November 8, 2006

To: Gerald Lang, Provost

From: The Graduate Education Task Force

Re: Report of the Provost’s Task Force on Graduate Education and the Graduate Student Experience

The Provost’s Task Force on Graduate Education and the Graduate Student Experience has been meeting since April 2006 to undertake a comprehensive assessment of WVU’s treatment of graduate education and research. This report offers concrete recommendations for a more holistic approach to achieving effective connections, enhancing quality, and sustaining growth.

WVU’s examination of graduate education coincides with national concern that the economy of the United States will soon be in crisis and that the standard of living will be jeopardized unless current trends in graduate degree programs reverse. Over the past twenty years, the percentage of advanced degrees earned at U.S. institutions has been steadily decreasing in the global workforce. Nationally, only half of the individuals currently enrolled in doctoral programs are expected to complete their degrees. Consequently, many institutions of higher education throughout the U.S. are reevaluating the role, mission, and expectations of graduate education.

WVU is positioned to make strategic decisions and investments that will align its graduate organization, programs, and environment, which we refer to as the graduate education enterprise, to address this national concern. Maximizing this opportunity to promote best practices and program innovation across campus will further the goals of WVU’s 2010 Plan and those of the state of West Virginia’s Vision 2015 Plan while enhancing the institution’s national prominence. Improving the quality of the graduate student body will directly impact teaching, scholarship, and service at WVU. As the quality of graduate teaching assistants improves, so does the quality of undergraduate education, particularly in introductory courses. Greater support of graduate assistants will significantly enhance scholarly productivity and innovation. These results, combined with consequent improvements in faculty effectiveness and retention, will enable WVU to rise in national rankings of research universities. These changes will lead to increased satisfaction among stakeholders and additional investments in the institution and our students.

It should be apparent that the graduate education enterprise at WVU is anything but revenue neutral. This enterprise underpins every critical indicator of the institution’s financial health and represents an undervalued investment opportunity for the state and the institution. Strategic decisions in allocating economic and human resources connected to graduate education will catalyze the growth of resources from tuition, overhead, and private support and will enhance WVU’s reputation.

The report that follows includes key recommendations for strategic changes to and investment in the graduate education enterprise at WVU. The initial page includes general recommendations and brief descriptions of the areas needing attention and resources. The comprehensive report provides background, an assessment of our current status based on internal and external sources, and specific strategies. The effective implementation of strategies outlined in this report will impact WVU’s stature and brand quality over time, advancing student and faculty recruitment and retention at all levels, strengthening relationships and alumni giving, and expanding the state’s economic growth.
The Provost’s Task Force on Graduate Education and the Graduate Student Experience
Summary of Key Recommendations

Significance of the Graduate Education Enterprise

*Value the role of the graduate education enterprise throughout the institution.* Graduate students play a critical role in the undergraduate classroom and in advancing scholarship and research. Their work is essential to achieving WVU’s 2010 strategic goals. In the past, President Hardesty drew the attention of the campus community to the importance of undergraduate students and effected change in university systems to fulfill the student-centered vision. Today WVU must recognize the importance of strengthening graduate education to advance the institution’s academic reputation and financial well being.

*Recognize the diversity of programs and objectives through an Office of Graduate Education and Life.* The leader of the OGEL should have a title, authority, voting membership in appropriate university bodies, and resources to be effective as head of the council of associate deans for research and graduate studies and as a liaison between Academic Affairs and the Research Office. The graduate education enterprise is composed of degree programs ranging from research-intensive doctoral programs to professional programs and certification programs. Each program fits within the institution’s land-grant mission, and each enhances the productivity, reputation, and effectiveness of the institution as a whole.

Institutional Support for Graduate Education

*Position the graduate education enterprise within the institution to increase effectiveness.* The graduate education enterprise at WVU must be reorganized to support both the efforts of individual programs for prominence in their fields and collective action among programs to seize increasingly interdisciplinary opportunities for growth. Graduate studies must be given a prominent position within the university’s structure in order to advance and coordinate the efforts of the colleges, the research office, and the units supporting graduate education and student life.

*Promote program innovation.* Graduate program assessment must be redesigned to encourage program innovation and to enable strategic investment for program prominence or pioneering degrees such as interdisciplinary programs, clustered foundational master’s programs, and on-line or distance degrees. Graduate programs with recognized excellence should be encouraged to disseminate best practice strategies throughout the university.

Productivity of Graduate Students

*Coordinate efforts at all levels to recruit high-quality graduate students from the national pool.* The university must work in partnership with degree programs to compete effectively for desired graduate students. High-quality graduate students will enhance undergraduate teaching and retention, improve research and faculty productivity, fuel economic development activity, and catalyze growth in university-private sector partnerships.

*Create a graduate experience of national prominence.* Building on its national reputation for innovative undergraduate student life programs, WVU must invest in the graduate student experience. The university and graduate programs must foster a vibrant intellectual environment that nurtures and respects graduate students as junior colleagues in the profession. The relationship between graduate program alumni and the university must be sustained to assist in placing students, enhancing alumni relations, and contributing to the vitality of the academic community.
The Provost’s Task Force on Graduate Education and the Graduate Student Experience
Fall 2006 Report

Summary of Key Recommendations

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Background on the Task Force

During the development of WVU’s 2010 Strategic Plan, the need for increased institutional attention to graduate education became evident. Although graduate education has been acknowledged as an important component of the institution, it warrants a more detailed evaluation in order to make the strategic decisions necessary to achieve the goals of the 2010 Plan. Graduate education is essential to the university’s mission, and graduate students are vital participants in its learning community. In recognition of the importance of graduate education, the *Provost’s Task Force on Graduate Education and the Graduate Student Experience* was formed by the 2010 Strategic Plan Implementation Committee in March 2006. The objective of the task force is to make specific recommendations to enable nationally competitive graduate programs to be developed and flourish at WVU.

Report Organization

Our report is organized into two major parts. The first part of our report establishes a framework to understand the task force recommendations. To compete globally, WVU must position itself within the national context of changing currents in graduate education. As national studies have indicated, universities must consider graduate organization, programs, and environment, which we have termed the graduate education enterprise, in strategic plans to improve graduate education. This report emphasizes the role of graduate students and graduate programs in achieving WVU’s 2010 Plan for academic excellence. Current financial and personnel conditions have provided WVU with significant opportunities to improve graduate education through bold planning and deliberate execution. Intentional investment in the graduate education enterprise will contribute to the realization of WVU’s strategic goals as well as the state of West Virginia’s strategic goals in science and technology. The logic model illustrates the direct relationship between executing the task force recommendations and achieving the goals of the 2010 Plan.

The second part of our report explains the specific recommendations of the task force. The first section recommends changes to the organization of the graduate education enterprise at WVU in order to develop the functional relationships needed to compete nationally in graduate education. Second, systemic needs in graduate students’ living, learning, and professional development are presented. Actions are proposed to enhance the environment for graduate students and to increase WVU’s national competitiveness with peer campuses for high-quality graduate students. In the third section, adjustments to the five-year review of graduate programs are recommended with the goal of providing a more holistic approach to program reporting and assessment. Finally, the report addresses program quality and innovation consistent with national directions in doctoral and master’s programs. The task force recommends mechanisms to encourage the development of academic degree programs that offer interdisciplinary options, technology-enhancement, and flexible scheduling.

National Currents in Graduate Education

WVU’s examination of graduate education coincides with national concern that the United States economy will soon be in crisis and that our standard of living will be severely diminished unless
current trends in graduate education, specifically Ph.D. production, are reversed.\textsuperscript{1,2,3} The growth that previously characterized U.S. advanced degree production has stagnated. Nationally only half of the individuals currently enrolled in doctoral programs are expected to complete their degrees.

Over the past twenty years, the worldwide demand for, and achievement of, advanced degrees has increasingly caused graduate degrees to be considered the minimum education level for professional employment and advancement, but the percentage of U.S.-earned advanced degrees in the global workforce has been steadily decreasing.\textsuperscript{3} Studies indicate that individuals will require a graduate education to remain in the middle or upper economic class and maintain a corresponding standard of living.\textsuperscript{1} At the same time, the emergence of a global knowledge economy has equalized access to human talent and is placing increased pressure on the American educational system. The availability of advanced degree programs beyond established academic communities in North America and Europe calls into question the future of U.S. global competitiveness.

