2015-2016 Annual Report of the Graduate School
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Alignment of Graduate School efforts with University strategic initiatives

The Graduate School has assumed a leadership position by undertaking initiatives toward helping the university achieve the goals and aspirations for graduate education articulated in the Plan for a New Horizon 2012- 2018, Beyond Boundaries and Destination Areas. As such, our efforts continue to focus on graduate education with the thematic areas of student preparedness, the campus of the future, and the global land-grant mission in addition to the concepts of VT-shaped individual, nexus of discovery, and community. The priorities and goals set by the Graduate School seem to fit quite well with the thematic areas and concepts of Beyond Boundaries and Destination areas. Below are the goals, which have evolved over the last ten years and are expected to evolve further as we move forward:

1. Implement and enhance the Transformative Graduate Education (TGE) initiative with emphasis on Academy for GTA Excellence, Communicating Science, Global Perspectives program, Scholarly integrity/ethics requirement and Career Professional development program
2. Support and enhance interdisciplinary graduate education at VT through Interdisciplinary Graduate Education programs (IGEPs), Individual Interdisciplinary PhD (iPhD) and Destination Areas
3. Review and update the portfolio of graduate education programs (degrees, certificates) especially for NCR and international partnerships and in alignment with Destination Areas (DAs) and Strategic Growth Areas (SGAs)
4. Expand data collection and analysis of graduate education including demographic data, climate survey, academic progress, diversity and more
5. Actively support the office of Recruitment and Diversity Initiatives (ORDI) toward achieving an inclusive and globally diverse graduate community; implement and evaluate InclusiveVT initiatives: holistic admissions criteria, creating affirming environment (anti-bullying), and inclusive Graduate Life Center (welcoming GLC).
6. Strengthen the academic community and reconsider ways to provide programs and opportunities for graduate students; specifically child care initiatives, work life balance and graduate family housing
7. Upgrade the use of technology in the Graduate School and academic units; and enhance use of social media and communication strategies for graduate students and other constituency groups (Web 2.0 technology; website, FaceBook, Blogs, Twitter, LinkedIn, Storify)
8. Enhance functionality and streamlined operations throughout the Graduate School to increase efficiencies and effectiveness

Progress in each of these areas is detailed at Virginia Tech Graduate School.

A. *Major Accomplishments of the Graduate School '15-'16*

The major accomplishments of the Graduate School are articulated below in keeping with the goal for VT to be a "global, inclusive destination for students and faculty interested in VT shaped education, research, and outreach . . . . integrated areas of excellence that span the dimension of disciplinary, interdisciplinary and problem solving with societal impact."

- Worked with Colleges and supported initiatives and plans that led to increasing graduate enrollment by 280 students, number of doctoral students by 46% and number of underrepresented groups by 15% with other demographics remaining relatively constant.
- Very successfully supported the use of Hobsons software by 110 departments/programs, which led to enhancement of communication with and recruitment of highly qualified applicants.
- Enhanced highly successful diversity programs including Diversity Scholars, Connect Lunches with specific groups, and mentoring program with plans to address and increase retention numbers.
- Implemented and achieved significant progress on InclusiveVT initiatives (affirming environment, holistic admissions, inclusive GLC)
- Supported unique and very strong IGEP programs, with 303 students currently enrolled, over 250 participating faculty, and over $200 million in active research projects
- Admitted four individual interdisciplinary PhD (IPhD) students and assisted those students in developing their research plans
- Established strong social media presence and communication strategy for disseminating information about graduate students' achievements and Graduate School initiatives (4500+ Facebook followers, 1300+ followers on Twitter with 3800 posts, 23 publications)
- Successfully implemented child care options of Little Hokies Hangout (LHH) and family support; monthly luncheons capped at 50 attendees, 150% in enrollment in LHH
- Launched Academy for GTA Excellence to advance and reward teaching excellence by graduate students; inducted members (12), associates (15) and three inaugural fellows
- Successfully reviewed and approved new graduate degrees, certificates and course offerings; 68 new or revised courses, 4 graduate certificates, 5 degree proposals
- Enhanced technology advancements and efficiency in budget, immigration, admissions and academic progress, and general operations
- Offered nearly 100 programs for graduate student throughout the year including Week of Welcome (1000+), GTA workshop (600+), orientations (750+) and Graduate Education Week (1500+) that reach more than 5000 students
- Continued to offer successful Transformative Graduate Education courses (10+ GRAD courses generated 1128 SCH in Fall and 602 in Spring)
- Offered for the 11th year the highly successful and visible Global Perspectives Program (GPP) in Switzerland and expanded it to the University of San Francisco de Quito (USFQ)
- Developed partnership with the University of San Francisco de Quito (USFQ) and established the 21st Century Faculty initiative for USFQ faculty
- Expanded a small makerspace at the Northern Virginia Center to the Qualcomm-VT Thinkabit lab, which will serve 90+ middle school students per week while providing unique research opportunities in Engineering Education and STEAM diversity efforts.
- Continued to implement and support advanced learning technologies at the Northern Virginia Center, which will further strengthen education programs that span across campuses.
- In partnership with others in the National Capital Region, began to identify workforce needs at the masters and doctoral level in order to shape future program development. Also continued to collaborate with local governments to identify potential areas for expansion and growth of our regional footprint

