

Quality Enhancement Plan, QEP Update

The focus of FAU's QEP is on improving student learning by integrating and expanding a culture of Undergraduate research and inquiry (URI) at FAU. Our QEP intends to 1. provide students more opportunities to actively participate in undergraduate research and inquiry (URI); 2. provide the fundamental skills necessary to engage them in this important activity and 3. improve both retention and recruitment of high potential undergraduate students. The QEP steering committee has recommended using the unifying theme "*Distinction through Discovery*" adopted from the Honors Education Task Force recommendations as the brand for this initiative.

FAU's faculty and students recognize inquiry to be both a process and a product which encompasses intellectual traits that transcend subject matter divisions. Examples of such commonalities include: questioning existing ideas, problem solving, thinking creatively, exploring new ideas and the processes by which knowledge is discovered. For the purposes of this QEP, our definition of research is:

An inquiry or investigation conducted by an undergraduate student that makes an original intellectual or creative contribution to the discipline or practice (modified from the Council of Undergraduate Research, CUR)¹.

The student audience that this QEP targets can be best described as "high potential undergraduates." This target audience includes both traditional high-achieving students (GPAs and standardized test scores) and others who are highly motivated and eager to learn and succeed.

The QEP is based on two critical issues identified here at FAU. First, QEP surveys^{2, 3} from FAU faculty and alumni indicate their strong interest in undergraduate students having the "Ability to critically evaluate information for decision making" as a learning goal. Second, University Institutional Effectiveness and Analysis, IEA retention reports^{4, 5} from 1999-2008 indicate that for the Boca campus, by the end of their second year, as many as 26% of the academically strong students leave our university. In addition, data obtained from the National Survey on Student Engagement⁶ (NSSE) survey in 2010 reinforced the need for great faculty-student interaction. The survey showed low student participation in faculty mentored activities such as Directed Independent Study (DIS) and capstone projects as compared to our peer institutions.

The rationale behind choosing undergraduate research and inquiry to address these issues was based on several reports, including the Boyer Report⁷ and the Association of American Colleges and University's High Impact Educational Practices⁸, which identify undergraduate research as a vital and valued practice for enhancing student success and addressing student retention⁹⁻¹¹. Engaging students in research and scholarly experiences that involve analyzing data and synthesizing information to formulate meaningful conclusions can generate solid foundations for higher order thinking. In addition, it provides a meaningful context to the scholarly skills they are developing in their studies. To that end, the QEP will focus explicitly on the content, critical thinking, and communication skills that support both successful scholarship through inquiry and the development of independent, self-motivated learning. We are in the process of refining our student learning outcomes to delineate the skills that constitute successful scholarly inquiry at both the lower and upper division.

The currently identified student learning outcomes (SLOs) for the QEP include the following:

SLO. 1: Students will master content knowledge (through core principals and skills) and apply that knowledge to serve as a foundation for acquisition of new knowledge

SLO. 2: Students will formulate research questions or scholarly problems with integration of fundamental principles and knowledge in a manner appropriate to their discipline

SLO. 3: Students will develop and implement a plan of action, including a review of the relevant literature, to address research questions or scholarly problems

SLO. 4: Students will develop skills such as critical thinking and information analysis and apply those to evaluate their own work and the work of others

SLO. 5: Students will acquire, demonstrate and master skills of ethical conduct of research and scholarly activity

SLO. 6: Students will develop strong research and scholarly writing skills and communicate their work through all appropriate formats, following the conventions of their disciplines

We will address these student-learning outcomes throughout their academic careers. In the lower division (LD), these skills will be introduced and developed by integrating a research focus into the curriculum. In the upper division (UD), these skills will be extended, reinforced and applied by continuing the curricular research and inquiry focus and by providing more students opportunities to engage in faculty-mentored research and scholarly activity. The plan of action to improve the student learning outcomes can be divided into six main goals:

Goal 1: Expand the number of opportunities that promote research and scholarly experiences for students

- a. Provide additional opportunities for students to participate in and disseminate their work with faculty-mentored research and inquiry based activities outside of the curriculum.
 - i. Establish a new Summer Undergraduate Research Fellowship (SURF)
 - ii. Expand the existing Undergraduate Research Grant Program to include travel funding and group projects
 - iii. Establish and sustain an FAU Undergraduate Research Journal (FAURJ)
 - iv. Expand the Spring Undergraduate Research Symposium
 - v. Encourage and provide support for students to conduct projects and present their original work nationally and internationally

Management of responsibility: new Office of Undergraduate Research and Inquiry (OURI); see Goal 4 below.

