



Vision for Graduate Education and Framework for Graduate Program Review¹

Report and recommendations of the Enhancing Graduate Education Frontrunner Group²
April 2012

Background

1. Lehigh is a research-intensive university with a tradition of placing our students at the center of our attention. The university strategic plan identifies enhancing graduate education as a priority. As we transitioned from development of the strategic plan to its implementation, Enhancing Graduate Education was identified as one of Lehigh's Frontrunner initiatives.
2. The May 2010 report of the Enhancing Graduate Education (EGE) working group considered the imperatives for graduate education from the student's perspective. Indeed, a student-centered perspective on what should drive growth and continuous improvement of our graduate programs can provide compelling reasons for students to choose Lehigh for their graduate education, as was articulated in that May report, and can guide us in providing graduate programs that develop people with the potential for extraordinary success.
3. With the intent that our aspirations for our students guide us in growth, continuous improvement and support of graduate programs across the university, the EGE working group recommends, and seeks endorsement of
 - a vision for graduate education at Lehigh, written in terms of our aspirations for our students. The vision represents our abiding commitment to developing the full professional potential in each graduate student.
 - a set of enabling competencies, to be acquired and demonstrated by our graduate students so that our aspirations for them may be fulfilled. It is our intent that each graduate program determines how these competencies should be defined, developed and assessed according to the nature of the field of study and the intent of the individual program.
 - a general framework for review of graduate programs. The framework emphasizes self-assessment by each program as the central and most productive element of program review and local ownership as critical to success. The framework incorporates the vision and competencies as a statement of the university's overarching goals for graduate education.

¹ **This document was accepted by the GRC upon unanimous vote at their meeting on April 17, 2012**

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Our Vision for Graduate Education

Having considered the vision laid out in our strategic plan and further developed in the May 2010 report, and having benefited from input from groups on campus,³ we seek endorsement of the following vision for Graduate Education at Lehigh, expressed in terms of our aspirations for our students:

We aspire for graduates of our doctoral, master's and certificate programs to achieve leadership and personal accomplishment in their professional pursuits. They will attain both depth and breadth of knowledge needed to advance the theory and practice of their chosen fields and will be adept at applying that knowledge. They will be committed to lifelong learning and to mentoring those who succeed them. They will be creative, embrace complexity, and productively challenge accepted paradigms and theories. They will be outstanding communicators and collaborators, able to build, work with, and lead diverse teams. Our graduates will be champions of constructive and ethical action who proceed with intention and integrity.

Competencies To Be Developed through Graduate Education

Having considered the breadth of capabilities necessary for graduates to succeed as described in the vision, we identify the following five areas of competency that each graduate student should acquire. The vision, and the competencies that enable graduates to fulfill the vision, should serve to guide each graduate program as it determines, specifically, what it should be doing with, and requiring of, its students.

Knowledge	Application	Context	Communication	Leadership
Knowledge, methods and modes of thought and reasoning in the field.	Use of knowledge and methods of the field to understand and solve problems; fundamental professional responsibilities.	Development of the field over time; relationship with related fields and those with which it is applied.	Communication of ideas with peers and others	Recognizing constructive roles of self and others; assembling, leading and working in teams; mentoring; ethical awareness and action.

We recognize that how graduate programs implement the vision and address the competencies is a dynamic and creative process and takes advantage of program faculties' expertise in their

³ To date, the department chairs, deans and the Strategic Plan Implementation Group have provided input on our proposed vision, the list of supporting competencies and the framework for program review. This document has benefited from considerable input from GRC. Draft vision and competencies were also shared with the Executive Committee of the Board of Trustees.

discipline. We provide attachment 1 to this document to provide some examples of how each competency might be defined in general, non-program-specific terms. Each program should define the competencies, and its specific goals for its students, in terms that are meaningful and relate to how they would be demonstrated in that program's field of study, in accordance with the intent of the program.