WVU joins a number of institutions from across the country that are engaging in the redesign of the graduate education enterprise in an effort to retain the nation’s academic leadership. A major shift in the way institutions, including WVU, approach their graduate programs, students, and opportunities is central to improving competitiveness for national and international applicants and ultimately to graduating individuals with advanced degrees who can compete effectively in a global workforce.\textsuperscript{4,5,6,7,8} Graduate schools throughout the country are enacting organizational and program changes to attract, develop, and support graduate students through all aspects of the graduate education enterprise. These institutions are re-envisioning the role and structure of graduate education to meet the needs of students, employers, and society. Students seek programs that demonstrate the program’s value, clear expectations and assessment, mentoring from multiple sources, peer support, professional and entrepreneurial training, interdisciplinary opportunities, multicultural training, and the engagement of stakeholders. The institutions undertaking this challenging transformation are likely to benefit from major increases in federal R&D funding, which has been designated to support the next generation of student researchers engaged in new discovery and innovation.

University and State Strategic Objectives

All aspects of the graduate education enterprise, including learning, discovery, and engagement, are intertwined in the implementation and success of WVU’s 2010 Plan. Students value the reputation of the institution in addition to the characteristics of individual departments and the opportunities for scholarship and professional development. Consequently, a strong reputation for scholarship attracts highly-qualified graduate students to the university. In turn, these students contribute to the university’s standing. Increasing the number of nationally recognized graduate programs and the profile of our graduate enterprise will positively impact the university by raising WVU’s ability to recruit high-quality undergraduate students, the quality of undergraduate education, and the value of WVU to stakeholders, employers, and prospective students and parents.

Graduate teaching assistants provide a substantial amount of instruction in classes, labs, and discussion sections, especially during the critical first year of college. Among 100-level classes, GTAs teach 57% of all history courses, 29% of math sections, nearly 100% of foreign language classes, 90% of women’s studies courses, 1,638 student in PSYC 101, approximately 400 students in ECON 101, and 76% of students in ENGL 101 and 58% in ENGL 102. One hundred percent of labs are taught by GTAs in statistics, physics, geology, geography, environmental geoscience, chemistry, and biology; many labs in engineering are also instructed by GTAs. GTAs teach many intermediate and upper-level courses as well. Overall, GTAs provide 47% of undergraduate instruction in English and 50% of communications students. They also teach 1,580 psychology students in 200-level courses. Obviously, teaching by high-quality graduate students has a direct impact on undergraduate education.

At the same time, a higher-quality graduate student body will increase the university’s scholarly output and its level of external funding. The presence of a skilled graduate student workforce is essential to recruiting and retaining high-quality faculty. Since better faculty attract better students, the reputation of programs will continue to grow among national and international peers. The result of strengthening the graduate education enterprise will be the delivery of higher-quality products—both in terms of better educated students at all levels and intellectual innovation, which will create jobs in WV for those students. If promoted publicly, these results should induce our stakeholders to provide higher levels of investment in the institution and our students.

A strong graduate education enterprise, as described above, is essential not only to achieving the university’s strategic objectives, but also to helping the state and nation realize their strategic objectives. Consistent with national directions, West Virginia’s Vision 2015 Strategic Plan for Science and Technology relies on expanded innovation and a strengthened workforce for the state to compete effectively in the global economy. The five goals of WVU’s 2010 Plan strengthen the institution’s ability to drive discoveries through scholarship and innovation and contribute to cultivating a workforce with sufficient education to compete in the global marketplace and to sustain economic growth.

Logic Model Narrative

The logic model illustrates the relationship, visually and systematically, among the resources available or required to enact change within the graduate education enterprise, the activities planned to improve graduate education and the graduate student experience, and the predicted outcomes of investment in the graduate education enterprise. The diagram clearly shows the cause and effect relationship between advancing the graduate education enterprise as suggested in this task force report and achieving institutional goals outlined in the 2010 Plan.

The logic model first depicts financial, structural, and personnel resources as “Inputs.” Among the resources allotted to the graduate enterprise is funding from the state, tuition revenue, grants, and special allocations for scholarship. Additionally, graduate advisors, the Office of Graduate Education, and current academic programs can offer guidance and models for enacting change.

The “Activities” recommended by the task force include creating an Office of Graduate Education and Life, developing recruitment programs that will be nationally competitive with peer institutions, changing the assessment procedures for graduate programs, modifying the procedures to develop new graduate programs or adjust existing programs, and establishing operational relationships between the graduate education enterprise and the research enterprise.

These activities will have “Short-Term Outcomes” in 1-3 years, “Long-Term Outcomes” in 4-6 years, and “Impacts” in 7-10 years. Investments in the task force recommendations are expected to increase WVU’s ability to recruit higher-quality graduate students, provide more diverse educational opportunities in graduate programs, and heighten the desirability of WVU graduate students to potential employees. In addition, these changes will impact WVU’s reputation as a research university, the quality of undergraduate education, the ability to recruit and retain high-quality faculty, and the level of scholarship and outreach provided by the university. The logic model describes when specific results can be achieved in order to provide realistic expectations for investment in the graduate education enterprise.
Graduate Studies Task Force Logic Model

**Inputs**
- Annual allocations of funding to WVU from State
- Tuition revenue
- Grant funds for faculty and graduate research
- Graduate advisors
- Contemporary graduate programs
- The Office of Graduate Education

**Activities**
- Develop a competitive recruitment and stipend program
- Create an Office of Graduate Education and Life (OGEL)
- Assess the effectiveness and quality of graduate programs through the Graduate Deans’ Council
- Promote cultural change by linking the graduate enterprise with support units
- Strengthen and enrich the graduate experience

**Short-Term Outcomes**
- Improved research and scholarship productivity of faculty
- Improved degree quality, relevancy, and productivity
- Increasing student quality and satisfaction (undergraduate and graduate)
- Growing industrial relationships and economic development
- Increased national recognition of Master’s and Ph.D. programs
- Increasing retention, completion and career opportunities

**Long-Term Outcomes**
- Ranked among top research institutions
- Nationally competitive in graduate student recruitment, scholarly productivity, graduation, and placements
- Nationally recognized for student satisfaction in quality of educational experience (undergraduate and graduate)
- Nationally recognized for graduate student / degree quality

**Impacts**
- Consistently ranked as a top research institution
- Nationally recognized for PhD and Master’s graduate program quality and innovation
- Sustained growth in WV’s knowledge-based economy
- Nationally recognized high-quality, inquiry-based undergraduate education
Organization of the Graduate Education Enterprise

Graduate and professional degree programs distinguish a university from a four-year college. Consequently, they contribute significantly to the mission and reputation of a modern research university such as WVU. At WVU, this enterprise is composed of diverse degree programs satisfying a range of student needs: research-intensive doctoral programs and their associated master’s programs; professional programs and terminal master’s program designed to prepare students for specific careers; and off-campus or distance programs, which provide certification or supplementary education for professionals as well as opportunities for lifelong learners. These programs not only contribute to the institution’s land-grant mission, but also support the productivity, reputation, and effectiveness of the institution as a whole.

Over the past 10 years the support infrastructure and attention paid to graduate education programs at WVU have not kept pace with the growth of WVU as a research university. This neglect becomes apparent when the most recent data for headcount enrollments from Fall 1996 and Fall 2006 are compared. While the headcount enrollment for undergraduate students and first professional students has increased, from 15,042 to 20,590 and from 939 to 1,420 respectively, the headcount enrollment for graduate students has decreased from 5,536 to 5,105. This task force believes that better coordination between the various offices serving graduate education at the university is essential for the graduate education enterprise to reach its potential and be on par with peers and undergraduate education at WVU.

Currently graduate education at WVU is decentralized with a Director of Graduate Education and University Graduate Council nominally serving in central coordinating roles. The Council’s authority is limited principally to academic matters such as graduate program evaluation and the approval of new programs or program changes proposed by the academic units. In its role as liaison with service units central to the success of graduate education enterprise, including Admissions and Records, Human Resources, the Office of International Students, Student Life, and Alumni Relations, the Council can exert some influence but lacks the necessary authority to promote the graduate education enterprise sufficiently. The Council has minimal overlap with key partners in the graduate education enterprise such as the WVU Foundation, the Research Office, and the Research Foundation. Likewise, the connections with external constituencies and stakeholders are neither clearly defined nor effective.

