# Infusing and Nurturing the Skills and Practice of Inquiry and Research in Education

THE USF QUALITY ENHANCEMENT PLAN January, 2005



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Developed by the University of South Florida in preparation for reaffirmation of accreditation by the Commission on Colleges of the Southern Association of Colleges and Schools

January, 2005

## INSPIRE: THE USF QUALITY ENHANCEMENT PLAN

#### **EXECUTIVE SUMMARY**

In November, 2002, the University of South Florida Board of Trustees approved a set of strategic priorities that set USF on a path to become a premier national research university.

Also in November 2002, a number of USF faculty members attended a Conference on Undergraduate Research and Scholarship and the Mission of the Research University. The Conference was sponsored by the Reinvention Center at Stony Brook, which was established to sustain the focus on undergraduate education in research universities inspired by the 1998 Boyer Commission Report, *Reinventing Undergraduate Education: A Blueprint for America's Research Universities.* Discussions at USF following the conference resulted in a proposal from the Provost that integration of research opportunities and inquiry-based learning into undergraduate education at USF should be a major focus of the University's Quality Enhancement Plan.

In the context of USF's strategic discussions, two complementary elements began to converge. One was the imperative to strengthen the institution's research environment through expanded and enhanced graduate programs and the promotion of discovery, creativity, and intellectual attainment among faculty. The other was the need to provide a challenging intellectual environment to attract the very best undergraduate students, and a clear recognition that this could in part be accomplished by infusing research and inquiry into the undergraduate curriculum.

On February 3, 2003, Provost David Stamps convened the USF Quality Enhancement Plan Committee and introduced its chair, Dean of Arts and Sciences Dr. Renu Khator. Provost Stamps charged the committee with developing (by October 2004) a Quality Enhancement Plan with two major areas of emphasis: integration of research opportunities and inquiry-based learning into the undergraduate curriculum, and a related review and improvement of the University's general education curriculum.

The Committee was divided into two working groups: the General Education Improvement Committee, and the Undergraduate Research Committee. A co-chair was appointed for each group. A Quality Enhancement Plan Steering Committee, consisting of deans and department chairs, was appointed to oversee the development of the Quality Enhancement Plan.

The Undergraduate Research Committee completed its work in March, 2004. The General Education Improvement Committee submitted its recommendation in August, 2004. The revised General Education curriculum was approved by the University Undergraduate Council in October, 2004 for implementation in Fall 2006.

The USF Quality Enhancement Plan is entitled INSPIRE (Infusing and Nurturing the Skills and Practice of Inquiry and Research in Education). This document describes the work of the QEP Committees and presents a five-year plan for implementation of their recommendations. Also presented is a five-year assessment plan. At the end of five years, a progress report will be prepared for review by the Undergraduate Council, which will then present recommendations to the Provost for the next five years (2009/10 through 2013/14).

#### **ACKNOWLEDGEMENTS**

INSPIRE: The USF Quality Enhancement Plan was made possible by the efforts of many faculty, staff, and students across the University of South Florida. We are deeply indebted to all who contributed to the development of the Plan and to all who are now involved in its implementation, including, but by no means limited to, the USF SACS Leadership Team, the QEP Committees, and especially Provost Renu Khator and former Provost David Stamps, without whose leadership and inspiration INSPIRE could not have become a reality.

Stuart Silverman

Dean of the Honors College

QEP Committee Chair

Robert Potter
Professor of Chemistry
General Education Improvement Committee Co-chair

William Rowe Director and Professor of Social Work Undergraduate Research Committee Co-chair

#### **USF SACS LEADERSHIP TEAM**

Judy Genshaft, President

Carl Carlucci, Executive Vice President and Chief Financial Officer Renu Khator, Provost and Vice President for Academic Affairs

Preston Mercer, Vice President and Chief Executive Officer of USF Lakeland

Harold Nixon, Vice President for Student Affairs

Kathleen Moore, Associate Vice President for Academic Affairs & Educational Outreach, SACS Liaison Officer

Elizabeth Bird, Chair and Professor of Anthropology, President of the Faculty Senate Staff: Dan Gardner, Director of Institutional Effectiveness

#### USF QUALITY ENHANCEMENT PLAN COMMITTEES

#### **Steering Committee**

Stuart Silverman, Dean of the USF Honors College (Committee Chair)
Emanuel Donchin, Chair and Professor of Psychology
Mark Durand, Dean of Arts and Sciences, USF St. Petersburg
Ron Jones, Dean of Visual and Performing Arts
Kathleen Heide, Interim Dean of Arts and Sciences
Colleen Kennedy, Dean of Education
Louis Martin-Vega, Dean of Engineering
JoAnn McCarthy, Dean of International Affairs
Robert Sullins, Dean of Undergraduate Studies

#### General Education Improvement Committee

Robert Potter, Professor of Chemistry (Committee Co-chair)

Carolyn Eichner, Associate Professor of Women's Studies

Carine Feyten, Associate Dean of Education

Maralee Mayberry, Chair and Professor of Sociology

Kathleen de la Pena McCook, Professor of Library and Information Sciences

Marcus McWaters, Chair and Professor of Mathematics

Janet Moore, Associate Dean of Undergraduate Studies

William Murray, Chair and Professor of History

Trevor Purcell, Chair and Professor of Africana Studies

Phillip Sipiora, Professor of English

Carlos Smith, Associate Dean of Engineering

Andrew Smith, Instructor of Library and Information Sciences

Miriam Stamps, Chair and Professor of Marketing

Len Vacher, Professor of Geology

Joanne Waugh, Associate Chair and Professor of Philosophy

Wallace Wilson, Chair and Professor of Art and Art History

#### Undergraduate Research Committee

William Rowe, Director and Professor of Social Work (Committee Co-chair)

Glen Besterfield, Associate Professor of Mechanical Engineering, Chair of the Undergraduate Council

Joan Kaywell, Chair and Professor of Secondary Education

Georg Kleine, Associate Dean of the Honors College

Elizabeth Larkin, Associate Professor of Education at USF Sarasota-Manatee

Alice Murray, Associate Vice President for Student Affairs at USF Lakeland

Rudiger Schlaf, Assistant Professor of Electrical Engineering

Dwayne Smith, Chair and Professor of Criminology

Steven Specter, Associate Dean for Admissions & Student Affairs and Professor of Medicine

Michael Zaworotko, Chair and Professor of Chemistry

#### Resource Persons for Quality Enhancement Plan Committees

David Campaigne, Director of University Experience

Teresa Flateby, Director of Evaluation and Testing

Ilene Frank, Librarian at USF Tampa Campus Library

Dan Gardner, Director of Institutional Effectiveness

Charlene Herreid, Coordinator of Institutional Effectiveness

Kathleen Moore, Associate Vice President for Academic Affairs & Educational Outreach,

SACS Liaison Officer

Diane Williams, Director of Center for 21st Century Teaching Excellence

#### THE UNIVERSITY OF SOUTH FLORIDA

Since opening for classes in 1960, the University of South Florida has developed into one of the nation's major public research universities. USF is classified as Doctoral/Research Extensive by the Carnegie Foundation for the Advancement of Teaching, and is ranked among the top 100 public research universities in the annual report "The Top American Research Universities." The University receives more than \$250 million a year in external funding to support research and development projects.

USF's rapid growth and success is reflected in numbers such as enrollment approaching 42,000 students from all 50 states and 100 foreign countries. The University confers more than 5,000 undergraduate degrees and 2,000 graduate degrees annually on campuses in Tampa, St. Petersburg, Sarasota-Manatee and Lakeland.

Students who come to USF represent all ages, cultures and ethnic backgrounds. Over one quarter of the student population is African American, Hispanic, Asian American, Native American or other nationality. Students choose from more than 200 undergraduate, masters, specialist and doctoral programs, including the doctor of medicine.

#### USF'S MISSION, GOALS, VALUES, AND VISION

#### Mission

The University of South Florida is a multi-campus national research university that supports the development of the metropolitan Tampa Bay Region, Florida, the United States and the world. Building upon unique strengths inherent in Florida's population, location, and natural resources, the university is dedicated to excellence in:

- Teaching and lifelong learning in a student-centered environment
- Research to advance knowledge and promote social, cultural, economic, educational, health, and technological development
- Service based on academic excellence and the ethic of community responsibility
- Community engagement to build university-community partnerships and collaborations

#### Goals

The University of South Florida will continue to expand its influence as a premier research university through:

- Strengthened research, creative, and scholarly endeavors
- Improved undergraduate and graduate academic programs that promote intellectual development and student success through a diverse, student-centered environment
- Engaged service that strengthens cultural and community life, and promotes lifelong learning and economic opportunity
- Increased fiscal self-sufficiency and appropriate state support

#### Values

The University of South Florida values:

- Teaching, research and service based on the highest standards of discovery, creativity, and intellectual attainment
- Development of the personal and professional potential of students, faculty, and staff, and enriching the quality of campus life
- An ethic of collegiality based on integrity, civility, academic freedom, professional responsibility, and collaboration among disciplines and units
- Access to an excellent education
- University/community engagement that increases the understanding of urban issues and advances community development
- · Cultural and ethnic diversity and global understanding

#### Vision

The University of South Florida envisions itself as a premier national research university that serves the metropolitan Tampa Bay Region, Florida, and the nation through:

- Excellent undergraduate and graduate instruction in a student-centered environment
- Creative, innovative, engaged scholarly endeavors, and the furthering of advanced knowledge
- Education that promotes freedom, unity, democracy, and understanding in the presence of our Nation's historical diversity
- · Generation and dissemination of knowledge to strengthen our society and the environment
- Greater fiscal self-reliance.

#### UNIVERSITY GOVERNANCE AND STRATEGIC PLANNING

Following a major reorganization of higher education governance in the State of Florida in 2001, the Florida Legislature established and Governor Jeb Bush appointed the USF Board of Trustees, vesting in it the authority to govern and set policy for the University. The inaugural meeting of the USF Trustees was held in August 2001. The Board is charged with "engaging in strategic planning for the university...[and insisting] on sound, long term planning that will guide the board, the president/CEO and other campus leaders toward a common goal."

The Trustees and broader campus community of the University of South Florida fully recognize, understand and embrace those fundamental principles that are driving change in contemporary public higher education. Planning for excellence in teaching and learning, scholarship and research, together with public service and community engagement, has been guided by a shared commitment to expanding access to higher education, ensuring efficiency throughout the University, and contributing to regional economic growth. Above all, the Board of Trustees has set local accountability as its primary responsibility.

USF embarked upon a new Strategic Planning process in early 2001, shortly after Dr. Judy Genshaft was inaugurated as President and prior to the creation and appointment of the Board of Trustees. The process was initiated at department, college, and campus levels with individual unit Action Plans completed by the end of the Fall semester of 2001. Shortly after the USF Board of Trustees was appointed in August 2001, President Genshaft conducted a retreat with Board members, the President's Cabinet, and the Council of Deans to review and refine the Mission and Vision Statements for the University.