B. *Draft of Three-Year Plan*

The Graduate School provides the administration home and leadership in graduate education for the entire university system including admissions, academic progress, academic program development and review, alumni relations, data analysis, development and fundraising, digital initiatives and technology enhancement, diversity and inclusion efforts, engagement initiatives, enrollment management, fellowships and assistantships, global initiatives and international programs, graduate honor system, graduate policies and procedures, international student services, interdisciplinary graduate programs, recruitment and retention, student activities and support services, and transformative graduate education (TGE) initiatives.

In addition to the goals and responsibilities articulated above, senior administrators were asked to comment upon efforts in specific areas: collaborations with colleges, implementation of destination areas, data ecosystem, communication profile, comprehensive assessment of student success, other critical functions, and reallocation of resources. The narratives highlight the ways in which the Graduate School goals are aligned with the specified areas and actively engage with cross-university efforts.

1. Collaborations with colleges

Beyond the administrative support and services provided university-wide, the Graduate School is actively engaged with the Colleges for development and delivery of disciplinary academic programs and the interdisciplinary graduate education programs. The efforts of the Graduate School provide both the coordinated administrative services (recruitment, admission, immigration, graduate catalog, academic progress, Institutional Plan for Graduate Education, tuition remissions, and more) and initiatives that complement and enhance the academic programs (TGE coursework, diversity fellowships, IGEPs, and more). We are actively engaged in supporting international cooperative programs and degree plans, which are lead by faculty members and colleges. We have continued to partner with colleges on degrees and fellowships (e.g., Shandong University 3+2, COE New Horizons Scholars, Cunningham Fellowships). All the "credit" (SCH, FARS) follows the faculty members and therefore is credited to the Colleges.

Metrics: proposals for degrees, certificates and graduate degrees, SCH generated and shared, tuition remissions, diversity assistantships, fellowships, awards

2. Role in Destination Areas

The Graduate School has assumed a leadership role in planning and implementing the Destination Areas through active engagement of Dean DePauw with the process of identifying and developing the DAs. As the DAs evolve, the Graduate School will assist with the development of curricula at the graduate level and will support the involvement of graduate students in DAs (e.g., through training to teach undergraduate courses, extension/engagement, research efforts). We can also collect and share data (assistantships, demographics, time to degree, and more) pertinent to development of DAs and SGAs. The experiences of the IGEP faculty and graduate students in addition to the knowledge gained through the administration of the IGEPs are valuable resources for the further development of DAs and SGAs. The staff in the Graduate School provided technology support for several DAs and SGAs meetings.