There has been some discussion within the task force regarding whether WVU would benefit from moving toward a centralized graduate school model. Many current national studies have emphasized the importance of a centralized administrative structure for competitive graduate programs. Among universities ranked from 80 to 100 by Research Expenditures in the most recent NSF survey, where WVU currently ranks 117, the structure of graduate education varies. Seven universities had centralized graduate schools, and seven had various decentralized approaches to graduate education. The remaining institutions were specialty schools such as medical universities, which do not utilize such classifications. Rather than recommend a specific structure, the task force decided to describe the needed characteristics and role of the university graduate office at WVU, here referred to as the Office for Graduate Education and Life (OGEL).
The following characteristics can guide the administration in formulating the office and its placement in the university’s organizational structure:

The key responsibilities of the university OGEL will be the integration of graduate programs into the university as a whole and the coordination of activities essential to the development of high-quality graduate programs. A study of the process of graduate education should be undertaken with the goal of identifying problem areas and opportunities for improvement. The analysis must begin with the recruitment of graduate students, the admission process, and the orientation process, and continue with matriculation into, persistence through, and graduation from the program, along with placement, post-graduation contact, and the development of alumni.

To meet WVU’s 2010 goals, the OGEL must be positioned organizationally to create and to institutionalize effective bridges between offices and programs that will enable WVU to propose, receive, and execute interdisciplinary activities. Opportunities for research or training grant programs and the projects funded by philanthropic organizations increasingly target societal issues. These endeavors require an effective convergence of disciplines. The leadership of OGEL must be able to initiate, lead, and coordinate interdisciplinary graduate activities that span the institution and bridge education, research, and outreach.

In order to maintain the competitiveness of WVU’s offerings, the OGEL must be positioned organizationally to work effectively with faculty and administration to develop a streamlined process for implementing new graduate programs and reviewing and updating existing programs. The leadership of the OGEL should have the authority to convene a Graduate Deans’ Council composed of the Associate Deans for Graduate Studies. This body would develop policies and procedures that enable the growth of our graduate programs and their reputations. The Council would be concerned with all organizational and infrastructure issues related to graduate education. The assessment of graduate programs, currently the major task performed by Graduate Council, could be the role of ad hoc committees appointed by the Graduate Deans’ Council from the ranks of the graduate faculty each year. The Graduate Deans’ Council would provide procedures to be followed by evaluation teams to ensure that evaluations are effective, efficient, equitable, and relevant. These reviews would focus on the objectives of graduate programs as they relate to the university’s strategic plan.

The OGEL must be positioned to enable WVU to expand its presence in new modes of delivering graduate education in order to address changing student demographics and needs, particularly for professional graduate programs, terminal master’s programs, and continuing education graduate programs. Likewise, there is a need to develop 4+1 and 3+2 master’s programs for both internal and external undergraduate programs. Such programs will provide an opportunity to grow graduate education while improving the quality of graduate students.
In order to be effective in this role, the university Office of Graduate Education and Life will require its leader to become a full-time administrator reporting to the Provost. The leader of the OGLE should have a title, authority, voting membership in appropriate university bodies, and resources to be effective in the areas described above. The leader’s roles as head of the council of associate deans for research and graduate studies and as liaison between Academic Affairs and the Research Office would ensure coherence between the teaching and research missions of the graduate enterprise. The new leader of this office would be charged with keeping, organizing, and supplying data; providing assistance in recruiting students; pursuing both research and development funding; organizing, recruiting for, and executing minority doctoral student programming; and establishing a Graduate Student Development Program that would provide a vehicle for graduate students to develop their skills in teaching and service as well as research.
The Graduate Student Experience

Ten years ago West Virginia University dedicated itself to student-centered learning and has since reinvigorated its undergraduate programs. Record undergraduate enrollment levels demonstrate the effectiveness of programmatic changes and have provided funding for continued innovation in educational approaches. WVU is currently evaluating and enriching graduate education, which will contribute to the undergraduate teaching mission, the university’s research mission, and the land-grant service mission.

WVU’s graduate programs and students advance the institution’s status as a student-centered research institution. Graduate students contribute significantly to the success of WVU’s teaching, research, and service missions. Students in the sciences and engineering work with undergraduates in laboratories and contribute to research groups. Graduate teaching assistants in the humanities and social sciences provide direct instruction in many undergraduate classes. Health science graduate students are vital to research productivity in the biomedical sciences and contribute to the education of health professionals. Recruiting and graduating talented graduate students will build and maintain high-quality graduate and undergraduate programs as well as research and service programs.

Institutions including the University of Wisconsin-Milwaukee, the University of Minnesota, Rice University, and Duke University have analyzed the graduate student experience and recommended implementing university-wide support systems to encourage degree completion. Studies indicate that students persist in programs with low student-to-faculty ratios, productive student-to-student relationships, planned student activities and events, and involvement in professional activities at local, state, national, and international levels. The quality of the relationship between graduate student and major professor functions as the most significant factor in successful completion of the degree. The Responsive Ph.D.: Innovations in U.S. Doctoral Educations (Woodrow Wilson Foundation, 2005) insists that centralized governance and communication mechanisms cultivate leadership and community among graduate students in diverse disciplines. Graduate students who lack community (academic, social, or both) withdraw from degree programs at higher rates than students who report strong support networks.

Cornerstones of the Graduate Student Experience

WVU has demonstrated its commitment to graduate education by establishing a $600 per year increase for each of the next four years (a total of $2,400) to the minimum graduate assistant stipend. Because graduate education at WVU is decentralized, comprehensive data on student acceptance, enrollment, and completion rates; funding and benefits offered to recruit students; teaching experience, mentoring programs, and professional development opportunities; and social services for students and their families has been difficult to locate and analyze. Individual colleges, schools, and departments at WVU vary in nearly all policies related to the graduate experience.

Analysis and recommendations related to the Graduate Student Experience focus on the issues of (1) the economics of recruitment, retention, and completion;
(2) professionalization through teaching, mentoring, and scholarly activities;
(3) governance and information resources; and
(4) community and social services.

The full report on the Graduate Student Experience (available as an Appendix in the Provost’s Task Force on Graduate Education and the Graduate Student Experience Report) provides a more detailed analysis of these areas with explanations of recommended action items.

(1) The Economics of Recruitment, Retention, and Completion

Low stipends and heavy workloads hinder recruitment of the most qualified students from national and international pools. University regulations state that the maximum work assignment should not exceed an average of 20 hours per week for the semester, but stipend work requirements vary dramatically across disciplines. Graduate student responsibilities may exceed the expectations at comparable institutions and slow students’ graduation.

- **Graduate student funding**: determine the competitiveness of WVU stipends and target stipend increases to outstanding programs; include student service fees in TA/RA packages; provide graduate students year-round library access; increase existing privately funded graduate fellowship programs; consider establishing a graduate nonresident tuition remission program.

- **Time-to-degree rates and attrition**: collect and analyze time-to-completion and attrition data; improve mentoring; encourage advanced graduate students to mentor first year students; conduct annual reviews to track progress towards completion; increase summer and online offerings.

(2) Professionalization through Teaching, Mentoring and Scholarly Activities

Attention must be focused on helping graduate students interact with other graduate students and with faculty. Graduate students need to learn about pedagogy and to understand the role of the professional within the profession. Successful mentoring relationships result in positive outcomes for the graduate student, the faculty member, the program, and the institution. A Graduate Student Development Program, administered by the OGEL, would assist programs in providing appropriate development for graduate students. Sessions in such a program could provide certifications for GTAs that would lead to a stipend increase once completed. This would improve the quality of undergraduate instruction, particularly in introductory courses.

- **Data collection and analysis**: establish systematic data collection, analysis, and reporting through OGEL using an online needs assessment survey to determine a baseline; from these data develop university policies to encourage high-quality teaching, mentoring, and professional development.
• Student professionalization: establish mentoring/networking plans that encourage discipline-appropriate scholarship including conference internships, presentations, publishing, and grant development; increase travel funding for research.

• Pedagogical preparation: require a teaching in higher education practicum; develop an evaluation plan for GTAs and GRAs, base reappointments on data; provide professional development based on evaluations.

• Faculty/departmental involvement: encourage faculty advisors to monitor student progress annually; recognize outstanding faculty mentors; publicize university, college, department, program professional development opportunities and schedule these activities at various times and days.

