

Developing an Ecological Perspective and Fostering Community Involvement

The Quality Enhancement Plan
for Florida Gulf Coast University

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

2005



FLORIDA
GULF COAST
UNIVERSITY

CONTENTS

List of Tables and Figures	i
Executive Summary	1
Section I: Context and Background	5
Introduction	5
Institutional Context	8
Environmental Education at FGCU	10
Civic Engagement and Service-Learning at FGCU	11
Key Terms and Definitions	12
Section II: Focus of the Plan	15
QEP Mission	15
Defining Principles for the QEP	15
Discussion of Student Learning	16
Relevant Literature	18
Literature Related to Environmental Education	19
Literature Related to Service Learning	26
Relevant Literature: Summary	32
Section III: Institutional Capability	35
Implementation and Continuation Activities	35
Administrative Oversight	41
Financial Resources	42
Section IV: Assessment of the Plan	45
Program Evaluation	45
Scope of the Plan	47
Student Learning Assessment	47
Curricular Review	50
Summary	53
Internal System for Evaluating the QEP and Monitoring Progress	53
Section V: Institutional Participation	59
Conclusion	61
Section VI: Appendices	63
Appendix A: FGCU Vision, Mission, and Guiding Principles	63
Appendix B: Undergraduate Student Learning Goals and Outcome	65
Appendix C: FGCU Student Characteristics	67
Appendix D: Course Descriptions	69
Appendix E: Service-Learning Courses at FGCU	70
Appendix F: Summary of QEP Development Activities	71
Appendix G: Overview of QEP Process	74
Appendix H: List of Acronyms	75
Appendix I: References	76

LIST OF TABLES AND FIGURES

Tables

Table 3.1 Five Year Plan 36
Table 3.2 QEP Phase I 37
Table 3.3 QEP Phase II 38
Table 3.4 QEP Phase III 39
Table 3.5 QEP Phase IV 40
Table 3.6 QEP Phase V 41
Table 3.7 QEP Budget 44
Table 4.1 Methods Used To Access 46
Table 4.2 Timeline for Implementation 50

Figures

Figure 1.1 Focus of QEP 7
Figure 1.2 Developmental Approach 7
Figure 3.1 QEP Organizational Chart 42
Figure 4.1 Context Diagram 54
Figure 4.2 Data Flow Diagram 55
Figure 4.3 Process Model 56
Figure 4.4 QEP Feedback Loop 57

EXECUTIVE SUMMARY

Quality Enhancement Plan Title: *Develop in students an ecological perspective and foster community involvement through experiential learning, scholarly dialogue, and interdisciplinary engagement.*

The founding mission statement for Florida Gulf Coast University (FGCU) noted that “study of the environment” would be a central focus and that “student volunteer service” would complement the teaching and service missions of the university. These two concepts—ecological perspective and civic engagement—have become integral parts of the university’s identity and were reaffirmed when a new mission statement was adopted in December 2002.

The ultimate goal of FGCU’s Quality Enhancement Plan (QEP) is to improve student learning in two of the university’s Undergraduate Student Learning Outcomes, specifically #3 “An Ecological Perspective” and #9 “Community Awareness and Involvement” by employing teaching and learning strategies that emphasize experiential learning, scholarly dialogue, and interdisciplinary engagement. The QEP provides an opportunity to systematically evaluate student learning in these areas and develop strategies to refine curriculum and enhance student learning as part of an on-going plan of continuous improvement.

The topic for FGCU’s QEP was selected following review of the university’s mission statement, analysis of SACS criteria for selecting the focus for a QEP, focus group interviews with faculty and administrators, and consultation with the academic community. A topic focusing on ecological perspective and community involvement was selected for the following reasons: This topic has broad university support; reflects the interests of the entire academic community and beyond; is consistent with the university’s Guiding Principles, which are deeply embedded in the institution’s culture; is congruent with the university’s mission and strategic plan; provides opportunities to incorporate evidence-based practice into successful student learning activities and educational processes that are already in place; and provides a framework for addressing goals and outcomes in multiple settings. In addition, this topic is forward-looking in that it will focus attention on how a new institution with a unique mission can maintain and improve quality as it grows and matures.

Campus-wide support and input have been and will continue to be important factors in the development and implementation of the QEP. Over the past few months, the QEP Committee has reviewed evidence-based literature in environmental education, service learning, experiential learning, and innovative pedagogy. The QEP Committee is proposing a five-year plan that involves five overlapping phases focusing on curricular development, faculty and student research, faculty development, assessment, and evaluation activities. The proposed QEP will build on current university planning and evaluation strategies and benchmarking to develop assessment instruments and processes to systematically evaluate student learning. Knowledge gained as a result of this systematic evaluation will be used to inform curricular and administrative decisions and practices.

*The Quality Enhancement Plan
for
Florida Gulf Coast University
10501 FGCU Boulevard
Fort Myers, FL 33965-6565*

February 2005

On behalf of the entire Florida Gulf Coast University community, we thank the members of the On-Site Review Committee for their time and expertise in evaluating our Quality Enhancement Plan (QEP) and for all suggestions that may be offered as a means of strengthening the QEP and enhancing overall institutional quality and effectiveness.

William C. Merwin
President

Bonnie Yegidis
Provost and Vice President for Academic Affairs

The QEP Committee

Gray-Vickrey, Dr. Peg
QEP Committee Chair
Professor
College of Health Professions

Andrews, Dr. Christine
Assistant Professor
College of Business

Hobbs, Dr. Bradley
Associate Professor
College of Business

Bevins, Dr. Sharon Irish
Associate Professor
College of Health Professions

Pieterse, Ms. Corrie
FGCU Alumna
Accounting Coordinator
College of Arts and Sciences

Bevins, Thomas
Assistant Professor
College of Health Professions

Ravelli, Dr. Joseph
Interim Director of General Education
Academic Affairs

Corcoran, Dr. Peter Blaze
Professor
College of Arts and Sciences

Summers, Ms. Linda
Director
Center for Civic Engagement

Duff, Ms. Cathy
Assistant Dean
Planning and Institutional Performance

Warren, Ms. Amber
Student
College of Education

Everham III, Dr. Edwin M.
Associate Professor
College of Arts and Sciences

Zager, Dr. Mary Ann
Associate Dean and Associate Professor
College of Professional Studies

Gonzales, Dr. Maria
Assistant Professor
College of Education

The SACS Steering Committee

Carter, Dr. Cecil Steering Committee Co-Chair College of Education	Snyder, Dr. Paul Steering Committee Co-Chair Planning and Institutional Performance
Bielen, Dr. Al Facilities Services	Hess, Dr. Debra College of Arts and Sciences
Dobbert, Dr. Duane College of Professional Studies	June, Dr. Vincent Student Affairs
Donlan, Ms. Rebecca Library Services	Rogers, Dr. Hudson College of Business
Duff, Ms. Cathy Accreditation Liaison	Vazquez, Mr. David University Budget Office
Gray-Vickrey, Dr. Peg College of Health Professions	Volety, Dr. Aswani College of Arts and Sciences
Hall, Mr. Matthew Student Government	

The SACS Leadership Team

Merwin, Dr. William President	Yegidis, Dr. Bonnie Provost and Vice President for Academic Affairs
Shepard, Dr. Joseph Vice President for Administrative Services	Magiera, Mr. Steve Vice President for University Advancement
Anderson, Ms. Audrea AVP Marketing & Community Relations	McAloose, Mr. Carl Director of Intercollegiate Athletics
Bullock, Mr. Curtis Executive Director FGCU Finance Corp.	Morris, Ms. Wendy General Counsel
Carter, Dr. Cecil SACS Steering Committee Co-Chair	Price, Ms. Mary Staff Advisory Council President
Duff, Ms. Cathy Accreditation Liaison	Price-Henry, Dr. Donna Faculty Senate President
Evans, Ms. Susan University Spokesperson	Snyder, Dr. Paul SACS Steering Committee Co-Chair
Gray-Vickrey, Dr. Peg QEP Committee Chair	

The Florida Gulf Coast University Board of Trustees

Lutgert, Mr. Scott F. Chair	Lester, Dr. W. Bernard Vice Chair	Cobb, Mr. Brian Trustee
Hall, Mr. Matthew Trustee	Lucas, Mr. David Trustee	Starkey, Mr. Jerry Trustee
Hart, Mr. Larry D. Trustee	Moon, Dr. Harry K. Trustee	Villalobos, Mr. P. Michael Trustee
Henry, Dr. Donna Price Trustee	Morton, Mr. Edward A. Trustee	Whitcomb, Ms. Jaynie M. Trustee

This Page Intentionally Left Blank.

SECTION I

CONTEXT AND BACKGROUND



FLORIDA
GULF COAST
UNIVERSITY

SECTION I: CONTEXT AND BACKGROUND

Introduction

From its inception, Florida Gulf Coast University (FGCU) has been a “different kind of institution” (McTarnaghan, 2003, p. 20). The history of the university’s mission and the formation of the institutional culture illustrate this point. In 1992, a year before the university’s president and any faculty or staff were hired, the Florida Legislature approved the institution’s founding mission statement, which had been developed by a group of professionals from within the State University System of Florida and the Florida Community College System. This mission statement would serve as a blueprint for institutional planning and decision making for years to come.

In 1993, Dr. Roy McTarnaghan, one of the chief architects of the new university’s mission, was selected as the institution’s first president. In the years that followed, President McTarnaghan set about the process of building a university and creating an institutional culture. He carefully assembled a leadership team that would come “together to take the Mission and put ideas to work” (McTarnaghan, 2003, p. 75). During the early years, new hires were selected not only for competence, but also for their “understanding and commitment to the approved Mission Statement” (p. 103). Applicants were “given a copy of the mission and asked to study it before the visit and interview. Later, if offered a position, each candidate was asked to commit to that mission as an integral part of employment” (p. 204).

The 1992 Mission Statement and two additional documents adopted prior to the institution’s opening in fall 1997 (the Guiding Principles and the Undergraduate Student Learning Goals and Outcomes), provided the foundation for the development of curricula and programs at FGCU. The mission called for an institution that focused on undergraduate education, the teaching-learning process, and other “themes” such as “faculty public service involvement, applied research to support teaching, student commitment to service projects, a focus on environmental studies, and a senior thesis or capstone project to integrate the learning experience” (McTarnaghan, 2003, p. 64). In 1996, a year before FGCU opened, the vice president for academic affairs and the deans, with support from the faculty, created and approved the Guiding Principles, “which sought to develop a bridge from Mission to operations and support the long-term planning process with philosophy and principles that would serve students, faculty, and staff well as successive generations populated the university” (p. 77). The Undergraduate Student Learning Goals and Outcomes provide an additional link between the university’s mission and academic programs and serve as a foundation for lifelong learning and effective citizenship. The Guiding Principles and the Undergraduate Student Learning Goals and Outcomes are as valued today as they were when initially adopted.

In 2002, during the tenure of current president, Dr. William Merwin, the FGCU Board of Trustees adopted a Vision Statement, approved a new Mission Statement, and reaffirmed the Guiding Principles. The new mission, which was the product of extensive dialogue and consideration by the wider campus community, emphasizes the future of the university while retaining many of the essential elements of the founding mission including a focus on teaching and learning, civic responsibility, and service to the community, as well as an emphasis on environmental sustainability.

The history of FGCU in years is brief, but the institutional culture is strong and the commitment to ideals represented in the mission statements, the Guiding Principles, and the Undergraduate Student Learning Goals and Outcomes runs deep. A Quality Enhancement Plan (QEP) focusing on these ideals is natural for FGCU. The QEP described in this document is intended to enhance student learning in two of the nine areas covered by the Undergraduate Student Learning Goals and Outcomes. The QEP addresses **ecological perspective** and **community awareness and involvement**.

Both **ecological perspective** and **community awareness and involvement** are central to the identity of Florida Gulf Coast University. The specific terminology may vary; but, as illustrated by the following excerpts from institutional documents, these two themes have been a part of the university since its inception.

1992 Mission Statement:

The region in which the university will be located combines rapid population growth in a geographically constrained area, the Gulf of Mexico to the west and Lake Okeechobee to the east, with a unique and sensitive environment.... The university, therefore, will be ideally suited to emphasize study of the environment. Complementing the public service mission will be a student volunteer service designed to provide each student with exposure to a planned community project, thus developing in the student a commitment to public service after graduation.

2002 Mission Statement (see Appendix A):

Florida Gulf Coast University continuously pursues academic excellence, practices and promotes environmental sustainability, embraces diversity, nurtures community partnerships, values public service, encourages civic responsibility....

Guiding Principles (see Appendix A):

Informed and engaged citizens are essential to the creation of a civil and sustainable society. The university values the development of the responsible self grounded in honesty, courage, and compassion, and committed to advancing democratic ideals. Through Service Learning requirements, the university engages students in community involvement with time for formal reflection on their experiences. Integral to the university's philosophy is instilling in students an environmental consciousness that balances their economic and social aspirations with the imperative for ecological sustainability.

Undergraduate Student Learning Goals and Outcomes (see Appendix B):

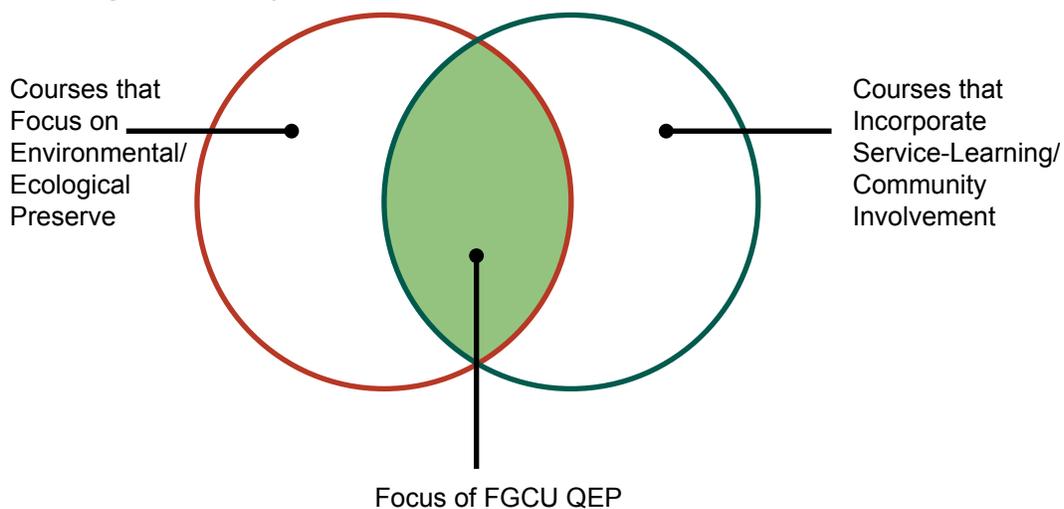
Goal 3: Ecological perspective. Know the issues related to economic, social and ecological sustainability. Analyze and evaluate ecological issues locally and globally. Participate in collaborative projects requiring awareness and/or analysis of ecological and environmental issues.

Goal 9. Community awareness and involvement. Know and understand the important and complex relationships between individuals and the communities in which they live and work. Analyze, evaluate and assess human needs and practices within the context of community structures and traditions. Participate collaboratively in community service projects.

The Undergraduate Student Learning Goals and Outcomes are addressed in numerous courses and experiences throughout the undergraduate curriculum. For the purposes of the

QEP, it was decided to limit the focus by addressing those experiences that fall within the intersection of (a) courses focusing on the environment and ecological perspectives, and (b) courses that incorporate service-learning as part of the academic experience (see Figure 1.1).

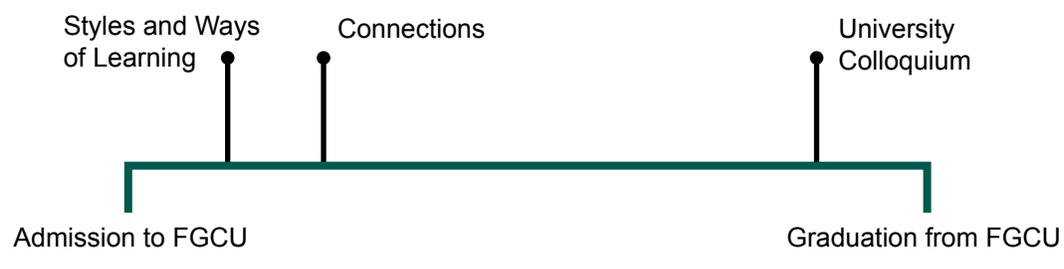
Figure 1.1: Focus of QEP: Intersection of courses focusing on the environment/ecological perspectives and courses that incorporate service-learning/community involvement.



It was further decided to narrow the scope of the QEP by focusing on the educational experiences provided at three points within the undergraduate curriculum (see Figure 1.2). The first two points are courses within the General Education Program: IDS 1301L Styles and Ways of Learning and IDS 2110 Connections. The third point is the upper-division course IDS 3920 Colloquium, which is taken by all graduates. IDS 1301L and IDS 2110 are taken by all first-time-in-college students and, in many cases, any transfer student who has not completed all General Education requirements at their previous institution.

Currently, the student learning goals of **ecological perspective** and **community awareness and involvement** are addressed as a regular part of the curriculum and assessed in some individual courses and within some programs. One purpose of the QEP is to add a developmental perspective to the undergraduate curriculum with respect to ecological perspective and community awareness and involvement.

Figure 1.2: Developmental approach to enhancing student learning in ecological perspective and community involvement.



Enrollment at FGCU has more than doubled since opening day in fall 1997 to more than 6,000 students in fall 2004 (see appendix C). In the foreseeable future both the university's student enrollment and the educational programs and services offered will continue to grow at a rapid pace. Consequently, it is critical that the university (a) find ways to continue offering quality educational experiences, and (b) be creative in its approach to enhancing student learning especially in areas of **ecological perspective** and **community awareness and involvement**, which are integral to the institution's identity.

This QEP describes the steps that FGCU will take to address the latter issue—enhancing student learning in the areas of **ecological perspective** and **community awareness and involvement**. The remainder of Section I provides additional background and context for the QEP including a review of the history and current status of environmental education and service-learning at FGCU. Section II contains information regarding the focus of the QEP including further definition of the expected QEP learning outcomes and a review of relevant literature. Section III addresses institutional capability as it relates to support for the QEP including timelines, administrative oversight of the QEP, and details regarding the financial commitment that allows for full implementation of the QEP for a period of five years. Section IV describes how FGCU will assess the achievement of goals outlined in the QEP. Section V describes role of campus constituents—faculty, staff, students, board members, and administration—in the selection and development of FGCU's QEP. Section VI contains appendices and a list of references.

Institutional Context

FGCU was created to address the educational needs of the rapidly growing Southwest Florida population and the increasing number of students who are seeking admittance into the State University System of Florida. FGCU strives to provide high quality educational opportunities for residents of Southwest Florida who historically have had limited postsecondary choices. This includes the residents of Charlotte, Collier, Glades, Hendry, and Lee counties as well as the wider surrounding geographic region of Southern Florida. It also extends to traditionally underrepresented populations including African Americans, Hispanics, Native Americans, first-generation students, the economically disadvantaged, adult students, and students with disabilities. As FGCU continues to grow to meet the needs of the region, the institution will ensure that all who can benefit from its programs and services will have access through initiatives focused on student recruitment, student retention, student diversity, student financial aid, and expanded educational choices at all degree levels.

