Proposal Deadline November 17, 2008

Notification of Award December 15, 2008

Implementation Semesters Spring '09, Summer '09, Fall '09

Contact

Veronique V. Tran, Ph.D. Director, Office of Undergraduate Discovery Programs <u>discovery@uh.edu</u> 713.743.5099

A. Introduction

In Spring 2008, the University of Houston developed a Quality Enhancement Plan (QEP) as required by the Southern Association of Colleges and Schools (SACS) for reaffirmation of accreditation. The plan was the result of a two-year planning effort involving faculty, staff, and students. The QEP Report, "Discovery-Based Learning: Transforming the Undergraduate Experience through Research," set forth a vision for integrating research and inquiry-based learning in the undergraduate experience at multiple levels, including developing university-wide initiatives, college and department-wide initiatives, building a research-supportive curriculum, and expansion of mentored research. The Research-Supportive Curriculum component of the *Learning through Discovery Initiative* will provide a mechanism to teach research skills to the majority of our undergraduates by the time they graduate.

These QEP grant guidelines provide background information, outline requirements for submission of proposals, and discuss criteria for evaluating requests for funding for fiscal year '09. Subsequent Requests for Proposals will take place annually through 2013. The broad-based Discovery Curriculum Task Force has been involved in the development of these guidelines and will evaluate proposals for funding.

The full QEP Report and these grant guidelines are available online via the of the Discovery website: <u>www.uh.edu/discovery</u>. In addition, resources/tools and best practices have been compiled in the Curriculum Toolbox section of the Faculty & Staff Gateway to assist faculty and staff in their QEP planning activities. It should be emphasized that not all enhancements will require funding to implement. Programs and course instructors are encouraged to review best practices in their discipline as well as the list of resources and best practices and implement changes throughout their undergraduate programs. QEP Curriculum Development proposals should be submitted for those significant enhancements that would require funding to develop and pilot. Proposals involving interdisciplinary and collaborative learning experiences are encouraged.

Research Definition and Student Learning Outcomes

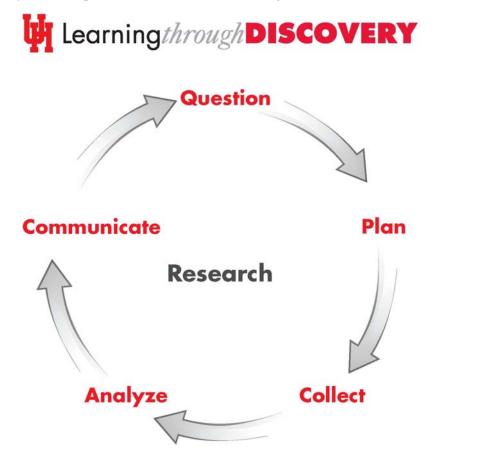
The following definition of research was adopted by the UH QEP Planning Committee to be broadly inclusive of research in all disciplines:

Research is a diligent and systematic inquiry or investigation into a subject in order to discover facts or principles, and increase the sum of knowledge, enhance design, or enrich artistic ability.

The Committee also defined the following QEP Student Learning Outcomes:

- 1. Students will be able to formulate a research question or problem.
- 2. Students will be able to identify basic principles and knowledge related to their research question or problem.
- 3. Students will be able to develop a research plan to address or resolve a specific question or problem.
- 4. Students will be able to collect and interpret data and information in an attempt to resolve the question or problem.
- 5. Students will demonstrate awareness of the responsible conduct of research.
- 6. Students will be able to articulate their research findings through written, performance, and/or oral presentations.

Many of skills specified in QEP Student Learning Outcomes are reflected in the Research Cycle:



B. Purpose

The purpose of the QEP Curriculum Development Grant Program is to support the enhancement of existing undergraduate courses or develop new courses that incorporate inquiry-based pedagogy or research practicum training.¹ Faculty are also encouraged to consult pedagogical best practices in their field. Following is a summary of categories of courses that qualify for funding:

- **Core Course** curricular enhancements at the core course level may involve improvement in one or more of the QEP Student Learning Outcomes. In addition, new interdisciplinary core courses or introductory research courses at the core level for non-majors are encouraged.
- **Courses in Major** at the intermediate level, instructors may incorporate activities that reinforce research-related skills into courses in students' major fields of study. Examples include discipline-specific incorporation of problem-based or case-study assignments, enhancements in information literacy skills, and reinforcement of student mastery of various forms of communication, whether written, oral, visual, digital, or performance.
- Writing in the Disciplines programs may propose developing writing in the disciplines (WID) courses that are inquiry-based and address some of the QEP Student Learning Outcomes in addition to the writing component. Such courses can be designed so that they qualify for the university's WID Core designation. WID Core courses may be restricted to a specific major or open to non-majors.
- **Research Intensive Courses** the research-intensive course designation will be used for advanced courses offering students the opportunity to engage in research projects that will improve their competencies in *all six* of the QEP student learning outcomes. Different pedagogical approaches include: Advanced Research Methods, Project-Based Laboratory, Investigation in the Community, Research Service Learning, Capstone Design and Practicum, Collaborative Industry Projects, Interdisciplinary Projects.²

C. Partnerships with QEP Resource Collaborators & Community Partners

Principal Investigators (PIs) are encouraged to partner with various university learning resources to strengthen development and implementation of their proposed enhancement or approach. Full listings of the types of resources and expertise that are available on posted on the Discovery website – Faculty & Staff gateway: www.uh.edu/discovery. Some examples include partnering with: subject librarians for information literacy training, writing center specialist for writing skills training, instructional designers for technology integration, and assessment specialists for determining applicable student learning outcomes. PI/Co-PIs should involve resource partners in the early stages of the planning process to ensure effective collaborations with workable timelines. Due to limitations on staff time and resources, some prospective partners may not be able to provide the level of support desired in all cases.