(3) Governance and Information Resources

WVU needs meaningful structures for graduate student governance and communication that extend beyond discipline boundaries. The Office of Graduate Education and Life should advocate for graduate students as well as expand in-person and on-line resources for students to apply, study, live, work, and graduate while contributing to WVU’s teaching, research, and service missions.

• Graduate Student Council: permit graduate students across disciplines to provide input regarding degree expectations, programmatic changes, potential degrees, and student life.

• Graduate education website: provide information about applying for and financing advanced degrees, professional development opportunities and funding, community information, and social services through the OGEL website.

• Community communication tools: develop in-person and on-line communication tools, ranging from informal social events to scholarly activities, to facilitate leadership and generate community among graduate students from across disciplines.

(4) Community and Social Services

Institutional efforts to promote students wellness through social services and community can have a beneficial impact on the productivity of the individual as well as the institution.

• University access: provide library access to all graduate students throughout the year; offer parking and PRT services; evaluate housing options supported by the university.

• Health and family services: study the feasibility of extending health coverage to full medical, dental, and eye insurance; provide on-site childcare or reimburse expenses.
Program Assessment and Development

West Virginia University recognizes the variety of graduate education programs that compose the institution. Despite WVU’s diversity, common bonds unite the programs, disciplines, schools, and colleges. All units within the institution share a commitment to quality graduate education. This goal is maintained, in part, through review and assessment procedures. Review and assessment should promote accountability to external stakeholders, encourage internal review, and result in the improvement of graduate education.

WVU’s graduate programs span the spectrum of disciplines comprising a research university. Their purposes vary from providing research intensive doctoral studies, to master’s programs that prepare individuals with specialized skills for careers, to graduate programs that provide continued professional development in various fields. While endorsing the importance of assessment for every graduate program, the task force advocates flexible approaches that best meet the needs of review in each field of study.

Self study and program review are integral to fulfilling the missions of the university. Most immediately, these activities focus attention on the capacity and quality of programs to carry out their instructional mission of learning—and by extension, their research and engagement missions. Review efforts provide the opportunity to assess program performance, to appraise the relevancy and contributions of the program to the university and constituencies, to evaluate challenges and opportunities, and to consider future needs and demands.

The task force recommends restructuring the review process to employ the practices of assessment more effectively. Realigning the review process with contemporary guidelines for assessment will enable programs to use assessment techniques to evaluate their instructional activities, performance, and progress toward desired goals and outcomes. The following description, adapted from Lynn Priddy, “Student Learning, Assessment, and Peer Review” (presented at the annual meeting of the Higher Learning Commission of the North Central Association of College and Schools, March 2006), provides a clear sense of purpose for assessment and describes its use and utility:

Assessment can be used to measure organizational accountability, distinctiveness, and effectiveness. More important, however, assessment helps us to understand and improve student learning and educational quality. As an institution committed to our students, we should assess the success of our students’ learning and the quality of the education we are providing.

Guidelines for Coordinating Assessment at West Virginia University

The task force encourages programs to adopt measures and benchmarks that can be reviewed by faculty and stakeholders annually. To use assessment as a tool for continuous improvement and program development, the most important locus of assessment is at the program level.
Every five years, programs are subject to a review process coordinated by the Graduate Council for the West Virginia University Board of Governors. These five year reports are self-studies; as such programs should regard the process as a valuable opportunity for examination, reflection, and improvement. This assessment process should be guided by the following principles:

- According to recommendations regarding the organization of the graduate education enterprise at WVU, the assessment of graduate programs, currently the primary task performed by Graduate Council, would be performed by ad hoc committees. Each year, the Graduate Deans’ Council would appoint members of the graduate faculty to participate in the review process.

- The leader of the Office of Graduate Education and Life and the Graduate Deans’ Council will provide advice and insight regarding the assessment process. In this facilitative role, both the leader of OGEL and the council should assess and revise, as necessary, processes for coordinating and conducting the review process.

- Each program should include faculty, students, and stakeholders in the self-study process. Stakeholder participation may take a number of forms, including surveys of employers, alumni surveys, and the advice of visiting or advisory committees.

- Each program should consider soliciting external program reviews to inform the self-study process. Some university programs are regularly reviewed and accredited by external bodies on a regular basis. To improve program performance, some university programs have utilized ad hoc external reviews by peers. External review enhances accountability and provides for valuable input from disinterested sources. The form and manner of external involvement is best left to the unit.

- In preparing self-studies, programs will be asked to reflect on contributions to the five core objectives of the West Virginia University’s 2010 Plan. To complement this discussion, programs will be asked to provide information through a series of metrics that reflect general assessment criteria and illustrate learning outcomes and student progress. In addition, customary information such as student enrollment trends, graduate admissions standards, student-faculty ratios, curricular integrity, resource adequacy, graduation rates, and faculty productivity will be included in the reports.

- In conducting its reviews, the ad hoc faculty committees and the Graduate Deans’ Council will recognize the diversity of programs, the variety of missions in graduate education, and the need for flexibility in the self-assessment process. The Council is encouraged to recognize innovation in assessment and self-study that might be adopted for use by other programs. While the Council’s review provides an accountability function in the program review process, its primary role is facilitative.

Finally, programs should seek recognition as programs of excellence among peer institutions and programs in their fields. There are various measures for distinction, such as national rankings by media, foundations, and professional-disciplinary associations. Programs may utilize a variety of
methods to build and demonstrate excellence. The program review process should be a tool to help in achieving this objective.
Best Practices for Recruitment, Program Growth, and Student Success

Informal discussions and personal anecdotes emphasize that graduate education at WVU has a student-centered feel. This atmosphere provides a unique asset for recruiting high-quality students focused on professional development and interested in quality faculty mentoring. The Junior Colleague approach to graduate education, through which students are fully integrated into all aspects of the department from education and scholarship to administration and assessment, is an effective practice in many departments and provides a useful model for the graduate education enterprise as a whole.

Recruitment

In graduate education, recruitment and marketing are generally most effective from a local or departmental level. Despite the importance of marketing individual programs, central coordination of these activities and their integration into the overall marketing plan of WVU will permit a wider target audience and increase the cost effectiveness of recruitment efforts. Units that provide support to graduate education, such as Admissions and Records, Human Resources, the Office of International Students, Student Life, and Alumni Relations, could improve their services by adopting a more comprehensive view of graduate education and increase their efficiency by integrating the specific needs of the graduate education enterprise into their routine operations. The task force recommends the following ideas for further consideration:

- A revised, streamlined on-line application process that automatically distributes information about prospective students to appropriate units and departments. Permitting students to indicate their interest through this process prior to requiring a processing fee would help significantly in recruiting the best students into programs that generate tuition or that face stiff competition for applicants.

- A tuition rate between out-of-state and in-state for WVU undergraduate alumni who are living outside of the state’s borders but interested in earning an advance degree at WVU.

- A flat-rate tuition model for graduate programs delivered on-line. This tuition rate would not distinguish between resident and non-resident students but would instead charge a competitive tuition rate based on the program market.

In order to attract the best students into our graduate programs, WVU should consider additional 4+1 programs that lead to both a bachelor’s and master’s degree in 5 years. For undergraduates entering with advanced standing, this could effectively result in completion of both degrees within 4 years. Agreements through which a student could spend 3 years at a four-year institution in the region and transfer for 2 years to WVU in order to earn the bachelor’s degree from the undergraduate institution and a master’s degree from WVU also should be explored.

A number of policies, procedures, and agreements could increase WVU’s ability to recruit its best students into Ph.D. programs. Dual bachelor and master’s programs could serve as recruitment tools for identifying outstanding students. In addition to encouraging the students to earn their master’s degrees at WVU, departments should recruit these outstanding
students into Ph.D. programs. Articulation agreements should be sought with regional institutions that offer only master’s degrees to provide their students with the opportunity to complete a Ph.D. at WVU while receiving appropriate credit for work completed at the other institution. Units that currently do not admit students directly into Ph.D. programs should consider offering and publicizing a doctoral program that does not require the student to complete the master’s degree first. Such direct admit programs can be more attractive to students because they enable degree completion within a more reasonable time frame. These approaches might be particularly helpful in increasing Ph.D. production in the STEM disciplines as outlined in “Vision 2015 The West Virginia Science and Technology Strategic Plan.” This plan specifically states a goal to increase by 10% per year the number of Ph.D.’s awarded in West Virginia in STEM fields through the year 2015.