Since opening day, enrollment has more than doubled—from approximately 2,500 students in fall 1997 to approximately 6,000 students in fall 2004. Students come from all 50 states, the District of Columbia, and more than 70 countries. The number of students living on campus has grown from 200 in 1998 to over 1,500 as of fall 2004. The University also has become increasingly diverse, from 13.7% minority students in fall 1997 to 16.3% minority in fall 2004, and the quality of the undergraduate student body has steadily improved with SAT scores of first-time-in-college students increasing from 1025 in fall 1997 to 1047 in fall 2004. First-year retention rates have improved from roughly 43% in 1998 to approximately 70% in fall 2004. Additional information regarding the University is available in Appendix C and in the FGCU Board of Trustees Information Systems (BOTIS) Report available at <http://www.fgcu.edu/trustees/Agenda.asp>

In Fall 2001, FGCU President William Merwin appointed a committee to address long-range planning. This committee, formerly referred to as the Long Range Planning Committee and now referred to as the Long Range Planning and Institutional Effectiveness Committee (LRPIEC), determined that a new strategic plan would need to do the following: (a) remain grounded in the demand for higher education in the immediate five-county service area; (b) reflect the demographic changes in Southwest Florida that have brought more young people to this region; (c) continue to emphasize student-centered learning, and (d) emphasize the need for appropriate training and employment opportunities for the residents of the region.

As an initial step in the process of updating the University's current strategic plan, a comprehensive review of the founding Mission Statement was conducted. This led to the adoption of a Vision Statement and a new Mission Statement by the FGCU Board of Trustees in December 2002. Based on the revised Mission Statement, the Long Range Planning Committee (LRP) then conceived a set of five key strategic directives to guide the development of FGCU during the next five years. The five strategic directives were broadly discussed throughout the University during the 2002-03 academic year, and then formally adopted by the FGCU Board of Trustees, in September 2003.

In August 2004, members of the University's faculty and administration participated in a leadership retreat to consider the Strategic Plan. They discussed plans and projected resources for their implementation and reviewed an organizational framework for completion of the new strategic plan with associated timelines. A new organizational framework to oversee the completion of the strategic plan, coordinate its implementation, and monitor its progress was announced, and the Long Range Planning and Institutional Effectiveness Committee (LRPIEC) was created to provide oversight and ensure the integration of planning, budgeting, assessment, and accountability to foster continuous improvement. This committee is co-chaired by the Provost/Vice President for Academic Affairs, and the Vice President for Administrative Services. The initial draft of the strategic plan was produced by LRPIEC in October 2004, and then shared with the University community for comment through public forums co-sponsored by the Faculty Senate and the Staff Advisory Council, and a workshop of the FGCU Board of Trustees before final adoption in January 2005.

This strategic plan will guide the university in making budgetary allocations over the next five years. Three of the seven goals of the Strategic Plan (excerpted below) include references to the QEP, thus ensuring that it will receive priority allocation for funding.

Goal 1: High Quality Education

- Pursue academic excellence to achieve national prominence in undergraduate education and expanding recognition for selected graduate programs.
- Utilize the Quality Enhancement Plan as an integrated model of curriculum revision, faculty development, faculty/student research, and assessment leading to student learning gains.
- Implementation of the University Quality Enhancement Plan (QEP) for student learning goals related to ecological perspective and community awareness and achievement of goals set forth in the QEP.

Goal 7: Community Leadership

- Position FGCU in a leadership role to address the educational, cultural, social, and economic interests of Southwest Florida. Strengthen civic engagement through course-embedded service learning.
- Course embedded service learning will become the norm for fulfilling student service learning requirements.
 - o Student service learning hours will grow from 80,541 in 03-04 to 92,541 hours.
 - o The number of credit-bearing service learning courses will grow from 38 to 43.
 - o Implementation of the Quality Enhancement Plan.

Goal 8: Ongoing Quality Improvement

- Implement and sustain an institutional effectiveness model for the University that is based on a culture of assessment, results in continuous improvement, and supports the University in effectively accomplishing its mission
- Systematic evaluation of the Quality Enhancement Plan (QEP) to foster improvement in student learning.

Environmental Education at FGCU

An institutional commitment to make environmental education an integral part of the identity of the University evolved from the early and complex environmental history of FGCU. The university realized its environmental mission through one course, IDS 3920 “University Colloquium: A Sustainable Future” (the Colloquium). The Colloquium is an upper-division course that all students take as a graduation requirement. The Colloquium examines the diversity of the local and global communities including cultural, social, political, economic, and ecological differences. It also examines ethical, historical, scientific, and health issues related to sustainability (See Appendix D for course descriptions).

Consistent with the guiding principle of interdisciplinary learning, faculty from all colleges are involved in the development and implementation of the course. From fall 1997 through fall 2004, the College of Arts and Sciences contributed by far the largest number of faculty (34%). Other colleges contributed as follows: College of Business (3%); College of Education (5%); College of Health Professions (15%); and, College of Professional Studies (2%). During the same period, approximately 40% of faculty teaching the Colloquium were adjunct faculty from the external community.

Since 1998, pre-test/post-test survey data have been collected for Colloquium. Preliminary analysis of data suggests student attitudes towards the Colloquium were initially unfavorable; however, attitudes towards the Colloquium appear more positive after completion of the course. Students have reported much greater understanding of environmental issues and an increased level of participation in activities in the natural environment. Perhaps the most striking student response is the substantial numbers of students who moved from virtually complete environmental ignorance to a deep concern about the environment and a desire

to change their personal behavior.

The Colloquium has been a required course for all undergraduate students for the past seven years. While the course has made small changes in terms of student enrollment caps, field trip options, and texts utilized, there have been no substantial changes fundamentally altering the course from its original philosophy. There is, however, variety in the way instructors teach the course and the level of ‘curriculum drift’ has not been evaluated.

While beginning data suggest that this course provides a promising beginning for enhancing student learning in ecological perspective, new research in environmental education and in pedagogy suggest that one course alone, offered at the end of a student’s educational experience, may not be sufficient. The QEP offers an exciting opportunity to employ a developmental approach to the curriculum to enhance student learning in ecological perspectives throughout the undergraduate experience.

Civic Engagement and Service-Learning at FGCU

The philosophical underpinnings of FGCU are based on a commitment to civic engagement and service-learning. In planning for this new institution during the 1990s, founders incorporated the latest research information, which highlighted the value of active engagement in the learning process and in the development of students as citizens. Service-learning pedagogy supports the mission, underlies several of the guiding principles, and is the basis for one of the nine undergraduate University learning goals.

FGCU opened its doors in 1997 with an Office of Service-Learning and an hour-based service-learning graduation requirement, 80 service-learning hours for students matriculating as freshmen/sophomores or 40 service-learning hours for students entering FGCU as juniors/seniors. Service-learning experiences are designed by students to meet one or more of the university learning goals. These experiences are independent from the academic curriculum and are not connected with the actual courses that they are taking.

Over the past four years, faculty have become increasingly interested in linking service experiences with learning in the classroom. The first service-learning courses were offered in 2001, with beginning discussion of institutionalizing service-learning through courses coming in 2002. At present, there are 37 service-learning courses that are regularly scheduled (See Appendix E).

FGCU established the Center for Civic Engagement in 2002. The Center for Civic Engagement provides faculty development activities related to service-learning, program management, fund raising, and community links. A Service-Learning Task Force was created to examine the possibility of moving from an hour-based to a course-based service-learning requirement for graduation. In 2003, the Faculty Senate authorized the Service-Learning Task Force to develop a transition plan for course-based service learning. The Service-Learning Task Force continues to meet and discuss the issues inherent in moving to a course-based graduation requirement. The QEP provides an exciting opportunity to enhance student learning in environmental perspectives and community involvement by integrating environmental service learning experiences into relevant courses (IDS 1301L Styles and Ways of Learning, IDS 2110 Connections, and IDS 3920 Colloquium).

Key Terms and Definitions

Civic Engagement

Civic engagement means working to make a difference in the civic life of our communities and developing the combination of knowledge, skills, values, and motivation to make that difference. It means promoting the quality of life in a community, through both political and non-political processes.

A morally and civically responsible individual recognizes himself or herself as a member of a larger social fabric and therefore considers social problems to be at least partly his or her own; such an individual is willing to see the moral and civic dimensions of issues, to make and justify informed moral and civic judgments, and to take action when appropriate.

Community Involvement

Community refers to a group of individuals who share an interest in cultural, social, political, health, or economic issues. Community involvement is mutually agreed upon action taken by community members to achieve long-term benefits for the community and to develop an overall stronger sense of community. This notion is expanded to include a land ethic; enlarging the boundaries of the community to include soils, waters, air, plants, and animals, or collectively: the land.

Ecological Perspective

An ecological perspective recognizes the interconnectedness among diverse ecological, social and economic contexts. While rooted in a sense of place, this perspective is developed by examining issues on both local and global scales. An ecological perspective attempts to balance economic and social aspirations with the imperative for environmental sustainability.

Experiential Learning

Experiential learning is purposeful engagement of learners in direct and meaningful experiences that include focused reflection. Past experiences are linked to current life experiences in order to develop meaning, construct new knowledge, and provide learners with the skills necessary for informed decision making and acting on those decisions.

Environmental Education

The goals of environmental education are to foster clear awareness of, and concern about, economic, social, political, and ecological interdependence in urban and rural areas; to provide every person with opportunities to acquire the knowledge, values, attitudes, commitment, and skills needed to protect and improve the environment; to create new patterns of behavior of individuals, groups and society as a whole towards the environment (United Nations, Tbilisi, 1977).

Interdisciplinary Engagement

Interdisciplinary engagement occurs when individuals from different disciplines strive for mutual understanding, knowledge, and awareness in pursuit of common goals and objectives. In interdisciplinary engagement, integration of knowledge and application and synthesis of ideas are encouraged, leading to the development of deeper understanding through critical thinking.

Scholarly Dialogue

Scholarly dialogue occurs through a respectful exchange of ideas, based on research, from a variety of perspectives. It is a transactional discussion in which individuals work toward understanding by critically reflecting upon their own positions and those put forth by others.

Service-Learning

Service-learning is an educational experience designed to meet mutually identified community and university needs. It is integrated into the classroom for an enhanced understanding of course and discipline content. Service-learning is a reflective activity that increases knowledge and skills, and provides an enriched learning experience that contributes to personal and career growth. In addition, service-learning facilitates civic engagement and responsibility through reciprocal learning and sensitivity to cultural, economic, and social differences. (Florida Gulf Coast University, n.d.)

There is inconsistency in the literature regarding the use of a hyphen in the term service-learning. The use of a hyphen helps convey the interconnectedness between service and learning as it connects two separate activities into a unified object. In this document, the term service-learning will be used to reflect the philosophical belief that there must be interconnectivity between service and learning.

Sustainability

“Sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development, 1987).

Sustainability Education

Education for sustainability, sometimes known as education for sustainable development, is an emerging field based on the concept of sustainability. Sustainability is commonly defined as meeting the “needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development, 1987). Sustainability education is learning and working to secure a future that is economically, ecologically, and socially sustainable.

This Page Intentionally Left Blank.

SECTION II

FOCUS OF PLAN



FLORIDA
GULF COAST
UNIVERSITY

SECTION II: FOCUS OF PLAN

QEP Mission

Early in its deliberations, the QEP Committee determined that a clear and concise mission statement was needed to inform university discussions and guide the QEP planning process. The following statement, which supports the FGCU mission, guiding principles, and student learning goals and outcomes, represents the philosophical underpinning of the university's QEP.

The mission of the QEP is to develop in students an ecological perspective and foster community involvement through experiential learning, scholarly dialogue, and interdisciplinary engagement.

Defining Principles for the QEP

Consistent with the mission of the QEP, the QEP Committee developed the following Defining Principles to provide direction for the planning, implementation, and evaluation of the QEP. To ensure broad awareness and acceptance, the principles were shared with the university community and were refined based on recommendations from faculty and administrators. They serve as an adaptable framework that guides future decisions and supports the goal of enhancing student learning in two of the FGCU student learning goals - ecological perspective and community awareness and involvement.

QEP Focus: The main focus of the QEP is on undergraduate student learning with respect to two university undergraduate learning outcomes—ecological perspective and community involvement.

University Commitment to Student Learning: The QEP engages the entire university community to ensure university-wide commitment to student learning.

Pedagogy: Because the university considers experiential learning, interdisciplinary engagement, and scholarly dialogue as fundamental to enhancing student learning, these guide and inform curricular development.

Student Learning: The QEP addresses achievement of the two learning outcomes—ecological perspective and community involvement—throughout the entire undergraduate experience.

Linkages: The QEP defines linkages between university educational activities, including general education, to ensure the coherency of its efforts to enhance student learning.

Assessment of Student Learning: Assessment is necessary for improvement and continual renewal. The QEP provides strategies and mechanisms for assessing student learning in two learning outcomes—ecological perspective and community involvement.

Assignment of Responsibilities: The QEP designates responsibility for oversight of

the proposed activities of the plan, including assessment, and identifies budgetary requirements.

Faculty and Staff Development: The QEP establishes opportunities for faculty and staff development activities designed to ensure successful achievement of the goal of enhancing student learning.

Diversity of Perspectives: The QEP recognizes that diverse perspectives with respect to the two learning outcomes—ecological perspective and community involvement—need to be covered in the University Colloquium as well as in other courses and activities that are linked through the learning outcomes.

Evaluation of the Impact of the QEP: The impact of the QEP is evaluated periodically and the QEP must be sufficiently flexible to allow modifications as identified through assessment.

SACS: The QEP must be developed in accordance with SACS guidelines and, therefore, must be designed above all to enhance student learning.

Discussion of Student Learning

Learning theory describes the link between observed changes in performance and what is thought to bring about those changes. Most learning theories share the following basic definitional assumptions: (a) learning is a persistent change in human performance or performance potential, and (b) in order to be considered learning, the change in performance must come about as a result of the learner's interaction with the environment. "Learning requires experience, but just what experiences are essential and how these experiences are presumed to bring about learning constitute the focus of every learning theory" (Driscoll, 1994, p. 9).

Collectively, the educational objectives described in the QEP are intended to lead to student learning in the following categories or domains:

- a. The cognitive domain, which refers to the recall or recognition of knowledge and the development of intellectual abilities and skills.
- b. The affective domain, which refers to changes in interest, attitudes, values, or dispositions, or the development of appreciations and adequate adjustment.
- c. The psychomotor domain, which refers to the use of motor skills, coordination, physical movement, or directly observable physical behaviors.

Each domain includes elements that represent the "*intended behavior* of students--the ways in which individuals are to act, think, or feel as the result of participating in some unit of instruction" (Bloom, 1956, p. 12). Some authors (Posner, 1995) argue that classifying objectives into separate domains is difficult. It can be argued that it is not reasonable to attempt to completely separate thinking and feeling, and that learning objectives may need to allow for some overlapping of domains. Possibly the greatest benefit of identifying the affective and psychomotor domains is that it forces educators to at least consider that one might want to also measure the changes in attitude or physical behavior that may result from educational experiences.

The main focus of the QEP is on undergraduate student learning with respect to two undergraduate learning outcomes—**ecological perspective** and **community awareness and involvement**. The primary task of the QEP is to facilitate and assess improvement in student learning. As indicators of student learning, the QEP establishes two broad goals and six objectives related to the learning outcomes of ecological perspective and community involvement.

QEP Goal 1: Develop an ecological perspective.

QEP Objective 1a: Demonstrate knowledge of the issues related to economic, social, and environmental sustainability.

QEP Objective 1b: Demonstrate the ability to analyze local and global environmental issues.

QEP Objective 1c: Participate in collaborative projects requiring analysis of environmental issues.

QEP Goal 2: Exhibit community involvement.

QEP Objective 2a: Demonstrate understanding of the complex relationships between individuals and communities.

QEP Objective 2b: Demonstrate the ability to analyze sustainability within the context of community.

QEP Objective 2c: Participate in collaborative service-learning projects that foster an ecological perspective.

Faculty at FGCU consider experiential learning, interdisciplinary engagement and scholarly dialogue as fundamental to enhancing student learning. The work of Kolb (1976; 1984) and Dewey (1938) and others are used as a framework for enhancing student learning.

Experiential learning is purposeful engagement of learners in direct and meaningful experiences that include focused reflection. Past experiences are linked to current life experiences in order to develop meaning, construct new knowledge, and provide learners with the skills necessary for informed decision making and action (Mirriam & Caffarella, 1999; National Campus Compact, 2004). Dewey is considered the forefather of experiential education with his seminal work, *Experience and Education*, published in 1938. “I take it that the fundamental unity of the newer philosophy is found in the idea that there is an intimate and necessary relation between the processes of actual experience and education” (Dewey, 1938, pp.19-20). According to Kolb, experiential learning offers a foundation for lifelong learning. Experiential education, as conceptualized by Kolb, involves content and substance as well as process and technique.

Interdisciplinary engagement occurs when individuals from different disciplines strive for mutual understanding, knowledge, and awareness in pursuit of common goals and objectives. Authentic interactive connections between the disciplines can positively impact teaching and learning. In interdisciplinary engagement, integration of knowledge and application and synthesis of ideas are encouraged, leading to the development of deeper

understanding through critical thinking (Burton, 2001; Snyder, 2001). Interdisciplinary education is accomplished through class discussions, outside assignments in which each discipline is required to learn the contribution of the other, and case examples that focus on application and integration of theory in practice. Situations are provided that foster collegiality, reflections, and learning in a controlled and safe environment (Cloonan, Davis, & Burnett, 1999).

The QEP recognizes that diverse perspectives with respect to the two learning outcomes—ecological perspective and community awareness and involvement—need to be presented to facilitate critical thinking, scholarly engagement, and learning. Scholarly dialogue occurs through a respectful exchange of ideas, based on research, from a variety of perspectives. It is a transactional discussion in which individuals work toward understanding by critically reflecting upon their own positions and those put forth by others (Reich, n.d.; Samples, n.d.). Understanding student learning styles is critical in the support of student learning. Kolb's work on learning styles has been seminal in this area (1976; 1984). The role of learning or cognitive styles in successful mastery of information and the impact of learning styles on the development of critical thinking abilities has been examined by many researchers (Watson & Glaser, 1980; Miller, 1987; Dunn, 2001; Zhang, 2003).

Finally, to solidify the educational experience in ecological perspective and community involvement, the QEP has defined linkages between university educational activities, including general education, to ensure the coherency of its efforts to enhance student learning. The QEP encompasses student learning in ecological perspective and community involvement throughout the entire undergraduate experience, beginning in general education with IDS 1301L Styles and Ways of Learning and IDS 2110 Connections and culminating in IDS 3920 Colloquium.

Relevant Literature

The focus of any QEP is, by its nature, on student learning and assessing student learning outcomes. In particular, the student learning outcomes of ecological perspective and community awareness and involvement are the focus of this QEP. The terminology used to describe these areas of study has evolved over time and consequently varies in the literature. What is referred to as community involvement in FGCU's student learning outcome, has been variously referred to as *service-learning* and more recently, *community engagement*. Because most of the literature refers to the activity of learning while engaged in some type of community service as service-learning, this is the terminology used throughout the review of the literature. The reader is advised that that community involvement and service-learning are used interchangeably.

Equally varied are the terms used to describe learning about the environment through either formal or informal educational activities. While FGCU's student learning outcome speaks to developing an ecological perspective, *ecological literacy* and *environmental education for sustainability* are terms more recently found in the literature. Ecological perspective and environmental and sustainability education may be viewed interchangeably.