Goal 2: Establish and sustain research-supportive curricular initiatives

- a. Encourage and support faculty integration of research-focused pedagogical approaches into the curriculum at both the upper and lower division.
 - i. Upper Division: Establish an upper division curriculum seed grant program to promote research and inquiry in upper-division curriculum through both degree programs and honors in the major programs.
 - ii. Lower Division: Establish a lower-division curriculum seed grant program which emphasizes re-design of Intellectual Foundations Program (IFP) courses and expands the Strategies for Learning Success, SLS program.
 - iii. Upper and Lower Division: Establish a new university-wide Research Certificate program for honors and non-honors students which include completion of a capstone experience.

Management of responsibility: collaboration between the University Honors Program, Undergraduate Studies, Honors College, college deans, University Honors Council, OURI, and UPC/UFS. Selection committees made up of faculty from the colleges and appropriate administrators will be responsible for evaluating and selecting all proposals.

Goal 3: Provide support and recognition for faculty and students engaging in URI and QEP initiatives

a. Faculty Support and Recognition

- i. Provide faculty professional development workshops and programs to engage in conversations about URI within FAU and externally
 1. Invite external experts in URI to FAU for conversations
 2. Expand the Faculty Learning Community program
 3. Travel to attend conferences related to URI and honors
 4. Establish informational sessions and workshops in-tandem with the seed grant program to provide professional development on topics including: integrating research and inquiry into upper division, lower division and larger classroom environments
- ii. Establish Master/Faculty URI Mentor program in each college and develop and implement training program
- iii. Recognize outstanding faculty for their contribution towards mentoring students in URI

b. Student Support and Recognition

- i. Establish and sustain a Student Club – Council of Scholarship and Inquiry
- ii. Establish and sustain a student peer-mentoring program for upper division undergraduate students and graduate students to serve as near-peer mentors in undergraduate research and inquiry and develop and implement a training program
- iii. Provide professional development and support to students both online and through workshops offered by the Office of Undergraduate Research and Inquiry (OURI)
- iv. Recognize outstanding students in URI

Management of responsibility: OURI, Center for Teaching and Learning subunits, college deans, University Libraries, Career Development Center, Division of Research, Center for E-Learning/Instructional Design and other associated units. The committee recommends assistance with coordination among all units at the university level.

Goal 4: Enrich and strengthen the undergraduate research and inquiry climate at FAU.

- a. Increase support for services that promote student faculty collaboration on undergraduate research and inquiry.
 - i. Establish and sustain OURI
- b. Coordinate the dissemination of up-to-date URI information to university and community
 - i. Establish a website for OURI, to serve as a clearinghouse of information related to URI and QEP opportunities
 - ii. Establish a database of all funded and non-funded undergraduate research and inquiry opportunities on the OURI website

- iii. Collaborate with existing supporting structures to coordinate information related to other URI opportunities currently supported including. Honors programs, Study abroad, Academic service learning, Internships, discipline specific fellowships etc.
- iv. Publish a quarterly newsletter on URI efforts within the university
- c. Maintain a clear and continued marketing plan surrounding QEP and URI efforts of faculty and students:
 - i. Visibly and verbally endorse the practices of URI as a valued and vital part of the mission of the institution both through OURI and University efforts
- d. Establish URI Steering committee(s) of faculty and students for:
 - i. Establish criteria and guidelines for granting programs (curricular and co-curricular) and mentor programs (Faculty and students)
 - ii. Evaluate Upper division and Lower division curriculum proposals
 - iii. Evaluate abstracts for grants, fellowships and awards
 - iv. Select Peer-mentors
 - v. Review FAURJ submissions
 - vi. Select judges for Spring Undergraduate Research Symposium

Management of responsibility: Office of the President, University Provost, college deans, OURI, Creative Services, Office of Information Technology, units responsible for study abroad and internships, Division of Research, and other associated units.

Goal 5: Evaluate QEP and URI initiatives to ensure that student learning outcomes and program goals are being met.

- a. Establish assessment plan for QEP and programs and integrate assessment into ongoing efforts currently underway within the university
- b. Establish an assessment committee to initiate, implement and evaluate ongoing assessments related to URI and QEP
 - i. Recommend a dedicated person in IEA to meet the QEP assessment requirements associated with SACS or hire a ½ time assessment coordinator for the QEP
- c. Establish web-based tracking system for managing assessment associated with QEP which includes an interface for interactive reporting
- d. Recruit an external evaluator for assessment to provide both formative and summative assessment of QEP program

Management of responsibility: OURI, Associate Provost for Assessment and Instruction, IEA, and existing assessment infrastructure within each college. An external evaluator for assessment will be recruited.