Program Growth

Proposed revenue-generating programs must be built on solid research and scholarship programs at the university. As noted in the discussion of national trends in graduate education and university objectives, the success of revenue-generating programs relies upon the academic reputation of the university as a whole and its reputation in research fields related to the potential revenue-generating programs. The foundation for effective marketing of these courses, certificates, and web-based programs is the quality and reputation of the residential program. With this caveat, opportunities for selected off-campus and web-based courses and degree programs should be explored.

WVU must identify state or regional needs that the university could meet and that could develop sustainable graduate programs. One critical example is the certification of science teachers: State Policy 2510.3 will shift the required three years of high school science education from 2 years of Coordinated and Thematic Science and one additional course to Physical Science, Biology, and Chemistry. This change will also increase the number of students requesting physics classes in their fourth year. Currently the state lacks educators to teach these chemistry and physics classes who meet the national standards of the No Child Left Behind Act. WVU should consider providing on-line or distance-based programs for in-service teachers in addition to campus-based teacher certification.

Additionally, the Office of Graduate Education and Life will need to gauge the potential market of lifelong learners interested in graduate programs at WVU. In some cases these may be complete degree programs, or they may be graduate certificate programs. Some of the groups that should be considered as prospective graduate students include:

- Non-traditional students
- Students employed full time in need of continuing education or certification related to employment;
- Individuals retiring to the area interested in pursuing a graduate degree for personal satisfaction.

To distribute limited resources where they will be most likely to be most effective, the task force recommends developing a “greenhouse” program to support new initiatives in the graduate education enterprise. This program will make available financial resources for developing new
graduate programs, but as part of the application for these competitive funds, would require units to identify their current resources (including personnel, related degree programs, and facilities), to demonstrate a strong need and applicant pool, and to provide a clear strategy for developing and sustaining the program. This greenhouse program would provide the best situated and most committed units with the resources to develop cutting-edge programs to drive the university’s graduate education enterprise. This process would require defined objectives, accountability measures, and a detailed external assessment of the applying program’s potential prior to investment.

Student Success

For retention and timely degree completion, all units should implement periodic review of all graduate students. This review should include written assessments provided to the student that indicate their progress towards degree completion. Any problems that might extend the time to degree or result in a student dropping from the program need to be identified and addressed proactively in an effort to ensure timely degree completion.

The placement of students completing graduate degrees needs closer monitoring and more active assistance from a central career planning and placement office. A Graduate Alumni Career Advisors office could assist current and former students in their career development. Some universities sponsor annual alumni career fairs in which alumni participate both as potential employers and job seekers. This interaction, coupled with effective tracking of graduate student alumni worldwide, would also assist in developing donors from the institution’s graduate program alumni.

Faculty evaluations of teaching effectiveness should weigh the effectiveness of graduate faculty as mentors to their graduate students equally with their teaching of undergraduate students. In some units a few faculty members are currently responsible for most of the graduate education occurring in the unit but do not receive proper credit in the annual faculty evaluation process.
This Task Force originates through the Provost of West Virginia University at the urging of the Implementation Team for the 2010 Plan.

West Virginia University is designated under the old Carnegie Foundation classification as a Doctoral/Research University–Extensive institution where graduate education is a critical part of its teaching and research missions. [The new Carnegie classification designates WVU as a Research University (high research activity)]. By either classification, graduate education helps define and differentiate WVU from other institutions and is highly valued by the faculty and the institution. WVU’s grant activities and the number of doctoral degrees awarded annually place the university among a select group of higher education institutions nationally. Given that graduate students are trained both through their scholarship and the experience of teaching undergraduates, our graduate programs and the students they attract are central to advancing WVU’s status as a uniquely student-centered institution.

The education and experience that graduate students receive at West Virginia University was identified by many members of the original Strategic Planning Committee and later by the Deans of the colleges and schools as an area worthy of examination relative to the goals 1 and 4 of WVU’s 2010 Plan to build the foundation for academic excellence. Moreover, the quality of our graduate students and our graduate programs is a significant factor in faculty recruitment and success central to goal 4. To this end, a Task Force is established. The Task Force will be chaired by Larry Hornak and Fred King. Members include: Pat Callery, Liz Fones-Wolfe, Andrew Hawkins, Bob Stitzel, Chris Plein, Curt Peterson, Judy Abbott, Thomas Saba, Brian Woerner, and Kimberly Fisher.

The Task Force is to report to the Strategic Planning Implementation Team by mid-September, 2006.

The work of this Task Force will address the recently endorsed recommendation of the Faculty Senate – namely, to undertake a comprehensive assessment of WVU’s treatment of graduate education and research and make concrete recommendations for a more holistic approach to achieving effective linkages, enhancing quality, and sustaining growth.

Furthermore, the work of the Task Force needs to take into account the forecast in enrollment growth in graduate education for each college and school.

The Task Force is charged with defining the role of graduate education at West Virginia University, as well as addressing the following four topics.
Topic 1. **Make recommendations regarding the Organization of Graduate Education**

- Evaluate the role of graduate education administration centrally
- Evaluate the relationship between graduate education and research
- Evaluate the function and role of graduate education administration within colleges/schools

Topic 2. **Define “Best Practices” for Program Growth and Student Success**

- Identify the best marketing and recruitment strategies
- Identify new programs that reach out to WVU’s undergraduate population (4 + 1 dual degrees; direct Ph.D. programs, for example)
- Lay-out issues related to poor retention and long time to graduation
- Identify indicators of success of graduate student career placement

Topic 3. **Evaluate Student Support and Development**

- Define measures of satisfaction with student experience
- Examine options that lead to a student-centered academic environment and reputation
- Identify opportunities for professional development

Topic 4. **Suggest Criteria for Programmatic Assessment and Evaluation**

- Provide a framework/guidelines for program assessment
- Assess the use of external evaluators in the five-year program reviews
- Determine how to define national indicators
- Review institutional policy for graduate faculty status
- Assess the use of advisory boards, especially for professional programs
- Suggest ways to report actions relative to the strategic planning goals into program reviews
Overview

West Virginia University’s graduate programs and the students they attract are central to advancing the institution’s status as a uniquely student-centered institution. Graduate education helps define and differentiate WVU from other institutions and is highly valued by the faculty and the institution. The Graduate Student Experience Group—Liz Fones-Wolfe, Judy A. Abbott, Kimberly Fisher, and Jessika Thomas—explored issues related to (1) social services and community, (2) retention, completion, and economics, (3) governance, communication and access to information, and (4) teaching, mentoring and professional development.

Institutions such as the University of Wisconsin-Milwaukee, the University of Minnesota, Rice and Duke report the importance of considering issues related to the graduate student experience and to implementing support systems to encourage progress toward degree completion. Task force reports from these institutions suggest that structures are needed to promote consistent and steady progress. These institutions realize that failure to complete graduate degree programs is extremely costly to students and to the institutions. There is a growing body of evidence that graduate students in more structured fields have far less attrition than students in programs lacking structure. Consequently, institutions are acknowledging that department and program culture is critical to students’ retention and completion. Students seem to persist in programs with good student to faculty ratios, productive student-to-student relationships, planned student activities and events, and involvement in professional activities at local, state, national and international levels. Based on reviewed reports, the most important factor in successful completion of the degree is the quality of the relationship between the graduate student and the major professor. Furthermore, productive relationships with high-quality advising in a supportive, nurturing environment lead to success. Additionally, studies suggest that the lack of integration of graduate students into a community (either academic or social or both) is one of the most important factors that cause students to abandon their degree programs.

Process

Members of the Graduate Student Experience Group met to review materials and notes generated during the Task Force meetings and to establish the breadth and depth of our group’s exploration of the topic. We generated a list of issues and sorted them into four categories—(1) social services and community, (2) retention, completion, and economics, (3) governance, communication and access to information, and (4) teaching, mentoring and professional development. Group members then claimed a category of interest to more deeply explore and to generate a summary that would include a statement of relevance, an evaluation of current status, and actionable items. We distributed the draft reports electronically and met to discuss our findings. In reviewing the draft reports, we found material that addressed aspects of the four topics outlined in the Charge to the Task Force:

Topic 2. Define “best practices” for program growth and student success
• lay-out issues related to poor retention and long time to graduation

Topic 3—Evaluate Student Support and Development
• define measure of satisfaction with student experience
• examine options that lead to a student-centered academic environment and reputation
• identify opportunities for professional development

What follows are drafts of the four category summaries.