The USF Strategic Plan, adopted by the USF Board of Trustees in November 2002, was built on the plans of each College and Vice Presidential area and refined to focus on nine strategic directions for the University:

- Promote nationally and internationally distinctive research and graduate programs.
- Advance collaborative learning and discovery to improve health for the community.
- Attract the very best undergraduate students by providing a challenging intellectual climate.
- Provide high quality academic programs and support services.
- Shape the enrollment profile to reflect the educational goals of a major urban research institution.
- Promote the intellectual, cultural, personal, and social development of all students through high quality student life programs.
- Provide a student-centered, user-friendly administrative and service infrastructure.
- Achieve fiscal self-sufficiency and develop a stable economic base for university programs and services.
- Establish USF as a national model for a university fully engaged with its local, national, and global communities.

## TOWARDS A QUALITY ENHANCEMENT PLAN

#### THE CONTEXT

In its publication *Principles of Accreditation: Foundations for Quality Enhancement*, the Commission on Colleges of the Southern Association of Colleges and Schools describes the Quality Enhancement Plan (QEP) as one of two documents that must be submitted in support of the institution's reaffirmation review. The QEP "describes a carefully designed and focused course of action that addresses a well-defined issue or issues directly related to improving student learning. The development of the QEP involves significant participation by the institution's academic community." The QEP is required in order to establish compliance with the Commission's Core Requirement 2.12, which reads as follows: "The institution has developed an acceptable Quality Enhancement Plan and demonstrates that the plan is part of an ongoing planning and evaluation process." The purpose of this document is to demonstrate that the University of South Florida has developed a Quality Enhancement Plan that meets the Commission's requirements.

USF's enrollment statistics for Fall 2004 show that the University has 32,486 undergraduate students, and each year USF admits nearly 5,000 new first-year students and over 4,000 new transfer students. The University's commitment to providing a high-quality educational and intellectual experience for these students is evident in its statements of mission, goals, values, and vision, and in the identification of its primary strategic directions.

Discussions about an appropriate Quality Enhancement Plan topic for USF began with the adoption of the University's Strategic Plan by the Board of Trustees in November 2002. The University states in its Strategic Plan that it is dedicated to excellence in teaching and lifelong learning in a student-centered environment; that it will continue to expand its influence as a premier research university through improved undergraduate and graduate academic programs that promote intellectual development and student success through a diverse, student-centered environment; that it values teaching, research and service based on the highest standards of discovery, creativity, and intellectual attainment, development of the personal and professional potential of students, and access to an excellent education; that it envisions itself as a premier national research university that serves the metropolitan Tampa Bay Region, Florida, and the nation through excellent undergraduate and graduate instruction in a student-centered environment; and that it plans strategically to attract the very best undergraduate students by providing a challenging intellectual climate, and to provide high quality academic programs and support services.

In the context of USF's strategic discussions, two complementary elements began to converge. One was the imperative to strengthen the institution's research environment through expanded and enhanced graduate programs and the promotion of discovery, creativity, and intellectual attainment among faculty. The other was the need to provide a challenging intellectual environment to attract the very best undergraduate students, and a clear recognition that this could in part be accomplished by infusing research and inquiry into the undergraduate curriculum. While individual colleges and departments have direct responsibility for the quality of undergraduate education in the major, the general education program, which forms the foundation of a high-quality undergraduate education, is the responsibility of the faculty as a whole. Thus

emerged the rationale for a review and revision of the general education program as part of an effort to integrate research and inquiry more broadly into undergraduate education.

#### THE ENVIRONMENT: GENERAL EDUCATION

The University of South Florida's Liberal Arts Curriculum was formally implemented in Fall 1994. Its stated goals are as follows:

- A love of learning that inspires curiosity and creativity, and instills confidence in one's ability to master new knowledge and grow from the experience
- An understanding of and respect for persons from whom the values of compassion, tolerance, sensitivity, and civic responsibility spring
- An appreciation of and capacity for enlightened personal expression that encourage a love of reading and of other forms of shared self-expression, creativity and discipline in language use, and active listening
- A respect for knowledge and its problems through exposure to and acquisition of various intellectual traditions and their values
- An understanding of the past that gives insight into personal and communal ideas and values, reveals the present as part of a historical process, and provides a basis for critical reflection on the present and the future
- A knowledge of and an appreciation for the physical and biological world through a working knowledge of the methods and philosophy of natural science, including observation, hypothesis formation and testing, logic, skepticism, tolerance of ambiguity and uncertainty, as well as an openness to new ideas and to the sharing of knowledge
- A knowledge of and an appreciation for the arts that heighten understanding to the human condition and how it is revealed, discovered, and expressed through the creative process
- A knowledge of and insight into different cultures that enhance appreciation of self and others, and enlarge understanding of needs and contingencies facing the peoples of the world
- An ability to think critically and solve problems in all phases of one's life, a recognition of
  and tolerance for problematic issues that require reflective decision-making to reach a sense
  of personal commitment
- Adaptability that enables one to anticipate, detect, and respond adaptively to changing information and circumstances
- Intellectual integration and balance that provide a basis for synthesizing ideals and perspectives, while encouraging continued intellectual exploration and development

The Liberal Arts Curriculum was designed to achieve the depth of a liberal arts education by ensuring that all courses in the curriculum encourage the development of learning skills and content appropriate to the field of study. These skills include conceptual thinking such as abstraction, planning, and design. They also incorporate analytical thinking skills including interpretation, problem solving, and practical application, as well as skills that involve originality or imagination. These skills also include the written and oral uses of language. The content of courses included in the liberal arts curriculum is such that students have the opportunity to acquire a basic and integrative understanding of the knowledge that pertains to the subject matter under consideration and learn how this knowledge relates to higher education as a whole.

The breadth of a liberal arts education is accomplished by allowing students to follow a course of study that includes the many diverse areas of inquiry in liberal arts: English Composition, Quantitative Methods, Natural Sciences, Social Sciences, Historical, Fine Arts, and African, Latin American, Middle Eastern or Asian Perspectives.

The all-inclusive character of a liberal arts education also requires that students be introduced to the widest range of scholarly viewpoints about the human and physical world. Although the university cannot hope to provide such introductions to every dimension of the world, there are some that so profoundly shape daily life and scholarship as to warrant systematic attention in a university's basic curriculum. Those include issues of values and ethics, international perspectives, environmental perspectives, race and ethnicity, and gender. The curriculum was intended to emphasize consideration of scholarly viewpoints that pertain to these dimensions across different areas of liberal arts inquiry to allow students to overcome the compartmentalization of knowledge that might interfere with a well-rounded and coherent liberal arts education.

The incorporation of the dimensions of values and ethics, international and environmental perspectives, race and ethnicity, and gender within the traditional liberal arts curriculum is a unique characteristic of liberal arts education at the University of South Florida. Another distinctive component is the Exit Requirements, the goal of which is to ensure that a student's liberal arts education is not restricted to the first two years of the undergraduate program but continues throughout the college years. Exit requirements provide students with an opportunity during their junior and senior years at USF to integrate their knowledge within the context of liberal arts. Courses that satisfy the Exit Requirements incorporate considerations of the dimensions of values and ethics, international perspectives, environmental perspectives, race and ethnicity, and gender. The assumption is that, by their junior and senior years, students will have a foundation in liberal arts and be better able to reflect upon ethical issues in a constructive way.

The Exit Requirements include six semester hours in Major Works and Major Issues and three semester hours in Literature and Writing. In the Major Works and Major Issues courses, students build upon the principles, concepts, and knowledge acquired in lower-division courses. The Major Works and Major Issues requirement is intended to provide all students with an opportunity to strengthen their knowledge of disciplines related to their majors or careers or to develop depth and/or breadth in areas of interest that are not necessarily related to their majors. The Literature and Writing requirement is intended to provide an opportunity for students to continue their liberal arts education by reading and studying significant literature of the world and by writing at least 6,000 graded words. All Exit Requirement courses are designed to be seminar-size courses, taught by regular faculty, in which enrollment is targeted at approximately 20 to 25 students.

#### THE ENVIRONMENT: UNDERGRADUATE RESEARCH OPPORTUNITIES

In the course of its evolution as a major research university, USF has been developing a strong commitment to the enhancement of undergraduate instruction through involvement in the creation of new knowledge. The University has the requisite research environment, including

extensive libraries, well-equipped laboratories, sophisticated computer capabilities, appropriate on-campus facilities, and, most importantly, faculty members nationally and internationally recognized in their fields who are willing to serve as mentors to students. All undergraduate students at the University of South Florida are encouraged to take advantage of opportunities for active participation in the learning process by engaging in collaborative learning experiences with faculty and graduate students and thus to learn through inquiry, rather than being the passive recipients of facts and concepts.

Through involvement in research projects, undergraduate students can gain the skills necessary for exploration, problem solving, and oral and written expression that can serve them well for a lifetime of learning, work and pleasure. Participation in the research process allows students to appreciate the arts, humanities, sciences, and social sciences in a way not otherwise possible. When a student engages in a mentored research project, that student learns to frame meaningful questions in a thoughtful manner. Scholars have long known that the nature of the question is critical in finding the answer. Participation in the research of active scholars allows students to learn how scientists, social scientists, artists, and humanists in their various ways go about creating new knowledge in their respective fields. The research process can therefore be a model for a lifetime of problem solving. Researchers learn to evaluate material critically rather than to accept it without evidence.

Undergraduate students who work on research projects have the opportunity to solidify their choices of majors and careers or to adjust plans for the future based on real experience. Research participation also allows students to interact with people of different backgrounds, cultures and professional expertise. Moreover, undergraduates who engage in research can often publish or otherwise present their work in professional contexts, and thus have a competitive edge when applying to graduate or professional school, or for a job. Colleges and departments across the University of South Florida traditionally have offered courses that include opportunities for students to participate in the collection, analysis, and reporting of data. For example, the College of Arts and Sciences is home to a Community Initiative that includes an experiential learning component through which students may participate in community-based research projects.

In 1999, USF established an Undergraduate Research program in the Office of Undergraduate Studies. The goal was to link undergraduate students with an interest in research with faculty willing to work with those students. While the program was part of the University Honors Program, which was then housed in the Office of Undergraduate Studies (in Fall 2002, the Honors Program became a free-standing Honors College), its services were available to all qualified and interested undergraduate students.

The University also allocated resources to fund a unique program for a select few first-year USF students, usually students participating in the University Honors Program (now the USF Honors College). Students are selected to become USF Undergraduate Research Scholars based upon exceptional high school academic achievement and superior SATI/EACT scores. During their first semester, these students enroll in "Discovery: People, Processes and Problems", a course taught by some of USF's most distinguished scholars. Following the "Discovery" semester, Undergraduate Research Scholars are assisted in identifying potential undergraduate research

opportunities that will allow them to work with a faculty member on research projects in future semesters. "Discovery" begins by broadly defining research as the systematic investigation of a phenomenon or problem. Then, faculty from the natural, social and health sciences, from engineering, business, education, humanities, the fine arts and other fields "tell their stories", how they became interested in doing research, and offer examples of problems and questions they have examined. Students interact closely with these researchers during the semester. The culminating "Discovery" experience is the development, in collaborative groups, of a research proposal that defines a problem or question and maps out a strategy for responding to the issue. Based upon the availability of faculty and funding, students then have the opportunity to carry out the research. Periodic receptions are designed to bring students together to discuss topics of mutual interest and to learn from and interact with research faculty. Scholarship support is available to Undergraduate Research Scholars as long as they are active in the program.