Partnerships with the Houston area community and beyond are also encouraged such as: non-profit, small business, community, corporate, etc. Projects involving corporate partners should leverage sponsorship for project implementation with QEP funding for course development.

¹ Examples of the types of activities or courses are further elaborated in Sections 3.4.1-3.4.3 of the QEP Report.

² Table 9 of the QEP Report summarizes the pedagogical approaches that may be applicable for research -intensive courses.

D. Levels of Funding

Funding will be available at three levels:

- Individual Faculty (up to \$5K) support for faculty to enhance existing courses or develop new courses at the core, intermediate or advanced research-intensive levels. Multi-semester courses are encouraged as they allow students to fully develop their projects.
- **Faculty Team** (up to \$10K) support for teams of faculty who collaboratively develop a plan to adopt a research-based pedagogy in several or all sections of a particular course. Faculty may also propose development of interdisciplinary projects which span several linked courses from different departments.
- **College/Department** (up to \$20K) support for departmental or college initiatives that include research-based enhancements in multiple courses from freshman/sophomore through junior/senior levels. This vertical integration could involve introducing a training module or research-based learning model in several courses. College-wide curricular enhancements could also involve horizontal integration across the disciplines of training modules or research-based learning model (e.g., college-wide implementation of information literacy training or a capstone course or research-intensive course in several majors).

D. Budget

Funding requests should be made based on the following categories:

- **PI/Co-PI Salary Support** partial summer salary support for PIs to significantly enhance existing courses or develop new courses. Course release time will be supported but approvals must be obtained by the appropriate department chair and/or academic program director of the unit so that alternative teaching assignments can be arranged.
- **Graduate Assistants** graduate assistants who assist in development and pilot implementation of the course and mentor undergraduates. Cross-disciplinary graduate assistants may be proposed where appropriate (e.g., a psychology graduate student may serve as an assistant and mentor to students in a computer science course).
- Undergraduate Assistants undergraduate assistants who assist with pilot implementation of the course and serve a peer instructors.
- **Partnership Support** partnerships involved in curriculum development and/or pilot implementation
- Technical Resources computer hardware, software, equipment to support pilot implementation³
- Course Materials reusable course materials (i.e., collections, holdings, manuals, models)
- **Other Costs** costs that do not fit into any of the above categories (i.e., guest speaker honoraria, travel to visit external partners, etc.)

F. Eligibility of Principal Investigator (PI) or Co-PI

Individual Faculty and Team Faculty proposals may be submitted by tenured and tenure-track faculty, clinical faculty, instructional faculty, and research faculty. PIs of individual or team proposals must be the course instructor(s) of record for the proposed course(s). A faculty member may serve as PI of no more than one individual and one team proposal. College and Departmental proposals that include multiple courses may be submitted by college or departmental administrators or faculty. There are no limits on the number of departmental and college level proposals. Proposals from interdisciplinary team members across departments and colleges are encouraged. Co-PIs may be from any of the faculty

³ PIs should not submit duplicate proposals for the QEP Curriculum Development Grant Program and the Faculty Development Initiative Program (FDIP). The two programs are distinct and support different goals. Faculty with projects focused on integrating technology only should submit proposals to the FDIP program: http://www.eto.uh.edu/

categories specified above. In addition, faculty and staff from QEP Resource Collaborators may serve as co-PI on proposals (e.g., subject librarians, writing specialists, instructional designers, assessment specialists, etc.).

G. Relationship to Institutional Effectiveness Planning

Beginning in Fall 2008, undergraduate programs have been asked to incorporate a student learning goal in IE plans that is research-specific for the discipline. Faculty developing QEP proposals should review their academic units' IE plan to ensure that the proposed enhancement is aligned with any research-related student learning outcomes. During the QEP proposal development phase, faculty should contact their college's assessment specialist for assistance.

H. Assessment of Student Learning Outcomes & Sharing of Best Practices

For funded QEP proposals, the Discovery Assessment Task Force and appropriate assessment specialist will assist faculty in identifying standards and developing instruments for measuring the effectiveness of the proposed course enhancement in improving the specified QEP Student Learning Outcome(s). PIs will be responsible for collecting and reporting data from their funded courses. In addition, faculty with successfully piloted QEP-funded projects will be encouraged to share their experiences with fellow colleagues during the annual Best Practices Showcase hosted by the Office of Undergraduate Discovery Programs each fall.

I. Proposal Evaluation

Proposals will be evaluated by the broad-based Discovery Curriculum Task Force. The review criteria include:

- Degree to which the enhancement has the potential to significantly improve student research skills training and practice.
- Specific QEP Student Learning Outcomes to be addressed.
- To what extent the proposed enhancement innovative and/or interdisciplinary
- The potential for the proposed enhancement to serve as a model for others to implement.
- Degree to which proposed course enhancement addresses a student learning outcome identified in the undergraduate program's Institutional Effectiveness Plan.
- Plan for departmental, college, or external support for sustained funding of successful pilot projects.

J. Proposal Submission and Notification of Award

All proposals must be submitted using the attached proposal template and include the following:

Cover Page. Specify details for the PI and Co-PIs is applicable. Proposals must be approved by the Department Chair and Dean of the College of the PI.

Proposal Narrative. Complete all applicable sections.

Budget Request. Specify funding requests in each applicable category and provide justification.

Signed proposals may be submitted electronically (PDF scan preferred) to <u>discovery@uh.edu</u> or sent by intercampus mail to Discovery (Mail Code 2040) by Monday, November 17, 2008. Notification of award will be made on or before Monday, December 15, 2008. Funds will be disbursed by December 23, 2008 provided that a local QEP cost center account is available for funds transfer.