The Economics of Recruitment, Retention, and Completion

Statement of Relevance

Recruiting talented graduate students is critical to building and maintaining high-quality graduate and undergraduate programs. Strong graduate programs are strategically important to the academic mission of WVU and to the economic growth of the state of West Virginia. Graduate students are major contributors to the success of the research and teaching mission. In the area of research they are important collaborators in the academic enterprise. In relation to teaching, in the sciences, they work with undergraduates in laboratories and research programs and in the humanities and social sciences, they provide direct instruction in many of the undergraduates in lower level classes. Low stipends and heavy workloads, however, make it difficult to recruit the most qualified students. Less able students require more help from the faculty, make fewer contributions to the research and teaching mission, take longer to complete their degrees and may be more likely to drop out. Low levels of support and heavy workloads make it difficult for even the strongest students to complete their course of study. Therefore adequate funding for graduate education should be a high priority.

Evaluation of Current Status

Graduate Student Funding

Graduate Student support comes from four available sources:

• Research assistantships provided by federal and industrial contracts and grants
• Teaching/research assistantships funded by the state
• Fellowships or grants funded by Foundation resources (private fund raising)
• Assistantships and or enhancements or caps to state funded stipends funded department generated resources (example summer-school teaching, on-line classes)

There is a wide range in Graduate Assistantship stipends at WVU from a low of $8,246 to a high of $33,000, with students in engineering, the sciences and medicine receiving the highest level of funding. Students in various discipline groupings tend to receive very different kinds of funding. Students in engineering, the physical sciences and medicine receive most of their support from grant-funded research assistantships. Students in the life sciences are supported by both research assistantships and state-funded teaching assistantships. Students in humanities, arts, and social sciences receive most of their support from teaching assistantships. Over the past five years stipends have steadily increased from a mean Graduate Assistantship Stipend of $10,404 in 2001-02 to $11,751 in 2005-06. A plan to increase graduate student stipends is being implemented. Each year for the next four years, the minimum stipend will increase by $600. Some departments have also significantly improved the competitiveness of their stipends with caps from Foundation funds or department generated resources. Anecdotal evidence suggests that WVU stipends with enhancements are at still at least 20% lower than peer institutions. In some programs the discrepancy may be much higher.

Stipend Work Requirements

Stipend work requirements also vary dramatically across disciplines, making it difficult to generalize. University regulations state that the maximum work assignment should not exceed
an average of 20 hours per week for the semester. The impression among faculty is that the amount of work graduates students must now do in teaching and research is more than comparable institutions expect and this can slow down student's time to degree.

**Time to Completion and Attrition**

Throughout the nation graduate students are taking longer to complete their degrees and many graduate programs have high attrition rates. This may also be the trend at WVU. Student failure to complete a program represents a major waste of university resources. The Council of Graduate Schools study on Ph.D. completion and attrition reports that the median time to completing the doctorate degree nationwide was 8 years in 2004. In November 2005, the Ph.D. Completion Project reported cumulative 10-year completion rates with engineering having the highest average completion rate (64%), followed by life sciences (62%), physical sciences and social sciences (both 55%) and humanities (47%). Completion rates and time to degree rates are not currently systematically collected at WVU. Students have five years to complete their degree requirements after attaining candidacy. Strict time-to-degree goals are important but an inflexible time limit may be a barrier to ultimate completion of the degree for students with family issues. There are efforts in some departments to help increase the number of students who finish their programs. English, for instance, offers multiple full year dissertation fellowships that provide most if not all Ph.D. students fellowship support to write their dissertations.

**Actionable Items**

**Graduate Student Funding**

• Conduct a study to determine the competitiveness of WVU stipends with peer institutions. However, cost of living should be factored into the comparison. Use this information to target stipend increases to outstanding graduate programs. Student financial support in WVU’s top programs must be competitive with peer institutions

• reward faculty who are successful in obtaining external funding that supports graduate students

• wherever possible build student service fees in to TA/RA packages
  - allow graduate students to waive fees for services they don't use, ie athletic tickets
  - allow graduate students to use the library year round without additional costs

• increase existing privately funded graduate fellowship programs

• to attract the best students in the professional schools and MA programs, consider establishing a graduate nonresident tuition remission program

**Shorten time to degree rates and reduce attrition**

• begin collecting and analyzing time to completion and attrition data — it is currently not part of the data provided in the Board of Governors report

• seek donors to support dissertation fellowships especially in under-funded disciplines

• conduct a study to compare work loads in various disciplines with peer institutions and use that information to adjust workloads where necessary

• provide more tuition waivers for students who have exhausted their regular support

• require a written prospectus and oral defense for all students writing a thesis (MA, MS, & Ph.D.) or prospectus for dissertation projects should be no later than six months after passing comprehensive exams

• improve mentoring, encourage advanced graduate students to mentor first year students
• distribute and discuss clear program guidelines and expectations with new students, with
  milestone achievement markers; Plans of Study should be approved in a timely fashion and
  reviewed and updated each year
• clarify faculty expectations for qualifying and preliminary exams; hold all students to same
  standards
• annual reviews of all students after candidacy to track progress towards competition of
  dissertation or thesis
• develop a uniform policy on the granting of extensions beyond the five year deadline based
  upon documented need
• improve communication and support for non-traditional and working adult students
• increased summer and online offerings to make it easier for students, especially non-traditional
  and working adult students to complete their degree
• organize dissertation support groups and provide dissertation writing workshops
• conduct exit interviews with both students who complete their program and those who leave
  without completion

Professionalization through Teaching, Mentoring, and Scholarly Activities

Statement of Relevance
  In addition to academic factors related to graduate students successfully completing
  programs of study, policy reports and scholars suggest that attention must be given to social and
  cultural factors that relate to recruitment, to retention, and to completion. Aspects of social and
  cultural factors include access to professional development, support in learning to teach in higher
  education, and opportunities to develop networks for professional and personal needs while
  engaged in graduate study. Specifically, attention must be focused on helping graduate students
  interact formally and informally with other graduate students and with faculty, develop an
  understanding of course development, learning, and instruction, experiencing success in teaching
  content and documenting student learning, and enlarging their understanding of the professional
  within the profession. The Responsive Ph.D.: Innovations in U.S. Doctoral Education
  (Woodrow Wilson Foundation, 2005) recommends departmental and extra-departmental
  structures to cultivate graduate student leadership within programs and through professional
  development, transparent and accessible information about expectations and opportunities prior
  to application and throughout the program, and expanding approaches to mentoring, especially
  for diverse students. But these recommendations are appropriate for all graduate students, not
  just students of underrepresented groups and not just doctoral students.

Evaluation of Current Status
  Individual colleges, schools, and departments at West Virginia University (WVU) vary in
  their explicit policies related to these critical aspects of the graduate experience. An example of
  developed and structured approach to supporting and developing graduate students in the Health
  Science Center. However, WVU lacks a systemic policy related to graduate mentoring and
  professional development. Peer institutions also vary in their attention to graduate teaching
  mentoring, and professional development. Though several institutions have formalized centers
  for teaching and learning that provides support for teaching, opportunities for professional
  development, and encouragement to network with other graduate students and to find mentoring
  partners, others have decentralized approaches similar to those at WVU.
Teaching

The WVU policy on a graduate teaching assistant appointment requires two three-hour courses per semester or the equivalent. Within WVU’s decentralized approach to developing teaching expertise of graduate students, departments and graduate programs control the requirements for graduate teaching assistants and for other graduate students who may have teaching responsibilities following the completion of their program. Currently, a number of departments and programs require graduate teaching assistants to enroll in a teaching course during the first semester of their appointment. These courses, taught by faculty in the discipline/program, focus on the theories and practices of teaching and learning within the discipline and are taken simultaneous to teaching responsibilities. International graduate students are also required to pass the SPEAK test prior to accepting responsibility for teaching undergraduate courses. [NOTE: The $35 fee for this exam is the responsibility of the graduate student rather than the department.] Departments and program make an effort to match the knowledge and expertise of the graduate teaching assistant to the content of the course, but there are instances of mismatches with implications resulting in minimal learning of content by the undergraduates in the course and in frustration, if not trauma, for the graduate teaching assistant when faced with his/her struggle to effectively teach.