#### **INSPIRE: AN INTEGRATED PLAN**

By Fall 2002, there was consensus among both faculty and academic administrators that a review of the Liberal Arts Curriculum should be undertaken. The decision to implement such a review was prompted in part by difficulties experienced by some colleges and departments, particularly those with professional undergraduate programs whose content is mandated by accrediting bodies and learned societies, in reconciling the implementation of Exit Requirements with subsequently-imposed, State-mandated credit-hour limits. Further justification for a review emerged from the above-mentioned discussions under way among faculty and academic administrators regarding the nature of undergraduate education in a research university. And finally, there were outcome data indicating that students did not know what they had been expected to have learned.

Since the publication in 1998 of the Boyer Commission Report, *Reinventing Undergraduate Education: A Blueprint for America's Research Universities*, USF faculty have been actively participating in conversations about undergraduate education in research universities, both within the University and at the national level. This publication generated excitement and interest in universities across the country. Several USF faculty became involved with the Reinvention Center at Stony Brook, which was established after the publication of the Boyer Commission Report to sustain the focus on undergraduate education in research universities inspired by the Report.

The Center sponsored a Conference on Undergraduate Research and Scholarship and the Mission of the Research University in November 2002. A number of USF faculty members, including then-Provost David Stamps, attended that conference. Discussions held upon their return to USF resulted in a proposal from Provost Stamps that integration of research opportunities and inquiry-based learning into undergraduate education at USF should be a major focus of the University's Quality Enhancement Plan.

Eventually, USF's strategic discussions about strengthening undergraduate education in the research university environment resulted in the idea of a Quality Enhancement Plan with a dual focus. The Plan has the title INSPIRE (Infusing and Nurturing the Skills and Practice of Inquiry

and Research in Education) and consists of two major components: the Foundations of Knowledge and Learning; and Undergraduate Research and Inquiry.

On February 3, 2003, Provost David Stamps convened the USF Quality Enhancement Plan Committee and introduced its chair, Dean of Arts and Sciences Dr. Renu Khator. Provost Stamps charged the committee with developing (by October 2004) a Quality Enhancement Plan with two major areas of emphasis: integration of research opportunities and inquiry-based learning into the undergraduate curriculum, and a related review and improvement of the University's general education curriculum.

The Committee was divided into two working groups: the General Education Improvement Committee, and the Undergraduate Research Committee. A co-chair was appointed for each group. A Quality Enhancement Plan Steering Committee, consisting of deans and department chairs, was appointed to oversee the development of the Quality Enhancement Plan.

Shortly after the implementation of the QEP process, Provost Stamps stepped down for health reasons, and Dr. Renu Khator was appointed as Interim Provost. Dr. Khator appointed Dr. Stuart Silverman, Dean of the Honors College, as chair of the QEP Committee. Dr. Robert Potter, Professor of Chemistry, and Dr. Kelli McCormack Brown, Professor of Public Health, were appointed as co-chairs of the General Education Improvement and Undergraduate Research committees respectively. Dr. McCormack Brown subsequently accepted an administrative appointment and was replaced as chair of the Undergraduate Research committee by Dr. William Rowe, Director of the School of Social Work.

A staff support team for the QEP Committee was composed of representatives of the offices of Academic Affairs, Undergraduate Studies, Institutional Effectiveness, and Evaluation and Testing; the Center for 21st Century Teaching Excellence; and the USF Libraries.

#### THE PLANNING PROCESS

#### **BACKGROUND DATA COLLECTION AND ANALYSIS**

The QEP Steering Committee agreed to begin the process of shaping the Plan with a broad-based, university-wide, information-gathering effort. In late February 2003, four open forums were held—two to discuss general education improvement, and two to discuss undergraduate research and inquiry-based learning. Faculty, staff, and students were invited, and the forums were well attended. At the same time, a group of faculty and graduate students from the Center for Research, Evaluation, and Measurement (CREAM) in the USF College of Education gathered and analyzed data on USF's existing general education and undergraduate research programs, including survey and student outcome data for mathematics achievement, writing skills, intellectual dimensions, and comprehension of the dimensions of the Liberal Arts Curriculum. These data, together with the results of the open forums, were brought together in a background data collection and analysis report prepared by the CREAM staff for the QEP Committee.

The major data sources for this work included:

- General Education Assessment Committee reports, including analyses of Graduating Senior Surveys and General Education Writing and Math assessments;
- Content analysis of Liberal Arts Curriculum course syllabi;
- A comparative analysis of literature and curricular information about undergraduate research programs at comparable institutions; and
- Content analysis of minutes, materials and transcripts of relevant meetings.

#### Review of General Education Assessments

Formal assessment reports on USF's general education curriculum were prepared in 2002 and 2003 by the General Education Assessment Committee (GEAC). This Committee began during the 2000-01 academic year as an ad hoc group of faculty and staff with a common interest in General Education assessment. The following year, the Provost formally appointed the GEAC and charged it with steering General Education assessment at USF.

The GEAC's annual reports for 2002 and 2003 included analyses of students' writing and quantitative skills, as well as a survey of students' knowledge and attitudes about the Liberal Arts Curriculum dimensions of values and ethics; race and ethnicity; global perspectives; and environmental issues. Findings included the following:

• Analysis of Writing Samples. Ratings of student writing were made using the Cognitive Level and Quality of Writing Assessment (CLAQWA), which is scaled on five dimensions. The first, Assignment Parameters, focuses on the degree to which the student fulfills the assignment requirements. The second, Structural Integrity, focuses on the organization of the writing. The third, Reasoning and Focus, considers how well ideas are developed. The fourth, Language, is based on word choice, vocabulary and sentence construction. The fifth, Grammar and Mechanics, examines consistency between the writing and standard edited English. Each dimension of the CLAQWA is rated on a five-point scale. It has been suggested that scores less than 2.5 indicate the student is not prepared for college level writing, ratings

between 2.5 and 2.9 indicate readiness for Composition I, ratings of 3.0 to 3.4 indicate readiness for writing in lower level classes, and ratings of 3.5 and higher indicate readiness for writing in upper level classes.

A review of the distribution of ratings from one comparison (71 students in Composition I and 324 students in Liberal Arts Exit courses) revealed a large number of students in both groups obtaining relatively low scores, and a lack of improved performance for the Exit course students. Only in Structural Integrity is the distribution of the Exit course students shifted upward relative to the Composition I students, indicating a higher average level of performance. Despite this upward shift in typical performance, the median score on Structural Integrity for students in the Exit courses was lower than 3.0, suggesting that the typical performance in the Exit courses did not reach the readiness threshold for writing in lower level classes. In each of the other dimensions the ratings tended to be lower for students in Exit courses, which is inconsistent with expectations for a program in which writing skills should be increasing throughout the program.

In other studies, the data were organized by students in the Honors Program and those not in the Honors Program. The pattern of not finding substantially better writing in Exit courses than in freshman-level courses was consistent across these two groups. Also, essays were scored using the Measure of Intellectual Development (MID), and again the reported data tended to fall below expectations.

- Student Surveys. In a survey of students' knowledge and attitudes about the General Education dimensions of values and ethics; gender; race and ethnicity; global perspectives; and environmental issues, students were asked for a self assessment of the amount of knowledge they had on each of the dimensions using a 5 point scale: none, little, some, quite a lot, and full knowledge. There tended to be more students in Exit courses than Composition I courses reporting they had quite a lot or full knowledge of a dimension. The biggest differences were in global perspectives (25% in Exit courses versus 10% in Composition I reporting quite a lot or full knowledge) and environmental issues (24% versus 12%). What was most striking, however, was that fewer than 50% of the Exit course students reported they had quite a lot or full knowledge for all dimensions but that of values and ethics. For values and ethics, 59% of the Exit course students reported quite a lot or full knowledge, which does not differ much from the 54% of Composition I students who reported quite a lot or full knowledge.
- Content Analysis of Liberal Arts Curriculum Course Syllabi. A content analysis of syllabi for a sample of courses identified as meeting the criteria of the Liberal Arts Curriculum was conducted for courses delivered during the Fall 2003, and Spring 2004, semesters. A total of 40 courses were included, 20 for each semester. Each syllabus was coded based on the five Dimensions and five Thinking Skills identified in previous studies. The five Dimensions are Values and Ethics, International Perspectives, Environmental Perspectives, Race and Ethnicity, and Gender. The five Thinking Skills are Conceptual Thinking, Analytical Thinking, Creative Thinking, Written Expression, and Oral Expression. The results of the content analysis of syllabi indicate that all of the Dimensions and Thinking Skills may not be adequately

addressed. Four of the five Dimensions (Values and Ethics, International Perspectives, Race and Ethnicity, and Gender) were represented in approximately one-third of the syllabi whereas Environmental Perspectives were only represented in three of the course syllabi (11%). Of the five Thinking Skills, the most under-represented skill was Creative Thinking, evidence of which was only noted in two of the syllabi reviewed (7%). In general, the five Dimensions were far less evident than the Thinking Skills in the various syllabi. Analytical Thinking was noted most often, with 21 of the syllabi reviewed containing some evidence that Analytical Thinking skills were addressed as part of the course expectations and/or goals. Even allowing for the fact that course content may not be completely or accurately reflected in a syllabus, these findings indicate that the expectations for a given course may not be clearly stated in the syllabus, which may contribute to students' confusion (reflected in the student surveys described above) about which dimensions and skills were actually addressed in the course.

• Quantitative Skill Assessment. In addition, analyses were made of quantitative skills. Data on the Finite Mathematics final exam were compared for Fall 2001, Spring 2002, Fall 2002, and Spring 2003. There seemed to be a relatively large number of students struggling quantitatively (e.g., 44% of the Spring 2003 students scored 49% or lower on the final exam) and there did not appear to be a meaningful improvement across semesters.

Thus, whether the focus was on writing skills, quantitative skills, or students' self-assessment of General Education dimensions, data seemed to suggest that many students were not reaching the desired levels. Quantitative data were reinforced by interview reports in which committee members heard much anecdotal evidence about the need to improve the General Education curriculum.

#### Comparative Analysis of Undergraduate Research Programs

To provide empirical information for USF's undergraduate research planning, the evaluation team gathered data about undergraduate research programs from 14 major research universities. Data were gathered on 10 aspects of each program: whether or not participation in the program was required, the extent to which student support was provided (i.e., financial support or academic credit), the breadth of the undergraduate research program (eligibility requirements for students and number of participating colleges and programs), the availability of useful program details (current projects, program contact information, past projects), program administration, and other pertinent information.

