



LEHIGH UNIVERSITY.



# Enhancing Graduate Education at Lehigh

*Strategic Frontrunner Working Group Report - May 26, 2010*



# Enhancing Graduate Education at Lehigh University

## Executive Summary

The membership of the Enhancing Graduate Education Working Group included the graduate associate deans of all four colleges, five faculty members, the Director of Graduate Student Life, a representative of the University Budget Office, and two graduate students. At the outset, the group was presented with the outcomes of the March 17 SPIG retreat. These outcomes included the working group's charge and guiding principles. The working group then eagerly pursued its task during a sequence of vigorous weekly meetings and through interim work shared over the past two months.

This report from the Working Group starts with a mission statement for Graduate Education at Lehigh University and then presents compelling "Value Propositions" that make graduate study at Lehigh distinctive both now and in the future. The core of the report is a set of recommendations for high-priority, short and longer term actions that would significantly strengthen graduate education at the University. These high priority recommendations, arranged into five classification areas, are summarized as follows:

### A. Recruiting, Admissions, and Enrollment Management:

#### *Short Term:*

**Graduate programs data system:** A more useful and efficient information database system for graduate programs across the campus needs to be developed and implemented.

**Graduate application:** An attractive and user-friendly electronic student application system fully supported by LTS needs to be developed and implemented for all graduate programs.

**Graduate-application evaluation and admissions processing:** A paperless and user-friendly application processing and evaluation system fully supported by LTS needs to be developed and implemented for all of our graduate programs.

#### *Longer Term:*

**Funding for graduate students:** Graduate programs are underfunded. Fund more teaching assistantships and fellowships and provide additional scholarship support. Provide funding for competitive offers with 12-month salaries, multi-year commitments, and family friendly benefits.

### B. Student Life

#### *Short Term:*

**Plan for an enhanced graduate student life program:** A plan should be developed for a world-class, graduate student life program that will enable its future realization.

**Improve funding for the graduate student life office:** The graduate student life office should be funded to reflect its current activities and responsibilities. Eliminate the need for periodic, regular, additional support from the four colleges.

**Graduate student initiatives:** Develop a process for developing initiatives and programs based on ideas that originate from graduate students. The Graduate Student Senate has ideas worthy of pursuing.

#### *Longer Term:*

**Student housing:** Acquire or develop graduate housing on the Bethlehem South Side.

**Student life program:** Build a graduate-student life program modeled on best practices in the nation.

### C. Program Quality Assurance:

#### **Short Term:**

**Improve graduate academic advising:** Uniform high quality advising based on clear guidelines and procedures should be a campus-wide reality.

**Graduate program assessment:** Assure the quality of all graduate programs through systematic assessment. While processes and metrics will likely differ across disciplines and colleges, all graduate programs should be periodically assessed in a meaningful fashion to insure quality and to identify strategies for improvement.

**Initiate steps toward a future leadership and professional development program:** A campus-wide leadership and professional development program is proposed as an important and distinctive value proposition that Lehigh could provide as an enhancement to all graduate student experiences. Plans should be developed for building such a program.

#### **Longer Term:**

**Implement a distinctive leadership and professional development program:** Launch and support a leadership and professional development program integrated across all graduate programs on the campus.

### D. Culture and Visibility Enhancement

#### **Short Term:**

**Enhanced visibility:** Emphasize the importance and value of graduate students at Lehigh by increasing visibility. Our graduate programs and graduate students are not marketed sufficiently using avenues such as the University website.

#### **Longer Term:**

**Provide the GRC with a more strategic mission:** Increase role of GRC in formulation of policies that enhance graduate education and in the design of implementation approaches for these policies.

### E. Facilities and Resources

#### **Short Term:**

No recommendations were considered appropriate as short-term initiatives.

#### **Longer Term:**

**Research support:** Provide support for a world-class research enterprise to help incubate new projects, bridge-fund existing projects, and to support disciplines with access to limited external support.

**Facilities:** World-class research facilities are critical to the success of any graduate education endeavor.

In addition to these high-priority recommendations, the Working Group identified four activities whose centralization would improve graduate education. These are included in the report along with a list of additional ideas that are potentially beneficial but that have lower priority at the present time. Finally, the report proposes strategies for moving graduate education at Lehigh University toward the Working Group's vision of a stronger and improved graduate program.