Support and evaluation of graduate teaching assistants’ teaching varies as well. Some departments/programs require graduate teaching assistants co-teach with faculty during their first semester, while other departments/programs assign faculty teaching mentors or faculty course coordinators for courses with multiple sections. Some departments/programs provide no support beyond syllabi used in the past. Evaluation of graduate teaching assistants range from scheduled observations by faculty with feedback (oral and/or written), to use of the Faculty Senate course evaluation system, to no evaluation. Consequently, continuation of graduate teaching assistant appointments may or may not be based on data and support and/or professional development focused on growth and success may not be suggested or provided, especially for those teaching assistants who struggle.

Though some departments/programs attend to developing the abilities of graduate students to develop courses, to teach students, and to evaluate learning, few if any departments/programs document this expertise as a part of the graduate program experience.

Mentoring

Mentoring may be formal or informal and may focus on all or selected aspects of the profession (i.e., scholarship, teaching, service, organizational citizenship, profession citizenship). A number of WVU departments/program have formal or semi-formal mentoring program where more experienced graduate students and/or faculty are partnered with newer graduate students. These mentoring programs often include structured orientations for incoming graduate students, social events such as picnics and receptions, and information about social services at the university and within the community for the graduate students as well as for families. All programs have faculty-graduate student advising relationships. Mentoring within these relationships vary primarily based on personality and “professional fit.”

At WVU, mentoring most often occurs within the faculty adviser/graduate student relationship. Within the Health Sciences Center programs and the sciences programs, graduate students are often a part of the research team lead by the faculty adviser. In these situations, faculty advisors, lab assistants, and other graduate students may develop mentoring relationships is graduate students. Within the social sciences, humanities, the arts, and education, the nature of
faculty research/scholarship may not lend itself to including graduate students and, thus, there are fewer opportunities for mentor/mentee relationships to develop. This unevenness in opportunity is also seen in teaching. Some courses have multiple sections with teams of faculty, graduate teaching assistants, and adjuncts working together, providing opportunities for mentorship. Other courses may have few sections or one section, resulting in less opportunity for mentoring relationships to develop.

Successful mentoring relationships often result in a lifetime involvement, with positive outcomes for the graduate student, the faculty member, the program, and the institution. Studies show that successful mentoring relationships assist with retention and program completion.

Professional Development

Professional development occurs at the university level, the department/program level, and the individual level. At the university level, graduate students are encouraged to participate in formal development and training opportunities provided by WVU. Topics and workshops are advertised through printed flyers, via university listservs, and websites. Departments/programs are uneven in encouraging graduate students to take advantage of these opportunities.

At the department/program level, professional development may occur through seminars, brown bag presentations, and faculty meetings. Many departments/programs regularly offer seminars and brown bag presentations, but these opportunities most often occur during regular working hours, making them unavailable to part-time graduate students or to graduate students in evening/weekend programs. Allowing graduate students, especially graduate teaching assistants, to attend faculty meetings and/or program meetings vary widely. Professional development at the department/program level also occurs during faculty searches. Graduate students are often encouraged to attend research presentations and many departments/programs include scheduled time for candidates to meet with groups of graduate students.

At the individual level, graduate students seek professional development through attending professional meetings and conferences. Local and regional meetings and conferences seem more attractive to graduate students because of the expense of attending professional gatherings. Many departments/programs provide travel funding, but the amount rarely covers all the costs incurred and access to the funds may be competitive.

Conclusion

Attention to social and cultural factors influencing teaching, mentoring, and professional development of graduate students at West Virginia University is decentralized and varies widely. Several departments/programs are directly and systematically providing positive experiences for graduate students. Other departments/programs may be attending to only a few of these important factors. To date, no data is systematically collected to examine these factors. Because West Virginia University is committed to improving the graduate experience for its students, establishing policies and practices may move the institution closer to this goal.

Actionable Items

- establish university policies and practices addressing social and cultural factors that influence high-quality teaching, mentoring, and professional development
- establish systematic data collection, analysis, and reporting
- establish an online needs assessment survey for current and past graduate student to establish a baseline
• create a centralized graduate student handbook; provide physical copies to all new graduate students as well as providing an electronic version
• require a teaching in higher education practicum, course or equivalent for all graduate teaching assistants and all doctoral students intending to enter the professorate
• require an evaluation plan for all graduate teaching assistants and for all graduate research assistants; base reappointment on data; provide professional development for graduate teaching assistants that struggle
• establish a mentoring/networking plan
• encourage faculty advisors to contact graduate students annually to monitor retention and progress toward completion
• encourage department/program professional development opportunities; vary the times of these opportunities to allow access by all graduate students
• better publicize university, college, department, program professional development opportunities
• increase travel funding for graduate students
• recognize outstanding faculty mentors

Governance and Information Resources

Statement of Relevance

The Responsive Ph.D.: Innovations in U.S. Doctoral Educations, a report produced at the initiative of the Woodrow Wilson National Fellowship Foundation, emphasizes the need for doctoral students to have departmental and extra-departmental structures through which to express concerns. Centralized governance and communication mechanisms cultivate leadership and community among graduate students in diverse disciplines. The report also insists that information about doctoral programs, with post-graduation expectations of employment, be made available to students throughout the application process, while in the program, and after graduation.

Evaluation of Current Status

West Virginia University lacks a meaningful structure for graduate student governance that would extend beyond departmental boundaries. The university has a Graduate Council staffed by faculty members and a Student Government Association with elected representatives. Although the Graduate Council by-laws and the Guide for International Students references a “West Virginia University Graduate Council,” no record of such a group or its activities can be found at any of WVU’s websites. The primary responsibilities of the Graduate Council are to conduct 5-year quality reviews of each graduate program, to create and interpret university-wide graduate policy, and to oversee minimum criteria for Graduate Faculty. Although a representative of graduate and professional student associations is included as an ex officio member, this position remains unfilled because there is no such graduate student organization. Similarly, although the Student Government Association by-laws do not prohibit graduate students from holding offices, the prevailing assumption is that all officers will be undergraduates.

Graduate students at WVU need an office, with on-line resources, that will bring together the information and processes necessary for them to apply, study, live, work, and graduate. The current Graduate Education website [http://www.wvu.edu/~graduate/] does contain limited
information about the application process, financing graduate school, assistantship expectations, and university policies regarding graduate education, but the site primarily redirects students to other WVU offices. Additionally, many links are broken and the website is irregularly maintained. The graduate website lack information that students need. In addition to university-wide applications, assistantship minimums, and thesis submission guidelines, for example, recommendations for graduate student housing, childcare, and community involvement should be included. The Office of Graduate Education has provided service in areas for which it is directly responsible, but could also serve as an advocate for graduate students. Students could feel more connected to the university and a larger community of graduate students from across the disciplines if the Office of Graduate Education facilitated communication between disciplines and with the Morgantown community.

Actionable Items

- **Graduate Student Council**: WVU needs to create a forum for graduate students from across disciplines and colleges to provide input regarding degree expectations, programmatic changes, potential degrees, and student life. The council should include seats for representatives from each college, with multiple seats for colleges with the largest population of graduate students. In addition to serving in an advisory capacity to the Director of Graduate Studies and the Graduate Council, the Graduate Student Council will facilitate the development of a graduate student community at this university. Student members will eventually determine the direction of the council, but possible programs sponsored by the Graduate Student Council could include support groups for students completing dissertations and theses, for minority or international students, or for other target groups; social activities for graduate students and their families beyond the academic functions in departments; inter-disciplinary research collaborations; or community outreach activities. A number of graduate programs at WVU have innovative activities, for example the College of Law’s Public Interest Advocates, and other programs could benefit from a forum designed to enhance the educational environment for student learning by promoting the discovery and exchange of ideas.

- **Enhanced Graduate Education Website**: The current Office of Graduate Education website must be expanded to provide current and potential students with comprehensive information about applying for and financing their educations, professional development opportunities and funding, community information, and social services. We recommend that the website include:
  - Information about the application process, preferably with an on-line application system that distributes applications to appropriate colleges and departments;
  - Links to and contact information for each graduate program at WVU, along with contact information for current graduate students willing to share their experience at WVU with potential students;
  - Statistics about acceptance rates and norms, completion rates, time-to-degree rates, and job placement rates for graduate programs;
  - Clear and comprehensive information about the costs of attending WVU with accurate information about living costs in Morgantown;
  - A list or searchable database of available assistantships, preferably with on-line application forms;
A list or searchable database of university supported fellowships and scholarships, funding opportunities for conference travel and research,

Information about members of the Graduate Faculty so that students in need of committee members could research the expertise and interests of potential readers or mentors;

Minutes from Graduate Student Council meetings;

Housing information with descriptions of neighborhoods, city maps, links to local transportation maps [Mountainline service routes], utilities information, etc.;

Lists of services (free or reduced-cost) provided for students by WVU, such as student health services, hospitalization insurance, mental health counseling, legal aid, child care expense reimbursement, dental clinic, bus and PRT routes, etc.