Of the 14 programs investigated, none required undergraduates to participate in research activities. However, substantial incentives for such participation were evident. All of the programs indicated that course credit is available for research participation and 11 of the programs (79%) described financial support for undergraduate researchers.

All of the programs investigated provided extensive research opportunities. Twelve of the programs (86%) indicated that all undergraduate students were eligible to participate, while the other two programs evidenced eligibility requirements that varied across programs. Similarly, 13

of the programs (93%) were either institution-wide or described a large variety of colleges that participated in the undergraduate research initiatives.

An obvious characteristic of the programs was the extent to which detailed descriptions of research opportunities and contact information were readily available. Program websites described a large variety of current research opportunities (n = 8, 57%) or bulletin boards for faculty postings of research opportunities (n = 2, 14%). Twelve of the programs (86%) provided information about previous research projects using a variety of formats (e.g., published abstracts, newsletters, undergraduate research journals, and copies of presentations). Finally, 13 of the programs (93%) provided critical contact information to allow interested students to directly contact the appropriate faculty members.

The nature of the program administration varied across the institutions. Some programs housed the Office of Undergraduate Research (led by an Assistant Dean) within a program of undergraduate studies, while others appeared to be housed in the Office of the Provost. However, most programs were centrally administered.

Finally, the programs reviewed offered other useful ideas for planning USF's undergraduate research initiative. Several strategies appear to be effective in developing and maintaining an active undergraduate research program. These include scheduling research information sessions each semester; establishing faculty liaisons from colleges; providing research workshops; and making available faculty mini-grants to be used as seed money for undergraduate research initiatives

#### Conclusions

The data gathered strongly supported the need for institutional focus on the undergraduate curriculum, with respect to both core curriculum coursework and research opportunities and activities for undergraduate students. In fact, over a three year period, analysis of student learning outcome data revealed lower than preferred performance in writing, intellectual development, analytical thinking, and liberal arts mathematics. While growth was documented for the Liberal Arts Curriculum dimensions, students' perceived knowledge levels were lower than desired, especially for International and Environmental Perspectives. These data suggested the need for the analysis of current general education coursework through the syllabus review, which revealed that the Dimensions and Thinking Skills deemed important for undergraduate students were not being addressed as fully as might be expected in the current courses offered. The secondary data analyses supported this finding through the limited difference between student performance by Composition I students and those in Exit Courses on the CLAQWA.

As noted in the open forum discussions and in virtually all interviews with faculty and administrators, the recent classification of the University of South Florida as a Carnegie Doctoral Research Extensive Institution requires that research opportunities be available for all students, not just those in the graduate or honors programs. The comparison of USF's undergraduate research program with those of other research universities suggested clear directions for the Quality Enhancement Plan. Students exposed to research early in their academic career might be more prone to pursue advanced academic opportunities in addition to advanced research

opportunities. Furthermore, research is, at least in part, creative in nature which implies that enhancing opportunities and knowledge of research for undergraduate students might enhance students' exposure to Creative Thinking opportunities, which the syllabus review determined to be lacking.

#### GENERAL EDUCATION IMPROVEMENT COMMITTEE

The General Education Improvement Committee (GEIC) was formally convened on February 3, 2003. The membership of the GEIC was drawn from faculty, department chairs, and associate deans in the Colleges of Arts and Sciences, Business Administration, Education, Engineering, and Visual and Performing Arts. The GEIC met at least twice monthly through the summer of 2004.

The GEIC began its work by hosting two open forums in February, 2003. Faculty, staff, and students from all colleges and campuses within the University of South Florida were invited to attend. Faculty shared their perceptions of the strengths and weaknesses of the existing Liberal Arts Curriculum and their experiences with general education programs at other institutions. Issues of curriculum content, control, and course approval and management were discussed.

One issue that emerged from the open forum discussions and subsequently from the GEIC's own deliberations was the difficulty of reconciling the general education and exit requirements of the Liberal Arts Curriculum with the statutorily-imposed constraints on degree length in the State of Florida. In April 2003, the GEIC met with a group of advisors from the undergraduate colleges to discuss this and other issues of the Liberal Arts Curriculum as they impact students' progress.

By Summer 2003, the GEIC had developed a list of goals and objectives for the general education curriculum, based on input received from faculty at the open forums and in ongoing discussions at the department and college levels, results from the General Education Assessment Advisory Committee's assessment reports, the report by the College of Education's CREAM group, and information gathered from peer institutions. It was agreed that the first draft of a revised general education program proposal would be distributed to faculty, students, and staff for review and comment in Fall 2003. Also during Fall 2003, Committee members studied, evaluated, and reported on general education program models from other research universities and heard presentations on Information Literacy, Quantitative Literacy, Technological Literacy, and General Education Assessment. Writing and critical thinking were also discussed; among other things, data compiled by the USF General Education Assessment Committee on USF students' current writing performance were presented. In December 2003, the GEIC heard a formal presentation from its companion committee, the Undergraduate Research Committee (URC), on the latter's draft proposal for increasing and improving opportunities for undergraduate student participation in research and inquiry-based learning. The purpose of this presentation was to ensure that the GEIC's general education proposal would mesh with the URC's recommendations regarding undergraduate research participation.

In Spring and Summer 2004, the GEIC developed and presented to the QEP Steering Committee, the Council of Deans, and the Provost a document entitled Foundations of Knowledge and Learning: A Proposal for General Education and Exit Courses at the University of South Florida. In light of the significant curriculum implications for departments, programs, and faculty associated with the General Education Improvement Committee proposal, this document was presented to the Undergraduate Council (a standing committee of the Faculty Senate) for final review and approval. The Undergraduate Council approved the proposed curriculum on behalf of the Faculty Senate in October 2004.

#### UNDERGRADUATE RESEARCH COMMITTEE

The membership of the Undergraduate Research Committee (URC) was drawn from faculty, department chairs and other academic administrators in the Colleges of Arts and Sciences, Education, Engineering, Honors, and Medicine. The URC was formally charged on February 3, 2003 and began its work by holding two open forums later that month. Faculty, students, and staff in all colleges and on all campuses of the University of South Florida were invited to attend one of the forums to engage in a dialogue on undergraduate research and inquiry-based learning.

The Committee decided that its next task would be to gather information on the current state of undergraduate research opportunities at USF. The next several meetings of the URC were devoted to presentations by representatives of various USF colleges and programs, including the Honors College, and the Colleges of Arts and Sciences, Engineering, and Education. Topics included the role of undergraduate students in laboratory research; graduate students as mentors; Peer-Led Guided Inquiry (PLGI) in the Chemistry program; the nature of research in the arts and humanities; and service learning. The Committee agreed that it should approach its work with as broad a definition of research as possible, understanding that University resources would not extend to one-on-one student-faculty research experience for all students, but that every student could be exposed to the process of research and inquiry both as part of the general education experience and within the major.

In Fall 2003, the URC designed a PowerPoint presentation summarizing its findings and recommendations to date. Committee members were charged with presenting the information to colleagues in their department, college, or regional campus and bringing the feedback to the URC. The URC presentation included the Committee's five points of consensus; a "research triangle" depicting the various types of research opportunities that might be available to a USF student as s/he progresses through an undergraduate program; information on undergraduate research initiatives currently in place at USF; a summary of opportunities and barriers; a tentative action plan; and an assessment plan.

The URC's five points of consensus were:

- Research experiences will be available to all students in all disciplines.
- Different types (levels of intensity) of research experience will be available to students based on their aptitude, ability, and interest.

- Students at all levels—freshman through senior—should have opportunities to participate in research. Special efforts must be made to include traditionally underrepresented groups.
- The undergraduate research experience can be divided into two main categories--inquiry-based and experience-based:
  - The general education curriculum should ensure an inquiry-based experience for all undergraduate students.
  - The URC will prepare more specific direction and guidance for the experience-based undergraduate research program.
- Experience-based research is more than observation or information gathering. Research in this context...
  - Is engaging
  - Is exciting
  - Is enjoyable
  - Involves analysis, original or creative thinking
  - Leads to a product/outcome that can be shared.

In December 2003, the URC shared its work to date with the General Education Improvement Committee. The purpose was to ensure that the proposals of both committees were consistent with respect to the incorporation of research opportunities at the lower division of undergraduate education.

The URC identified the following opportunities that would emerge from an institutional commitment to undergraduate research:

- An institutional culture shift would result.
- There would be incentives for students, faculty, and departments.
- Undergraduate research would become a distinguishing feature of the USF experience.
- Students would be prepared for graduate education and for research-based and creative careers.
- University research would be enhanced.
- The University could make a positive difference in the community.
- There would be more opportunities for interdisciplinary research.
- The University would increase its national visibility in attracting students.

The URC identified the following institutional barriers to the implementation of an undergraduate research initiative:

- Institutional culture.
- Funding constraints.
- Lack of infrastructure.
- Lack of support.

Responses by faculty and students to the URC proposals were generally positive with respect to the intent but tempered by concerns about the availability of infrastructure and resources. Feedback was also received about additional initiatives already in place in departments and colleges across the institution.

## INSPIRE: THE USF QUALITY ENHANCEMENT PLAN

#### **COMPONENTS OF THE PLAN**

INSPIRE: The USF Quality Enhancement Plan consists of two related components. One is an initiative designed to improve the University's general education program with a special emphasis on the development of students' writing and inquiry skills. The other is an initiative designed to increase opportunities for students to participate in research and inquiry-based learning activities.

#### Foundations of Knowledge and Learning

At the foundation of the USF Quality Enhancement Plan is the document prepared by the General Education Improvement Committee entitled *Foundations of Knowledge and Learning: General Education and Exit Courses at the University of South Florida*. The Foundations of Knowledge and Learning Program at the University of South Florida emphasizes inquiry as the means of developing complex intellectual skills that enable students to become critical thinkers, concerned citizens, successful professionals, and reflective people who throughout their lives are aware of, understand, and engage with the complexities and challenges that our global realities require.

The curriculum is designed to produce University graduates who will:

- Understand symbolic, expressive, and interpretive communication systems in all of their complexities.
- Confront with an inquiring mind the natural, social, technical, and human worlds, and their interrelationships.
- Understand theories and methodologies for producing knowledge and evaluating information
- Interpret and understand human diversity in a global context.
- Discover and pursue a meaningful life, as well as being a responsible steward of the human and physical environment.

The specific objectives of the curriculum are as follows:

# A. Understand Symbolic, Expressive and Interpretive Communication Systems in All of their Complexities

- 1. Written: Students will demonstrate well-organized, well-developed papers that reflect appropriate use of language. They will demonstrate specific knowledge, critical and analytical abilities, and appropriate use of technology consistent with assignment objectives.
- 2. Oral: Students will demonstrate well-organized, well-developed oral presentations that reflect appropriate use of language and technology consistent with assignment objectives.

3. Other systems and forms: Students will demonstrate an understanding of the creative processes and experiences to be found within literature and the arts, and their relevance to culture by analysis, critical thinking, interpretation, performance, or other creative activity.