Goal 6: Sustain URI efforts established through the QEP beyond the time-frame of SACS

Current suggestions include:

- i. Establish a marketing, business and development plan for QEP sustainability
- ii. Sustain through a permanent OURI office.
- iii. Consider adding one additional credit to courses deemed research intensive, the tuition of which could support OURI and its endeavors.
- iv. Integrate URI as a key component of the President's Challenge Fund

v. Community sponsorship by working with the Office of Community Engagement

Management of responsibility: OURI, Office of the President, University Provost, Undergraduate Studies, all FAU Honors programs, Community Engagement, and University Advancement.

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Administrative Oversight:

QEP Co-Chairs: Dr. Ed. Pratt and Dr. Jeffrey Buller

QEP Director: Dr. Donna Chamely-Wiik

QEP Executive Committee: Dr. Ed. Pratt and Dr. Jeffrey Buller, Dr. Donna Chamely-Wiik, Dr. Megan Davis, Dr. Jerome Haky, Dr. Jennifer Peluso, Mr. James Fowlkes, Mr. Joshua Scholl

QEP Steering Committee members, distributed among 4 sub-committees: Subcommittee members and their academic discipline: N.B. Chair of the subcommittee is **bolded**.

Curriculum Committee

1. **Jennifer Peluso (Faculty, College of Science)**
2. **James Fowlkes (Staff, Instructional Services)**
3. Ed Pratt (Dean Undergraduate studies)
4. Barclay Barrios (Faculty, College of Arts and Letters)
5. Jerry Haky (Faculty, College of Science)
6. Jennifer Bebergal (Staff, Center for Learning and Academic Student Success)
7. Sharon Dormire (Faculty, College of Nursing)
8. Colin Hughes (Faculty, College of Science)
9. Madelyn Lavigne (Staff, Library Systems)
10. Asli (Ceylan) Oner (Faculty, Design and Social Inquiry)
11. Aruna Khan (Undergraduate student representative)

12. Viet-Hang Truong (Undergraduate student representative)
13. Jennifer McDevitt (Graduate student representative and note-taker)

Co-Curricular Committee

1. **Donna Chamely-Wiik (Faculty, QEP director and College of Science)**
2. **Megan Davies (Harbor Branch Oceanographic Institute)**
3. Dan Meeroff (Faculty, College of Engineering)
4. Angela DiCosola (Faculty, College of Arts and Letters)
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6. Gary Castrogiovanni (Faculty, College of Business)
7. Melissa Crawford (Staff, Center for Learning and Academic Student Success)
8. Jeffrey Galin (Faculty, University Center for Excellence in Writing/ College of Arts and Letters)
9. Madelyn Lavigne (Staff, Library Systems)
10. Vincent Long (Undergraduate student representative)
11. Patricio Coicou (Undergraduate student representative)
12. Jennifer McDevitt (Graduate student representative and note-taker)

Upper Division Honors

1. **Jeff Buller (Dean Honors College)**
2. Kim Dunn (Faculty, College of Business)
3. Dani Raviv (Faculty, College of Engineering)
4. Pat Liehr (Faculty, College of Nursing)
5. Mary Branaman (Faculty, College of Arts and Letters)
6. Don Ploger (Faculty, College of Education)
7. Jerry Haky (Faculty, College of Science)
8. Jennifer McDevitt (Graduate student representative and note-taker)

Student Culture Committee

1. **Joshua Scholl (Undergraduate Student, College of Science)**
2. Patricio Coicou (UG student, Science)
3. Vincent Long (UG student, Science)
4. Alena Rodriguez (UG student, Science)
5. Viet-Hang Truong (UG student, Arts and Letters)
6. Aruna Khan (UG student, Science)
7. David Aarons (UG student, Arts and Letters)
8. Adam Chen (UG student, Science)
9. Reginald Horace (UG student)
10. Nikolle Lambrinos (UG student, Science)
11. Genna Risucci (Graduate student, College of Education)
12. Cynthia Maceda (UG student)
13. Nicole Wengert (UG student, Honors program)
14. Tara Wengert (UG student, Honors program)
15. Francis Geubelle (UG student, Science)

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