# Enhancing Graduate Studies at Lehigh University

Working Group Report

May 26, 2010

## Introduction

The membership of the Enhancing Graduate Education Working Group included the graduate associate deans of all four colleges, five faculty members, the Director of Graduate Student Life, a representative of the University Budget Office, and two graduate students.

### *Enhancing Graduate Education Working Group:*

John Coulter, Mechanical Engineering and Mechanics, RCEAS, Co-Chair

Michael Stavola, Physics, CAS, Co-Chair

Kate Arrington, Psychology, CAS

Adafo Austin, Graduate Student, CoE

Ward Cates, Education and Human Services, Teaching, Learning and Technology, CoE

Lynn Columba-Piervallo, Education and Human Services, Teaching, Learning and Technology, CoE

Volkmar Dierolf, Physics, CAS

Markus Gnerlich, Graduate Student, GSS President, RCEAS

Kathleen Hutnik, Graduate Student Life

Warren Loller, Budget Office

Heibatollah Sami, Accounting, CBE

Jennifer Swann, Biological Sciences, CAS

Andrew Ward, Management, CBE, (replacing M. Saffer)

Our work benefited greatly from the participation of the graduate coordinators of the four colleges:

Mary Gulick, College of Business and Economics

MaryAnn Haller, College of Arts and Sciences

Donna Johnson, College of Education

Brianne Lisk, P.C. Rossin College of Engineering and Applied Science

At the outset, the group was presented with the outcomes of the March 17, 2010 Strategic Plan Implementation Group retreat. These outcomes included the working group's charge and guiding principles.

***Working group charge:***

- Define the demographics of our graduate student population on multiple dimensions.
- Identify distinctive value propositions associated with a Lehigh graduate education experience.
- Identify needs to enable Lehigh to effectively recruit, retain, fully prepare, place, and maintain lifelong connections with graduate students.
- Identify core competencies for graduate programs and related resource implications.
- Identify processes and procedures for quality control of graduate programs.
- Identify what infrastructure at what levels seems most appropriate to support graduate education.

***Guiding principles:***

- Link to the University strategic plan and include cross-disciplinary engagement.
- Must have needed resources to successfully implement.
- By all reasonable standards, we should seek a diverse student population that reflects the diversity of the U.S. population in the relevant fields of study.
- Data-based assessment with student success and satisfaction included.
- Provide high quality programs that provide an environment to maximize creative energy (work/life balance)
- Core competencies must include soft skills development (leadership, prof. development, non-academic support)
- All proposals for enhancement must be sustainable.

***Working Group Process:***

The working group pursued its task during a series of vigorous weekly meetings of the entire group, with significant interim work shared by the group between meetings. Nearly all meetings were fully attended and energetic and very positive contributions were made by all members of the group. The anticipated outline of the final report was developed early on, and used as a compass to keep work focused throughout the two month study period. As a result much was accomplished, but this is obviously only the start of a long term graduate education enhancement process at Lehigh.

## 1. Graduate Studies at Lehigh University: Mission Statement

*Graduate study programs at Lehigh University shall provide a personally and intellectually enriching environment for the development of leaders in a broad range of fields who will contribute significantly to the interdisciplinary and diverse global community.*

## 2. Distinctive Lehigh Graduate Studies Value Proposition

The working group addressed the value proposition issue by developing two lists. The first list contains important areas of existing Lehigh graduate program strength, while the second list identifies critical areas that we need to strengthen to realize the desired value proposition.

### **Areas of Existing Lehigh Graduate Programs Strength:**

- World-renowned scholarship at a university that values teaching on an equal footing.
- Significant personal interaction with faculty: Size conducive to personal mentoring.
- A focus on building strong research niches that can cross departments and colleges
- Collegial and truly interdisciplinary campus environment.
- Connections to and placement at post-graduation employers.
- Connection to a broad-based and successful graduate alumni group.
- Entrepreneurial opportunities: Highly successful entrepreneurs back on campus.
- Reasonable cost, safe living environment in a moderately sized community (the Lehigh Valley) near major northeastern U.S. metropolitan cities (New York, Philadelphia, Boston, Washington D.C.)