As is naturally the case when guided by a vision for future success, a program's goals may include elements that are difficult to assess at the time of graduation. There is some natural tension between the need to identify specific learning objectives and degree requirements, and the fact that ultimate success is dependent upon the achievements of the people who carry the Lehigh label into their careers. Each program should use available evidence and literature, and its best judgment, in setting its specific learning objectives and degree requirements.⁴

Realizing the Vision: Benefits and Key Components of Program Review

Having set goals for its students in light of the university's vision and goals, and having determined to the best of its ability how those goals are best supported by what it does with, and expect of, its students, a graduate program should strive to discover how well its graduates are meeting its goals and use that information to drive continuous improvement. One important element in achieving this purpose is periodic program review. Having all graduate programs complete such review offers four clear benefits:

1. Continuous improvement: Reviews can guide design, development and continuous improvement of graduate programs. While programs should be constantly attentive to university and program-specific goals, periodic review provides a critical opportunity for data collection, assessment, reflection and formulation of plans.
2. Exchange of best practices: Shared reviews provide means for exchanging best practices among programs.
3. Enhanced accreditation reviews: Reviews help us meet the expectations of accreditation bodies, both within colleges and across the university, *in ways that reflect our values and priorities*. For example, at the university level, Middle States requires we have broadly-defined university-level competencies or goals for graduate students and that programs demonstrate the inter-relationships of university, college, program and course-level goals. Approaching the task in the manner proposed here can satisfy Middle States expectations.
4. Identifying needs: Review of programs across the university can help identify common needs and guide best use of university resources.

While colleges, in consultation with their graduate programs, should establish review processes for those programs, we suggest that all such processes include *local ownership and responsibility* and *an expectation of high quality*. The most constructive review process is characterized by local ownership, with self-study and continuous improvement in the hands of the program faculty at its center. In an effort to support the evolution of such review processes, we propose a general framework for program review and suggest roles for established bodies within existing structures. Our intent is that the colleges and the individual programs have the freedom to determine the most effective approaches.

⁴ In a parallel effort, the EGE group's graduate enrollment management project will support tracking of students after graduation.

To fulfill our expectation of high quality everywhere and a distinctive character for Lehigh graduate education, we must encourage flexibility, creativity and thoughtfulness in locally owned processes for program review. We should, however, expect every program to attend diligently to the success of its graduates and to its alignment with university goals. All program reviews should lead to continuous improvement in quality, as defined by what we value in graduate education.

Framework for Program Review: Roles and Responsibilities

Our recommendations for program review are best explained in terms of the roles and responsibilities of the stakeholders in the process.

Role of the Program: Articulation of Program Goals

As part of its framework for program self-study, a program should identify its individual goals and their relationship to university-wide competencies. The colleges may provide specific processes for doing so. Typically, a program will

1. interpret the university-wide competencies in the context of that program's field of study and the likely career needs of students in the program and then set its goals for development of student competency in each area.
2. identify its specific entry requirements, learning objectives, curriculum, degree requirements, etc., that support achievement of its goals and determine how it assesses student progress up to the time of graduation. This is something all programs presently do, whether tacitly or through formal processes defined by their colleges.
3. describe how the program will assess the degree to which its goals are being achieved after graduation.

Role of the Program: Periodic Program Review

1. Program review should be conducted at regular and appropriate intervals, on a schedule determined by the college, in concert with GRC, taking into account factors such as allocation of administrative support and alignment with accrediting agency cycles. For graduate programs accredited by external agencies, program reviews should seek synergy across review processes and avoid unnecessary duplication.
2. The program review should include diligent and frank self-assessment of the extent to which a graduate program is meeting its goals, attending as much as possible to evidence of competency leading to success after graduation.
3. The review should support formulation of action plans for continuous improvement, included how to address identified deficiencies. Self-assessment, augmented by any input from accreditation bodies or external advisors, should determine the need for revision of a program's goals and/or the means through which its goals are met.
4. In formulating action plans, the program should consider how they align with and complement college and university strategic plans.

Role of Colleges in Program Design and Review

1. The college assures that each of its programs completes a diligent and substantive periodic review according to its schedule and provides support for conducting those

reviews. This may include establishing appropriate review processes for use within the college as well as necessary administrative support.

2. In concert with the GRC, colleges establish and maintain the calendar of reviews for their graduate programs.
3. Internally, colleges make use of the results of program reviews to enhance graduate programs and address college strategic needs and priorities.
4. Colleges make available to the GRC reports on the outcomes of graduate program reviews.