Website maintenance must be a priority for the Office of Graduate Education. Broken links and outdated information will dissuade students from applying to WVU graduate programs as well as curtail the usefulness of the site to current students.

• Communication Forums: Graduate students have limited opportunities to learn about students, research, and events in other departments. The Office of Graduate Education should create on-line and in-person communication forums that will facilitate leadership and generate community among graduate students. These forums could include very informal social activities as well as scholarly activities. They will serve to help students develop their professional skills and connect with a network of supportive colleagues. These types of personal and professional support structures provide students with needed encouragement and role models. Possible communication forums include:

  o On-line calendar: Visiting lecturers, dissertation defenses, performances, etc. that might be of interest to graduate students should be recorded in one location. Frequently these events, especially job candidate talks, are not listed on the university calendar. These opportunities for academic enrichment should be publicized to graduate students.

  o On-line chat boards: Graduate students should have an on-line bulletin board to support each other, ask questions, and plan social events.

  o Listserv: Graduate students are informed of ETD workshops via a listserv, but this tool could be employed for additional information.

  o Social activities: The Office of Graduate Education should organize or sponsor some social activities for interested graduate students. Although not all students will want to participate, a welcome dinner (which could be a bring-your-own-picnic) at the beginning of the semester and continued informal events will foster a supportive network for graduate students who have felt disconnected from the university. New faculty members have a “rooky club” which meets regularly off-campus to discuss their experiences and encourage each other. A similar program could be put in place and interested students would perpetuate the activities. These events could be publicized through the listserv and on the calendar.
Community and Social Services

Statement of Relevance

The graduate student experience is a key factor in the productivity of a student during their graduate school years. “Social connectedness is a much stronger predictor of the perceived quality of life in a community than the community's income or educational level” (REF Social Capital Community Benchmark Survey). Because of the importance of social connectedness and ease of graduate school experience, efforts into developing an individual’s happiness through the promotion of social services and community could have a profound impact on the productivity of the individual as well as the institution. This connectedness is likely to promote networking across disciplines and thus promote inter-disciplinary studies. The connectedness of students is likely to ease of transition into graduate school for incoming students and promote a positive attitude that would be helpful in the recruitment of strong graduate students.

Evaluation of Current Status

Housing—Campus Housing in Morgantown is available to graduate student at the medical center. Two buildings with 62 efficiency and 20 one-bedroom apartments each are available. All apartments are furnished and contain an all-electric kitchenette and ceramic tile bath with tub-shower combination. The rooms include the cost of phone and cable. Laundry facilities are available for an additional fee. Currently the rental fee for a room in the medical center is $485. Additional housing is available at College park apartments. The housing in this unit is limited and typically has no vacancies. Otherwise various housing situations are available throughout Morgantown from independent realtors. Posting can be found in the school newspaper as well as the local newspaper and the internet.

Community—Social groups around the university are currently not organized on a university level. International students social groups have been established which could be a model for a university wide organization. The international students groups participate in a variety of activities including festivals with their native food and live shows.

Parking—Parking for faculty and graduate students that is provided by the university is limited on the downtown campus but is much more accessible on the Evansdale Campus. Parking at the Coliseum is available with a free bus ride to the campuses. The Mountainline Bus system is available to the entire WVU community provide they have a valid WVU id. The system has numerous routes throughout Morgantown with various pickup/drop-off sites. The PRT is available but requires a payment of 50¢ per ride for graduate students and staff unless they have paid a special fee to the university. The special fee, however, is grouped with the campus sporting events fee so is approximately $350 per semester. Parking spaces are available downtown to faculty but they must frequently wait years to be awarded a parking space. Graduate students do have access to WVU at the Medical Center parking where they must pay a fee to obtain access.

Library—Currently the university has various library facilities on the different campuses. Library access is limited to the hours of operation of each of the libraries. In the case of humanities, an extra fee is required in the summer months before access is obtained. There are a limited number of online journals available through the library’s website.
Health Care—Health Care for graduate students and GRAs and GTAs is Hospitalization and Limited Illness Insurance. It is provided on a yearly basis, starting in August for GTA/GRA and does not extend to dental, eye, or family insurance purposes. It is limited coverage, with a $250 deductible and 20% co-pay after the $250 is fulfilled.

Child Care—The university does not provide child care for infants. There is a nursery school available on campus which is the West Virginia University Child Development Laboratory. Two sessions are held on a daily basis in which 3, 4, and 5 year olds attend the morning class and 4- and 5-year-olds attend the afternoon class. A before- and after-school program is available for parents that need this service. In addition, a summer exploratory program is also offered in May and June. The program is not available in the July and August months. Enrollment in the program is limited. In recent years a waitlist has developed, which makes it necessary to place a child on the list at a very early age in order to insure enrollment at age three. This service is available for a fee of an unknown amount. (At the time of writing this paper the program is on summer recess, so no one was available for comments). The following are two child care programs that is available for undergraduate students and for benefit-eligible employees.

Student Child Care Assistance Program (SCCAP). This program provides low-income WVU undergraduate students with reimbursement for a portion of their child care expenses. Eligibility for the program depends on the following criteria: WVU undergraduate student must be Pell grant eligible and file a FAFSA with WVU Financial Aid Office prior to enrolling in SCCAP. Participant must be enrolled in a minimum of three credit hours at the WVU main campus in Morgantown (WVU regional campuses are not eligible for this program). WVU student must submit SCCAP application and required support documentation. Children are between six weeks to age twelve. Children are claimed as a dependent on the student's previous year's federal tax return. Children are enrolled in a licensed child care center that is accredited or seeking accreditation.

Child Care Assistance Program designed to help offset the costs associated with child care for benefit-eligible employees. The program provides a mechanism for distributing the University’s limited child care resources to employees on a sliding scale, thus providing financial assistance to a large number of employees. The plan provides reimbursement for a portion of an employees child care expenses for full-time, after-school, and summer child care needs. Monies from this plan are paid to employees on a tax free basis as allowed by federal guidelines under Section 129 of the IRS code. The eligibility guidelines for the program require the following: Children are six weeks to age twelve. Children are enrolled in a state licensed child care center. Children are claimed as a dependent on the employees previous year's federal tax return. Employee must submit an application annually.

Career—Job search services are available to graduate students through the Career Services Center. Students can meet with a career counselor for their search. The counselor can let them know when on campus recruiters will be on campus as well as upcoming job fairs. The center has a list of currently available job openings that the student can search for possible placement.

Actionable Items
- The university should help build an enhanced sense of community among graduate students and between graduate students and faculty. Promotion of community can certainly be an
important focus of a new Graduate Student Council. In addition Colleges and Departments should also be encouraged to sponsor activities or put into place structures (student groups) to combat isolation among graduate students and help integrate them into an academic or social community.

• The recommendation of free PRT access is strongly suggested. This recommendation is based on the needs of transportation as well as the need to travel to the different campuses for library purposes. It is also recommended that the Medical school parking fees be waived for GTAs and GRAs.

• Library access should be at minimum available to all graduate students regardless of their current status of GTA/GRA. Extension of online access should be compulsory if hours of operation cannot be extended for graduate students. (Note at PITT graduate students are given keys to their libraries.)

• Healthcare- Extension of coverage to dental and eye insurance would be recommended. Family coverage should be explored.

• Child care- Childcare expenses reimbursement should be provided to graduate students.

“Social connectedness is a much stronger predictor of the perceived quality of life in a community than the community's income or educational level.”

Similarly, personal happiness is also much more closely tied to the level of community social connectedness and trust than to income or educational levels. This is true, even controlling for individual characteristics, such as income, education, and so on. That is, even comparing two persons of identical income, education, race, age, and so on, the one living in a high social capital community typically reports greater personal happiness than his/her "twin" living in a low social capital community. The same thing is not true of the overall level of community income or education. In other words, your personal happiness is not directly affected by the affluence of your community, but it is quite directly affected by the social connectedness of your community.

Reference: http://www.cfsv.org/communitysurvey/results4.html
Social Capital Community Benchmark Survey