### **Areas that Need to be Strengthened to Enhance our Value Proposition:**

- Individual student program flexibility along with low barriers between academic programs.
- Supportive environment focused on career growth
- Vibrant and high quality graduate student life program.
- Leadership and professional development program integrated across all graduate programs on the campus.
- Diverse graduate population that includes members from traditionally underrepresented populations

## 3. Graduate Student Population

### **Current Graduate Student Population:**

At the present time (Spring of 2010), there are 2100 students enrolled in Lehigh graduate programs. A detailed breakdown of this population is presented as an appendix to this report.

The total number of students listed in the appendix is slightly larger than 2100 because some of the students are enrolled in cross-college programs. Some key statistics associated with our current graduate student enrollment follow:

- Total current graduate student population: 2100
  - CAS: 466
  - CBE: 437
  - COE: 618
  - RCEAS: 579
- Full-Time: 984, Part-Time 1,116
- Doctoral: 685, Masters: 1,272, Undeclared: 143
- Female: 959, Male: 1,141
- Domestic: 1,593
  - All States represented with majority from PA.
- International: 507
  - 50 Countries represented with majority from China, Turkey, India, Taiwan, Thailand, and Korea
- Ethnicity of domestic students:
  - Minorities: 168
  - White/Non-Hispanic: 1,188
  - Unknown: 236

### **Projected Graduate Student Population in 2020:**

As part of the effort the Working Group did attempt to project the Lehigh graduate student population ten years from now. This was accomplished by assuming a marginal increase in faculty size and an enhanced university-wide emphasis on research and graduate programs. The result was a projected future graduate student population of over 3000. A detailed breakdown of this projection is presented in the Appendix. In addition, some key points associated with this analysis follow:

- We will still need to offer both full-time and part-time programs into the future.
- We anticipate a balance of male and female graduate students overall, with an improved balance in specific programs.
- We anticipate an increase in the number and diversity of international graduate students attending Lehigh.
- We anticipate an increase in the diversity of domestic graduate students attending Lehigh.

### **Diversity Goals:**

One of Lehigh's goals in enhancing graduate education must be to diversify its graduate student population by increasing the percentage of students from underrepresented groups. An attainable goal might be to increase the representation of such students to the level to which they are represented nationally among graduates with degrees appropriate for admission. For

example, in 2007 African-Americans made up 7% of the population graduating with a bachelor’s degree in biological sciences. We could work toward this percentage of African-Americans in graduate programs in the biological sciences. The representational goals should be specific to each discipline and should be guided by benchmarking and data on the size of the pool of students from underrepresented groups who are qualified to pursue graduate study.

Lehigh should also consider whether to assume a leadership position in expanding the representation of underrepresented groups in all programs or perhaps in a select group of programs. This has the potential to add to our value proposition, to raise our national and international profile, to attract external funding, and to increase the extent to which Lehigh might be viewed as a strong source of future doctoral students (from our master’s graduates) and future leaders in the field (from our doctoral graduates). Such an aggressive approach would be a *university*-level initiative and would require greater support than a single department or college could provide.

#### 4. High Priority Initiatives and Recommendations

In the following two sections we lay out a series of high priority initiatives and recommendations for the short and longer term that would lead to the significant enhancement of graduate studies at Lehigh University. These are grouped into the following categories:

- **Recruiting, Admissions, and Enrollment Management**
- **Student Life**
- **Program Quality Assurance**
- **Culture and Visibility Enhancement**
- **Facilities and Resources**

At the end of each recommendation is a rating that is a categorization of the recommendation according to where it falls on the following Knowledge/Resources continuum:

Code	Knowledge Status	Resource Status
1	Know how to do now.	Need no new resources.
2	Can learn how to do.	Need no new resources.
3	Know how to do now.	Resources would need to be reallocated.
4	Can learn how to do.	Resources would need to be reallocated.
5	Know how to do now.	Requires substantial new resources.
6	Can learn how to do.	Requires substantial new resources.



## 4.1 Short-term High Priority Recommendations:

### Recruiting, Admissions, and Enrollment Management

#### 1. Graduate programs data system: (K-R code: 3)

Develop a more powerful information database system for graduate programs at Lehigh. Strategic planning and program reporting and evaluation depend on the ability to get reliable data quickly and easily. The systems to do this do not exist right now. Lehigh should implement processes to collect more and better data and to make data easier to retrieve.

The system to be developed should also make data related to diversity efforts, outcomes and opportunities accessible: We should be able to obtain information about the diversity of the grad population at Lehigh and about the effect of actions we take to enhance diversity. These data could prove useful in supporting grant proposals.

