Integration of Inquiry-Based Learning
Quality Enhancement Plan

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Section 1: Vision

Share your vision of how your proposed topic has the potential to transform an issue related to student learning at the institutional level. Consider your audience of the Mason community members – why should we embrace this topic and how will it enhance student learning at Mason?

Encouraging students to become lifelong learners (including research and global learning) involves increasing opportunities for students to appreciate the benefits of inquiry-based learning as a process towards developing critical thinking, creative, and research-based skills. While past initiatives focused on writing, critical thinking, and technology across the curriculum by promoting and surveying individual classes, this initiative will (also) actively encourage and promote _interdepartmental, inter-college, or town-gown opportunities_ to help students apply these skills with larger more complex issues. By developing a central resource for inquiry-based and application of contemporary topics in the classroom that cuts across typical school-based lines, the long-term vision for this proposal will result in stronger commitment to lifelong learning with benefits to the University members and partners.

This proposal will include a few opportunities under development that are examples of emerging opportunities to implement this proposal.

Section 2: Congruence with Mission and Goals

Demonstrate how your proposed topic is consistent with Mason's mission and 2014 Strategic Plan.

By incorporating teaching methodologies in and outside the classroom focused on inquiry-based learning, this proposal can assure students with tools for access to enhanced learning opportunities and environments (Goal 2). It is hoped that such inquiry will help students use local partnerships (government, industry, other academic) to maintain a positive attitude towards lifelong learning (Goal 4). Among the major topics that would benefit greatest from these tools is our ability to focus on global and community problems related to health, climate change, technology, community and culture, conflict, communication, and creativity (Goal 5).

Section 3: Student Learning Outcomes

Identify at least four _measurable_ student learning outcomes that your proposed topic expects to address. Specifically, if your plan were to be adopted, what would students know and be able to do as a result?

If implemented in a classroom-based setting, based on similar efforts to engage students in inquiry or case-based learning, the following learning outcomes should be expected:

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1. Increased attendance and classroom interaction

2. Increased evidence of awareness of critical thinking skills and research skills

3. Improvement in presentation and communication skills (if students are allowed to write about or present their findings regarding the case)

4. Develop an appreciation for or continued interest in addressing critical issues that are presented in the case.

Assessment may also be made at a college-wide or university-wide level.

1. Increased interest in the pursuit of additional programs, certificates, minors, or majors, including any "make your own major" degrees. This will include the formation of degree-granting curricula that may cross multiple departments or schools.

2. Increased interest in GMU graduate programs or potential collaboration opportunities with other community, regional, or national stakeholders.

3. Increased number of grant proposals or awards that help foster interdisciplinary and/or experiential learning.

4. Increased success in undergraduate, graduate, and faculty fellowships and internships, as measured by increased number of applications and acceptances.

5. Increased number of faculty-mentored programs for undergraduates, graduates, and professional students, with a similar increase in the quality of faculty-student and faculty-faculty mentoring.

6. Increased number of scholarly and non-scholarly presentations and publications, especially including student authors.

7. Greater ability to recruit, retain, and promote academically, demographically, and disciplinary diverse faculty, students, and postdoctoral fellows.

8. Increased usage of library (online or in-person) and University Life resources (as there would be contextual incorporation of these organizations into course syllabi).

The intangible long-term benefits to student learning include evidence that students express an interest to be more engaged in the problems facing the community and develop projects or programs that can raise awareness to these problems or that can help address some of these issues. At Duke University, the Duke Engage program (http://dukeengage.duke.edu/) has helped to fund projects proposed by faculty and invite local speakers or activists to talk about issues and help students better understand how they can make a difference. Many Duke engineering students (Engineering World Health) have gone overseas or to local communities to build prosthetic devices for poor and indigent individuals to enhance their quality of life.

Section 4: Possible Avenues for Implementation

Describe how your proposed QEP topic relates to an issue where there is momentum building on campus or an issue that would be significantly strengthened through added attention and resources. Include your ideas about possible strategies for implementing this topic so that we could obtain meaningful results. Where possible, highlight opportunities to build on current institutional initiatives and resources.

The following proposals may be modified as necessary due to financial or personnel constraints. What is thus described are suggested ways for the concepts above to be implemented throughout the University.