# B. Confront with an Inquiring Mind the Natural, Social, Technical and Human Worlds and their Interrelationships

- 1. Students will demonstrate an understanding of mathematics, the natural sciences and technology, including historical context and interrelationships with other disciplines.
- 2. Students will demonstrate an understanding of the social and behavioral sciences, including historical context and interrelationships with other disciplines.
- 3. Students will demonstrate an understanding of the arts and humanities, including historical context and interrelationships with other disciplines.

#### C. Understand Theories and Methodologies for Producing Knowledge and Evaluating Information

- 1. Students will demonstrate a general understanding of theories and methods of producing knowledge.
- 2. Students will demonstrate critical thinking and analytical abilities, including the capacities to engage in inductive and deductive thinking and quantitative reasoning, and to construct sound arguments.
- 3. Students will demonstrate an understanding of the scientific process.
- 4. Students will demonstrate an understanding of historical process.
- 5. Students will demonstrate information literacy skills including: identifying appropriate questions, problems, or issues; determining appropriate sources of information; locating and evaluating necessary information; and analyzing, synthesizing, and applying the knowledge gained.

#### D. Interpret and Understand Human Diversity in a Global Context

- 1. Students will demonstrate a critical understanding of the local and global processes that historically influence and help to define human differences. These might be expressed in biological, social, or cultural terms and include aesthetic, economic, gender, linguistic, political, religious, and other differences.
- 2. Students will demonstrate a critical understanding of how these differences have influenced the relative rights and responsibilities (e.g., issues of social justice, discrimination, and exploitation) accorded to individuals and groups within human societies, and how the actions of individuals and groups in one society affect life in another.

- 3. Students will demonstrate a critical understanding of theories (e.g., economic development, language, race, and gender) as to how these differences might affect the way(s) in which an individual or a group experiences and interprets the world.
- 4. Students will demonstrate a critical understanding of the role of language in forming cultural identities.

## E. Discover and Pursue a Meaningful Life as well as Being a Responsible Steward of the Human and Physical Environment

- 1. Students will demonstrate an understanding of how their decisions and actions affect the human and physical environment.
- 2. Students will demonstrate a critical understanding of local and global processes that reveal culturally different ways of pursuing a meaningful life, and of how such differences affect the environment.
- 3. Students will demonstrate intellectual development that emphasizes active involvement in the learning process, methods for developing answers, and the acquisition of critical facts and concepts.

The GEIC document includes detailed criteria for course approval with respect to courses that satisfy the core area requirements (Mathematics and Quantitative Reasoning, Natural Sciences, Social and Behavioral Sciences, Fine Arts and Humanities, Human Cultural Diversity and Global Context, and English Composition) and the curriculum dimensions (the Intellectual Strategies-Critical Thinking and Inquiry; the Approaches to Knowledge—Scientific Processes, and Creative and Interpretive Processes and Experiences; the Perspectives—Global Context, Historical Context and Process, Environmental Perspectives, Human and Cultural Diversity, Ethical Perspectives, and Interrelationships Among Disciplines; and the Competencies—Written Communication, Oral Communication, Language, Information Literacy, and Quantitative Literacy).

In response to concerns about student writing that emerged from the assessment reports on the existing Liberal Arts Curriculum, the GEIC included among the *Foundations of Knowledge and Learning* support for improving writing. The Committee made the following recommendations:

First, the scope of the USF Writing Center should be expanded to serve multiple purposes such as offering: individual instruction for students with severe weaknesses, training for peer and graduate assistants, and workshops targeting specific topics. There is evidence that some students have extensive deficiencies, which necessitate one-on-one tutorial assistance. Second, due to the elevated importance of writing and associated class size requirements,

graduate and peer assistants will be needed to facilitate the grading process. The Writing Center should develop and facilitate training for the peer and graduate assistants. The workshops for student writers could target:

- Developing and expressing ideas in papers.
- Understanding and avoiding plagiarism.
- Organizing for effective communication.
- Understanding and addressing appropriate audiences.
- Developing peer review capabilities.
- Writing research papers in the disciplines.
- Selecting and evaluating appropriate references.

The Writing Center should be available for in-person and internet tutorials, including synchronous peer review sessions. The need for this type of center was confirmed by results from the recently distributed Survey of Writing Evaluation Practices at the University. Although writing is assigned and writing weaknesses are revealed in courses ranging from history to biology, most faculty and graduate assistants report they are not equipped or have insufficient time to provide writing instruction.

In addition to Composition I and II, Gordon Rule classes should focus on process writing, specifically including feedback and revision. Of course, revision involves more than superficial editing; it fosters a deeper understanding, clarifies the meaning of the text, and helps organize writing to promote communication of ideas. Further, the importance of revision in improving writing and thinking is well documented in the composition literature. Thus, faculty who teach non-Gordon Rule general education courses should be encouraged to include writing assignments that allow or require students to revise their work. In these classes, graduate or peer assistants should be provided commensurate with the amount of writing assigned and the thoroughness by which the writing is to be assessed. These graduate and peer assistants should be trained through a collaborative effort between the Writing Center in the Department of English and the Center for 21st Century Teaching Excellence. Courses in any discipline in which writing assignments are given, feedback is offered, and revisions are encouraged, should be provided the designation: "process writing". Students seeking a baccalaureate degree from USF should be required to take a specific number of these "process writing" courses, as designated & approved by the Undergraduate Council and listed in the University Catalog.

Whenever possible, faculty should encourage writing to learn. By putting thoughts into words in a well-developed organized manner, students' reasoning skills will become sharper and deeper learning will occur. Student writing will be maintained and evaluated through electronic portfolios. Required writing samples and student selected writing samples will be included to ascertain if an acceptable level of writing proficiency is reached.

In short, if writing becomes an intentionally systematic focus of the General Education curriculum in particular, and all coursework in which writing plays a large role in general, stu-

dent writing and thinking will more closely approximate what we expect from the University graduate.

The Committee agreed that the Exit Courses that are such a distinctive feature of the existing Liberal Arts Curriculum should be retained, with some structural modifications designed to accommodate those programs and disciplines in which externally-imposed curriculum constraints have prevented full inclusion of the Exit Course requirements. The *Foundations of Knowledge and Learning* document describes the proposed Exit Program as follows:

Two exit courses (six credits total) are required. Enrollment is restricted to upper level students. Each course must emphasize at least three of the perspectives of the general education curriculum. The two courses should be interdisciplinary in nature and, where possible, should be offered outside the discipline/field of the student's major. The intent is to extend the general education/liberal arts curriculum throughout the baccalaureate program, signaling that the university values a liberal education as a vital part of any USF degree. Courses should be viewed as an essential part of general education and important to the program. The courses will include:

- One "writing intensive" course.
- One "capstone" course.

Each course should include an interdisciplinary experience that extends the liberal arts goals of the general education curriculum.

The Committee understands that some majors are faced with increasing curricular demands for specialized courses to meet the increasing demands for work and further graduate study, juxtaposed with the legislative limitation on credit hours in the degree. In those majors in which there is no room in the curriculum for the two exit courses to be offered outside the discipline or field, the courses may be offered as part of the major. These exit courses in the major must take on an interdisciplinary approach that causes students to reflect on issues and problems in the major within the context of broader perspectives outside the major. They must also emphasize at least three of the perspectives of the general education curriculum.

The writing course may focus on writing within the discipline where students gain skills that assist in their preparation for work as professionals in that field or for continuation of their study in graduate programs. However, the courses should include work that addresses writing for the "lay public" as well. Similarly, the capstone course should include an assessment and synthesis of materials from the major as well as from the liberal arts, infusing interdisciplinary connections between the two areas.

An example of an interdisciplinary writing course in the upper division would be an investigation of a text, document, work, discovery, episode, or idea, the impact and analysis of which extends beyond traditional disciplinary boundaries. Ideally, the topic of this course should be one that challenges the tendency to divide human inquiry within disciplinary

boundaries. For example, this course might focus on the "Scientific Revolution," focusing on how this period in our history has changed our ideas of how knowledge is acquired, how the world is structured, how society should be organized, how various cultures and civilizations effect one another, and how we can and should represent ourselves and the world around us in sciences, humanities, and the arts. Or, a course could be organized around the discovery of DNA, focusing on not only on its scientific consequences, but also on the social and ethical questions that followed in the wake of this discovery, as well as its literary and artistic representation by James Watson in his memoir, or in the film *The Race for the Double Helix*, or in the biography of Roslyn Franklin, *The Dark Lady of DNA*. One could also organize a course around the idea and movement called "Modernism," or the discovery of the "New World," the effects of which can be studied from nearly every perspective we adopt in disciplinary inquiry. The faculty who teach such courses may come from several departments within the university, and might have a common syllabus that, among its requirements, would include a research paper that required sustained critical analysis and argument.

Finally, the Committee proposed the creation of a nine-member General Education Council, chaired by a tenured faculty member and appointed by the Provost, to oversee the development, implementation, and ongoing assessment of the Foundations of Knowledge and Learning program. The General Education Council would have the following charge:

- Establish a collegial process that encourages the widest possible faculty participation in the development and delivery of general education courses.
- Approve (certify) courses following the criteria established in the Quality Enhancement Plan.
- Encourage the development of additional general education courses, especially areas in which options for students are limited.
- Review approved courses on a periodic basis (e.g., every three years) to ensure that the courses continue to satisfy the established criteria.
- Provide continuous assessment of the general education curriculum and student learning outcomes to ensure that the expectations established by the Quality Enhancement Process are met.

In keeping with the Committee's belief that a liberal education goes beyond the required 36 hours of general education and the required Exit Program and its expectation that the Foundations of Knowledge and Learning should be infused throughout the curriculum in all undergraduate majors, the General Education Council would also be charged to promote:

- Extensive efforts in all colleges and departments to extend the interdisciplinary approaches and understandings of the various disciplines.
- Students in all disciplines mastering at least one language other than their native language and acquiring a working facility with as many other languages as their interests and time allow.
- Continuing development of communication skills, written and oral, through courses in the majors that include emphasis on those skills.
- More emphasis on ethical dimensions, integrity and social responsibility in all areas of inquiry, scholarship and citizenship.

- Practice of using independent, knowledge based and creative thinking through a lifetime of learning.
- Infusion of diversity and multi-cultural concepts in the specialization areas, including multiple perspectives and styles of pedagogy.
- Expansion of course availability in the area of Historical Content and Process.

The Foundations of Knowledge and Learning Component Matrix is shown in Table 1.

The GEIC recommended that the annual budget for implementation of the General Education curriculum should include resources for the following:

- General Education Council. Funding for operations and staff support.
- Course Development. Support to departments for stipends, faculty reassignments, and teaching assistants.
- Capacity Enhancement. Support to departments for faculty positions, teaching assistants, and other instructional resources.
- Peer Learning. Stipends for undergraduate students to serve as mentors for other undergraduate students.
- Assessment. Support for assessment of student learning outcomes and program effectiveness.