Role of Graduate Associate Deans (GADs)

1. GADs monitor the schedule of periodic reviews for graduate programs in their colleges. GADs notify the GRC when changes to that schedule are necessary, providing an explanation for any change.
2. GADs work with deans and graduate programs to determine who should prepare summaries of program reviews and make review presentations to the GRC. In some cases, this presenter may be the GAD.
3. GADs serve as agents for sharing problems, solutions and best practices, within colleges (in accord with college practices) and across colleges.
4. GADs assist colleges, departments and graduate programs in understanding university (GRC) expectations.
5. GADs help the university (GRC) understand college, department and graduate program priorities and needs.

Role of the GRC

Per R&P, GRC has responsibility to “[r]eview the appropriateness and quality of graduate programs and research activities in relation to the educational objectives of the university.”⁵ Because these recommendations are framed specifically in terms of fulfillment of university-wide goals by each graduate program, GRC has a central role. Because the work of each program, with support from its college, needs to set its own objectives and determine how best to meet them, the natural role for GRC is in setting expectations and facilitating exchange of information. GRC can also play a critical role in discerning university-wide needs.

1. The GRC sets expectations for periodic reviews of all Lehigh graduate programs, reviews that are diligent, creative and constructive.
2. In consultation with the colleges, the GRC derives a calendar for all periodic program reviews.
3. The GRC reviews summaries of the periodic program reviews.
4. The GRC facilitates sharing best practices among graduate programs, both within and across departments and colleges.
5. Based on the findings of multiple program reviews, the GRC provides guidance to the colleges, programs and university administration, as appropriate, on potential ways to

⁵ R&P 1.2.2.3, item 2

enhance graduate education at Lehigh. This may include articulation of common graduate program needs, prioritization among multiple priorities, and identification of desirable policies and practices, and communication of these to appropriate administrative units.

Attachment 1. Proposed graduate student competencies, with non-field-specific examples.

	Knowledge	Application	Context	Communication	Leadership
	Knowledge, methods and modes of thought and reasoning in the field.	Use of knowledge and methods of the field to understand and solve problems; fundamental professional responsibilities.	Development of the field over time; relationship with related fields and those with which it is applied.	Communication of ideas with peers and others	Recognizing constructive roles of self and others; assembling, leading and working in teams; mentoring; ethical awareness and action.
Examples of specific competencies					
Increasing level of development → → → →	<p>Clear mastery of content in the field or the portion of the field appropriate to the degree.</p> <p>Recognize the limitations of current knowledge in the field; the ability to pose original questions that challenge current understanding.</p> <p>Contribute to advancement of knowledge in the field.</p> <p>Contribute to revision of established knowledge or theoretical frameworks.</p>	<p>Apply knowledge per established practice in the field.</p> <p>Recognition of established knowledge or practice applicable to a well-formed problem.</p> <p>Understanding of ethical dimensions of practice and making decisions accordingly</p> <p>Solve complex, unstructured or ill-structured problems; ability to contribute to ongoing evolution and advancement of practice in the field.</p> <p>Recognize ethical implications of decisions and act accordingly</p> <p>Marked creativity in solution of complex, unstructured, or ill-structured problems, contributing to significant advancement of practice in the field.</p>	<p>Awareness of development of the field over time; understanding of relationships with related fields or those along with knowledge in the field is applied.</p> <p>Predict or articulate the trajectory of change in knowledge, practice and dominant methods or frameworks; ability to discern previously unrecognized relationships between the field of study and other fields.</p> <p>Import methods or theoretical frameworks from one field into another.</p>	<p>Sound communications in multiple modalities, as appropriate for professional practice in the field.</p> <p>Communicate content in the field to others at different levels of understanding.</p> <p>Discern others' needs for information and understanding according to their goals and backgrounds and to inform them accordingly.</p> <p>Construct compelling arguments appropriate to the backgrounds and perspectives of a range of audiences.</p>	<p>Work effectively with peers in shared work.</p> <p>Understanding effects of own communication and action on others' thinking, motivation and behavior; taking ethical action accordingly.</p> <p>Work effectively with others of complementary capabilities.</p> <p>Advocate or guide others in ethical decision-making and action; consciousness-raising and ethical advocacy.</p> <p>Recognition of others' potential contributions according to their backgrounds and preparation; active role in development of other people; ability to assemble and lead productive teams.</p>