#### 2. Graduate applications: (K-R code: 3)

Improve the grad application process: Grad applications should be (1) online, (2) easy to use, (3) fully supported by LTS, (4) able to reduce the paperwork and work flow process for faculty and staff, and (5) designed to help produce data about inquiries, admissions and declines that will help support strategic planning.

#### 3. Graduate application evaluation and admissions processing: (K-R code: 3)

Improve the graduate application review and evaluation process. This process should be supported by an electronic database and workflow system that minimizes paperwork and enables efficient and effective applicant evaluation. The system to be developed should be sufficiently uniform across the campus to support interdisciplinary graduate programs.

### Graduate Student Life

#### 4. Plan for an enhanced graduate student life program: (K-R code: 1)

Develop a plan for creating a world-class graduate student life program modeled after best practices in the nation (see Boston College, Virginia Tech, University of Pennsylvania, Yale). While it may take a few years to implement such a plan, having the plan now would allow us to begin to budget for its realization and allow us to decide which things to implement first.

#### 5. Improve funding for the graduate student life office: (K-R code 3)

Provide the Graduate Student Life Office with a budget that reflects its current responsibilities. Eliminate the present practice of requiring the director to ask the four deans to support key activities that happen every year but that are not in the office's budget.

**6. Graduate student initiatives:** (K-R code 2)

Develop a strategy for developing good student ideas into university-level programs. The Graduate Student Senate is interested in enhancing the graduate experience beyond social activities and is focused on enhancing student life and the visibility of graduate education at Lehigh. Ongoing GSS projects are addressing needs not met by other university allocations of resources (for instance: travel grants, graduate research review, student center activities).

## **Program Quality Assurance**

**7. Graduate advising:** (K-R code 1)

Improve the quality of academic advising across departments and colleges. Written and uniform university guidelines and procedures should be available online. Professional development opportunities could be offered to faculty on best practices in advising. Consider creating a *Best Practices in Advising* document that could be provided to every faculty member and incorporated into new faculty orientation.

**8. Graduate Program Assessment:** (K-R code 1)

Assure the quality of existing programs through systematic assessment: While the process and metrics for assessment of existing programs will likely differ across disciplines, departments and colleges, every program should be assessed on a periodic basis. Such assessment should address strategic planning for the future. Program assessments should advance the interests of the program, college and university.

**9. Leadership and professional development program:** (K-R code 3)

Develop a plan for a distinctive leadership and professional development program. Examining the program at Michigan State as a model would be a possible starting point. A program could focus on issues such as project management, personal time management, leadership skills, work/life balances, resource/timeline management, teamwork and group dynamics, cross-cultural issues, and communication skills.

## **Culture and Visibility Enhancement**

**10. Enhanced visibility:** (K-R code 3)

Emphasize the importance and value of graduate students through higher visibility on the university website, in publications, and through awards and recognition. This would make it possible for the larger Lehigh community, parents of undergraduates, and potential undergraduate and graduate students to see that graduate education is an integral part of Lehigh.

## Facilities and Resources

All high priority recommendations related to facilities and resources are proposed as longer term initiatives.

### 4.2 Longer Term High Priority Recommendations:

#### Recruiting, Admissions, and Enrollment Management

##### 1. Funding for graduate students: (K-R code: 5)

Fund more teaching assistantships and fellowships and provide additional scholarship support: Graduate programs are underfunded, in some cases woefully so. Several programs are limited not by faculty size, but rather by student support. Most programs could grow by 20%, but some could grow by 200%, if support were available.

The funding that is provided should allow graduate programs to make competitive offers. Determine these amounts by benchmarking against aspirational peers to include such things as 12-month salaries, multi-year commitments, and family-friendly benefits packages.

#### Graduate Student Life

##### 2. Student housing: (K-R code 5)

Acquire and/or develop additional attractive and affordable graduate housing options located on the South Side, near campus, thus also advancing our South Bethlehem initiative. The Packer House has been extremely successful as a pilot initiative and might be used as a model for additional graduate housing.

#### Program Quality Assurance

##### 3. Implement a distinctive leadership and professional development program: (K-R code 4)

Create and support a leadership and professional development program integrated across all graduate programs on the campus.

#### Culture and Visibility Enhancement

##### 4. Provide the GRC with a more strategic mission: (K-R code 2)

The GRC is the natural committee to help formulate policies that enhance graduate education and to identify and help design implementation approaches for many of the recommendations in this report. Further, this group could serve as an advisory panel for senior leadership. The GRC currently spends an inordinate amount of its time handling course and curriculum issues.