A.   University-wide "resource" seminar classes that are based on major challenges.

A common complaint is that many students are thrust into the college experience without any opportunity to appreciate the complexity of the major problems that may help frame their academic and extra-academic experience. Most incoming students (freshmen and transfer) do not take a UNIV 100-like course that gives them a chance to become a member of a "community" to navigate the great resources GMU offers. Engineering and Science students fail to grasp the importance or relevance of topics outside their own major (such as ethics, communications skills, or politics) and wind up with extremely narrow learning experiences. This is further complicated by the "commuter" nature of the majority of students who attend GMU and thus may feel more alone here. A case-based "introduction to your community" course offers a chance for students not only to know about the diverse majors and programs that are offered at GMU, but offering an inquiry-based set of cases forces students to discover the resources that GMU offers regarding library resources, student life resources, student organizational resources, academic advising resources, and community networking opportunities. This would be an improvement from the UNIV courses offered as many cases would engage students' interests further. Such small-group discussion-based courses can be 1-2 hours in length and should deliberately recruit students from across the University to be represented. Similarly, the required "synthesis courses" and discipline-specific 300-level writing courses (required to graduate) may be reformed.

The HHS 201 class I teach (Introduction to the Health Professions) is one such course that appeals across the University. Regardless of one's personal interest to pursue a health professional career, discussions may focus on the politics of health care system reform, multicultural barriers to quality access, global health, health technology and innovation, the importance of health communication, prospective health and alternative health care, accurate portrayal of disabilities in the media, and so forth. Cases I have developed (available on request) allow for discussion with current practitioners in the area, which further engages students to understand how a team of health care providers can function (or not) to care for one patient. Cases may be developed based on contemporary issues and developing University resources, such as the new Military Students Resource Center, the Multicultural Research and Resource Center, and the Office of Disability Services. In short, the course while administered by CHHS can easily incorporate discussions with students from across the University. Students may also be asked to consider diversity, ethics, conflict resolution, and personal reflection.

Similarly, case-based discussions may be used with environment-oriented studies. Co-curricular activities with Science and Society on Planetary Climate Change may range from looking at ways to market clothes that are ecologically friendly (involving students involved with management, engineering, science, visual-performing arts). Such cases exist or are in development through concerted efforts with the National Science Foundation (which is also looking at societal and community impacts of planetary climate change) and the United Nations Foundation, and one example of the interdisciplinary approach to discussion of planetary climate change is the 2008 annual meeting of the Society for the Advancement of Chicanos and Native Americans in Science (SACNAS). This proposal will encourage additional engagement by other units who normally would not be associated with this issue but may have different and creative ways to do so within their own curricula (for example, How important are these issues to the careers taken by students in Recreation, Health, and Tourism?).

B.   Orientation or extracurricular programming

Case-based discussions may also be used to frame university-wide programming that could be developed outside a specific class or set of classes. This may be a great opportunity to have a monthly meeting of small groups that are formed prior to the first week of classes based on a common "freshman" or "university" book. Such discussions

can thus incorporate Residential Life, especially with the Living Learning Communities, or events organized by multiple student organizations, as long as those communities engage academically, intellectually, and demographically diverse. Tangible outcomes for such discussions may include student-developed "5-minute films," community service projects, or possible student research projects.

C.   University-wide coordination and assessment of Inquiry-Based Learning

The University should provide at minimum a resource to administer and collect data on multidisciplinary case-based and engagement-based learning across the University. This resource should be organized and assessed under the Center for Teaching and Learning with frequent contributions and discussions with teaching faculty, research faculty, students, staff, and administrators to develop opportunities throughout the year for interdisciplinary inquiry-based programming. This office would award small teaching curriculum-based grants similar to those issued for adopting and developing technology into and across the curriculum may be used to help spur inter-collegial inquiry-based cases or learning opportunities that allow students to initiate their own investigation and apply their classroom knowledge. Other personnel-based awards may also be used to help train graduate students and educators in inquiry-based learning, similar to the CTE faculty fellows. At least one such fellow should be designated and awarded at each major educational unit across the institution.

This resource is needed to support individual young or adjunct faculty who wish to teach courses based primarily on cases. Because these classes are designed to be interdisciplinary or span across multiple University academic interests, evaluation of a faculty member who is hired under a single department or college is extremely challenging as many appointment committees may see such coursework as being distracting to one's promotion case. This resource needs to be supported at the Provost and collegiate Dean with content advising determined by a council or committee of undergraduate education administrators or designated teachers from each college or large departments as well as designated advisors from the University Libraries and other University Life units (similar to the Diversity Research Group). Furthermore, this resource requires the development of a community of graduate students, postdoctoral instructors, and junior faculty who are allowed to meet and interact with each other outside the typical department-only socials.