaching, research, and outreach missions to their graduate students. Are there areas within the University in which disproportionate emphasis is placed on either research or teaching, for example, that would affect the University's pursuit of excellence? How are research and teaching assistantships allocated and assigned? Are units promoting an integrated view of scholarship in which research, teaching, and outreach are complementary, mutually-supportive activities or a narrower perspective in which, say, only research or only teaching is highly valued and emphasized?

There was general consensus that emphasizing the teaching role as an essential part of graduate training, as well as career development for graduate students and postdoctoral scholars, is energy well-directed and that programs aimed at these goals should be further supported and formalized. UNL should revise, extend, and evaluate support systems for graduate students and postdoctoral scholars as appropriate to provide for better mentoring and professional development as well as better understanding of the strategies that are most helpful to facilitating their progress. UNL should increase the investment in preparing students to compete for prestigious fellowships. The importance of applying for such awards must be made more visible to students.

In the committee's view, graduate research assistants and postdoctoral scholars seem to be an underutilized resource in terms of undergraduate student intellectual engagement. Properly mentored, for example, these advanced students could help provide undergraduates with rich one-on-

**Properly mentored, graduate students could provide undergraduates with rich one-on-one research experiences. The undergraduates, in turn, can support the work of graduate research assistants and postdoctoral scholars to further advance the research agenda of the University.**

one research opportunities, and in turn, the undergraduates could be a resource to support the work done by the graduate research assistants and postdoctoral scholars to further advance the research agenda of the University. Similarly, graduate students' development as teachers and mentors would be advanced by their guiding undergraduates in community and other outreach activities involving the application of knowledge.

In general, the committee feels that it would be beneficial to closely examine the models and methods already employed by different units at UNL that produce higher levels of intellectual engagement and achievement. There likely are common elements across different models that work well and can be implemented on an institution-wide basis. The aim is to identify successful strategies already being used at UNL that could be used campus-wide to advance the engagement and accomplishments of our graduate students.

#### COMMENTS ON THE GRADUATE, PROFESSIONAL, AND POSTGRADUATE EDUCATION DATA

The University should strive to better understand how graduate and professional students conceive of their role in the UNL community; the academic, professional and social support systems available to them; and how their experiences might be enhanced over time. The processes to gather this information could be parallel to those described earlier focusing on undergraduate students.

In order to document outcomes for graduate and professional students, UNL could benefit by more systematically identifying what constitutes academic achievement and productivity for them and tracking those measures over time. A useful start will be provided by a future edition of the *Institutional Indicators of Quality*; this report will contain information on graduate student publications, presentations, and performances based on department-specific criteria.

### ***The Faculty and Staff Experience***

#### WHAT WE LEARNED

A primary mission of UNL is contributing important knowledge to the state, nation, and world. The University needs to attract, develop, and retain a world-class faculty and professional staff to produce scholarship, teaching, and outreach judged to be of the highest quality. Again, a high level of intellectual engagement is critical to fostering and sustaining a campus environment that will attract the best employees and promote the best discovery, innovation, and achievement.

**The University needs to attract, develop, and retain a world-class faculty and professional staff to produce teaching, scholarship, and outreach of the highest quality.**

Faculty members are heavily involved in undergraduate education, graduate training, and supervising postdoctoral scholars. Since implications for each of these areas are discussed extensively with respect to faculty in earlier sections of this report, this section will focus more on research, scholarship, and outreach. The restricted focus of this section makes no statements or implications about the relative importance of the tripartite mission for UNL faculty. As stated earlier in this report, this committee strongly believes that the missions of teaching, research, and outreach need to be closely interrelated and mutually supportive.

### *Quantitative measures*

The *2002 Quality Indicators Report* tells a story both of strengths and areas for further development, with evidence of substantial improvement in recent years. All top research universities assess the level of federal research dollars they expend. By this indicator, UNL is at somewhat lower absolute levels than its peer institutions, although there was a modest rise in federal dollars from 1996 through 2001. However, a better measure of UNL's progress is the amount of federal research dollars awarded, because the amount expended typically lags behind as an indicator of excellence. There was a sharp 66% increase in federal dollars awarded to UNL from 1999-2001; the amount of total sponsored dollars awarded increased 27% during that same period.