A survey of the literature in the areas of environmental and sustainability education in higher education and service-learning is provided below. The purpose of the following sections is to provide the reader with a review of salient research to identify best practices

in the implementation of environmental and sustainability education and service-learning in order to improve student learning outcomes. A survey of current and best practices in these two critical areas of student learning follows.

Literature Related to Environmental Education

In order to better understand the current status of environmental education in higher education settings, it is necessary to gain a thorough understanding of the history of environmental education in a broader sense. Although there is significant environmental literature available to the interested reader, much of the literature is focused on topics other than outcomes-based research related to environmental education. Still less is dedicated to the efficacy of environmental education in higher education settings. To be thorough, an examination of both international and national legislative and policy initiatives is necessary. Additionally, review of higher education initiatives and practices is warranted as this directly relates to the focus of the QEP.

International Initiatives

For more than three decades, there has been a concerted effort by international groups to raise awareness of environmental issues and the need for education of the public about environmental issues. Beginning in 1972 with a conference in Stockholm, several international meetings, gatherings, and conferences have occurred (UNESCO, 1977). These seminal events resulted in significant recommendations and declarations that shaped the future of environmental education.

In 1972, the United Nations Conference on the Human Environment took place in Stockholm. The purpose of this conference was to consider the need for a common vision and guiding principles for preservation and protection of the environment for future generations. Proclamation Six stated in part, “ a point has been reached in history when we must shape our actions throughout the world with a more prudent care for their environmental consequences. Through ignorance or indifference we can do massive and irreversible harm to the earthly environment on which our life and well-being depend. Conversely, through fuller knowledge and wiser action, we can achieve for ourselves and our posterity a better life in an environment more in keeping with human needs and hopes”. During this conference, concern was expressed that there was a need for an international framework for the development of environmental education. Recommendations from this conference included a series of regional and local workshops that were organized throughout the world (UNEP, 1972).

The original Stockholm conference, followed by regional and local meetings, culminated in the International Workshop on Environmental Education in Belgrade in 1975 and the beginning of the International Environmental Education Programme (IEEP), jointly developed by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) and the United Nations Education Programme (UNEP) (UNESCO, 1977). From the Belgrade Charter, key objectives of environmental education were identified as follows:

- a. Awareness: to help individuals and social groups acquire an awareness of and sensitivity to the total environment and its allied problems
- b. Knowledge: to help individuals and social groups acquire basic understanding of the total, its associated problems and humanity's critically responsible presence and role in it
- c. Attitudes: to help individuals and social groups acquire social values, strong feelings of concern for the environment and motivation for actively participating in its protection and improvement
- d. Skills: to help individuals and social groups acquire skills for solving environmental problems
- e. Evaluation ability: to help individuals and social groups evaluate environmental measures and education programmes in terms of ecological, political, economic, social, aesthetic, and educational factors
- f. Participation: to help individuals and social groups develop a sense of responsibility and urgency regarding environmental problems to ensure appropriate action to solve these problems (Belgrade Charter, 1975)

In addition, a major recommendation of this conference was to convene an international conference on environmental education whose expressed purpose was to address environmental policy. Such a conference occurred in 1977.

The Intergovernmental Conference on Environmental Education, jointly organized by UNESCO and UNEP, took place in Tbilisi in 1977, with a declaration following in 1978. Environmental education was defined as follows: "Environmental education is a learning process that increases people's knowledge and awareness about the environment and associated challenges, develops the necessary skills and expertise to address the challenges, and fosters attitudes, motivations, and commitments to make informed decisions and take responsible action" (UNESCO, 1977; The Tbilisi Declaration, 1978).

It became clear during this conference that although some progress had been made in the increasing awareness of issues surrounding the environment and environmental education, all of the hopes of the Stockholm conference had not been met. There was consensus that environmental issues were much more complex than simply that of their physical or biological components. Conference participants identified other components of the environment including social, cultural, political, and economic components and determined that analysis of environmental issues must include these essential elements (UNESCO, 1977; The Tbilisi Declaration, 1978).

Such a holistic approach to environmental education, by its very nature, demands that education be interdisciplinary in its approach to understanding and solving problems. Environmental education therefore means learning *from* the environment in addition to learning *about* the environment. This also implies a more hands-on, problem-oriented, field-based approach to understanding problems and has necessitated curricular reform in formal education. The General Report from the conference stated that "environmental education should be integrated into the whole system of formal education at all levels to provide the necessary knowledge, understanding, values, and skills needed . . . in devising solutions to environmental problems". Recommendations were made to UN Member States to assist them in adopting their own national environmental education policies (UNESCO, 1977; The Tbilisi Declaration, 1978).

In 1987, the UNESCO-UNEP Congress was held in Moscow to analyze progress made in environmental education since the Tbilisi Conference ten years before and to develop an international strategy for the environmental education and training that would be necessary in the 1990s (UNESCO, 1977; Secretariat, 1987). The report from this conference documented numerous gains made since the Tbilisi Conference, including the works of several educational and research groups such as the International Geological Correlation Programme, the International Hydrological Programme, the International Oceanographic Commission, and the Programme on Natural Resources. All of this work, supported by UNESCO and UNEP, included a training and environmental education component (UNESCO, 1977; Secretariate, 1987). The interdisciplinary nature of these programs thus served as a model for future endeavors.

Twenty years after the original Stockholm conference, the United Nations organized the Conference on Environment and Development (UNCED) in Rio de Janeiro. This conference was also known as the Earth Summit. The outcome of this conference was summarized into a document known as Agenda 21. The document's Chapter 36, "Promoting Education, Public Awareness, and Training," detailed a reorienting of education towards sustainable development. Further, the document stated that education was crucial for promoting sustainable development and for providing people with the tools to address issues of environment and development (Promoting Education, 1992).

In September 2002, the UN organized the World Summit on Sustainable Development (WSSD) in Johannesburg, South Africa. This meeting prioritized environmental education, and its newest iteration, education for sustainable development. The WSSD recommended a Decade of Education for Sustainable Development- 2005-2014. The General Assembly of the United Nations quickly agreed. Events throughout the world are planned with particular emphasis on education for sustainable development in higher education.

National Initiatives

Concurrently, environmental education and policy were taking shape in the United States through important legislative imperatives, policy initiatives, and crucial citizen grassroots efforts. In 1962 with the publication of Rachel Carson's seminal work, *Silent Spring*, public awareness of widespread pesticide poisoning markedly increased. Although the Clean Air Act was originally passed in 1955 and several fragmented groups had addressed environmental concerns, there was no single agency or group to coordinate and focus environmental preservation, conservation, and education efforts (EPA, 1999a).

The National Environmental Policy Act became law in 1969 (P.L. 91-190). One of its major initiatives was to require Environmental Impact Statements as part of the permitting process for a variety of development activities. However, it was not until 1970 that the National Environmental Education Act (P.L. 91-516) was passed and the Environmental Protection Agency (EPA) was formed. Also in 1970, the Pollution Prevention Act became law. This was followed by passage of the Endangered Species Act in 1973. In 1974, the EPA and General Mills kicked off a public awareness/service campaign to improve public awareness of environmental problems, concerns, and issues (EPA, 1999a).

In 1990, the National Environmental Education Act (P.L. 101-619) was signed into law, reiterating and expanding earlier initiatives. This was the first time that the EPA had been

given a Congressional mandate to strengthen environmental education as an integral part of its overall mission for protection of the environment. The Pollution Prevention Act was also signed into law. The National Environmental Education Act (EPA –171-R-96-001) became law in 1996, essentially reauthorizing previous mandates (EPA, 1999a).

In 1999, the EPA presented a paper with specific recommendations to improve the quality of environmental education. The paper stressed the importance of providing a real world context in which learning is connected to issues that affect communities. Learning should occur through a hands-on, student-driven investigative learning process. The paper asserted that environmental education enables learners to develop critical-thinking, problem-solving, and decision-making skills. The authors recommended replacing a traditional and more compartmentalized curriculum with one that consists of an interdisciplinary approach, connecting multiple fields and domains of knowledge (EPA, 1999a).

In another release in 1999, the EPA promoted environmental education as a means of improving everyday lives and ensuring the health and welfare of the nation, by protecting human health, advancing quality education, creating jobs in the environmental field, promoting environmental protection along with economic development, and encouraging stewardship of natural resources (EPA, 1999b).

Higher Education Initiatives

At nearly the same time that the National Environmental Education Act of 1990 became law, another group was meeting with a more specific agenda. University leaders came together because of a commitment to sustainability in higher education settings (University Leaders for a Sustainable Future, 2004).

In 1990, a group of 22 university presidents and chancellors gathered in Talloires, France to discuss their concerns about defining, promoting, and demonstrating a commitment to sustainability in higher education settings. More specifically, they delineated key actions that higher education institutions must take in order to create a more sustainable future. They further defined the role of the university as follows: “universities educate most of the people who develop and manage society’s institutions. For this reason, universities bear profound responsibilities to increase the awareness, knowledge, technologies, and tools to create an environmentally sustainable future” (The Talloires Declaration, 1990).

Further, the Talloires participants recognized that universities are uniquely situated to bring together all disciplines to move forward towards sustainability. They specifically agreed to take the following actions: increase awareness of environmentally sustainable development, create an institutional culture of sustainability, educate for environmentally responsible citizenship, foster environmental literacy, practice institutional ecology, involve stakeholders, collaborate for interdisciplinary approaches, enhance primary and secondary schools’ capacity, broaden national and international service and outreach, and maintain the momentum (The Talloires Declaration, 1990). The University Leaders for a Sustainable Future organization serves as the Secretariat for signatories of the Talloires Declaration (University Leaders for a Sustainable Future, 2004).

Evaluation of environmental education in the United States has been both formal and informal. A Congressionally mandated evaluation was conducted by the National

Environmental Education Advisory Council and was summarized in a formal report (EPA 171-R-96-001). Although the report broadly examined the status of environmental education throughout public school experiences, the most salient information comes from post-secondary or higher education settings.

This report indicates that there is significant variation in methods of and strategies for preparing citizens to be environmentally literate. Commonly, environmental education activities take place through preparing those in future environmental careers. Some universities and colleges prepare teachers to be able to include environmental education activities into their curricula by providing them with pre-service environmental education opportunities. At other universities and colleges, there are opportunities for those in other fields of study such as environmental management courses or training through business schools. Fewer yet are the universities and colleges that not only provide all students with environmental education opportunities but also have graduation requirements in environmental education for all students (EPA 171-R-96-001). Florida Gulf Coast University is one such university.

The need to learn about the issues and concepts inherent in environmental and sustainability education in higher education settings has been discussed for many years. Surveys have repeatedly demonstrated that most Americans have basic misconceptions and misunderstandings about the environment (National Report Card, 1998; 1999). Models have been proposed as frameworks for teaching about sustainability (Fien, 2002; Herremans & Reid, 2002; Wright, 2002; Warburton, 2003). Proponents have discussed the need for specific strategies that assist students in moving from simply developing an awareness of sustainability to a deeper understanding of the complexities of the issues (World Commission, 1987; Herremans & Reid, 2002; Warburton, 2003). Researchers have sought to determine the availability of environmental education courses for undergraduates in the United States (Wolfe, 2001) and have studied the effects of a single environmental studies course on student environmental behaviors (Smith-Sebasto, 1995).

Despite acknowledging the importance of environmental education, the significance of the issues, and a commitment by many to support sustainability in higher education settings (The Talloires Declaration, 1990), many institutions of higher education worldwide have not yet made significant changes to their curricula to include sustainability education (Thomas, 2004) or remain unaware that such declarations have taken place (Herremans & Reid, 2002). Implementing necessary changes has been slow. Although the focus of Thomas's work is primarily on institutions of higher education in Australia, potential barriers to implementation are found universally. They include difficulties in defining and coming to agreement about the definition of sustainability education (Wals & Jickling, 2002; Thomas, 2004); concerns that the concept of sustainability is too broad; a lack of resources and personnel equipped to teach the topic; ideological resistance to curricular change, especially when changes require stepping outside of one's own discipline; infrastructure barriers to support changing faculty assignments; and a lack of an organizational reward system (Thomas, 2004).

Even when there is adequate institutional support and other barriers are removed, translating a commitment to sustainability education into a curriculum that prepares students to be environmentally literate citizens can be difficult. Models of understanding and teaching about sustainability have been proposed (Sadler, 1988; Herremans & Reid, 2002; Warburton, 2003). Bronski, in his address at the 14th North American Interdisciplinary Conference on

Environment and Community proposed, “sustainability is a continuous process, not the end result by which we seek to integrate environmental, social, and economic factors” (Bronski, 2004).

Developing a concept of sustainability requires the student to understand the environment from more than one perspective. In addition to the environmental aspect, there are also economic and social aspects (Sadler, 1988; Newport, Chesnes, & Lindner, 2003; Warburton, 2003). Because of this, it is often not an easily understood concept for those with only a superficial knowledge of the environment and environmental issues. A strategy of “deep learning” has been proposed in order for students to understand the complexities of environmental, social, and economic issues, requiring interdisciplinary thinking and the ability to envision the topic holistically (Warburton, 2003).

In spite of these difficulties, there remains the imperative to strive towards the goal of sustainability in higher education. Anthony Cortese has eloquently described the unique opportunity, if not true mandate, that institutions of higher education have in the following passage: “Higher education institutions bear a profound moral responsibility to increase the awareness, knowledge, skills, and values needed to create a just and sustainable future. . . They have the unique freedom to develop new ideas, comment on society, and engage in bold experimentation” (Cortese, 1992, p.5). Indeed, Corcoran and Wals state that there has never been a greater opportunity to create the foundation for a sustainable future and that institutions of higher education play an enormously important role in leading society towards this sustainable future (2004a).

Further, the fact that sustainability has different meanings for different people is viewed as a strength rather than a weakness and allows the individual to imbue meaning within an appropriate personal context (Corcoran & Wals, 2004b) for a uniquely developed “sense of place.” Therefore, the access that students in higher education settings have to environmental education is crucial in developing an awareness of sustainability.

Although there are nearly 1,000 institutions of higher education that offer majors in environmental studies, environmental science, and similar courses of study, the extent to which non-majors had access to such coursework or how many institutions required any type of environmental literacy knowledge as a graduation requirement is not known. Chief academic officers at nearly 1,200 institutions of higher education were surveyed about the extent to which undergraduate students had the opportunity to enroll in or were required to complete coursework in environmental literacy. Only 7% of responding public institutions reported some content requirement, with slightly more than 14% of private institutions also requiring coursework designed to improve environmental literacy (Wolfe, 2001). These findings are consistent with previous assessments of environmental education in higher education settings.

There has been much discussion about the amount of student exposure to environmental education that is necessary to create a change in attitude or environmentally responsible behavior. In one study, non-environmental study majors enrolled in either an environmental studies course or an introductory history course (control group) at the same institution during the same semester. Students completing the environmental studies course demonstrated a more internal locus of control for reinforcement of environmentally responsible behavior, meaning that they relied less on external motivations and rewards for exhibiting such behaviors. They also demonstrated significant gains in knowledge and skill in categories

of environmentally responsible behavior and in self-report of environmentally responsible behaviors (Smith-Sebasto, 1995). This study supports the theory that exposure to a single environmental studies course can have a profound impact on an individual's behavior.

In another study, students worked not as individuals but as a team to solve an environmental problem. Students enrolled in a bio-environmental engineering design course were given an authentic campus problem to solve, related to storm water treatment, which utilized a project-based learning approach. Although students did not completely solve the problem, the approach provided useful feedback to the university and effectively provided the students with skills to assess social, environmental, and economic sustainability issues (Brunetti, Petrell, & Sawada, 2003).

The most exciting and relevant research has examined projects that combine the elements of service-learning with education for sustainability and sustainable practices. One such study by Pike and colleagues (2003) examined students' recycling behavior in student apartments. Professors, at the request of students, developed a specialized course that allowed a group of interested students to design a study to test whether education about recycling and opportunities for recycling affected students' recycling efforts.

Student apartments were divided into three groups: Group A received recycling bins and education about recycling; Group B received recycling bins alone; and Group C (the control group) received neither education nor recycling bins. Although there were no statistically significant differences in recycling behaviors between Groups A and B, students in both Groups A and B increased their recycling behaviors by the study's completion when compared to their pre-study participation levels. These changes were not demonstrated in Group C.

Student engagement in this study was essential on several levels. The students who initiated and designed the study with the assistance of their professors demonstrated their willingness to tackle a campus problem. Students participating in the study demonstrated their willingness to recycle when bins were provided. Collaboration between the academic and administrative sides of the university contributed to the success of the experiment.

Other researchers have studied sustainability and student environmental behaviors through habitat restoration and other projects tied to university coursework and academic activities (Bowler, Kaiser, & Hartig, 1999; Mitton & Guevin, 2003). Bowler and his colleagues examined the effects of ecological restoration fieldwork and classroom instruction on student behaviors, attitudes, and perceptions. All classes received in-class instruction. One class of students was responsible for extensive ecological restoration on multiple field trips. A second class made only one ecological restoration field trip. The third class made a field trip to the restoration site but did not participate in any restoration work. This study demonstrated that ecological restoration fieldwork positively affected students' intentions to behave ecologically, and intentions translated into ecological behaviors (Bowler, et al., 1999).

Mitton and Guevin (2003) describe another example of habitat restoration in a higher education setting. The authors describe a project whose main goal was to enhance environmental awareness and stewardship through habitat restoration on land surrounding a new campus walking trail that connected to a community park. College students, faculty and staff, local community volunteers, and organizations including the National Wildlife

Federation and the National Audubon Society worked together to place nesting boxes for birds, identify additional water sources, and plant native fruit-bearing trees. The study demonstrated that students were able to see the impact of their efforts and continued to conduct field research.

It has been demonstrated that students who are active participants in their own learning are more likely to retain what they learn and incorporate learning into action. By linking service-learning with environmental and sustainability education, there are numerous opportunities for collaboration within and across disciplines. There is a crucial role that service-learning opportunities play in higher education settings in the acquisition and application of knowledge and skills. Research supporting the importance of service-learning opportunities follows.

Literature Related to Service-Learning

Service-learning has over 100 definitions (Kendall as cited in Eyler & Giles, 1999, p. 3). Campus Compact (2004) defines service-learning as “a particular form of experiential education that incorporates community service.” Definitions of service-learning generally include elements related to instructional methodology, personal development, and academic goals.

The following is the definition of service-learning at FGCU:

Service-learning is an educational experience designed to meet mutually identified community and university needs. It is integrated into the classroom for an enhanced understanding of course and discipline content. Service-learning is a reflective activity that increases knowledge and skills and provides an enriched learning experience that contributes to personal and career growth. In addition, service-learning facilitates civic engagement and responsibility through reciprocal learning and sensitivity to cultural, economic, and social differences.

Integration of service-learning into higher education has greatly increased over the past 15 years. Combining community service and academic courses and successfully accomplishing both service goals and learning outcomes can be challenging. This relationship was illustrated by Eyler and Giles (1999) by separating the terms “service” and “learning.” Service-learning implementations can be thought of on a continuum with a service component implemented as part of freshman orientation at one end and a two-tier program of connected experiences at the other end of the continuum.

Another useful depiction is the tension between service-learning and academe that was developed by Sigmon (1996), illustrating the differences between programs that emphasize service rather than learning and vice versa. The different emphases that exist in courses hints at the difficulty involved in matching the service need with achievement of academic outcomes.