Metrics: FTE, SCH, survey results (climate, demographics, interdisciplinary thinking, academic progress)

3. Data ecosystem

Data are very important in evaluating progress and trends and determining needs. Although we have collected and analyzed data about graduate education for the past several years, we have hired this year a full-time coordinator to improve these efforts. The Assessment and Evaluation Manager works closely with the Directors of Admissions and Academic Progress, Office of Recruitment and Diversity Initiatives, Communications, and Student Services and Immigration to gather, analyze, and interpret data needed for efficient and effective operations in their offices. These data are available on our website in clear visualization formats. We have also consulted with academic units about their data needs for enhanced decision-making. The data collected include applications/admissions/enrollment and yield, descriptive demographics, time to degree, assistantships, climate surveys, participation numbers and rates, impact of TGE courses, and more. Currently, we are tracking information using our InclusiveVT holistic admissions approach to determine if the admissions pool has become more diverse in criteria other than the standard demographic factors. We have also developed a post-admission but pre-enrollment survey to determine the needs and desires of incoming graduate students in order to provide more relevant student services. These data are available to all (including the public). I envision the sharing of these data and the development of additional data needs through a collaboration with the Provost office. We are also building the infrastructure for more in-depth analysis of facility usage at the Northern Virginia Center and revising policies/procedures to increase utilization.

Metrics: SCH, change in demographics, results of climate surveys, results of holistic admission criteria assessments, space usage

4. Communications

Communication is an important function for the university and it is difficult to represent all components of the large comprehensive university equally and to the multiple and differing constituencies. It was challenging to gain the visibility needed for graduate education and as a result, the Graduate School hired a Communications Manager in 2014 to focus on graduate education. This effort has proven very effective in communicating clearly about the quality of graduate education, accomplishments of graduate students, and the initiatives of the Graduate School. We work very closely with university advancement in marketing, branding, messages, and more. We maintain strong links with colleges and programs to ensure consistent messages about programs and policy/procedures. Use of social media for the Graduate School has been highly successful raising the profile of the Graduate School but more importantly the profile of graduate education at Virginia Tech. We have developed materials and brochures used in recruitment across all colleges and programs. The Graduate School has experience and expertise in communicating and is more than willing to share and collaborate with other units in the Provost office. In fact, the Graduate School Communications Manager worked .50 for the Vice Provost for Inclusion and Diversity for the nine-month transition through July 1, 2016.

Metrics: impact and reach of message through # of hits or visits to website and social media; number of Graduate School and graduate student features in VT Daily News

5. VT shape individual

Although it was not called VT-shaped student, the Transformative Graduate Education initiatives (established in 2003) and the Graduate Life Center (established in 2005) have focused through a combination of academic and extra-curricular professional development programs on shaping the graduate experience of Virginia Tech students. The IGEPs promote disciplinary depth along with interdisciplinary breadth in areas of crucial societal importance. Various TGE and

Graduate Student Assembly-organized activities promote experiential learning and scholarly engagement. Our InclusiveVT initiatives also contribute to attracting, but more importantly, retaining a diverse graduate student population. Each year we have added to the TGE initiatives and strengthened the affirming environment (GLC and beyond), which represents our comprehensive, inclusive, adaptive approach to supporting student success.

The Graduate School inclusiveVT initiatives also contribute to attracting but more importantly retaining a diverse graduate student population. See below for an excerpt from a blog post on VT-shaped individual with a focus on the graduate student:

> "…. the transformative graduate education (TGE) initiative 'pushes the boundaries of traditional disciplinary academic education and provides the philosophical underpinnings for a truly innovative graduate education experience.' TGE is framed by four cornerstones (pillars): knowledge, scholarly inquiry, leadership, and social responsibility. Our efforts and activities are grounded within the fundamental principles of interdisciplinarity, inclusion and diversity, ethics, innovation (technology) and global perspectives."

> Beyond the myriad of courses and programs offered, I should highlight a few examples of the ways in which the TGE initiatives contribute to the preparation of the VT-shaped graduate student as described above. To address the "deep sense of ethics", all graduate students must demonstrate understanding of academic integrity and satisfy an scholarly integrity and ethics requirement officially recorded on their graduate plan of study.