A different kind of measure of research impact and innovation is the Index of Commercial Impact of Faculty Research. Here the data showed UNL to be doing better than our peer institutions in the number of start-up companies, but not as well on the number of licenses or options executed or license income received, with figures adjusted for size of tenured and tenure track faculty. However, all three parts of the Index displayed upward trends over the past several years.

### *Honors and awards*

Many University faculty members have won nationally-competitive awards, honors, and prestigious professional memberships, exhibiting a relatively stable rate over the time period noted above. UNL's faculty came in at about the midpoint of our peer institutions on these awards, but did have the fewest members in the National Academies of Science and Engineering. The National Research Council ratings of faculty quality place UNL below all but one of our peer institutions for the two time periods where results were compared in 1982 and 1993. It is important to note, however, that while the University improved on these indicators across that time period, so did the our peer institutions.

### ***Faculty recruitment and retention***

According to the Quality Indicators data, the University appears to be making progress in attracting a more diverse faculty base at UNL. The percentage of faculty who are *not* white males has grown from 22% in fall, 1996, to 34% in fall, 2001, which reflects increases in both female faculty (23.1% to 25.4%) and faculty of color (8.2% to 11.0%). This puts us within 2% of our peer institution average.

Exit survey data confirm that UNL is beginning to have some success in retaining the diverse faculty that it requires to maximize its intellectual achievements. Indeed, a large majority of exiting employees reported they had a positive employment experience. According to five years of exit survey data, roughly 70% of both faculty and staff who left UNL would recommend employment at UNL to a friend. An even higher percentage reported having a *positive* or *very positive* experience at UNL. However, while 62.1% of female faculty/administrators (versus 52.1% of males) say that they would consider returning to UNL, approximately one-quarter of them indicated that “lack of support for women in the department” was *very important* in their decision to leave UNL. Among non-white faculty/administrators, 56.3% say they would consider returning (versus 54.8% of whites), but 19.2% indicated that “lack of support for minorities in the department” was *very important* in their decision to leave UNL. These differences are signs that further inquiry and action are required to create environments best suiting the needs of each of these respective groups.

**According to five years of exit survey data, roughly 70% of both faculty and staff who left UNL would recommend employment at UNL to a friend. An even higher percentage reported having a *positive* or *very positive* experience at UNL.**

### ***Campus climate: Engagement***

The Gallup Survey provides another perspective on the climate and morale at UNL. The survey instruments used at UNL have been used extensively in the private sector and with public organizations such as government and health care agencies. UNL is the first academic institution to collect data with this survey, however, so no peer comparison data are available. The first administration of the Gallup Survey provided an overall picture of the campus without distinguishing between faculty and staff responses. The Gallup Q<sup>12</sup> data are of interest because these items explicitly assessed the level of “engagement” at UNL. Generally speaking, UNL had a level of “workplace engagement” very similar to norms from business and other public organizations. On some items, UNL was above the 50<sup>th</sup> percentile of these norms in terms of engagement level.

With respect to the results collected using the Q<sup>12</sup>, UNL faculty and staff were at the 60<sup>th</sup> percentile relative to the Gallup workplace norms in responding to having a sense of mission. UNL personnel were also relatively high (relative to the Gallup norms) in terms of rating their associates and fellow employees with regards to their *doing quality work*,

and relatively high in terms of having the opportunities for personal learning and growth. The Q<sup>12</sup> item that received the best overall aggregated score was “*I know what is expected of me at work,*” with 43% of the respondents giving this the highest rating of 5.

In contrast to the above patterns in the data, some of the areas that UNL received lower Q<sup>12</sup> results than Gallup’s norms centered on the quality of social relations such as being recognized for doing good work. The quality of these social relations may have direct or indirect effects on many faculty and staff in creating the conditions for optimal intellectual engagement.

### ***Campus climate: Inclusiveness***

The Gallup report also included an *Inclusiveness Index* measuring how individuals in an organization interact, communicate, and make decisions that optimize the use of their talents. Items on which UNL personnel were most likely to give their units the highest inclusiveness rating referred to making the best use of talents and freedom to express one’s views. Items on which UNL personnel overall gave their units lower ratings included references to their “organization” and its fairness and use of talents.

### ***Campus climate: Group differences***

The findings show few group differences on either the ratings of Engagement or Inclusiveness, based on comparisons made by gender, ethnicity (whites vs. nonwhites), length of service, or sexual orientation. All of these groups rated these items similarly (except that women tended to rate higher than men on a number of items).