One method of broadly categorizing service-learning utilizes dimensions that foster institutionalization (institutional characteristics), service-learning implementations or programmatic features (instructional methodology), or the achievement of academic goals

(academic outcomes). Institutional characteristics and instructional methodologies are reviewed because these areas are critical for effective service-learning implementation and are illustrative of best practices in this area. Instructional methodology utilizes a framework provided by Eyler and Giles (1999) and addresses program characteristics associated with effective service-learning programs.

Institutional Characteristics

Building an engaged campus is likened to a maturation process (American Association for Higher Education, 2004) that involves not only developing a shared language and shared learning, but also building infrastructure, expanding collaboration, instituting policies, and assessing impacts. A number of consistent themes emerge in this research.

The following are indicators of an engaged campus (Furco, 2004):

1. Mission and purpose that explicitly articulates a commitment to the public purposes of higher education.
2. Administrative and academic leadership (president, trustees, provost) that is in the forefront of institutional transformation that supports civic engagement.
3. External resource allocation made available for community partners to create richer learning environments for students and for community-building efforts in local neighborhoods.
4. Disciplines, departments and interdisciplinary work have incorporated community-based education allowing it to penetrate all disciplines and reach the institution's academic core.
5. Faculty roles and rewards reflect a reconsideration of scholarship that embraces a scholarship of engagement that is incorporated into promotion and tenure guidelines and review.
6. Internal resource allocation is adequate for establishing, enhancing, and deepening community-based work on campus – for faculty, students, and programs that involve community partners.
7. Community voice that deepens the role of community partners in contributing to community-based education and shaping outcomes that benefit the community.
8. Enabling mechanisms in the form of visible and easily accessible structures (i.e., centers, offices) on campus to assist faculty with community based teaching and to broker community partnerships.
9. Faculty development opportunities are available for faculty to retool their teaching and redesign their curricula to incorporate community-based activities and reflection on those activities within the context of the course.
10. Integrated and complementary community service activities that weave together student service, service-learning and other community engagement activities on campus.
11. Forums for fostering public dialogue are created that include multiple stakeholders in public problem-solving.
12. Pedagogy and epistemology incorporate a community-based, public problem-solving approach to teaching and learning.

Several studies support Furco's (2004) indicators of the engaged campus. Findings focus on the importance of resources and faculty rewards. Insufficient resources and/or faculty rewards acts as a barrier to service and service-learning partnerships. In a study of 55 institutions, Berman (1999) examined antecedents and impediments of effective service-learning, how institutions responded to differing challenges, common factors of successful implementations and the key players involved. Antecedents necessary for effective implementation included solid staffing and a tendency toward collaborative and collegial problem solving.

Challenges to successful implementation included chaotic institutional organization, poor staff and faculty training, and lack of faculty incentives. Key players involved in successful service-learning implementations tended to have relationships throughout the university with all interested parties. This finding is supported by Morton and Troppe (1996) who state the need for a team of faculty and staff who are "organizationally literate," borrowing from Peter Senge's *The Fifth Discipline* (1990). Organizational literacy refers to knowing what is going on, who's who, how to get things done, and understanding organizational history and values. Finally, "all successful service-learning programs had congruence with organizational goals, a clear articulation of mission, faculty driven plans for program implementation, creative means to integrate service with study, long-term goals and plans, and open communication systems." (in Eyler, Giles, Stenson, & Gray, 2001).

Further support is found in a study by Bergkamp (1996) who examined service-learning implementations in Catholic colleges and universities. This study confirmed the importance of the link to university mission and also highlighted frustration with the lack of resources to support program administration, the lack of connection to the faculty reward structure, and pedagogical issues regarding service-learning implementations within courses.

Three broad forms of service-learning implementations into universities were identified by Strand, Marullo, Cutforth, Stoecker, and Donohue (2003). This typification is useful in that the placement of service-learning in the organizational structure may affect success.

- a. Implementation by section where an instructor uses a community contact to create a service experience within a course.
- b. Creation of an office of service-learning that serves to connect service opportunities with courses. This structure may be related to university goals and may also track student and faculty involvement in service-learning.
- c. Formation of a service-learning consortium that also might involve corporate sponsorship. This form is found in large metropolitan areas where corporations and large universities can collaborate and capitalize on synergistic efforts to satisfy their respective community obligations.

Research regarding the effect of institutional structure related to successful service-learning provides support for the need for appropriate staffing (Berman, 1999) and also presidential leadership with clear goals, a structure to support programs, strategic planning that focuses on mutual interaction between campus and community, committed faculty, and academic support for students (Battaglia, 1995). Evidence addressing differences in service-learning quality due to organizational structure specifically were not identified.

Instructional Methodology

Eyler and Giles (1999) summarize the results of two national survey research projects that included extensive student interviews before and after the service experience. They examined attitudes and perceptions of learning and student views of the service-learning process. Instructional methodologies or program characteristics identified by the authors and associated with effective service-learning include placement quality, application, reflection, and community.

Research supports the view that many goals of service-learning depend not only on the service experience itself but on how the experience is integrated into the course. Their research relates specific program characteristics to personal development and to the achievement of learning goals. Personal development outcomes include stereotyping/tolerance, personal development, interpersonal development, closeness to faculty, and citizenship. Learning outcomes include learning/understanding and application, problem solving/critical thinking, and perspective transformation.

The importance of placement quality is noted in the following quote from Eyler and Giles (1999):

Placement quality is about the service in service learning. Before any other consideration, service-learning practitioners must pay attention to establishing community connections that will provide productive situations for students as well as genuine resources useful to the community. The service is where service-learning begins. ...If the service does not work well for the student, the learning may not be productive. (p. 167)

Placement quality provides the real world setting in which to ground the experience useful for acquiring knowledge. Placement quality was a predictor of most personal development measures and was a significant predictor of some learning goal measures (Eyler & Giles, 1999). These results were also supported by others who found high quality service-learning experiences to be a major factor related to effective service-learning (Batchelder & Root, 1994; Kohl, 1996; Mabry, 1998).

The strength of the connection between the service experience and classroom activities is referred to as application. Application was a significant predictor of most measures of academic learning outcomes (Eyler & Giles, 1999). Application was often the strongest predictor of learning outcomes including learning/understanding, problem solving/critical thinking, and perspective transformation. These findings were also supported by Batchelder & Root (1994). Application was also a significant predictor of some measures of stereotyping/tolerance and personal development.

Furco (2004) supports this assertion by stating that the service and learning components should enrich each other. The learning component of a course should be enriched by the experience and vice versa. Papamarcos (2002) supports the use of integrative, team-based projects to fully leverage skills of business students arguing that too often students are involved in activities that are beneath their skills and thus do not reap the full benefits of the service experience. Based on his experience integrating service-learning in business education, Papamarcos states that it is critical for a faculty member to carefully consider the fit of a project with overall course objectives, making sure there is a clear educational purpose to the engagement.

Eyler and Giles (1999) described reflection as the hyphen in service-learning opportunities. Students must pay explicit attention to the reflection process. The amount and quality of reflection also makes a difference. Reflection includes both written reflection and discussion-based reflection. Written reflection can serve not only as a record of the experience but can also help students clarify their thoughts. Discussion is used to share feelings, for analysis, and for application of service experiences to course concepts.

Eyler (1993) found that extensive reflection was a positive predictor of acquiring curriculum-related concepts but that a modest level of reflection was not. Academic learning was significantly associated with discussion-based reflection and problem solving and perspective transformation was significantly associated with written reflection. Written reflection was also significantly associated with the development of personal characteristics including stereotyping/tolerance and personal development. Support for reflection as a critical factor for achieving successful service-learning is widely supported in service-learning research. Gray et al. (1998) gathered data over a 3-year period from 930 Learn and Serve America, Higher Education institutions. Survey results confirmed the benefits of thoughtful reflection. Similar findings are confirmed by McElhaney (1998) and Kohl (1996).

Community refers to whether the service experience meets the needs of the community. Community needs are frequently overlooked in favor of creating meaningful experiences for the students (Eyler & Giles, 1999). Community voice was the most frequent predictor of personal growth outcomes. Interestingly, students who felt that they met the needs of the community did not feel their course was intellectually stimulating.

Effective service-learning summed up by the 5 Cs: connection, continuity, context, challenge, and coaching (Campus Compact, 2004). Connection: learning not compartmentalized between classroom and world; Continuity: via Dewey - learning is a lifelong process (importance of reflection); Context: knowledge and skills are contextual, learning with real problems in the real world; Challenge: challenge current perspectives; Coaching: adequate support – for faculty to provide adequate interaction and feedback to challenge and support students.

Academic Outcomes

The positive impact of service-learning on academic outcomes is supported by many studies for K-12 as well as studies in higher education. Eyler and colleagues (2001) provided a valuable summary of research findings related to service-learning in higher education. The following discussion uses their learning outcome summary statements with descriptions of some of the major supporting research studies. Learning outcomes associated with service-learning include:

- a. Students or faculty report that service-learning has a positive impact on students' academic learning.
- b. Students or faculty report that service-learning improves students' ability to apply what they have learned in "the real world."
- c. The impact of service-learning on student academic learning as measured by course grades or GPA is mixed.
- d. Service-learning participation has an impact on such academic outcomes as demonstrated complexity of understanding, problem analysis, critical thinking, and cognitive development.

The effect on academic learning is measured by many studies that range from large national studies to individual experiences in the classroom. Three studies are summarized here beginning with a national study of 20,000 students and ending with two studies utilizing control groups to examine the effect of service-learning on student academic outcomes.

Vogelgesang and Astin (2000) conducted a pre/post survey. Self-reported data showed that academic skills including GPA, writing skills and critical thinking skills all changed significantly when service-learning or community service was performed. Using a sample size of 49, Ward (2000) found that faculty believed students showed more depth and had a better knowledge of course content as a result of service-learning experiences. Two other studies measured student achievement using service-learning and non-service-learning sections of the same course (Strage, 2000; Berson & Younkin, 1998).

Strage (2000) examined the performance of 477 students over five semesters to determine if learning outcomes differed based on involvement in service-learning. Service-learning students scored significantly higher than the non service-learning students, although the increase was not evenly distributed. In addition, students showed improved analytical ability later in the course. Journal entries indicated that students made better connections between the service and course concepts as the course progressed.

Berson and Younkin (1998) also examined learning outcomes using service-learning sections and control sections. Student success was measured using grades, attendance, assignments and course evaluations. Results indicate that service-learning students achieved significantly higher mean course grades.

The ability of students to apply what has been learned in the real world speaks to the value of service-learning as experiential education. Bacon (1997) examined the writing of 72 students who were writing for community organizations through a service-learning course and analyzed students' transitions from academic to non-academic writing over the course of two years. It was found that stronger academic writers performed better and that learning to write in new settings involved a complex interaction of knowledge, attitudes, and behavior.

Juhn, Tang, Piessens, Grant, Johnson, and Murray (1999) evaluated a project that provided health education to teachers. Qualitative and quantitative data were collected pre- and post-program for a control group as well as the service-learning group. Students participating in the service-learning group rated their ability to communicate significantly higher than non-participants. Participants also showed significantly increased skills, as well as comfort with and knowledge of working in school and community settings over the control group.

Evidence of student learning as demonstrated by course grades is mixed, with some studies indicating a positive impact on learning as previously discussed (Vogelgesang & Astin, 2000; Strage, 2000) and with other studies showing no difference between service-learning and control groups. Studies showing no difference include Parker-Gwin and Mabry (1998) who administered pre- and post-course surveys to 260 students enrolled in three different types of service-learning courses, one of which required service-learning. Contrary to expectations, the students who were required to participate in service rated the importance of service-learning significantly less favorably. Results may have been impacted by the quality of the placement.

The effect of service-learning on the complexity of student understanding, problem analysis, critical thinking, and cognitive development shows interesting results. Batchelder and Root (1994) compared a service-learning class to a traditional class examining the effect of service-learning on moral cognition, reasoning, and the development of occupational identity. Students exhibited significant gains on complex cognitive traits and a greater awareness of the complexity involved in dealing with social problems. Both quality of instruction and on-site supervision were important mediating variables.

Relevant Literature: Summary

The importance of the FGCU QEP is well supported by the literature. Research supports the efficacy of service-learning and environmental education learning opportunities. While there has been increasing attention to service-learning and environmental education in the literature, there is a noticeable absence of evidence-based studies, particularly in higher education.

Interpretation and comparison of research findings are challenging because of the differences found in research methods, sampling, and focus. In spite of the presence of some conflicting findings in these studies and the difficulties associated with generalizing the findings of studies that use small, non-randomized samples, it is still possible to make the following conclusions regarding best practices in environmental education:

- a. Exposure to a single environmental literacy course can have profound impact on an individual's behavior.
- b. Developing an environmental awareness requires that students examine the environment from more than one perspective.
- c. Team-based applied problem-solving in environmental studies provides students with the skills necessary to assess sustainability issues.
- d. Combining environmental education with in-field experiences facilitates student involvement in environmental activities and field research.
- e. Active participation during environmental education improves learning retention and fosters involvement in environmental activities.

Furthermore, commonalities that arise from a comparison of service-learning studies and best practices suggest that:

- a. Service-learning experiences are associated with a better knowledge of course content, improvement in complex cognitive traits, and in some cases, higher grades.
- b. Effective implementation of service-learning requires adequate staffing, collaborative problem solving, and a strong link to the university mission.
- c. Challenges to implementation of service-learning include inadequate faculty and staff training, lack of faculty incentives, and poor institutional organization.
- d. Instructional methodology associated with effective service-learning includes placement quality, application, extensive reflection activities, and community involvement.

It is important to note that there are no studies that specifically explore the impact of service-learning on enhancing ecological perspective in higher education. Thoughtful integration

of service-learning experiences into courses that promote environmental and sustainability education will provide FGCU with an unparalleled opportunity to impact student learning. Although there are barriers to implementation of environmental education and service-learning in higher education as outlined in the review of literature, a commitment to integrate and systematically assess student learning in these areas is critical to enhancing student learning and meeting the unique mission of FGCU.

This Page Intentionally Left Blank.

SECTION III

INSTITUTIONAL CAPABILITY



**FLORIDA
GULF COAST
UNIVERSITY**

SECTION III: INSTITUTIONAL CAPABILITY

Institutional capability addresses capacity and planning issues related to (a) the implementation and continuation of the QEP including timelines; (b) administrative oversight including personnel and the adequacy of administrative processes to maintain the improvement of quality; and (c) financial, physical, and academic resources to implement and sustain the QEP.

Implementation and Continuation Activities

Implementation and continuation timelines include a five-year summary of activities from academic year 2005/2006 through 2009/2010 (see Table 3.1) and detailed activities for QEP Phase I (2005/2006), Phase II (2006/2007), Phase III (2007-2008), Phase IV (2008/2009) and Phase V (2009/2010) (See Tables 3.2-3.6). Within each of the five phases, QEP activities are grouped by the categories of (a) implementation, (b) curricular development, (c) faculty and student research, (d) faculty development, (e) assessment, and (f) evaluation.

Implementation activities are related to the initiation and administration of the FGCU QEP. Key implementation activities include appointment of the QEP Director and QEP Advisory Committee, establishing linkages across campus, implementation of grant writing activities and continuously revising the QEP and faculty development plan based on data assessment, analysis, and evaluation.

Curricular development activities relate to curricular development and revision based on assessment data. While the QEP timeline includes specific timeframes for curricular revision, the QEP committee acknowledges that these dates are estimates and the actual timeframe is dependent upon how quickly the curricular revision process occurs. The QEP curricular revision process is complicated by the fact that the courses are multidisciplinary in nature and including faculty from multiple perspectives may necessitate a longer review and development process.

Faculty and student research activities are designed to enhance student learning in environmental perspective and community involvement. Activities in this section include drafting guidelines for faculty student research grants, providing financial support to encourage this type of research, and dissemination of research findings among campus constituents.

Faculty development is an ongoing process that centers around four key activities. The first activity is the QEP Training Institute. The training institute involves specific development activities for faculty that are teaching in courses that address the two learning outcomes—ecological perspective and community involvement. The University Engagement day provides development activities for the entire academic community on ecological perspective and community involvement. The goal is to increase involvement of students, faculty, staff and administration in the QEP. It also provides an opportunity for faculty and students to showcase their work. College-based training involves funding for individual colleges to engage faculty, staff and students in discipline-specific training related to ecological perspective and community involvement. The Novice Instructor Training is designed to

enhance teaching skills of new faculty who will be teaching in courses that are part of the QEP. This training will emphasize the importance of interdisciplinary collaboration, scholarly dialogue and experiential learning.

Assessment and **Evaluation** activities are closely linked with the Office of Planning and Institutional Performance and encompass activities such as establishing annual goals and objectives, benchmark assessments and conducting assessment of student learning, the QEP and administrative oversight of the QEP. Specific evaluation activities include annual reports, formative and summative evaluations, review by external consultants, implementation of a continuous feedback loop and establishing linkages to the Long Range Planning and Institutional Effectiveness Committee and the Strategic Plan.