> In order to help graduate students "communicate effectively", the Graduate School offers a variety of approaches: two graduate courses – Communicating Science (2 cr) and Citizen Scholar Engagement (3 cr) and recognition as a Citizen Scholar. In addition, the Graduate School also offers a course entitled Inclusion and Diversity in a Global Society (3 cr) and actively promotes an affirming and welcoming graduate community and the ORDI….

> The "T" educated individual stresses both disciplinary depth and interdisciplinary breadth and the VT Graduate School has actively engaged in developing initiatives and opportunities to foster interdisciplinary programs and interdisciplinary thinking. Among these are the Interdisciplinary Graduate Education Programs (IGEPs), the development of the individualized interdisciplinary PhD program (iPhD) and support for the Interdisciplinary Honor Society (IDR) established by VT graduate students....."

Metrics: SCH, participation rates in GRAD courses, Global Perspectives, Citizen Scholar Engagement recognition; interdisciplinary research funding supported by IGEPs; employment in nonacademic as well as academic sectors

6. Other critical functions

All functions of the Graduate School are focused on and in support of graduate education university-wide (including all campuses and locations). The Graduate School works with all administrative units of the Provost's office. We have formal and informal collaborations with the undergraduate education, student affairs, outreach and international affairs, research and innovation, enrollment management, inclusion and diversity, library, faculty affairs, fiscal operations, NCR, Roanoke, and BOV. We continue to be adaptive to the needs of other administrative units (administration services, alumni, fundraising, budget, etc.) in support of graduate education. In addition, we provide professional development workshops for faculty and staff regarding graduate education and learning technologies. The VT Graduate School continues to be a leader in graduate education around the nation and across the globe. It serves as a model for

the future of graduate education in many areas (student services, ethics, TGE, social media, IGEPs, and more). On a yearly basis, we host one or two days Graduate School Deans and Associate Deans who want to learn more about our successful initiatives.

Metrics: SCH, FTE associated with IGEPs and international collaboration, # of programs/workshops, invitations, awards/recognitions, visits, conference presentations

7. Redirect resources and reallocations

Since 2002, I have sought continuous improvement and reallocated resources to create and sustain the Graduate School as a comprehensive, responsive, and innovative academic unit. Some additional resources were requested and received but much of the adjustments below came from reallocation. We continue to seek ways to increase our efficiency and effectiveness. Examples include:

- sustaining a strong commitment to inclusion and diversity by creating a position, office, and programs (ORDI),
- moving from paper to digital records, requiring a shift in staff patterns to include more technology-related positions,
- placing emphasis on communication and hiring a full-time manager,
- understanding the need for ongoing and meaningful assessment and hiring a full-time coordinator,
- modifying the philosophical approach to academic services and moving from processors to advisors who provide direct support to academic degree programs,
- enhancing student development opportunities and expanding through innovative staffing patterns (GLC fellows),
- adopting a philosophy and practice of cross-training and shared spaces to increase collaboration within the graduate school,
- increasing the coursework and professional development experiences available through TGE.

For nearly 20 years, the Graduate School has offered a program to increase the English proficiency for international GTAs. The personnel and operational costs have been borne by the Graduate School and the SCH have been credited to the English Department. The program was offered to reduce the costs of improving speaking and writing abilities of incoming international students and to fill a gap in training international GTAs. I have questioned whether the Graduate School should be responsible for offering this service in the future. As in other areas, the Graduate School should be the responsible to setting standards and quality control with respect to GTAs for whom English is not the native language, but should not be implementing the program. Therefore, it is my intention to eliminate the international teaching assistant training program as currently housed in the Graduate School and find alternatives to ensure quality control in this area.

For many years, the Graduate School has provided direct payments to programs operating in the National Capital Region, plus direct salary support to the library, in order to support their operations. These payments are based on legacy amounts as opposed to quantitative or qualitative metrics, and thus seem incompatible with the new PIBB model for resource allocation. Therefore, these payments will be carefully evaluated and likely redirected to support broader university-level goals in the future.

Metrics: FTE reallocations, SCH generated and return on investment