## **Facilities and Resources**

### **5. Increase research support: (K-R code 5)**

Create a real revenue stream for the Vice President for Research and Grad Studies so that he has money to work with to help incubate new projects, bridge-fund existing projects and support disciplines areas in which it is difficult to land external funding to support innovative research.

### **6. Research facilities and resources: (K-R code 5)**

Improve the quality of our research facilities: While we considered detailed suggestions for research facility enhancements beyond the scope of our working group, world-class research facilities and resources (physical facilities, access to electronic databases, journals, etc) are critical to the success of any graduate education endeavor.

## **5. Opportunities for Centralization**

The enhancement of some aspects of graduate studies at Lehigh might be best achieved through the centralization of certain functions or activities on the campus. This section presents four such recommendations for centralization.

### **1. Airport pickup welcoming program:**

Develop a centralized airport-pickup/welcoming program for international students and even domestic students from distant states.

### **2. Diversity focused recruiting:**

Centralize recruitment and retention activities focused on diversity and appropriate internationalization of the graduate student body. A good model for this might be what Leon Washington currently does in soliciting and supporting minority students in undergraduate admissions.

### **3. Alumni network:**

Create a centralized Graduate Student Alumni Network database.

### **4. Graduate student career services:**

Develop centralized high quality career services for graduate student placement. This is of particular importance to graduates of professional masters programs.

## 6. Additional Graduate Education Enhancement Suggestions:

During the deliberations of the Graduate Studies Front Runner Working Group, a number of suggestions in addition to those presented above as highest priorities were discussed. These additional items are presented here.

### **Recruiting, Admissions, and Enrollment Management**

**Modern recruiting strategies:** Improve departments' and colleges' awareness of latest strategies for recruiting. Purchase e-mail lists of target populations from GRE-like organizations. Utilize social media outlets (like Facebook) to advertise.

**Diversity growth scholarship:** Consider creating a competitive "Diversity Growth" special graduate scholarship/GA position which would be awarded to the program/department that: (1) Had a clear strategic plan to increase diversity in its graduate program; (2) Can document formal activities designed to increase grad diversity; and (3) Had the largest increase in grad student diversity over the past year of any program/department at Lehigh. If this scholarship/GA position produces results, consider adding a second such scholarship/GA position so that the top two programs/departments could be rewarded.

**Target of opportunity funds:** Set aside funding for "target-of-opportunity" recruiting for under-represented populations.

**Diversity recruiting tools:** Enhance the diversity of our graduate student body through a university-wide, centrally located initiative with tools, resources, and non-financial support. Examples of tools might include databases that provide names of potential students or that provide information about local resources available to minority students. Resources might include scholarships and other forms of financial support. This would be in addition to other types of financial support available for all students. Further, we need centrally located support for faculty in helping them pursue external funding for minorities.

**Centralized recruiting resources:** Graduate programs would like to increase national and international draw. The university should consider ways to centralize marketing and recruitment efforts to take best advantage of tools, resources, and support. As is, these efforts are uneven across the university and smaller programs and departments may have too few people and resources to do what is needed. Specific marketing initiatives should be targeted towards increasing diversity in the graduate student population.

**Summer research programs:** Increase the quality and number of summer research opportunities for undergraduates at Lehigh, with an emphasis on creating opportunities that

support diversity. This is a practice that is known to be effective in attracting these students to graduate school.

**K-12 outreach:** Establish a better connection between Lehigh graduate programs/graduate students and K-12 outreach activities across the campus. Henry Odi's office may be able to help here, particularly in landing external funding.

**Application fee revenues:** Create a direct relationship between application fee revenues (as well as other graduate student-related income) and the funding of services and expenditures for graduate education.

## Graduate Student Life

**Benchmarking:** Complete a benchmarking study of graduate student life programs nationwide.

**More visible Graduate Student Senate:** Find ways to enhance the visibility and importance of the Graduate Student Senate on the campus. One mechanism would be to expand the funding of the GSS to enable them to better support programs such as the graduate student travel grants program.

**Student-life opportunities:** Assure that graduate students have access to campus resources in every way equal to undergraduates. Rethink the financial model that allocates some services and facilities as "undergraduate" because they are funded through fees assessed on undergrads.