Table 3.1: Five year plan (Phases I through V)

	Phase I 05-06	Phase II 06-07	Phase III 07-08	Phase IV 08-09	Phase V 09-10
Implementation	Establish linkages and appoint Director and Advisory Committee	Implement grant writing activities	Make revisions in QEP and faculty development plan based on data analysis and evaluation	Continue revisions	Continue revisions
Curricular Development	Use a developmental model and sequence relevant courses Refine curriculum for IDS 3920 University Colloquium Implement refined IDS 3920 University Colloquium	Conduct university-wide curricular revision to move from hours-based to course-based service-learning	Refine IDS 3920 University Colloquium and SL courses based on evaluation of data from Midpoint review	Make revisions in developmental sequencing of courses that address environmental perspective and community involvement based on data analysis and evaluation	Begin planning for continuation phase of QEP
Faculty & Student Research	Draft criteria for Faculty/Student team research grants	Implement Faculty/Student research grant program	Implement Faculty/Student research grant program	Report on research grant activities and research findings	Report on research grant activities and research findings
Faculty Development	Plan: QEP Training Institute University Engagement Day College-Based Training Novice Instructor Training	Plan, initiate and evaluate: QEP Training Institute University Engagement Day College-Based Training Novice Instructor Training	Plan, initiate and evaluate: QEP Training Institute University Engagement Day College-Based Training Novice Instructor Training	Plan, initiate and evaluate: QEP Training Institute University Engagement Day College-Based Training Novice Instructor Training	Plan, initiate and evaluate: Etc.
Assessment	Establish annual goals and objectives for the QEP Conduct baseline assessments and benchmarking Conduct assessment of student learning and student learning outcomes	Establish annual goals and objectives Assessment of student learning and student learning outcomes	Establish annual goals and objectives Assessment of student learning and student learning outcomes	Establish annual goals and objectives Assessment of student learning and student learning outcomes	Establish annual goals and objectives Assessment of student learning and student learning outcomes
Evaluation	Conduct detailed evaluation of courses that address ecological perspective and community involvement surveying faculty and academic units Conduct detailed evaluation of Service-Learning courses detailing hours awarded per course Conduct analysis of existing data Evaluate QEP programming Draft annual report	Conduct midpoint review and planning process based on comprehensive analysis and evaluation of data from yrs 1&2 with thorough review by external consultant. Conduct analysis of existing data Evaluate QEP programming Refining planning phases 3 & 4 based on evaluation of data	Conduct analysis of existing data Evaluate QEP programming Annual report	Review of progress to date and determine programmatic needs that still need to be addressed in year 5 of QEP with external consultant Conduct analysis of existing data Evaluate QEP programming Annual report	- Final summative evaluation of QEP - Conduct analysis of existing data - Evaluate QEP programming - Prepare annual report

Table 3.2: QEP Phase I (2005/2006)

	Spring/Summer 2005	Fall 2005	Spring/Summer 2006
Implementation	<ul style="list-style-type: none"> - Finalization and approval of QEP plan. - Establish linkages with courses and activities that foster ecological perspective & community involvement - Appoint QEP Director/QEP Coordinator/Community Partnerships Coordinator - Serve as Interim Advisory Committee providing support for QEP until Director is appointed - Initiate IRB Approval - Formation of QEP Joint Curriculum Task Force - Appoint QEP Advisory Committee 	<ul style="list-style-type: none"> - Coordinate faculty teaching and IDS 3920 University Colloquium - Disband QEP Committee 	
Curricular Development	<ul style="list-style-type: none"> - Identify and use developmental model - Sequence relevant courses within developmental model - Meetings with General Education Council 	<ul style="list-style-type: none"> - Refine curriculum and submit to University Undergraduate Curriculum Committee for approval 	<ul style="list-style-type: none"> - UTC approves curricular revisions - Implement refined IDS 3920 University Colloquium
Faculty & Student Research	<ul style="list-style-type: none"> - Draft criteria for faculty/student team research grants 	<ul style="list-style-type: none"> - Approval Process - Review Applications 	
Faculty Development	<ul style="list-style-type: none"> - Plan QEP Training Institute - Plan University Engagement Day - Plan College-Based Training - Plan Novice Instructor Training 	<ul style="list-style-type: none"> - Plan QEP Training Institute - Plan University Engagement Day - Plan College-Based Training - Plan Novice Instructor Training 	<ul style="list-style-type: none"> - Plan QEP Training Institute - Plan University Engagement Day - Plan College-Based Training - Plan Novice Instructor Training
Assessment	<ul style="list-style-type: none"> - Establish annual goals and objectives for the QEP - Conduct baseline assessments and benchmarking 		<ul style="list-style-type: none"> - Conduct assessment of student learning and learning outcomes
Evaluation	Finalize planning of Evaluation Process		<ul style="list-style-type: none"> - Conduct detailed evaluation of relevant courses - Conduct detailed evaluation of service-learning courses - Analyze data - Evaluate QEP programming - Draft annual report - Report QEP progress to LRPIEC

Table 3.3: QEP Phase II (2006/2007)

	Fall 2006	Spring/Summer 2007
Implementation	<ul style="list-style-type: none"> - Implement grant writing activities for QEP - Conduct university-wide curricular revision to move from hour-based to course-based service-learning 	
Curricular Development	<ul style="list-style-type: none"> - Refine curriculum and submit to University Undergraduate Curriculum Committee for approval 	<ul style="list-style-type: none"> - Implement refined IDS 3920 University Colloquium
Faculty & Student Research	<ul style="list-style-type: none"> - Implement Faculty and Student Research Grant Program 	<ul style="list-style-type: none"> - Disseminate findings to campus community
Faculty Development	<ul style="list-style-type: none"> - Plan and initiate QEP Training Institute - Plan and initiate University Engagement Day - Plan and initiate College-Based Training - Plan and initiate Novice Instructor Training 	<ul style="list-style-type: none"> - Evaluate QEP Training Institute - Evaluate University Engagement Day - Evaluate College-Based Training - Evaluate Novice Instructor Training
Assessment	<ul style="list-style-type: none"> - Establish annual goals and objectives 	<ul style="list-style-type: none"> - Conduct assessment of student learning and learning outcomes
Evaluation	<ul style="list-style-type: none"> - Conduct analysis of existing data - Conduct evaluation of programming 	<ul style="list-style-type: none"> - Draft annual report - Conduct midpoint review and planning process based on comprehensive analysis and evaluation of data from years 1 & 2 and thorough review by external consultant - Refine planning phases 3 and 4 based on evaluation of data - Report QEP progress to LRPIEC

Table 3.4: QEP Phase III (2007/2086)

	Fall 2007	Spring/Summer 2008
Implementation	- Make revisions in QEP Plan and Faculty Development Plan based on data analysis and evaluation	
Curricular Development	- Refine IDS 3920 University Colloquium and service-learning courses based on evaluation of data from midpoint review	
Faculty & Student Research	- Implement Faculty and Student Research grant program	- Disseminate findings to campus community - Report on research grant activities and research findings
Faculty Development	- Plan and initiate QEP Training Institute - Plan and initiate University Engagement Day - Plan and initiate College-Based Training - Plan and initiate Novice Instructor Training	- Evaluate QEP Training Institute - Evaluate University Engagement Day - Evaluate College-Based Training - Evaluate Novice Instructor Training
Assessment	- Establish annual goals and objectives	- Conduct assessment of student learning and learning outcomes
Evaluation		- Conduct analysis of existing data - Evaluate QEP programming - Prepare annual report - Report QEP progress to LRPIEC

Table 3.5: QEP Phase IV (2008/2009)

	Fall 2008	Spring/Summer 2009
Implementation	<ul style="list-style-type: none"> - Make revisions in QEP Plan and Faculty Development Plan based on data analysis and evaluation Review progress to date and determine with external consultant the programming needs that still need to be addressed in year 5 of QEP. 	
Curricular Development	<ul style="list-style-type: none"> - Make revisions in developmental sequencing of courses that address environmental perspective and community involvement based on data analysis and evaluation 	
Faculty & Student Research	<ul style="list-style-type: none"> - Implement Faculty and Student Research grant program 	<ul style="list-style-type: none"> - Disseminate findings to campus community - Report on research grant activities and research findings
Faculty Development	<ul style="list-style-type: none"> - Plan and initiate QEP Training Institute - Plan and initiate University Engagement Day - Plan and initiate College-Based Training - Plan and initiate Novice Instructor Training 	<ul style="list-style-type: none"> - Evaluate QEP Training Institute - Evaluate University Engagement Day - Evaluate College-Based Training - Evaluate Novice Instructor Training
Assessment	<ul style="list-style-type: none"> - Establish annual goals and objectives 	<ul style="list-style-type: none"> - Conduct assessment of student learning and learning outcomes
Evaluation		<ul style="list-style-type: none"> - Conduct analysis of existing data - Evaluate QEP programming - Prepare annual report - Report QEP progress to LRPIEC

Table 3.6: QEP Phase V (2009/2010)

	Fall 2009	Spring/Summer 2010
Implementation	- Make revisions in QEP Plan and Faculty Development Plan based on data analysis and evaluation	- Submit Status Report for QEP to SACS COC - Assessment of Impact Report
Curricular Development	- Begin planning for continuation phase of QEP	
Faculty & Student Research	- Implement Faculty and Student Research grant program	- Disseminate findings to campus community - Report on research grant activities and research findings
Faculty Development	- Plan and initiate QEP Training Institute - Plan and initiate University Engagement Day - Plan and initiate College-Based Training - Plan and initiate Novice Instructor Training	- Evaluate QEP Training Institute - Evaluate University Engagement Day - Evaluate College-Based Training - Evaluate Novice Instructor Training
Assessment	- Establish annual goals and objectives	- Conduct assessment of student learning and learning outcomes
Evaluation		- Conduct analysis of existing data - Evaluate QEP programming - Report QEP progress to LRPIEC - Prepare annual report - Prepare final summative evaluation of QEP

Administrative Oversight

The university recognizes that it must have a strong administrative structure to implement and maintain the QEP process. Therefore, it has created an administrative structure within the organization that is reflective of the importance of the QEP. Three new positions will be created:

- a. The QEP Director, reporting directly to the Provost and Vice President for Academic Affairs, will be responsible for administration of the QEP.
- b. The QEP Coordinator, reporting to the QEP Director, will assist the director in administration of the program.
- c. The Community Partnerships Coordinator, reporting to the Director of the Center for Civic Engagement (existing position), will coordinate community

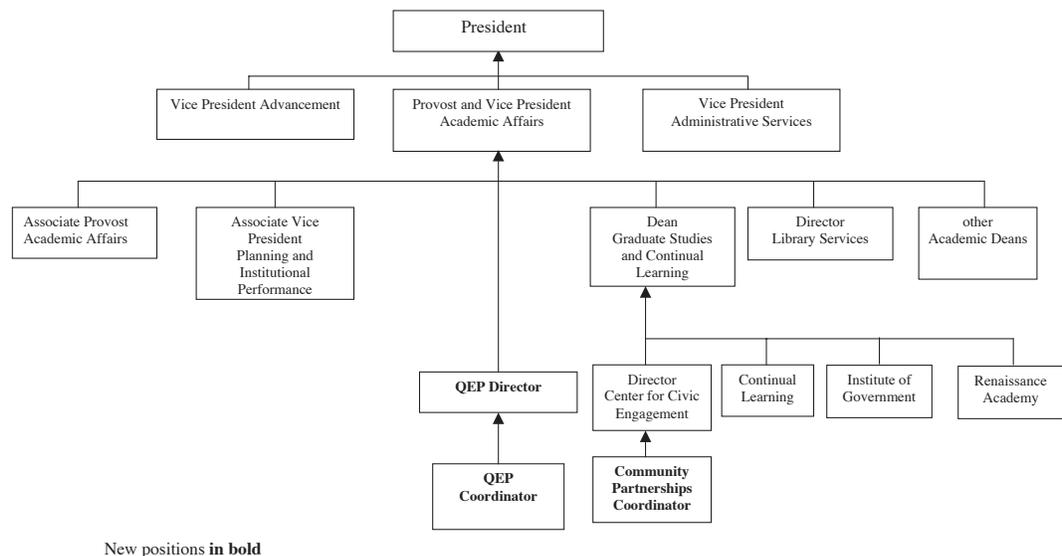
service activities and placements. The addition of this position enables the two directors to support the goals of the QEP.

The organizational chart presented in Figure 3.1 shows the three new positions and their relationship in the university organizational structure.

The Provost and Vice President of Academic Affairs will appoint the QEP director in consultation with the QEP Committee. The QEP director, in consultation with the Provost and Vice President of Academic Affairs and the QEP Committee, will appoint a QEP Advisory Committee comprised of one faculty member from each college and the Director of Civic Engagement. This committee will serve the QEP in an advisory capacity to ensure that an interdisciplinary focus of the QEP is maintained and that the QEP Defining Principles are followed.

The university has in place an evaluation procedure for assessing the performance of all senior administrators. Consistent with this procedure, the QEP Director is evaluated to (a) determine achievement of expectations for the position, and (b) determine achievement of expectations for the office including staff. In addition, an external consultant will be utilized at the end of phase II (spring 2007) and the end of phase IV (spring 2009) to conduct a review of the actual plan and the administration of the QEP.

Figure 3.1: QEP Organizational Chart



Financial Resources

The budget for the QEP, as presented in Table 3.7, was developed by the QEP Committee to ensure that funding will be adequate to implement and sustain the QEP over a five-year period of time. The budget received careful consideration and has the support of the SACS Steering Committee, the Provost and Vice President of Academic Affairs, the President’s Executive Group, and the SACS Leadership Team. The SACS Leadership Team formally approved the QEP budget on November 9, 2004.

The budget covers funding for a QEP Administrative Director, a half-time QEP Coordinator, a half-time Coordinator for Civic Engagement, a QEP Advisory Committee, faculty support for teaching in QEP related courses, faculty and staff development, faculty/student research, and assessment and evaluation of student learning, and the QEP program and administrative oversight. The budget demonstrates university commitment to the QEP and institutional capacity for the initiation and continuation of the QEP.

As noted previously, the QEP is linked to the budgeting process through the Strategic Plan, which includes references to the QEP in three of seven goals. The Strategic Plan guides the university in making budgetary allocations, thus ensuring priority consideration for funding of the QEP.

Table 3.7: QEP Budget.

	<u>2005/2006</u>	<u>2006/2007</u>	<u>2007/2008</u>	<u>2008/2009</u>	<u>2009/2010</u>
1. Administrative director					
Annual Stipend	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000
OPS course release	4,737	4,737	4,737	4,737	4,737
FICA/benefits	4,278	4,278	4,278	4,278	4,278
Operating expense	7,500	7,500	7,500	7,500	7,500
Total	28,515	28,515	28,515	28,515	28,515
2. Half-time QEP coordinator					
Salary	20,000	20,600	21,218	21,855	22,510
Benefits	6,000	6,180	6,365	6,556	6,753
Operating expense	2,320	2,320	2,320	2,320	2,320
Total	28,320	29,100	29,903	30,731	31,583
3. QEPAC stipend	5,400	5,400	5,400	5,400	5,400
4. Course releases/overload contracts					
Number of sections	21	22	24	25	27
Course release contracts	49,770	52,756	55,922	59,277	62,833
Number of sections	21	21	21	21	21
Overload contracts	67,830	67,830	67,830	67,830	67,830
Total	117,600	120,586	123,752	127,107	130,663
5. Faculty and staff development					
Training institute		19,148	19,148	19,148	19,148
Univ. Engagement day		10,000	10,000	10,000	10,000
College based training		7,500	7,500	7,500	7,500
Novice instructor training		12,600	9,450	6,300	3,150
Total		49,248	46,098	42,948	39,798
6. Professional development					
Conference funding		10,000	10,000	10,000	10,000
Research grants: faculty/ student teams	10,000	4,000	2,000	2,000	2,000
Total	10,000	14,000	12,000	12,000	12,000
7. Assessment					
Test administration	3,150	3,245	3,345	3,451	3,563
Assessment by outside consultant	5,000	5,000	5,000	5,000	5,000
Assessment tools	15,000	15,000	15,000	15,000	15,000
Operating expense	2,000	2,000	2,000	2,000	2,000
Total	25,150	25,245	25,345	25,451	25,563
8. Center for Civic Engagement					
Salary (Half-time coordinator)	20,000	20,600	21,218	21,855	22,510
Benefits	6,000	6,180	6,365	6,556	6,753
Operating expense	2,320	2,320	2,320	2,320	2,320
Work study students	6,000	6,360	6,742	7,146	7,575
Materials	1,000	1,060	1,124	1,191	1,262
Total	35,320	36,520	37,769	39,068	40,421
Subtotal QEP Budget	\$ 250,305	\$ 308,613	\$ 308,781	\$ 311,219	\$ 313,943
9. 10% Contingency	25,031	30,861	30,878	31,122	31,394
Grand Total QEP Budget	\$ 275,336	\$ 339,475	\$ 339,659	\$ 342,341	\$ 345,337

SECTION IV

ASSESSMENT OF THE PLAN



FLORIDA
GULF COAST
UNIVERSITY

Program Evaluation

This plan outlines how FGCU will evaluate the extent to which it is meeting the QEP mission of developing in students an ecological perspective and fostering community involvement. Since learning related to ecological perspective and community involvement may be occurring throughout the entire undergraduate experience, this plan also evaluates linkages among several of the University's educational activities, including General Education, to ensure the coherency of its efforts to enhance student learning. Consistent with the philosophy that evaluation is necessary for improvement and continual renewal, the plan combines evaluation of student learning with evaluation of the administrative, academic, and curricular processes established to achieve this goal of enhanced student learning. Thus, the program evaluation requires a comprehensive, university-wide, multifaceted, an interdisciplinary effort. The scope of the program evaluation is graphically depicted in the Data Flow Diagram, Process Model, and Feedback Loop and will be discussed later.

This is an objectives-oriented program evaluation based on two pre-existing student learning outcomes of the University. The objectives are clarified and expanded to encompass the levels of mission, goals, and objectives. The impact of the QEP must be evaluated periodically to measure how well it is meeting the stated objectives. The timeframe of measurement and evaluation are outlined in the plan. A variety of techniques will be used to measure how well the students are achieving the stated objectives. Methods used to assess QEP Goals and Objectives are outlined in Table 4.1. The QEP evaluation plan also outlines procedures for gathering, management, and evaluation of the data related to these measurements

Table 4.1: Methods used to assess QEP goals and objectives.

Learning Goals and Objectives	Assessment Points				Post-graduation
	IDS 1301L: Styles and Ways of Learning	IDS 2110 Connections	Transfer Orientation	IDS 3920 University Colloquium	
Develop an ecological perspective: a) demonstrate knowledge of the issues related to economic, social, and environmental sustainability b) demonstrate the ability to analyze local and global environmental issues c) participate in collaborative projects requiring analysis of environmental issues	ELCAI ¹ QEP-specific SAI items ¹ Curriculum-specific assessment ²	ELCAI ² QEP-specific SAI items ² Curriculum-specific assessment ²	ELCAI QEP-specific SAI items	ELCAI ² QEP-specific SAI items ² Curriculum-specific assessment ²	Alumni survey
	ELCAI ¹ QEP-specific SAI items ¹ Curriculum-specific assessment ²	ELCAI QEP-specific SAI items ² Curriculum-specific assessment ²	ELCAI QEP-specific SAI items	ELCAI ² QEP-specific SAI items ² Curriculum-specific assessment ²	Alumni survey
	Portfolio assessment ² QEP-specific SAI items ¹	Portfolio assessment ² QEP-specific SAI items ²	QEP-specific SAI items	Portfolio assessment QEP-specific SAI items ²	Alumni survey
Exhibit community involvement: a) demonstrate understanding of the complex relationships between individuals and communities b) demonstrate the ability to analyze sustainability within the context of community c) participate in collaborative service learning projects that foster an ecological perspective	Portfolio assessment ² QEP-specific SAI items ¹ Curriculum-specific assessment ²	Portfolio assessment ² QEP-specific SAI items ² Curriculum-specific assessment ²	QEP-specific SAI items	Portfolio assessment QEP-specific SAI items ² Curriculum-specific assessment ²	Alumni survey
	Portfolio assessment ² QEP-specific SAI items ¹ Curriculum-specific assessment ²	Portfolio assessment ² QEP-specific SAI items ² Curriculum-specific assessment ²	QEP-specific SAI items	Portfolio assessment QEP-specific SAI items ² Curriculum-specific assessment ²	Alumni survey
	Modified CSAS ¹ QEP-specific SAI items ¹ Triangulated Community Involvement ² Assessment ²	Modified CSAS ² QEP-specific SAI items ² Triangulated Community Involvement ² Assessment ²	Modified CSAS QEP-specific SAI items	Modified CSAS ² QEP-specific SAI items ² Triangulated Community Involvement ² Assessment ²	Alumni survey

¹ Assessment done at the beginning of the course

² Assessment done at the end of the course

The QEP must also be sufficiently flexible to allow for modifications deemed necessary as a result of program evaluation. It is anticipated that through the analysis of data, program evaluation will identify educational activities or other components of the QEP that can be improved to further enhance learning. The process of evaluating the program and then making recommendations for revision is outlined in this plan and also shown in the Data Flow Diagram, Process Model, and Feedback Loop.

Scope of the Plan

The QEP Committee understands that student learning related to ecological perspective and community involvement occurs in courses other than IDS 1301L Styles and Ways of Learning, IDS 2110 Connections, and IDS 3920 Colloquium and occurs as a result of student experiences outside of FGCU coursework. Although it is impossible to control for all variables related to student learning, the QEP assessment plan is designed to demonstrate learning that occurs over the period of time that students are enrolled at FGCU. Thus, measurement of student learning will be conducted near the time of initial enrollment at FGCU, during, and near the conclusion of undergraduate studies.