#### **Undergraduate Research and Inquiry**

The Undergraduate Research Committee based its recommendations on its original conception of the "research triangle" depicted in its Fall 2003 PowerPoint presentation and shown in Figure 1.

The Committee felt strongly that the implementation of a comprehensive program of undergraduate inquiry and research at the University of South Florida would require the resources of a central office charged with its oversight and facilitation. Specifically, the Committee recommended that the existing Office of Undergraduate Research (OUR), located in the USF Honors College, be assigned this responsibility. While the OUR may remain in its current administrative location in Honors, the committee recommended that its charge should be explicitly expanded to include all USF undergraduate students. (The OUR has served both Honors and non-Honors students since its inception, but it was established primarily to enhance the Honors Program.) The committee also recommended that a University-wide faculty committee, with members representing all colleges and campuses, should be created to advise the OUR Director. The Director and the Advisory Committee together will be responsible for:

- Recommending the use of resources allocated to support the Undergraduate Inquiry and Research Program.
- Facilitating undergraduate inquiry and research in all colleges, schools, and departments at USF and on all campuses.
- Encouraging student interest in undergraduate inquiry and research.
- Recruiting faculty who will provide undergraduate inquiry and research experiences for students.

- Matching students and faculty through in-person efforts as well as through a web-based matching service.
- Assisting college, school, department, and campus level contacts for undergraduate inquiry and research.
- Assisting/advising undergraduate students in their efforts to prepare for graduate school.
- Providing support to colleges, schools, departments, and campuses in their preparation of grant applications that will include undergraduate research opportunities.
- Assisting colleges, schools, departments, and campuses in their efforts to seek other outside funding for undergraduate inquiry and research.

The Committee's goal is to have at least 1,000 undergraduates involved in intensive research activities by 2013/14. The goal for 2005/6 is 200 students.

The URC recommended that the annual budget for the Undergraduate Research and Inquiry Program should include resources for the following:

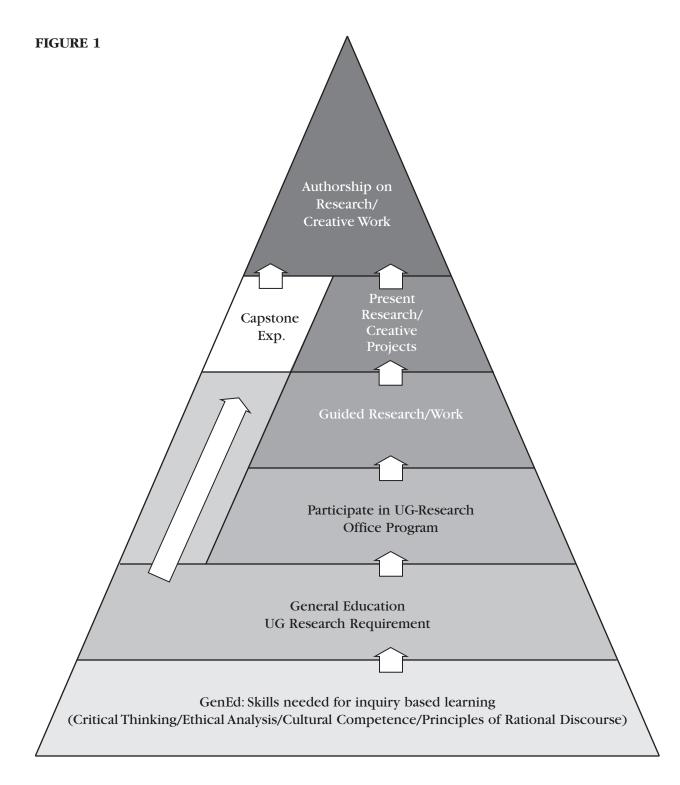
- Startup costs for department initiatives. These one-time funds would be provided on a competitive basis to purchase equipment or provide other support to initiate research opportunities that would subsequently be sustained from department resources.
- Student and faculty incentive funds. These funds for undergraduate research fellowships would be of two types to meet the needs of different departments:
  - Base level funds. Participating faculty would receive an annual allocation per undergraduate student to cover purchase of research supplies or payment of a small stipend to the student.
  - Fellowship level funds. These would be external funds obtained by the participating faculty member that would be matched by the University.
- Underrepresented student incentives. These funds would be used specifically to increase the number of undergraduates from underrepresented groups participating in undergraduate research activities.
- Augmentation of new faculty startup funds. These funds would be added to the new faculty startup package for the specific purpose of paying stipends to undergraduate research assistants. Use of the funds would be required by a certain date to encourage the timely hiring of undergraduate students.
- Dissemination of undergraduate research outcomes. These funds would cover trips to national conferences for the most gifted undergraduate researchers to introduce them to the process of result dissemination and would be awarded competitively. A separate allocation would be used to support faculty participation in conferences in order to publicize the University's efforts and achievements with respect to undergraduate research, which would both raise the institutional profile and facilitate the acquisition of external funding for undergraduate research opportunities.
- Faculty, instructor, and graduate assistant support. The Committee recognized that recurring resources would be needed in departments to fund faculty release time or additional faculty, instructor, and graduate assistant positions. This would enable departments to offer smaller classes in the major in order to facilitate the inclusion of undergraduate research experiences. These funds might also be used for the development of undergraduate research-oriented courses on topics such as experimental procedure, record keeping, dissemination of

- results, literature research, etc. Departments would request these funds through a competitive process.
- Freshman reading program. This would involve an annual required reading program (a collaboration of the Office of Undergraduate Research and the Office of Student Orientation) that would stimulate interest in and understanding of research. The program would begin with the identification of a book likely to be of interest to students and that would be read during the summer prior to their matriculation in the fall. A Freshman Convocation would be held early in the Fall semester with the author as guest speaker.
- Distinguished lecture series. Such a series is a traditional vehicle for promoting scholarly and artistic discourse at the highest possible levels. The purpose of such discourse is to advance the mission of scholarship and artistry, to challenge the thinking and creativity of University citizens, and to ensure that the University community participates in the larger discussions of the core academic disciplines nationally and internationally. It is expected that the lecture series would eventually be funded, at least in part, by an outside sponsor.

TABLE 1. Foundations of Knowledge and Learning: USF General Education Requirements: COMPONENT MATRIX

| Core Areas   |   |                         |   |        | (See crite   | Dimensions <sup>b</sup><br>(See criteria for explanations) | b<br>lanations)                       |                              |   |                             |                  |   |
|--|---|-------------------------|---|--------|--|--|---------------------------------------|------------------------------|---|-----------------------------|------------------|---|
| Knowledge and Inquiry <sup>a</sup> (see criteria)                  | Knowledge and Intellectual Strategies Inquiry <sup>a</sup> (Required) |                         | Approaches to<br>Knowledge<br>(Processes)           |        |  | Perspectives<br>(Contexts)                                 | ctives<br>exts)                       |                              |   | Ŏ                           | Competencies     | ş   |
| For<br>General Education<br>(12 courses,<br>36 credit hours)       | Critical Inquiry<br>Thinking  | Scientific<br>Processes | Creative and Interpretive Processes and Experiences | Global | Historical <sup>e</sup><br>Context<br>and<br>Process | Environ-<br>mental<br>Perspectives                         | Human<br>and<br>Cultural<br>Diversity | Ethical<br>Perspec-<br>tives | Interrela-<br>tionships<br>among<br>Disciplines | Written<br>Lang 1<br>Lang 2 | Oral<br>L1<br>L2 | Information<br>Literacy<br>Quantitative<br>Literacy |
| Mathematics Mathematics (1 or 2) Quantitative Reasoning 2 (0 or 1) |   |                         |   |        |  |  |                                       |                              |   |                             |                  |   |
| Natural<br>Sciences (2)<br>(1 life sci,<br>1 phys sci.)            |   |                         |   |        |  |  |                                       |                              |   |                             |                  |   |
| Social and<br>Behavioral<br>Sciences                               |   |                         |   |        |  |  |                                       |                              |   |                             |                  |   |
| Fine Arts (1) and Humanities (2)                                   |   |                         |   |        |  |  |                                       |                              |   |                             |                  |   |
| Human Cultural<br>Diversity and<br>Global Context                  |   |                         |   |        |  |  |                                       |                              |   |                             |                  |   |
| English<br>Composition<br>(2)                                      |   |                         |   |        |  |  |                                       |                              |   |                             |                  |   |
|  |   |                         |   |        |  |  |                                       |                              |   |                             |                  |   |

a individual courses will be assigned to only one Core Area of Knowledge and Inquiry. b All courses must be certified for a minimum of 5 dimensions (two of which must be intellectual strategies). c For the first 2 years of General Education implementation, at least one course taken by a student must include Historical Context and Process Perspective. Following the first 2 years, the requirement will be two (2) courses provided resources are available to offer the necessary number of courses.



#### IMPLEMENTATION OF THE PLAN

Full implementation of the Quality Enhancement Plan will begin in 2005/6. A QEP Director (0.50 FTE faculty position reporting to the Dean of Undergraduate Studies) will be appointed in Fall 2005 to oversee the implementation of the Quality Enhancement Plan. The Director will be assisted by a QEP Advisory Committee.

In Spring 2004, as part of the University's budget planning for fiscal year 2004-5, Provost Renu Khator asked the Quality Enhancement Steering Committee, the General Education Improvement Committee, and the Undergraduate Research Committee to prepare a budget estimate for implementation of the Quality Enhancement Plan in 2004/5 and beyond. A budget estimate was developed based on the draft proposals of the two working committees, and Provost Khator committed almost \$5 million dollars by 2013/4 to support implementation of the Plan. Approximately \$500,000 was allocated in fiscal year 2004/5 to fund preliminary activities, as follows:

- The revised general education program proposed by the General Education Improvement Committee in its document, Foundations of Knowledge and Learning (see pp. 22ff) was approved by the Undergraduate Council on behalf of the USF Faculty Senate in October, 2004. The new general education curriculum was approved for implementation in Fall 2006. As a next step, the General Education Council will be appointed and charged in Spring 2005; the 2004/5 resource allocation will provide release time for the Chair and staff support for the Council. Departments will initiate course development, in most cases beginning with a review of existing general education offerings to determine which courses already meet the new criteria or would do so with modest revisions. Departments and colleges will also be expected to initiate planning for full implementation of the new program and develop resource requests for 2005/6 and beyond, to include capacity enhancement in the form of additional faculty positions, teaching assistants, and adjuncts.
- Dr. Naomi Yavneh, Professor of Humanities, was appointed to the newly created, part-time faculty position of Director of Undergraduate Research in October 2004. A support staff position for the Office of Undergraduate Research was also created. An Undergraduate Research Advisory Committee was appointed to assist the Director. The 2004/5 budget of the Office of Undergraduate Research also includes resources that may be allocated to departments on a nonrecurring basis to fund efforts to initiate or expand research opportunities for undergraduate students, and funding for the Distinguished Lecture Series. Departments and colleges will be encouraged to initiate planning for full implementation of the new program and develop resource requests for 2005/6 and beyond, to include capacity enhancement in the form of additional faculty positions, research assistants, and postdoctoral fellows.
- The 2004/5 preliminary budget for the Quality Enhancement Plan also includes allocations to the Office of Institutional Effectiveness to begin developing assessment activities and to the Center for 21st Century Teaching Excellence for faculty development activities. Online resources are being developed to assist colleges, departments, and individual faculty with

Quality Enhancement Plan implementation, as are workshops for the General Education Council; for faculty interested in developing new and existing courses to meet the newly approved general education criteria; and for departments and faculty interested in enhancing undergraduate research and inquiry-based learning in their programs and courses.