Perhaps the main finding relevant to building a coherent culture at the University was the variation in ratings *between units* with respect to both levels of rated Engagement and Inclusiveness. For example, when the units at UNL were divided into quartiles, in the lowest quartile, an average of 22% of the employees gave a 5 to the item that they had a clear sense of UNL’s mission and purpose. In contrast, when the highest quartile was examined, almost twice as many (43%) indicated having a clear sense of mission and purpose. To achieve the highest levels of intellectual engagement across the University will require attention to developing the culture and climates at the local neighborhood level.

## WHAT ARE THE IMPLICATIONS?

### *Analyzing impact of focusing resources*

Even in the best of times, we cannot be outstanding in all areas of endeavor. Consequently, the choices made with regard to excellence doubtless also will affect the kind and quality of instruction, research, and outreach services that UNL can provide. We envision that in the future the University will need to spend more time considering how investments in these areas of excellence will affect its teaching, research, and outreach.

Changes in priorities at UNL may also lead to positive initiatives that would otherwise have not been considered. One theme of this report has been the need to cross boundaries and integrate resources inside the University to achieve goals. UNL must define its mission as a public land grant research university in such a way that people can clearly identify with that mission and become wholeheartedly engaged in achieving it. The same types of integration and engagement can also take place beyond the University's borders where collaborative partnerships can be formed. Limitations on future resources may prove to be a stimulus for engaging the broader Nebraska community in ways not previously imagined. Taking into account the many areas that the University reaches out to its constituencies and summarizing its major points of impact would seem to be useful strategies for determining the effectiveness of these programs and broadcasting to the state of Nebraska how we make a difference in "our community."

### *Intellectual and workplace engagement*

We did not consider the assessment of "workplace engagement" in the Gallup report to be one and the same as "intellectual engagement and achievement." Rather, we view effective workplace engagement as representing a facilitating condition where lively, but respectful intellectual engagement can blossom. A certain threshold level of workforce engagement in units is a necessary, but not a sufficient condition for members to feel comfortable rigorously challenging each other's perspectives, assumptions, and world views as required in outstanding teaching, scholarship, and outreach.

Achieving the goal of excellence requires that every individual work to make UNL an inclusive, open environment that embraces discovery and learning. The challenge for creating this kind of environment starts with University leaders at all levels supporting greater openness and receptivity to new ways of thinking and doing.

**UNL must define its mission in such a way that people can clearly identify with that mission and become wholeheartedly engaged in achieving it.**

## COMMENTS ON THE FACULTY AND STAFF DATA

Like most inquiries that attempt to pull together a vast array of data sources, our review suggests several areas for further exploration. What, for example, are the quality indicators about whose importance most or all members of the University community would agree, and that should be highlighted and tracked over time? We noted a high degree of variability across the campus in terms of the culture/climate results. Although work is now underway at the departmental and unit level to address some of this variation, additional follow-up and support no doubt will be required to determine the best conditions for promoting intellectual engagement across the University. It is likely that many chairs and directors on campus rose to their leadership positions on the basis of their academic achievements, but may have had relatively less support for development of leadership skills. Providing these leaders with experiences that enhance their abilities to lead, while also holding them accountable for the culture/climate in their units, could help lessen the variation now present.

**Achieving the goal of excellence requires that every individual work to make UNL an inclusive, open environment that embraces discovery and learning.**

Specifically with regard to the initial use of the Gallup Survey, we feel that our institution needs to continue work on creating an assessment system that is credible to faculty and staff, and that will allow UNL to monitor improvements in making its culture more intellectually engaging over time. Refinements of method and analysis should be made to insure that the University is tracking the right variables in the right way, so that units will know if their efforts result in higher levels of engagement and achievement, and whether all groups (e.g., staff, pre-tenure faculty) know what is expected of them and identify with the University's mission. Ideally, such a system will allow for assignment of accountability for tracking and reporting on progress.

## ***Conclusions and Recommendations***

What will be necessary for UNL to become one of the very best people's universities in the United States, as envisioned by the 2020 Task Force and this committee? In order to achieve that greatness, UNL must remain committed to the uncompromising pursuit of excellence. The requirements for doing so can be expressed in a few phrases: intellectual challenge, seamless environment, and reflective self-assessment.