Although program evaluation is by nature an organic process, and the original plan may be modified over time, the QEP committee has established the initial plans and is proposing an ongoing process of evaluation, revision and implementation. The first step is for the QEP Director, the QEP Advisory Committee (QEPAC) and the Center for Civic Engagement (CCE) to establish initial annual goals and objectives for the QEP. These goals must relate to initial supervision and coordination of the academic activities related to offering the courses involved, primarily IDS 3920 Colloquium, but also coordinating with faculty and administrators responsible for IDS 1301L Styles and Ways of Learning and IDS 2110 Connections. Also, the QEP Director and QEPAC will collaborate with the General Education Council and CCE to identify and perform an initial evaluation of all courses that address ecological perspective and community involvement. For example, during spring 2005 a survey will be given to all faculty to determine the extent that ecological perspective and community involvement content is being addressed in general education and major courses. The QEP Director and QEPAC will also begin to examine evidence of the student learning that occurs in those courses. Initial data will be gathered from university students, faculty and staff, as well as from community members. Data will be collected in both quantitative and qualitative forms.

Student Learning Assessment Plan

The initial focus of the student assessment plan is to establish a baseline measure for the extent to which the chosen student learning outcomes are achieved through the current FGCU curriculum. One of the first tasks is the development of six items to be included on the Student Assessment of Instruction (SAI) (discussed in detail later) for all sections of IDS 3920 Colloquium. The items will specifically address the QEP learning objectives. Students will be asked to self-report the extent to which they: a) can demonstrate knowledge of the issues related to economic, social, and environmental sustainability, b) can demonstrate the ability to analyze local and global environmental issues, c) can demonstrate understanding of the complex relationships between individuals and communities, d) can demonstrate the ability to analyze sustainability within the context of community, e) have participated in collaborative projects requiring analysis of environmental issues, and f) have participated in collaborative service learning projects that foster an ecological perspective. These six

items will be included on the spring 2005 SAI for all sections of IDS 3920 University Colloquium. These six items will also be administered to transfer students at transfer orientation starting in fall 2005, and will be added to IDS 1301L Styles and Ways of Learning and IDS 2110 Connections in fall 2005.

The QEP Director, with assistance from QEPAC, will also develop a standard form of portfolio assessment to evaluate the quality of learning related to ecological perspective and community involvement that occurs in IDS 1301L Styles and Ways of Learning, IDS 2110 Connections, and IDS 3920 Colloquium. The QEP Director and QEPAC will also specify a sampling plan to gather this benchmark data, and develop a rubric to be used to apply a score to the student work. This initial benchmark measurement is a modest start; however, it is data that can feasibly be collected in this beginning phase, and constitutes valuable data that can be collected on an ongoing basis for comparisons with future years. It is anticipated that the measurement of student learning will become more sophisticated as the QEP Director's office and QEPAC become fully established.

By fall 2005 the QEP Director and QEPAC will initiate student testing with a nationally recognized "external" instrument: the Environmental Literacy and Citizenship Assessment Instrument (ELCAI), and a modified version of another external instrument, Community Service Attitudes Scale (CSAS). The QEP Director and QEPAC will modify the CSAS in order to shift the instrument's emphasis to community service specifically related to the environment. What follows is a description of the ELCAI and CSAS.

ELCAI. The ELCAI will be used to measure student learning in the area of ecological perspective (McKeown-Ice, 1997). The ELCAI is designed to evaluate program effectiveness, not individual student performance. It would not be used to give an individual student a grade, but has been chosen to measure student learning over time at the institutional level. The items on the instrument measure general knowledge related to the environment, and are not necessarily reflective of content coverage in FGCU coursework. It is recommended by the developers of the instrument that the instrument be given to incoming students, and then again prior to graduation to determine whether their environmental literacy and environmentally-responsible behaviors have changed during their time at the institution (McKeown-Ice). The instrument has four modules: Natural Science, Social Science, Environmental Issues, and Environmentally-Responsible Behaviors. The first three modules are multiple-choice tests, with items requiring higher-order thinking. The fourth module is a self-report type of survey. The instrument uses an item bank that can either be randomly sampled, or intentionally split into two tests to meet the needs of a pre-test/post-test scenario. The ELCAI is a nationally recognized instrument that is based on sound preliminary test construction principles (McKeown-Ice, unpublished data).

Since Eyler's work (2001) demonstrates that service-learning has a positive impact on students' academic learning, incorporating environmentally focused service-learning into IDS 1301L Styles and Ways of Learning, IDS 2110 Connections, and IDS 3920 University Colloquium should have a positive impact on student learning. Therefore, student post-test scores on the ELCAI would be expected to be higher after the environmentally focused service-learning component is added to these courses.

CSAS. The Community Service Attitudes Scale (CSAS) will be modified to measure students' attitudes about community service related to the environment. The CSAS is described in *The Measure of Service Learning: Research Scales to Assess Student*

Experiences (Bringle, Phillips & Hudson, 2004). The scale is designed to measure students' attitudes about community service based on the model of helping behavior developed by Schwartz (Bringle, Phillips & Hudson, 2004). The survey consists of 46 items, each using a seven-point response scale. The survey has eight subscales: normative helping attitudes, connectedness, costs, awareness, benefits, seriousness, career benefits, and intentions. The survey has suitable psychometric characteristics, and is thought to be a good instrument for a longitudinal study of perceptions of, attraction to, changes during, and outcomes from service-learning (Bringle, Phillips & Hudson, 2004). Although the psychometric qualities of the CSAS instrument may change as a result of the modifications, modification of an existing, validated instrument is the best option. In order to enhance the validity of the modifications made to the CSAS, the QEP Director and QEPAC will consult with experts in the fields of service-learning and environmental education for expert review of the modified items. The QEP Director and QEPAC will also include examination of the psychometric characteristics of the modified CSAS in the QEP evaluation plan.

Starting in the fall of 2005, these instruments will be administered first to students as they enter FGCU. For first-time-in-college (FTIC) students, the instruments will be administered in IDS 1301L Styles and Ways of Learning, a course typically taken very early in students' time at FGCU. Transfer students with an Associate in Arts (AA) degree are not required to take IDS 1301L Styles and Ways of Learning, so those students will take the ELCAI and modified CSAS initially at transfer orientation. FTIC students will also complete these instruments at the conclusion of IDS 2110 Connections. This course is typically taken near the end of completion of the general education requirements, and is a point in their academic careers similar to the entering transfer student with an AA degree. All students will then take the ELCAI and modified CSAS again at the conclusion of IDS 3920 University Colloquium. This schedule allows for evaluation of learning over time, as well as allowing for a comparison of two groups of students (FTIC and transfers). FTIC students will have the advantage of going through the curricular sequence of IDS 1301L Styles and Ways of Learning, IDS 2110 Connections, and IDS 3920 Colloquium, while transfer students only take IDS 3920 Colloquium. The QEP plan includes curricular revision to ensure that this sequence creates an opportunity for developmental learning related to ecological perspective and community involvement. Transfer students with an AA degree will not go through this developmental sequence of coursework, and comparison of these groups will provide data on the value of this developmental sequence.

The QEP Committee has identified that there will be three categories of students that exist depending on when the students are enrolled in IDS 1301L Styles and Ways of Learning, IDS 2110 Connections, and IDS 3920 Colloquium. These categories include: 1) "current" students (taking IDS 3920 Colloquium 2004-2005, 2) "transitional" students (taking IDS 3920 Colloquium 2005-2006, and 3) "new model" students (taking IDS 3920 Colloquium 2006-2007 or later. The QEP will use a student ID number to identify all individual student data in order to determine which category a student belongs in.

The timeline for implementation of QEP plan for student assessment for 2005-2007 is summarized in Table 4.2.

Table 4.2: Timeline for implementation of QEP plan for student assessment.

Spring 2005	AY 2005-2006	AY 2006-2007
QEP-specific SAI items	QEP-specific SAI items	QEP-specific SAI items
Quantitative portfolio assessment with rubric	Quantitative portfolio assessment with rubric	Quantitative portfolio assessment with rubric
Qualitative portfolio assessment	Qualitative portfolio assessment	Qualitative portfolio assessment
Existing curriculum-specific assessment	Modified curriculum-specific assessment	Modified curriculum-specific assessment
	ELCAI	ELCAI
	Modified CSAS	Modified CSAS
	Triangulated Community Involvement Assessment	Triangulated Community Involvement Assessment

The evaluation plan will utilize triangulation of various external and internal, quantitative and qualitative measurement of student learning. The QEP will utilize two external instruments: the ELCAI and modified CSAS instruments, as well as internal, curriculum-specific tests, surveys, questionnaires, portfolio assessment of student work (including term papers, journals, and other products), and focus group interviews designed by FGCU faculty. Fixed response instruments using scanner readable answer sheets can be used efficiently for all students; however, student work that cannot be scored by scanner will only be sampled for rubric-based data analysis. Student portfolio work will also be sampled for qualitative data analysis. In order to evaluate the temporal aspects of student learning, portfolio entries will be required on a regular basis throughout the semester in order to examine changes in knowledge, attitudes or skill over time. Evidence-based literature emphasizes that portfolios must include student reflection. A post-graduation survey will be developed to measure attitudes about ecological perspective and community involvement of our alumni. Measurement of learning related to community involvement in particular will triangulate measurement by source, with assessment of student learning being done by the student, course faculty, and community partner using a standard format (Triangulated Community Involvement Assessment) designed at the university. This format will combine fixed-response items that can be read by scanner, as well as open-ended short essay questions that will be sampled for rubric-based quantitative, as well as qualitative data analysis.

Curricular Review

To maintain an interdisciplinary perspective in IDS 1301L Styles and Ways of Learning, IDS 2110 Connections, and IDS 3920 Colloquium, a QEP Joint Curriculum Task Force will be formed in 2005. Membership on the QEP Joint Curriculum Task Force will include the QEP Director, the QEPAC, a representative from the General Education Council, and one faculty member from each of the above mentioned courses. Curricular recommendations from the QEP Joint Curriculum Task Force will be submitted to the General Education Council and the Undergraduate Curriculum Team for review and approval.

The QEP Joint Curriculum Task Force will examine the curricula in IDS 1301L Styles and Ways of Learning, IDS 2110 Connections, and IDS 3920 Colloquium to evaluate how well these courses form a curricular developmental sequence intended to enhance learning related to ecological perspective and community involvement. The CCE will examine the curricula of service-learning courses to evaluate whether those courses enhance learning related to ecological perspective and community involvement. The CCE will also gather data on how many service-learning hours are required in each of these courses.

Faculty Self-Evaluation

Course and self-evaluation forms completed by faculty will be designed to gather data on course quality or effectiveness from the faculty perspective. Critical self and peer evaluation will be encouraged in an effort to refine the implementation of best practices in education. This data will also include faculty feedback on the QEP Training Institute, University Engagement Day, College-Based Training, and Novice Instructor Training for IDS 3920 Colloquium, IDS 1301L Styles and Ways of Learning, and IDS 2110 Connections.

Student Assessment of Instruction

The data from the Student Assessment of Instruction (SAI) will be used for measurement of faculty/course quality from the student perspective. Student assessment of instruction has always been carried out at FGCU. It began with the eight-item State University System Student Assessment of Instruction (SUSSAI) that was mandated for use in every course, every semester by the Florida Board of Regents. In 1999, the faculty expressed an interest in a more thorough assessment of instruction. The Faculty Senate's Institutional Affairs Team (IAT) worked on developing new items to add to the required eight items. The IAT submitted recommended changes, and the Faculty Senate approved the use of a new instrument that included the original eight SUSSAI items, added twelve new items, and has room for faculty to add seven additional course-specific items. In 2001, the university began to use the twenty-item instrument as standard student assessment of instruction in all courses. The Office of Planning and Institutional Performance (PIP) is responsible for coordinating the collection and management of SAI data. PIP will provide the QEP Director with the analysis of this data for IDS 1301L Styles and Ways of Learning, IDS 2110 Connections, and IDS 3920 Colloquium. As mentioned above, six additional items will be added to the SAI for use specifically in IDS 3920 Colloquium. This data collection will start in spring 2005, and items used at that time will be used on an ongoing basis for evaluation over time. The data from the standard items will also be analyzed for information about the quality of learning occurring in the course. Although intended to be primarily an evaluation of the faculty member rather than the course curriculum, some information about the quality of the course can be gleaned from these assessments. As ecological perspective content is added to IDS 1301L Styles and Ways of Learning and IDS 2110 Connections, the six additional items will be added to the SAI for those courses also.

Focus Groups Interviews

Qualitative inquiry will be used to provide descriptive data in the participants own words and observable behavior. Focus group interviews, using a semi-structured interview technique, will be used to collect the qualitative data. Purposeful sampling, using homogenous samples of students, course faculty, community partners, and FGCU graduates and their employers will be used. Data will be analyzed and evaluated by the Office of the QEP

Director, QEPAC, and CCE to provide information on the quality of learning that occurred, the quality of learning experience opportunities provided, and to gather recommendations for improvement.

Data Management and Analysis

The collection and management of some of the data will be a shared responsibility between the QEP Director and the Office of Planning and Institutional Performance (PIP). PIP collects course evaluation data (SAI) for all courses, including courses that address ecological perspective and community involvement. Initially, program evaluation will focus on IDS 1301L Styles and Ways of Learning, IDS 2110 Connections, and IDS 3920 Colloquium. It is possible that other courses may be evaluated in the future, but these courses have not been selected for inclusion in the QEP at this time. PIP will analyze the data from the SAI and share the analysis of this data with the Office of the QEP Director. PIP will also collect data from the ELCAI, modified CSAS, and course specific tests, surveys, and questionnaires using fixed-response instruments with scanner readable answer sheets from IDS 1301L Styles and Ways of Learning, IDS 2110 Connections, and IDS 3920 Colloquium. PIP has the capacity for collecting, scanning, storing, and analyzing data from scanner readable answer sheets and the QEP Director's office will outsource that work to PIP.

The Office of the QEP Director will be responsible for coordinating the sampling, management, and analysis of student work that cannot be scored by scanner. This student work will be analyzed using a scoring rubric for quantitative data analysis; however, the QEP will also sample student work for qualitative data analysis. Considering the paucity of research that has been done on the assessment of student learning related to service-learning focused on the environment, the theory generating nature of qualitative data analysis will be very valuable. The themes that develop from qualitative analysis can be used to evaluate the quality of student learning as well as formulate the basis of additional approaches to program evaluation and/or research.

The office of the QEP Director, with assistance from PIP, will gather, clean, collate, and store all data that demonstrate evidence of student learning related to ecological perspective and community involvement in a universal database. The student identification (ID) numbers will be used to identify all individual student data. Institutional Review Board approval will be secured in relation to using student ID numbers on student assessment instruments. Confidentiality will be assured. Measures will be taken to ensure that student ID numbers are not on SAI feedback given to faculty.

Linkages between relevant university data sets (including student demographic information in Banner) will be identified and documented. All of these activities will be coordinated through the office of the QEP Director; with assistance of PIP, Information Systems, and the Registrar's Office. The Office of the QEP Director and PIP will collaborate to analyze qualitative and quantitative data showing evidence of student learning related to the chosen student learning outcomes, and whether the amount of learning that was projected as a goal can be demonstrated. Qualitative and quantitative data related to evaluations of faculty, courses, curricula, and training programs, and feedback from other sources will be analyzed for use in the evaluation of how effectively the QEP Plan is being implemented. The Office of the QEP Director will synthesize all of this data analysis in order to evaluate QEP programming to determine the effectiveness of FGCU's efforts to enhance student learning in the two chosen undergraduate student learning outcomes.

Recommendations to the QEP Director

The Office of the QEP Director will seek recommendations pertaining to enhancing student learning related to ecological perspective and community involvement from the QEPAC, CCE, General Education Council, QEP Joint Curriculum Task Force, Faculty Senate, Student Government Association, Undergraduate Curriculum Team, Staff Advisory Council, Provost's office, community partners, and faculty who teach in courses that address ecological perspective or community involvement. Recommendations will be sought in the areas of curriculum, measurement of student learning, and data collection, storage, or analysis. For any areas where learning objectives are not being met or where QEP evaluations demonstrate deficiencies in the QEP Plan, recommendations will be made for revisions in the Implementation Plan. The Office of the QEP Director will write an annual report, set annual goals and objectives, and propose the Implementation Plan for the following year. A midpoint and end review of the QEP will be conducted by an external consultant.

Implementation Plan

The implementation plan is revised on a yearly basis. The Office of the QEP Director will propose curricular revisions to the General Education Council and the Undergraduate Curriculum Team (UCT). Curricular revisions approved by the UCT are reviewed with the QEPAC and the CCE, and then curricular revisions are made to the appropriate courses. Recommendations for faculty development are reviewed with the QEPAC and the CCE, and then are implemented by the QEP Training Institute.

Summary

The evaluation plan that has been developed for the QEP is both appropriate and feasible. It achieves a balance between the use of external measurement instruments and those instruments that are internal and tailored more specifically to FGCU. It informs through the use of both quantitative and qualitative data, is organic in nature, and designed to be flexible enough to meet unforeseen challenges and has the ability to respond to future opportunities for data collection and analysis.

Internal System for Evaluating the QEP and Monitoring Progress

These diagrams represent the planned implementation of the Quality Enhancement Plan (QEP); they do not include the dynamics of the development of the QEP. Figure 4.1 is a **Context Diagram** that illustrates all of the external entities that interface with the QEP Process and the data flows between the QEP Process and those entities. Figure 4.2 is a **Data Flow Diagram**. The Data Flow Diagram explodes the Context Diagram and illustrates the processes within the QEP. All entities and data flows represented in the Context Diagram are represented within the Data Flow Diagram. Figure 4.3 is a **Process Model**, which is distinguished from the data flow diagrams in that it assigns responsibility for processes.

Figure 4.1 illustrates the data flows between the QEP Director, QEPAC, and other FGCU departments and outside entities related to the QEP. Both the QEP Director and QEPAC are located within the QEP Process bubble. It shows flows of information to and from the QEP, excluding connections between entities that do not involve the QEP. Information flows include data, analysis, recommendations, approvals, and revisions.