**Community building:** Focus on community-building among graduate students and social options to combat isolation. Identify creative ways to keep students engaged from all programs across the campus community.

**Multicultural community building:** Formulate and implement graduate student life initiatives specifically directed towards multicultural and diversity issues of importance to minority graduate students.

**Graduate offices and common spaces:** Provide "home" spaces for graduate students. Such spaces might be shared (as RCEAS has done with a grad commons area with lockers) or more personalized (as in library carrels/rooms and individual or shared offices). Having such graduate spaces may help to build a sense of community among graduate students.

**Cross-cultural activities:** Create and support a program that will incentivize cross-cultural activities planned and carried out by graduate student groups and associations. Create activities that help to create a sense of graduate student identity that is broader than the department or discipline in which they are studying.

Although it is important to make students feel welcome, currently students are encouraged to construct cultural-themed clubs, student associations based on nationality, etc. This has the undesirable effect of group self-isolation, which should be discouraged so that more students identify with Lehigh University, rather than their home town / home country / native language.

**Family-friendly resources:** Enhance the support system for graduate students: Make available child care, spousal support and health and wellness resources that grow with the increasing graduate population.

**Support for new student populations:** Offer enhanced student support services appropriate for new student populations (for example, under-represented groups).

## **Program Quality Assurance**

**Diversity enhancement:** Incorporate diversity enhancement in graduate programs as a required component of strategic plans and assessment processes across the campus.

**Standard for distance and online courses:** Formulate a clear set of standards for online courses at Lehigh. What are the minimum characteristics such courses must exhibit? How will we assure such courses meet these standards? Collect best practices in distance education and share across colleges. Consider what role the Office of Distance Education should play in delivering online courses. Rethink the present positioning of distance education as a unit of LTS, as well as the current distance education funding and support models.

**Alumni feedback:** Track graduates and use their feedback to enhance our programs. All programs should track their graduates and follow-up periodically with them. This can help us to identify strengths and weaknesses of our programs and should enhance alumni relations if done properly.

**Improve advising options:** Create within colleges a source for “second opinion” academic advising. In this way, students uncertain about their programs can confirm they are receiving proper guidance.

**Student-led mentoring program:** Develop and implement a mentoring program that provides opportunities for advanced students to mentor newer students in course work, research, and academic and student life issues.

**New graduate programs:** Think strategically about the development of new programs: What should our criteria be for the addition of new graduate programs? As a university, Lehigh should make decisions about how many graduate programs we should have and what makes a graduate program viable. Decisions need to be strategic in determining what a graduate program does for Lehigh in relation to what it costs.

**Graduate career services support:** Create an appropriately staffed Career Services unit to fully support the distinctive needs of graduate students seeking employment.

## **Culture and Visibility Enhancement**

**Communicate best practices:** Identify and share best practices: While there are differences across programs, departments, and colleges in terms of the value proposition for Lehigh's graduate education, we should identify those things which are common and share best practices across these groups.

**Interdisciplinary courses:** Develop more interdisciplinary course offerings.

**Lower barriers between graduate programs:** Can we formulate strategies to lower barriers between departments and colleges in order to add flexibility to the programs we offer? For example, could we make it easier for a student to earn an MS in one college and then a PhD in another? To make joint programs a Lehigh trademark, we will need to work on tuition accounting across colleges.

## **Facilities and Resources**

**Modernize instructional facilities:** Assure that instructional facilities accommodate a wider range of teaching/learning approaches than lecture: Remodel existing classrooms or create new classroom facilities that are conducive to the flexible needs of modern education. The traditional lecture-type layout of a classroom does not always apply.

## **7. Moving Toward the Vision: Strategies for Ongoing Improvement**

It should be recognized that the strategic planning process for enhancing graduate education requires much more than what this workgroup has been able to do or had time to do. This group has identified many questions and issues worthy of subsequent discussion and research.

The graduate associate dean in each college appears to be the natural person to play a lead role in advancing this initiative. With that in mind a follow-up effort involving all of the



graduate associate deans is recommended. While these individuals could lead the charge, in the end enhancing graduate education should be about involving as many faculty members as possible in the discussion. Communication with the faculty will be a key component if this initiative is to succeed. Faculty need to feel well informed and that they have a voice in any changes.