**TABLE 2** FIVE-YEAR IMPLEMENTATION PLAN FOR INSPIRE: THE USF QUALITY ENHANCEMENT PLAN

|  | 2004/5   | 2005/6  | 2006/7                                     | 2007/8 | 2008/9 |
|--|--|---|--|--------|--------|
| General Education<br>Improvement         | Undergraduate Council approves new curriculum  | QEP Director (0.50 FTE faculty position) is appointed                                   | >>   | >>     | >>     |
|  | Provost appoints General Education Council and allocates stipend for Chair.                                  | Departments continue<br>General Education course<br>development                         |  |        |        |
|  | Departments begin reviewing existing General Education courses.  | Departments begin capacity enhancement (faculty, teaching assistants, adjuncts).        | Departments continue capacity enhancement. | >>     | >>     |
|  | Departments begin developing new General Education courses.  | Peer Learning Program<br>implemented (80 under-<br>graduate students per year)          | Peer Learning Program continues.           | >>     | >>     |
|  | Departments develop budget requests for capacity enhancement.  | Support staff position for General Education Council allocated and filled.              |  |        |        |
| Undergraduate<br>Research and<br>Inquiry | Lecture Series begins.   | Lecture Series continues.   | >>   | >>     | >>     |
|  | Office of Undergraduate<br>Research receives expanded<br>scope and mission.                                  | Freshman Reading Program begins.  | Freshman Reading<br>Program continues      | >>     | >>     |
|  | Director of Undergraduate<br>Research (.50FTE) appointed.  | Departments begin capacity enhancement (faculty, research assistants, postdocs)         | Departments continue capacity enhancement. | >>     | >>     |
|  | Support staff position (1.00FTE) filled.   | Office of Undergraduate<br>Research distributes faculty<br>and student stipend funds to | >>   | >>     | >>     |
|  | Advisor position (1.00 FTE) filled.  | departments.  |  |        |        |
|  | Departments develop budget requests for capacity enhancement, including faculty and student stipends.        |   |  |        |        |
| Faculty Support<br>and Development       | Web sites developed<br>for General Education<br>Improvement and<br>for Undergraduate<br>Research and Inquiry | Development and enhancement of online resources.  | >>   | >>     | >>     |
|  | Orientation for General<br>Education Council   |   |  |        |        |
|  | Faculty workshops on new<br>General Education curriculum<br>scheduled.                                       | General Education course development workshops for faculty continue.                    | >>   | >>     | >>     |
|  | Faculty workshops on<br>Undergraduate Research and<br>Inquiry scheduled.                                     | Faculty workshops on<br>Undergraduate Research and<br>Inquiry continue.                 | >>   | >>     | >>     |

#### MEASURING THE SUCCESS OF INSPIRE

The success of INSPIRE will be measured in two ways:

- The extent to which the stated action components have been implemented.
- The extent to which improvements in student learning outcomes have been demonstrated.

Table 3 shows the five-year INSPIRE assessment plan. At the end of five years, the QEP Director will prepare a progress report for review by the Undergraduate Council. An action plan and resource request for the next five-year period (2009/10 through 2013/14) will be developed by the QEP Director based on the results of the Undergraduate Council review and presented to the Provost for approval.

#### **EVALUATING THE PLAN AND MONITORING PROGRESS**

The proposed system for evaluating the Quality Enhancement Plan includes both process (implementation) monitoring and product (outcome and impact) assessments. The progress of the Quality Enhancement Plan will be monitored through the collection and analysis of data related to critical events planned for the installation and implementation of both the General Education Improvement and Undergraduate Research and Inquiry components (see Table 2). Such critical events include the appointments of individuals and committees, allocation of resources, and provision of professional development to enhance the infrastructure of USF to support the Quality Enhancement Plan. Other key elements of the process evaluation include monitoring student and faculty program participation, identification of obstacles and challenges associated with the establishment and implementation of the components, and assessment of the psychometric integrity of instrumentation developed for student assessments. Key questions that will guide the Quality Enhancement Plan evaluation are:

- To what extent are the stated action components implemented?
  - What impediments and challenges to implementation are encountered?
  - How are these challenges overcome?
- To what extent does the revised General Education coursework facilitate:
  - the development of thinking skills needed for undergraduates to engage in research?
  - the achievement of other learning outcomes identified in the Quality Enhancement Plan?
- To what degree does the University environment encourage undergraduates to become involved in research?
- What is the impact of research involvement on undergraduate students' subsequent academic and professional achievements?

Annual progress reports, including summaries of relevant process data and identified challenges to the implementation, will be prepared by the QEP Director. The provision of annual reports will allow sufficient time to adjust implementation strategies, if needed, to ensure that subsequent phases have maximum opportunity for success.

TABLE 3 CUMULATIVE FIVE-YEAR ASSESSMENT PLAN FOR INSPIRE: THE USF QUALITY ENHANCEMENT PLAN

|   | 2004/5   | 2005/6  | 2006/7  | 2007/8   | 2008/9   |
|---|--|---|---|--|----------|
| General<br>Education<br>Improvement           | Continue Freshman and Senior Surveys.  | >>  | >>  | >>   | >>       |
|   | Continue assessing intellectual development, writing skills, and math skills.  | >>  | >>  | >>   | >>       |
|   | Add assessment of Information Literacy.  | >>  | >>  | >>   | >>>      |
|   | Administer NSSE.   | >>  | >>  | >>   | >>>      |
|   |  | Add assessment of critical/analytical thinking.   | >>  | >>   | >>       |
|   |  | Develop criteria and rubrics<br>or select standardized tests to<br>assess core areas of Social &<br>Behavioral Science and Fine<br>Arts & Humanities. | ·>  | ·>   | >>       |
|   |  |   | Develop criteria and rubrics<br>or select standardized tests to<br>assess core areas of Natural<br>Sciences & Human & Cultural<br>Diversity & Global Context. | >>   | >>       |
|   |  |   | Develop criteria and rubrics for oral communication and quantitative literacy.  | >>   | >>-      |
|   |  |   |   | Implement 3-year cycle for assessment of Social/Behavioral Sciences, Fine Art Humanities, Human & Cultur Diversity/Global Context, and Natural Sciences. All other areas continue to be assessed annually. | s/<br>al |
| Under-<br>graduate<br>Research<br>and Inquiry | Update and expand baseline information on existing UGRI initiatives at USF.  |   |   | accoccca amicany.  |          |
|   | Develop annual survey to<br>measure UGRI participation<br>rates by students, faculty,<br>departments, and disciplines. | Implement annual survey of UGRI participation rates by students, faculty, departments, and disciplines.   | >>  | >>   | >>-      |
|   | Develop UGRI-related items for Graduating Senior Survey.   | Add UGRI-related items to Graduating Senior Survey.   | >>  | >>   | >>-      |
|   |  | Identify measures of students'<br>inquiry skills (course-<br>embedded or standardized test  |   | >>   | >>       |
|   |  |   |   | Collect and compare information on UGRI initiative in place at USF.  | 98       |
| Implementation<br>Process                     |  | Report on critical events   | >>  | >>   | >>       |
| 1 100633                                      |  | Report on resource allocations  | >>  | >>   | >>>      |
|   |  | Identify obstacles/challenges   | >>  | >>   | \\\\\    |

#### MEASURES TO BE USED TO ASSESS THE PLAN

A multi-method approach to data collection will be employed to ensure adequate measures are gathered to assess the breadth and depth of the implementation of the Quality Enhancement Plan and to evaluate its ongoing effectiveness. To address questions of process, both quantitative and qualitative data will be gathered. Quantitative measures may include student enrollment in and completion of General Education courses, student participation in the Lecture Series and Freshman Reading Program, and surveys of student perceptions of the quality of their experiences. Additionally, data will be gathered on information dissemination about undergraduate research opportunities, student and faculty participation in undergraduate research and venues available for students and faculty to share their research, and resource allocations to colleges and programs. Qualitatively, Quality Enhancement Plan document reviews (e.g., course approval processes, course syllabi, and course materials) and interviews with key stakeholders (program directors, participating faculty, and students) will be conducted to augment the quantitative information.

Measures of student outcomes will provide an important component of the assessment of Quality Enhancement Plan effectiveness. In support of the General Education components, measures will include student scores on intellectual development, writing, and math assessments (see Table 3). Additionally, assessments in Social/Behavioral Science, Fine Arts/Humanities, Human and Cultural Diversity and Global Context, and Natural Sciences will be developed, field tested, and validated during the first three years of the Quality Enhancement Plan. These assessments will be used to measure student growth in critical skill areas. Additional indices of student outcomes include the proportion of students who engage in research, and the number of opportunities and financial resources provided to support undergraduate research. These measures and the relationship between participation in research and academic achievement will provide additional empirical evidence of the efficacy and effectiveness of the Undergraduate Research and Inquiry components of the Quality Enhancement Plan.

As the Quality Enhancement Plan matures and the revised General Education curriculum and Undergraduate Research and Inquiry initiatives become ingrained in the culture of the university, additional measures will be implemented to include additional stakeholders (alumni surveys and interviews with employers, for example).

During 2004/05, the assessment plan for the General Education program will remain focused on the weaknesses previously identified by the General Education Assessment Advisory Committee (see pp. 15ff) while also generating baseline data for comparing later student learning outcomes following implementation of the Quality Enhancement Plan. Particular attention will be paid to assessment of student writing in the English Composition program and student perceptions of recently implemented changes. In addition to assessments of writing, intellectual development, cognitive levels, general education dimension, and mathematics achievement, the National Survey of Student Engagement (NSSE) will be used to measure students' perceptions of their engagement and research activities.