Figure 4.1: Context diagram

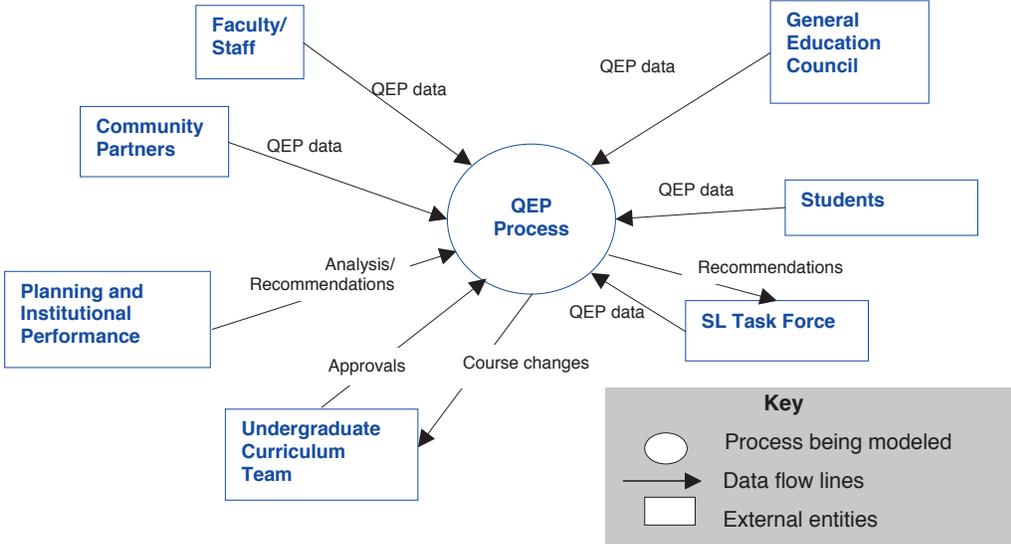


Figure 4.2 shows the process by which data is transformed within the QEP and the flow of data between participants. This diagram is also known as a “Level 0 Diagram” and shows only the top-level processes. Each process bubble within the Level 0 Diagram can be further exploded into sub-processes. For example, process bubble *1.0 Prepare Data* could be further exploded into three processes including *1.1 Collect Data*, *1.2 Input Data*, and *1.3 Prepare Reports*. Again, the QEP Director and QEPAC control the steps within this process. QEP data flows in from target audiences including faculty and staff, students, General Education Council, service-learning task force and community partners. Data preparation and analysis is handled internally, with analysis and recommendations provided by PIP. The QEP Director, QEPAC, and Director of Civic Engagement use the results to evaluate the QEP, and recommend curriculum revisions and training modifications. Revisions to the curriculum follow the curriculum approval process through the General Education Council and the Undergraduate Curriculum Team. Note also that this diagram is a snapshot of an ongoing process. At the completion of *Process 5.0 Implement Revisions*, the QEP process would restart at *Process 1.0 Prepare Data*.

Figure 4.2: Data flow diagram.

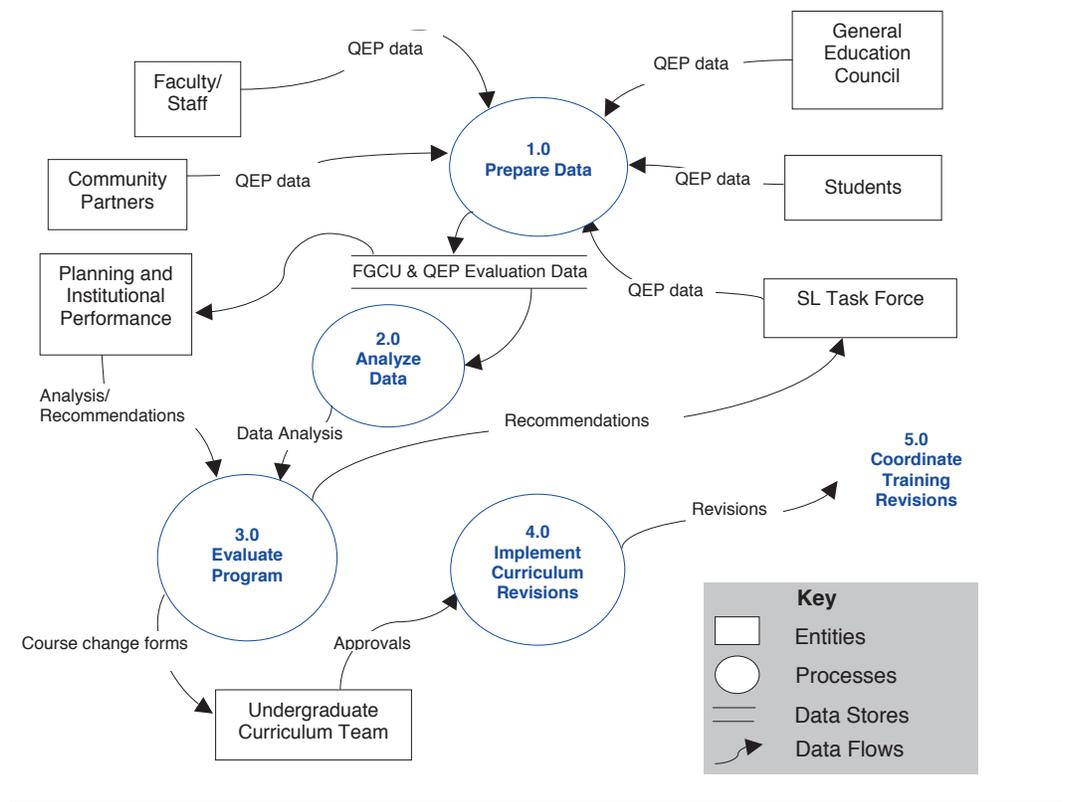
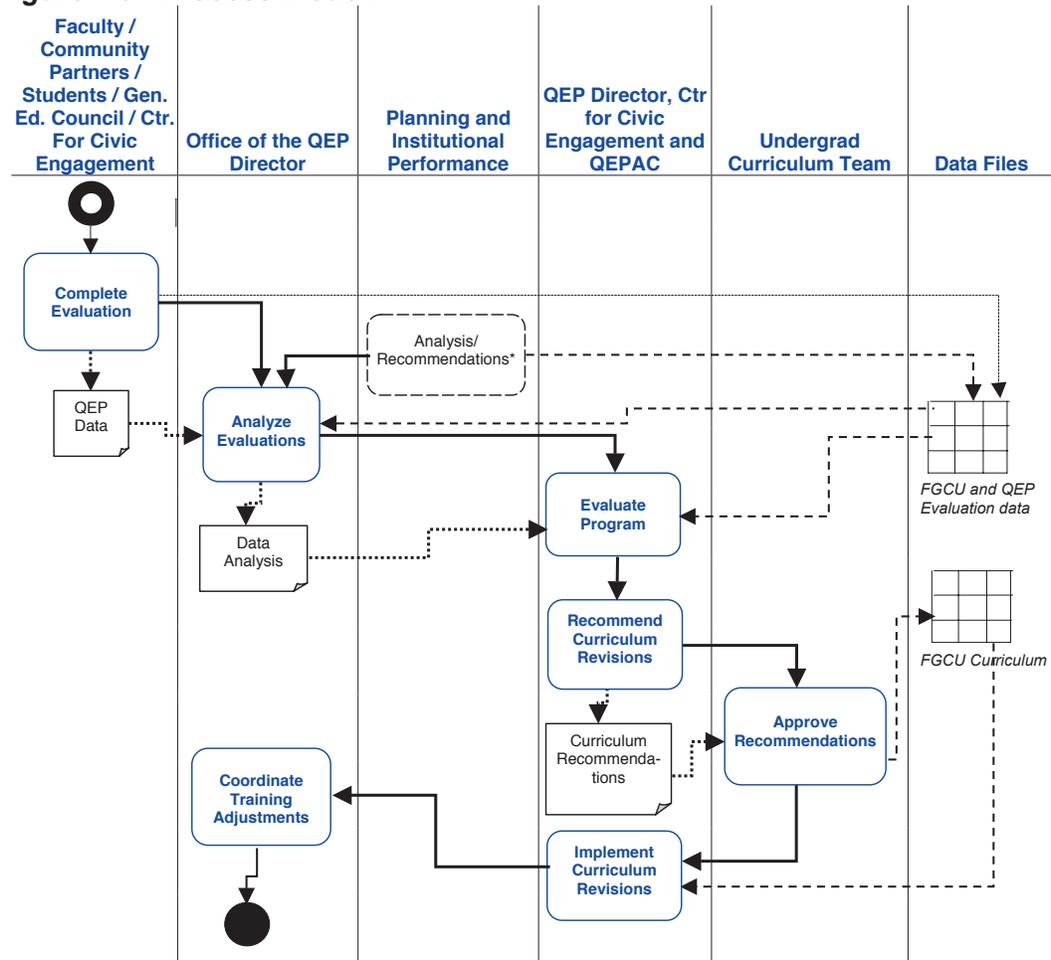
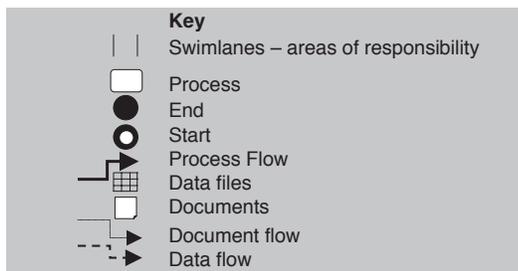


Figure 4.3 is designed to show the same processes diagrammed in Figure 4.2 with the responsible entities indicated at the top of each column. The Data Files column indicates the data that is being stored and the specific names of the files. The process originates with the QEP Director who coordinates analysis of QEP data. QEP data is collected from faculty, staff, students, the General Education Council, community partners and the Center for Civic Engagement at FGCU. Planning and Institutional Performance (PIP) also supplies analysis and recommendations. Program evaluation and resulting curriculum revisions originate with the QEP director, QEPAC, and Director for the Center for Civic Engagement. Recommended curriculum revisions are sent to the General Education Council and the Undergraduate Curriculum Team for approval. Once curriculum revisions are approved, changes in training programs are coordinated by the Office of the QEP director and implemented.

Figure 4.3: Process model.

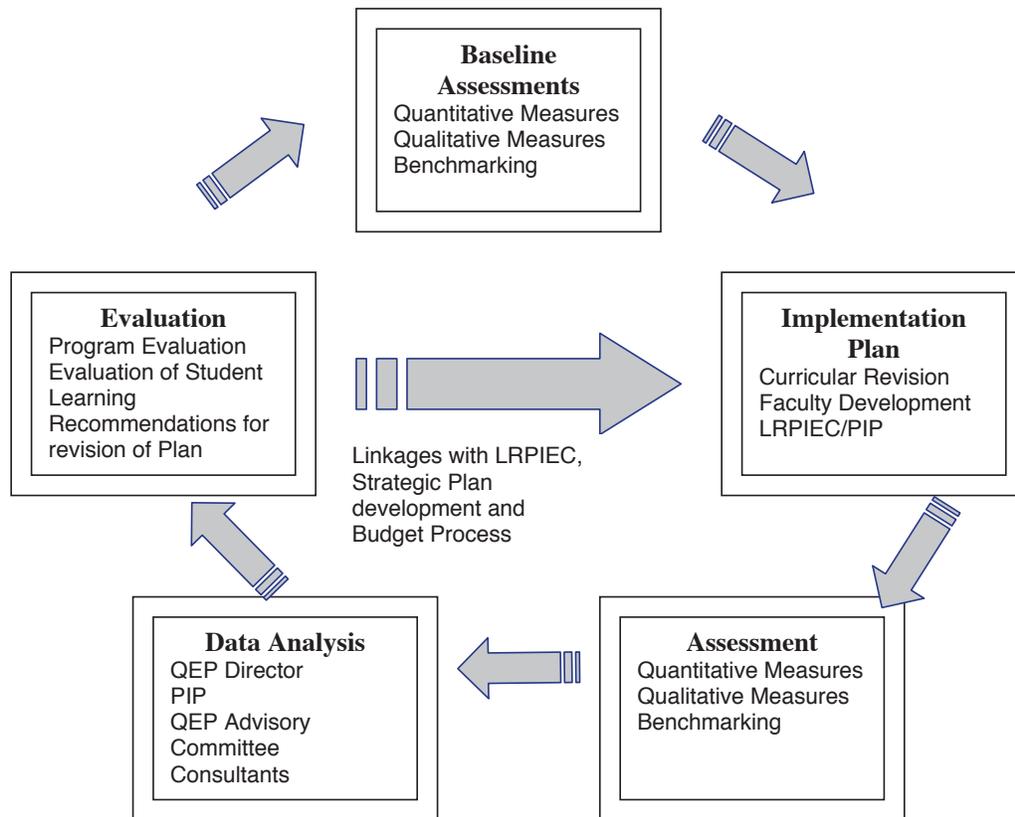


* Planning and Institutional Performance also perform course assessment. Although this assessment process is **not** part of the QEP, this assessment data will be used by the QEP.



Quality enhancement is at the heart of the FGCU Quality Enhancement Plan. The QEP Feedback Loop (Figure 4.4) is a graphic representation of the systematic and coherent feedback processes that will be used in the QEP. The feedback loop is used to inform, modify, and improve student learning related to Ecological Perspective and Community Involvement.

Figure 4.4: QEP feedback loop



This Page Intentionally Left Blank.

SECTION V

INSTITUTIONAL PARTICIPATION



**FLORIDA
GULF COAST
UNIVERSITY**

SECTION V: INSTITUTIONAL PARTICIPATION

All campus constituencies—faculty, staff, students, trustees, and administrators—were involved in the development of university’s QEP (see Appendix E). In early 2003, information regarding the new process for reaffirmation of accreditation with Commission on Colleges of the Southern Association of Colleges and Schools was shared with the campus community using multiple methods of communication: (a) presentations at college, group, and unit meetings; (b) email messages to all faculty, staff, and students; (c) public forums; and (d) web notices. The campus community was provided with full descriptions of the new Compliance Certification and Quality Enhancement Plan processes. Individuals were also referred to the Commission on College’s website <http://www.sacscoc.org> for the *Principles of Accreditation* and other source documents.

The Deans Council was responsible for overseeing the process of gathering suggestions for the QEP topic. Individuals and groups were encouraged to submit a brief proposal (2-page maximum) identifying suggested title; context, issues to be addressed, and goals; explanation as to how the suggested topic would contribute to institutional quality, with special attention to student learning; and timeline for implementation and realization of results. Four proposals were submitted, and a special QEP Task Force under the direction of the Deans Council evaluated the proposals for strengths, challenges, and opportunities, at times going back to the submitting individual/group for clarification and additional information. The Office of Planning and Institutional Performance also provided information regarding assessment alternatives. The Deans Council considered the original proposals along with the comments of the QEP Task Force at a retreat in July 2003, and subsequently identified two topics as being particularly strong in meeting the criteria for a QEP as outlined in the *Handbook for Reaffirmation of Accreditation*.

In September 2003, the SACS Leadership Team reviewed the original proposals, the findings of the QEP Task Force, and the recommendations of the Deans Council and unanimously endorsed the following QEP focus and working title:

Revise the University Colloquium using both the Campus Ecosystem Model to center the course on campus and civic engagement to ensure the course meets the University student-learning goal of developing an “ecological perspective.”

This topic was selected because it (a) had broad university support, especially within the colleges; (b) represented guiding principles that are deeply embedded in the university’s culture; and (c) provided opportunities to incorporate best practices into successful student learning activities and educational processes that are already in place. In addition, the topic was forward-looking in that it focused attention on how a new institution with a unique mission could maintain and even improve quality as it grows and matures.

In fall 2003, the QEP Committee began its research and deliberations guided by the QEP working title. As discussions progressed, it became apparent to the QEP Committee that the initial working title could be interpreted as focusing more on a course (IDS 3920 Colloquium) than on the outcome of student learning. Since the purpose of the QEP is to increase the effectiveness of some aspect of an institution’s educational program relating to student learning, the QEP Committee felt it was important to have a QEP title that reflected this emphasis on student learning. After careful consideration of the SACS guidelines and discussion with various constituencies including the Faculty Senate, the Deans Council,

and the SACS Steering Committee, the QEP Committee proposed the following refined QEP working title:

Develop in students an ecological perspective and foster community involvement through experiential learning, scholarly dialogue, and interdisciplinary engagement.

This revised working title is based on two of the university's Undergraduate Student Learning Outcomes, specifically Goal 3: An Ecological Perspective and Goal 9: Community Awareness and Involvement. This subtle change in wording kept the focus on student learning, facilitated assessment of outcomes, made it easier to link the QEP with the university's mission statement and strategic plan, and provided a framework for addressing relevant goals and outcomes in multiple settings. On April 27, 2004, the SACS Leadership Team approved the refined QEP working title.

Throughout the remainder of 2004, the QEP Committee met weekly to discuss development of the QEP. The QEP committee worked on creating a transparent process where every member of the community felt free to engage in open and candid discussion of the QEP and QEP Process. Strategies used to facilitate the campus engagement plan included using multiple avenues of communication, reaching out and going to constituents, maintaining early and continuous communication, posting QEP documents and minutes on the FGCU SACS Website for public review, and purposely seeking out multiple viewpoints to ensure that all voices were heard.

The QEP Committee members also served as informal channels of communication with the wider campus community. The QEP Chair is a member of the SACS Leadership Team and the SACS Steering Committee and provided regular progress reports to those groups. The President and Provost updated the FGCU Board of Trustees on reaffirmation activities on several occasions. As the QEP began to take shape, QEP Committee members attended numerous unit meetings and also hosted two open forums in October 2004 in order to solicit feedback on the draft plan from the wider campus community. Throughout the entire process, the QEP was endorsed by relevant campus groups and the final draft was approved by the SACS Steering Committee and the SACS Leadership Team. Appendix G provides an overview of the QEP process and graphically represents the Campus Engagement Plan from Exploration and Topic Selection to the Refinement and QEP Development.

CONCLUSION

The ultimate goal of FGCU's Quality Enhancement Plan (QEP) is to improve student learning in ecological perspective and community involvement by employing teaching and learning strategies that emphasize experiential learning, scholarly dialogue, and interdisciplinary engagement. This topic has received strong support from all campus constituencies and is congruent with the FGCU Mission.

Research supports the inclusion of service-learning and environmental education in the higher education curriculum. Thoughtful integration of service-learning experiences into courses that promote environmental education will provide FGCU with an unparalleled opportunity to impact student learning. Sufficient human and fiscal resources have been allocated to the QEP. These fiscal resources will provide opportunities to implement creative strategies designed to address barriers that have been identified in the literature. The QEP provides a framework to systematically evaluate student learning using internal and external instruments. Strategies to refine curriculum and enhance student learning will be developed as part of an on-going plan of continuous improvement.

This Page Intentionally Left Blank.

SECTION VI

APPENDICES



FLORIDA
GULF COAST
UNIVERSITY

Appendix A FGCU Vision, Mission, and Guiding Principles

VISION STATEMENT

Florida Gulf Coast University will achieve national prominence in undergraduate education with expanding recognition for selected graduate programs.

MISSION STATEMENT

Established on the verge of the 21st century, Florida Gulf Coast University infuses the strengths of the traditional public university with innovation and learning-centered spirit, its chief aim being to fulfill the academic, cultural, social, and career expectations of its constituents.

Outstanding faculty uphold challenging academic standards and balance research, scholarly activities, and service expectations with their central responsibilities of teaching and mentoring. Through these efforts, the faculty and University transform students' lives and the southwest Florida region.

Florida Gulf Coast University continuously pursues academic excellence, practices and promotes environmental sustainability, embraces diversity, nurtures community partnerships, values public service, encourages civic responsibility, cultivates habits of lifelong learning, and keeps the advancement of knowledge and pursuit of truth as noble ideals at the heart of the university's purpose.

GUIDING PRINCIPLES

The founding of Florida Gulf Coast University at the advent of a new century is a signal event. It comes at a moment in history when the conditions that formed and sustained American higher education are fundamentally changing, and at a time when rapid shifts wrought by technology and social complexities are altering the very nature of work, knowledge, and human relationships. As a public institution, Florida Gulf Coast University eagerly accepts the leadership opportunity and obligation to adapt to these changes and to meet the educational needs of Southwest Florida. To do so, it will collaborate with its various constituencies, listen to the calls for change, build on the intellectual heritage of the past, plan its evolution systematically for the twenty-first century, and be guided by the following principles:

Student success is at the center of all university endeavors. The university is dedicated to the highest quality education that develops the whole person for success in life and work. Learner needs, rather than institutional preferences, determine priorities for academic planning, policies, and programs. Acceleration methods and assessment of prior and current learning are used to reduce the time it takes to earn a degree. Quality teaching is demanded, recognized, and rewarded.