Lastly, the issue of graduate education needs to be appropriately represented by a dedicated champion at the University leadership level. The detailed mechanism as to how this can be best achieved remains to be identified.

In closing, the present report is respectfully submitted as a first step along the path to significant graduate education enhancement at Lehigh University. The members of the Working Group greatly appreciate the fact that this initiative has been identified as a frontrunner, and very much enjoyed the opportunity to contribute to the effort.

**Current Graduate Student Population at a Glance**

	<i>Degree-Seeking Students</i>						<i>Non-Degree Students</i>	<i>Totals</i>
	On-Campus					Off-Campus		
	Research-based		Professional			Distance Ed.		
	Full Time	Part Time	Full Time	Part Time				
Day				Evening				
<b>CAS</b>	<b>299</b>	<b>17</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>117</b>	<b>34</b>	<b>473</b>
<i>Male</i>	153	—	2	0	0	54	10	
<i>Female</i>	146	—	4	0	0	63	24	
<i>International</i>	61	0	6	0	0	1	2	
<i>Minority</i>	18	0	0	0	0	2	6	
<b>CBE</b>	<b>18</b>	<b>0</b>	<b>133*</b>	<b>0</b>	<b>187</b>	<b>81</b>	<b>59</b>	<b>345</b>
<i>Male</i>	10	0	74	0	131	56	39	
<i>Female</i>	8	0	59	0	56	25	20	
<i>International</i>	11	0	68	0	28	5	7	
<i>Minority</i>	1	0	4	0	13	15	6	
<b>CoEd</b>	<b>86</b>	<b>130</b>	<b>91</b>	<b>0</b>	<b>381</b>	<b>129</b>	<b>41</b>	<b>858</b>
<i>Male</i>	15	46	19	0	88	58	6	
<i>Female</i>	53	52	65	0	230	65	30	
<i>International</i>	0	22	2	0	37	4	0	
<i>Minority</i>	18	10	5	0	26	2	5	
<b>RCEAS</b>	<b>488</b>	<b>0</b>	<b>57</b>	<b>15</b>	<b>0</b>	<b>87</b>	<b>16</b>	<b>663</b>
<i>Male</i>	358	0	46	11	0	69	15	
<i>Female</i>	130	0	11	4	0	18	1	
<i>International</i>	334	0	12	2	0	0	1	
<i>Minority</i>	14	0	6	3	0	11	2	

**2339**

\*Includes 40 FT MBA students who attend evening classes

**Projected Graduate Student Population - 2020**

	<i>Degree-Seeking Students</i>						<i>Non-Degree Students</i>	<i>Totals</i>
	On-Campus					Off-Campus		
	Research-based		Professional			Distance Ed.		
	Full Time	Part Time	Full Time	Part Time				
Day				Evening				
<b>CAS</b>	<b>450</b>	<b>20</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>120</b>	<b>50</b>	<b>650</b>
<i>Male</i>	225	—	—	0	0	60	25	
<i>Female</i>	225	—	—	0	0	60	25	
<i>International</i>	—	—	—	—	—	—	—	
<i>Minority</i>	—	—	—	—	—	—	—	
<b>CBE</b>	<b>40</b>	<b>0</b>	<b>160</b>	<b>0</b>	<b>220</b>	<b>100</b>	<b>60</b>	<b>580</b>
<i>Male</i>	22	0	88	0	121	55	33	
<i>Female</i>	18	0	72	0	99	45	27	
<i>International</i>	16	0	53	0	33	5	7	
<i>Minority</i>	3	0	11	0	19	15	6	
<b>CoEd</b>	<b>92</b>	<b>143</b>	<b>98</b>	<b>0</b>	<b>457</b>	<b>142</b>	<b>41</b>	<b>973</b>
<i>Male</i>	16	51	20	0	106	64	6	
<i>Female</i>	57	57	70	0	276	72	30	
<i>International</i>	0	24	2	0	44	4	0	
<i>Minority</i>	19	11	5	0	31	2	5	
<b>RCEAS</b>	<b>600</b>	<b>0</b>	<b>250</b>	<b>30</b>	<b>0</b>	<b>200</b>	<b>30</b>	<b>1110</b>
<i>Male</i>	420	0	175	21	0	140	21	
<i>Female</i>	180	0	75	9	0	60	9	
<i>International</i>	390	0	50	4	0	0	—	
<i>Minority</i>	60	0	38	6	0	30	5	

**3313**