Expected outcomes to be assessed in 2005/6 will include the following:

- Students will demonstrate proficient writing skills by organizing and developing their writing appropriate to the audience and purpose of the writing assignment, and by using appropriate language for the context. Seventy percent of the students sampled in exit courses will attain a mean score of 3.5 or higher on the Cognitive Level and Quality Writing Assessment on a standard assignment and an assignment selected from a general education exit course; 100% will attain a mean score of "3" on the same assignments.
- Students will demonstrate an understanding of social scientists' methods of inquiry to study social life by using systematic analyses to interpret data in a social science research project. A five-point primary trait analysis of the critical components identified by social science faculty will be used to judge students' understanding. A score of "3" on each of the components will be required to demonstrate proficiency.
- Students will demonstrate an understanding of the methods of behavioral science inquiry by developing a behavioral science research proposal. Proposals will be judged to be at the "acceptable" level by a faculty committee. Proposals will be revised until this level is attained.
- Students will demonstrate an understanding of artists and audiences by engaging in a project to understand both perspectives. Student will "discuss" both perspectives through written, oral, or performance examples. With a five-point scale, faculty will judge student products on creativity and levels of understanding of the artist and audience.
- Students will demonstrate improvements in critical/analytical thinking as evidenced by scores on the Measure of Intellectual Development and the Cognitive Scale of CLAQWA. Twenty percent more students will score in the "Expected" and "Desired" categories of the MID than in 2003-2004 and 10% more students in 2005-2006 than in 2003-2004 will demonstrate application and higher levels on the Cognitive Scale of CLAQWA.
- Improvement will be demonstrated in students' liberal arts mathematics performance as demonstrated in scores on the Finite Mathematics Common final. As compared to 2000-2004 results, ten percent more students will earn a passing score of 70%.
- A larger percentage of students will engage in research activities, such as conducting
  research in a lab in the field or in the library (virtual and in person), as evidenced by results
  in the Quality Education Enhancement Survey and NSSE as compared to 2003-2004 baseline
  data.

#### USE OF ASSESSMENT RESULTS TO IMPROVE STUDENT LEARNING

Annual progress reports will include summaries of both process and outcome data. An annual assessment of progress toward implementation of the Quality Enhancement Plan and the measured impacts on student learning and development will provide an opportunity to modify programs to increase their effectiveness. These reports will include analyses of changes in student learning, hypotheses of reasons for success or failure at achieving the target student outcomes, and suggestions for redirecting resources and/or refining measures in subsequent years. Similarly, for the Undergraduate Research and Inquiry (UGRI) component, annual progress reports will analyze the extent of change in research and inquiry involvement as measured in the preceding years, offer tentative explanations and suggestions for improvement, and report on the extent to which involvement in research is related to achievement, as measured by the battery of General Education assessments.

### MONITORING THE EFFECTIVENESS OF THE ASSESSMENT PLAN

Although the Joint Committee Standards for Program Evaluation (1994) are most often used for metaevaluation, or determining the post-hoc effectiveness of an evaluation effort, these standards will be used in this evaluation project as criteria for designing, conducting, and reporting Quality Enhancement Plan evaluative information for both the General Education and the Undergraduate Research and Inquiry components. Using such standards for project design is critical for assuring quality, systematic evaluation materials, methods, and reports.

The four families of evaluation standards that will guide the design include utility, accuracy, appropriateness, and feasibility. The utility standards will help the project ensure that information gathered during the evaluation will serve the information needs of those providing and those monitoring the General Education and Undergraduate Research and Inquiry programs. The accuracy standards will be used to help ensure that technically accurate information is used to determine the worth or merit of aspects of the program. The University of South Florida must be concerned with the welfare of those involved in the programs as well as all those affected by this evaluation; thus, the Committee's propriety standards will be used to guide evaluation planning and procedures to ensure they will be conducted legally, ethically, and with regard for all stakeholders. Finally, realizing the financial constraints present at USF, the Joint Committee criteria of realism, prudence, diplomacy, and frugality within the feasibility standards will be used as criteria for action through all phases of the evaluation. Table 4 contains a summary of the criteria within each of the families to illustrate the systematic nature of the standards and their utility for designing, conducting, and reporting evaluation information from this project.

As a summary of the assessment plan, Figure 2 contains a graphical representation of the Quality Enhancement Plan evaluation model that depicts the main focus of the evaluation project (i.e., the Quality Enhancement Plan components of General Education and Undergraduate Research and Inquiry). Beneath these Quality Enhancement Plan umbrella components are the program evaluation standards that guide the evaluation across the components and that provide

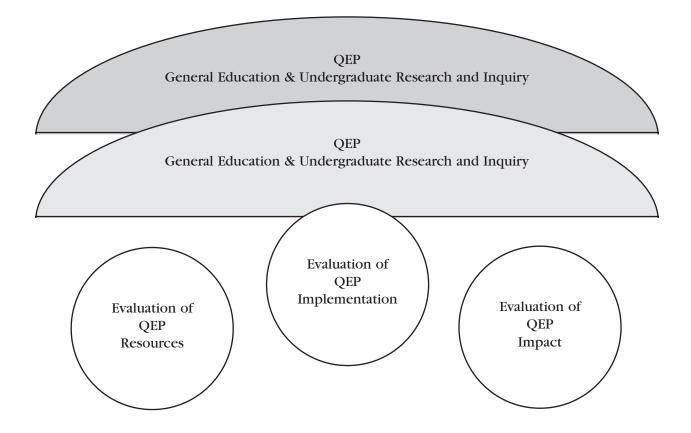
the foundation for judging the quality of the assessment. Finally, the bottom of the figure depicts the management focus of the evaluation, including resources allocated, programs implemented, and impacts of the Quality Enhancement Plan on student learning.

### TABLE 4

Four Families of Program Evaluation Standards for Designing, Conducting, and Reporting the Evaluation for the General Education (GE) and the Undergraduate Research and Inquiry (UGRI) Strands Summarized from the Joint Committee Standards for Program Evaluation (1994)

| Utility  | Accuracy  | Proprietary  | Feasibility   |
|--|---|--|---|
| Stakeholder identification Evaluator credibility Information scope and selection Values identification Report clarity Report timeliness and dissemination. Evaluation impact | Program documentation Context analysis Describe purposes and procedures Defensible information sources Valid information. Reliable information Systematic information Analysis of quantitative information Analysis of qualitative information Justified conclusions Impartial Reporting Metaevaluation | Service orientation Formal agreements Rights of human subjects Human Interactions Complete and fair assessment Disclosure of findings Conflict of interest Fiscal responsibility | Practical procedures Political viability Cost effectiveness |

FIGURE 2 The QEP Evaluation Model



## **CONCLUSION**

INSPIRE: The USF Quality Enhancement Plan is an important step in the evolution of the University of South Florida into one of the nation's major public research universities. Successful implementation of INSPIRE will help create an intellectually challenging environment that will attract the most highly talented undergraduate students. It will also enhance USF's ability to attract qualified faculty who will contribute to the development of nationally and internationally distinctive research and graduate programs. Thus, INSPIRE, when fully implemented, will contribute significantly to the achievement of USF's strategic goals and objectives, as well as to improved learning outcomes by USF students.

### Online Resources for INSPIRE: The USF Quality Enhancement Plan

http://www.usf.edu/overview.html Overview of the University of South Florida.

http://www.usf.edu/ataglance.html Quick Facts About USF.

http://isis.fastmail.usf.edu/president/vis\_val.html USF Mission. Goals, Values, and Vision.

http://isis.fastmail.usf.edu/board/index.html University of South Florida Board of Trustees.

http://usf.edu/admin\_org.html USF Organizational Chart of Administration.

http://www.fboe.org/BOG/default.asp Florida Board of Governors.

http://www.acad.usf.edu/IE/PPA/local.asp USF Strategic Plan.

http://www.acad.usf.edu/IE/QEP/QEPMain.html USF Quality Enhancement Planning.

http://www.ugs.usf.edu/gec/facappdoc.htm The Liberal Arts Curriculum: The Approved Faculty Document.

http://naples.cc.sunysb.edu/Pres/boyer.nsf The Boyer Commission on Educating Undergraduates in the Research University. Reinventing Undergraduate Education: A Blueprint for America's Research Universities. Publication Date: 1998.

http://www.sunysb.edu/pres/0210066-Boyer%20%report%20final.pdf The Boyer Commission on Educating Undergraduates in the Research University. Reinventing Undergraduate Education: Three Years After the Boyer Report. Publication Date: 2001.

http://www.sunysb.edu/Reinventioncenter/index.html The Reinvention Center at Stony Brook.

http://www.acad.usf.edu/IE/QEP/QEPinvitation.html QEP Needs Assessment Report, 5/17/04.

http://www.acad.usf.edu/IE/QEP/QEPinvitation.html General Education Improvement Proposal August, 2004.

http://www.acad.usf.edu/IE/QEP/QEPinvitation.html Undergraduate Research Recommendations, March 9 2004.

http://www.usf.edu/GenEdAssessment USF General Education Assessment Advisory Committee

## General Education: Programs and Models at Other Universities

AAC&U Newsletter - Article on Reinventing General Education at UCLA

Binghamton University, SUNY, General Education Program

Case Western Reserve University, Seminar Approach to General Education and Scholarship

Duke University, Curriculum 2000 report on General Education

Duke University, Curriculum 2000 report summary

Georgia Institute of Technology, committee report on General Education

Harvard University, Core Curriculum Requirement

Massachusetts Institute of Technology, Undergraduate Program Requirements

North Carolina State University, Undergraduate Program Information

Penn State Symposium on General Education

Portland State University, General Education Program

Stanford University, Undergraduate Education

The Reinvention Center at Stony Brook, Resources on General Education

University of California at Los Angeles, General Education program

University of Illinois, Urbana-Champaign, General Education

University of Michigan, College of Literature, Science, & Arts, Undergraduate Education

University of Michigan, Global Change Curriculum

University of Tennessee, Chattanooga, General Education Program

University of Texas at Austin, Bridging Disciplines Program

### General Education Assessment: Strategies, Methods, Examples

California State University, San Bernardino, General Education Assessment

Cleveland State University, General Education Assessment

Clemson University, General Education Assessment

Marymount University, General Education Assessment

Northern Illinois University, General Education Assessment

Oklahoma State University, General Education Assessment

SUNY Brockport, General Education Assessment

SUNY Cortland, General Education Assessment

Suny Geneseo, Assessment of General Education

University of South Carolina, General Education Assessment

University of Wisconsin, Green Bay, General Education Assessment

### Undergraduate Research and Inquiry: Examples, Cases, and Model Programs

Case Western Reserve University, Seminar Approach to General Education and Scholarship

Duke University, Undergraduate Research Support Office

Georgia Tech University, Undergraduate Research

Harvard University, Research programs for students

Harvard University, Facts about undergraduate research

Massachusetts Institute of Technology, Undergraduate Research Opportunities Program

Rensselaer Polytechnic Institute, Undergraduate Research Program

Stanford University, Sophomore College

Stanford University, Undergraduate Research Opportunities

State University of New York at Stony Brook Undergraduate Research and Creative Activities Program

Syracuse University Future Professoriate Project, Anthropology

Syracuse University Future Professoriate Project, English

University of California at Berkeley, Commission on Undergraduate Education

University of Chicago, College Research Opportunities Program

University of Chicago, Little Red School House Program

University of Delaware, Undergraduate Research Program

University of Iowa, Rhetoric Department

University of Maryland, The Gemstone Program

University of Maryland, Maryland Center for Undergraduate Research

University of Michigan, Integrating Research and Undergraduate Learning

University of Missouri-Columbia, General Education Program

University of Utah, LEAP program

University of Washington, Scholarly Research for Undergraduates

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