### INTELLECTUAL CHALLENGE

All functions of a public, land grant university depend on knowledge: generating and understanding the latest information and then sharing it publicly. As UNL strives to identify and enhance its dimensions of excellence, it must emphasize intellectual challenge and optimize the engagement of all segments of the UNL community in the tasks it faces.

- Above all, the University needs to attract, develop, and retain a world-class faculty and professional staff in order to produce scholarship, teaching, and outreach that are judged both internally and externally to be of the highest quality.
- Our review of the undergraduate experience revealed that the focus on intellectual challenge must be enhanced. For example, new student orientation should focus more effectively on the academic and intellectual tasks of the undergraduate; academic support services should be improved, especially for first-year students; and the resources available to instructors working with first-year students should be increased.
- The Gallup survey revealed substantial variation in the degree of engagement among units. The University needs to foster greater experimentation with methods for enhancing engagement within the various units of UNL, and then encourage the emulation of successful strategies.

#### THE SEAMLESS ENVIRONMENT

It is common to refer to the “tripartite mission” of the land grant university: teaching, research, and outreach. This is misleading, however, in that it implies that these three areas are separable. They are not! Whenever university professors bring their expertise to students on campus (teaching) or to the broader community off-campus (outreach), they must communicate more than facts. They must convey the methods that are used to generate reliable facts and evaluate competing concepts and ideas. Only if these methods are passed on can the recipients become autonomous individuals, generating their own data and ideas and evaluating issues and problems on their own. UNL must work to achieve this seamless environment internally and effectively represent this view of the University externally.

- UNL must identify and encourage the development of leadership among faculty, staff and students whose efforts embody the seamlessness of the ideal land grant university.
- UNL needs to more fully integrate research and public service with the undergraduate experience. Students often report that their most significant learning experiences come when they get to apply the methods and ideas they have learned in the classroom. Expanding the opportunities for undergraduates to participate in high quality research and community programs will enrich education, research, and outreach.
- UNL needs to better integrate the undergraduate and graduate experiences. Among possible directions for promoting better integration are a campus-wide study of the preparation and utilization of graduate teaching assistants in undergraduate

instruction, moving toward more integrated data gathering on undergraduate and graduate student experiences, and planning leading to innovative research and experiential programs for undergraduates in which graduate students play prominent roles as leaders and mentors.

#### REFLECTIVE, CONTINUOUS SELF-ASSESSMENT

During our work as a committee, it became apparent that UNL has committed itself to a thorough, continuous process of assessment and renewal. We heartily endorse these efforts, and recommend that UNL continue to refine them.

**The University should engage in an ongoing process of self-reflection focused on the student, faculty, and staff experiences that contribute most to excellence.**

- The University should engage in an ongoing process of self-reflection focused on clarifying the student, faculty, and staff experiences that most contribute to educational excellence. As part of this self-reflection, the University should continue to make public its progress toward creating an optimal environment for intellectually challenging and engaging its students, faculty, and staff.
- A ratchet allows a gear to rotate in only one direction. All too often, assessment acts like a ratchet, allowing new evaluation processes and measures to be added, but never removed. Not all of the information the University collects is equally valuable, and too much information can be as bad as too little. UNL should look for ways to streamline data collection and analysis to make assessment as useful, flexible, and efficient as possible.
- Assessment needs to relate processes to outcomes. In planning future directions for assessment, models relating processes and outcomes should guide the selection of measures and analyses used to judge efforts to improve intellectual engagement and achievement.

All of the functions with which a public, land grant university is entrusted depend on generating, understanding and communicating knowledge. As UNL strives to identify and enhance its definition of excellence, therefore, the emphasis must be on knowledge and intellectual challenge. We must always keep before us the goal—to be a university fully engaged in the processes of generating and mastering the latest and best information, whether in the arts, humanities, sciences or professions. We aspire to be a university whose students, staff and faculty bring both the *what* and the *how* of the frontiers of human knowledge to the world, by educating undergraduate, graduate and postdoctoral students, and by extending its reach off-campus, for the economic and social benefit of society.

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## ***Appendix A***

### ***AAU Institutions Participating in NSSE Consortium***

Ohio State University

Pennsylvania State University

University of Colorado-Boulder

University of Illinois-Urbana

University of Maryland

University of Missouri-Columbia

University of Nebraska-Lincoln

University of Pittsburgh

University of Texas-Austin

University of Virginia

University of Washington