Academic freedom is the foundation for the transmission and advancement of knowledge. The university vigorously protects freedom of inquiry and expression and categorically expects civility and mutual respect to be practiced in all deliberations.

Diversity is a source of renewal and vitality. The university is committed to developing capacities for living together in a democracy whose hallmark is individual, social, cultural, and intellectual diversity. It fosters a climate and models a condition of openness in which students, faculty, and staff engage multiplicity and difference with tolerance and equity.

Informed and engaged citizens are essential to the creation of a civil and sustainable society. The university values the development of the responsible self grounded in honesty, courage, and compassion, and committed to advancing democratic ideals. Through Service Learning requirements, the university engages students in community involvement with time for formal reflection on their experiences. Integral to the university's philosophy is instilling in students an environmental consciousness that balances their economic and social aspirations with the imperative for ecological sustainability.

Service to Southwest Florida, including access to the university, is a public trust. The university is committed to forging partnerships and being responsive to its region. It strives to make available its knowledge resources, services, and educational offerings at times, places, in forms and by methods that will meet the needs of all its constituents. Access means not only admittance to buildings and programs, but also entrance into the spirit of intellectual and cultural community that the university creates and nourishes.

Technology is a fundamental tool in achieving educational quality, efficiency, and distribution. The university employs information technology in creative, experimental, and practical ways for delivery of instruction, for administrative and information management, and for student access and support. It promotes and provides distance- and time-free learning. It requires and cultivates technological literacy in its students and employees.

Connected knowing and collaborative learning are basic to being well educated. The university structures interdisciplinary learning experiences throughout the curriculum to endow students with the ability to think in whole systems and to understand the interrelatedness of knowledge across disciplines. Emphasis is placed on the development of teamwork skills through collaborative opportunities. Overall, the university practices the art of collective learning and collaboration in governance, operations, and planning.

Assessment of all functions is necessary for improvement and continual renewal. The university is committed to accounting for its effectiveness through the use of comprehensive and systematic assessment. Tradition is challenged; the status quo is questioned; change is implemented.

Note: The Vision Statement and the Mission Statement were approved by the Florida Gulf Coast University Board of Trustees, December 2, 2002. The Guiding Principles were approved by the Deans Council, June 18, 1996.

Appendix B: Undergraduate Student Learning Goals and Outcomes

Florida Gulf Coast University is committed to the following learning goals and educational outcomes, believing they provide a foundation for lifelong learning and effective citizenship. The specific outcomes involving knowledge, understanding, analysis, evaluation and collaboration provide the basis on which the University and the learner, sharing responsibility, can measure progress toward reaching these goals.

Goal 1. Aesthetic Sensibility

- A. Know and understand the variety of aesthetic frameworks that have shaped, and continue to shape, human creative arts.
- B. Analyze and evaluate the aesthetic principles at work in literary and artistic composition, intellectual systems, and disciplinary and professional practices.
- C. Collaborate with others in projects involving aesthetic awareness, participation and/or analysis.

Goal 2. A Culturally Diverse Perspective

- A. Know and understand the diversity of the local and global communities, including cultural, social, political and economic differences.
- B. Analyze, evaluate and assess the impact of differences in ethnicity, gender, socioeconomic status, native language, sexual orientation and intellectual/disciplinary approaches.
- C. Participate in collaborative projects requiring productive interaction with culturally-diverse people, ideas and values.

Goal 3. An Ecological Perspective

- A. Know the issues related to economic, social and ecological sustainability.
- B. Analyze and evaluate ecological issues locally and globally.
- C. Participate in collaborative projects requiring awareness and/or analysis of ecological and environmental issues.

Goal 4. Effective Communication

- A. Know the fundamental principles for effective and appropriate communication, including reading, writing, speaking and listening skills.
- B. Organize thoughts and compose ideas for a variety of audiences, using a full range of communication tools and techniques.
- C. Participate in collaborative projects requiring effective communications among team members.

Goal 5. Ethical Responsibility

- A. Know and understand the key ethical issues related to a variety of disciplines and professions.
- B. Analyze and evaluate key ethical issues in a variety of disciplinary and professional contexts.
- C. Participate in collaborative projects requiring ethical analysis and/or decision making.

Goal 6. Information Literacy

- A. Identify and locate multiple sources of information using a variety of methods.
- B. Analyze and evaluate information within a variety of disciplinary and professional contexts.
- C. Participate in collaborative analysis and/or application of information resources.

Goal 7. Problem-Solving Abilities

- A. Understand the multi-disciplinary and interdisciplinary nature of knowledge.
- B. Apply critical, analytical, creative, and systems thinking in order to recognize and solve problems.
- C. Work individually and collaboratively to recognize and solve problems.

Goal 8. Technological Literacy

- A. Develop knowledge of modern technology,
- B. Process information through the use of technology.
- C. Collaborate with others using technology tools.

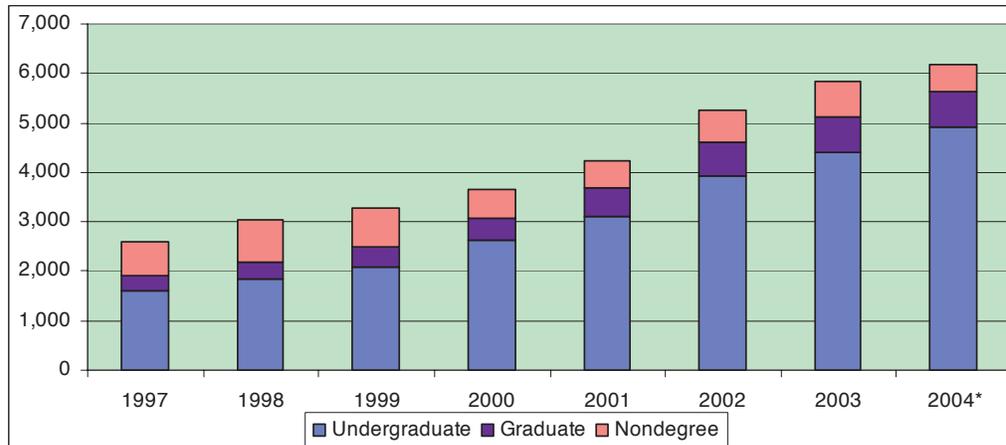
Goal 9. Community Awareness and Involvement

- A. Know and understand the important and complex relationships between individuals and the communities in which they live and work.
- B. Analyze, evaluate and assess human needs and practices within the context of community structures and traditions.
- C. Participate collaboratively in community service projects.

Appendix C: FGCU Student Characteristics

Source: FGCU Board of Trustees Quarterly Report

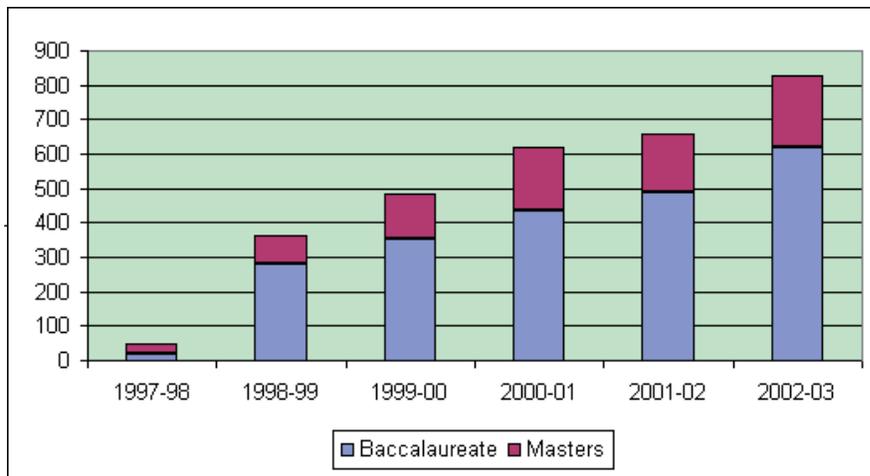
Headcount Enrolled by Class, Fall Terms



Fall Term	1997	1998	1999	2000	2001	2002	2003	2004*
Undergraduate	1,602	1,854	2,074	2,625	3,112	3,926	4,398	4,931
Graduate	295	344	407	440	580	686	733	704
Nondegree	687	830	803	588	543	646	694	546
Total	2,584	3,028	3,284	3,653	4,235	5,258	5,825	6,181

*as of 12/12/04

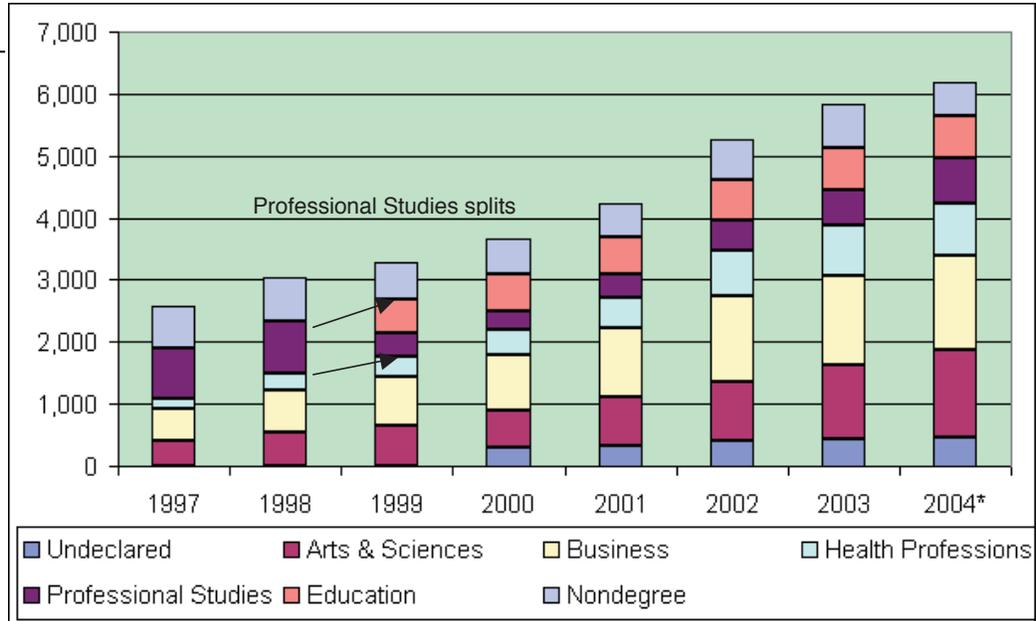
Degrees Granted by Academic Year 1997-98 to 2003-04



<u>Term</u>	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04
<u>Baccalaureate</u>	18	282	355	434	490	621	667
<u>Masters</u>	31	80	127	186	169	206	232
Total	49	362	482	620	659	827	899

Source: BOE Student Data Course Files.

Headcount Enrolled by College, Fall Terms



	1997	1998	1999	2000	2001	2002	2003	2004*
Undeclared	1	2	0	306	334	407	435	458
Arts & Sciences	400	548	650	584	769	956	1,187	1,414
Business	519	675	783	913	1,111	1,381	1,435	1,521
Health Professions	178	267	327	382	503	739	835	833
Professional Studies	790	840	382	319	375	473	563	726
Education	0	0	535	591	602	666	684	690
Nondegree	696	696	607	558	541	636	686	539
Total	2,584	3,028	3,284	3,653	4,235	5,258	5,825	6,181

Appendix D: Course Descriptions

IDS 1301L Styles and Ways of Learning

Introduction to the interdisciplinary and multidisciplinary nature of the curriculum in the General Education program at Florida Gulf Coast University. A mechanism for establishing a shared understanding of the mission of the university and the intention of and approaches to the curriculum. Provides students with training in the basic skills necessary to perform well in the university setting (e.g., time management, intergroup skills, facilitative and interactive learning, effective utilization of technology). Required of all entering freshmen. The students will gain insight into various learning styles and ways of knowing and will have the opportunity to identify and learn more about their respective learning styles in their first semester at Florida Gulf Coast University.

IDS 2110 Connections

Capstone interdisciplinary experience for general education. Summarizes major points in the bodies of knowledge acquired while participating in the General Education Program; illustrates the integration of the Program; and provides opportunities for the students to utilize the knowledge and skills gained from the General Education experience in an applied manner. Involves research, application of theoretical models, and utilization of learned skills.

IDS 3920 University Colloquium

The University Colloquium brings together students from all five colleges in a series of interdisciplinary learning experiences. These experiences are designed to address the ecological perspective outcome in relations to other university outcomes and guiding principles. Critical thinking and communication skills will be enhanced through field trips, discussion, projects, and a journal to be maintained by each student.

Appendix E: Service-Learning Courses at FGCU

Faculty	Discipline	College	Course(s)
Margaret Bogan	Science Education	Education	Science Methods
Dee Burgess	Accounting	Business	Financial Reporting and Analysis II
Linda Beuttner	Gerontology	Health Professions	Principles and Practices in Recreation Therapy Foundations of Therapeutic Recreation
Jon Braddy		Arts & Sciences	Political Campaign Rhetoric
Richard Coughlin & Donna Price Henry	Political Science Biology	Arts & Sciences	Foundations of Civic Engagement
Peter Blaze Corcoran & Jim Wohlpert		Arts & Sciences	Environmental Literature
Robert Diotalevi	Legal Studies	Professional Studies	Advanced Legal Research Real Estate Law
Lee Duffus	Marketing	Business	Marketing Analysis and Strategy Marketing Research
Elizabeth Elliott	Special Education	Education	Teaching Children with Moderate/Severe Disabilities
Charles Fornaciari	Management	Business	Business Ethics
Charles Fornaciari & Charles Mathews	Management Management	Business	Ethical Issues
Tina Gelpi	Occupational Therapy	Health Professions	Principles of Development Community Practice
Debra Giambo	Education/ ESOL	Education	Secondary Language Acquisition, Community & Culture
Pamela Haisman & Halcyon St. Hill	Health Sciences Health Sciences	Health Professions	Intergenerational Interaction
Craig Heller	Arts & Sciences	Arts & Sciences	Marginality and the Experience of Other
Karen Landy	Gerontology	Health Professions	Intro to Health Professions
Mike McDonald	Anthropology	Arts & Sciences	Methods in Anthropological Research
Ingrid Martinez- Rico	Spanish	Arts & Sciences	Advanced Oral Expression Intro to Oral Translation Interpreting Oral Skills Spanish Composition
Daysi Mejia	Social Work	Professional Studies	Intro to Human Services
Elizabeth Murray	Nursing	Health Professions	Community Based Practice
Kristin Nail		Arts & Sciences	Public Relations Tactics Nonprofit Public Relations
Maria Roca		Arts & Sciences	Styles and Ways of Learning Connections Integrated Core Senior Seminar Speech Senior Seminar
Elia Vazquez- Montilla	Special Education	Education	Young Children with Special Needs
Eleanor Weingart	Education	Education	Intro to Education (planned) Teaching Diverse Populations

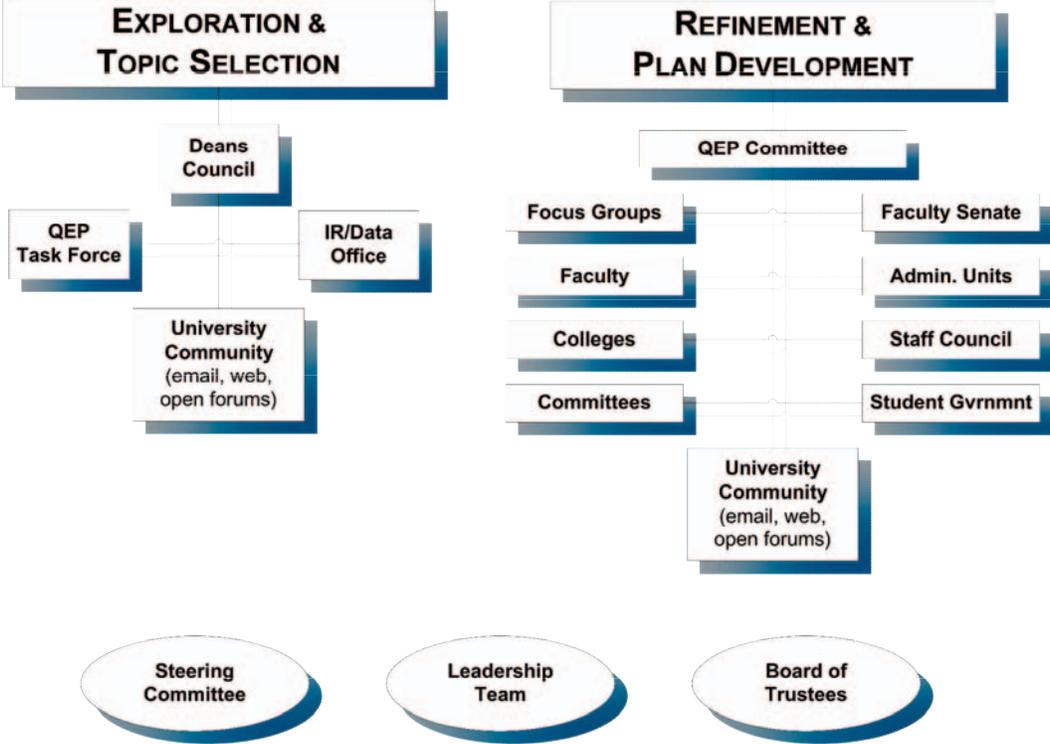
Appendix F: Summary of QEP Development Activities

Date	Activity	Lead Individual/Group
March 11	Presentation to SACS Leadership Team regarding reaffirmation and QEP process	Accreditation Liaison
March 20	Presentation to Long Range Planning Committee regarding reaffirmation and QEP process	Accreditation Liaison
March 21	Presentation to Faculty Senate regarding reaffirmation and QEP process	Accreditation Liaison
March 27	Presentation to Administrative Services regarding reaffirmation and QEP process	Accreditation Liaison
April 10	Update FGCU Board of Trustees on new reaffirmation process including QEP	President
April 22	Email message to all faculty, staff, and students regarding new reaffirmation process including the QEP and open forums scheduled for April 24 and April 29	President
April 24	Open forum to provide information on QEP process and solicit input regarding potential QEP topics	Accreditation Liaison; Deans Council; Faculty Senate President
April 29	Open forum to provide information on QEP process and solicit input regarding potential QEP topics	Accreditation Liaison; Deans Council; Faculty Senate President
April 30	Presentation to University Advancement on reaffirmation and QEP process	Accreditation Liaison
May 12	QEP website activated including: Description of the QEP process Directions for submitting QEP proposals Materials from the open forum	Accreditation Liaison; Office of Planning and Institutional Performance
May 12	Email message to all faculty encouraging submission of QEP topic proposals	Faculty Senate President
May 13	Email message to all staff encouraging submission of QEP topic proposals	Staff Advisory Council President
May 15	Charge to QEP Task Force (provide Deans Council and Executive Group with recommendations regarding QEP proposals)	Provost

May 21-July 25	Consideration of the QEP proposals and identification of issues, strengths, and challenges	QEP Task Force
July 29	Retreat to discuss recommendations of QEP Task Force	Deans Council
September 9	QEP topic selection	Leadership Team
September	Appointment of QEP Committee	Provost
October 29	First QEP Meeting (minutes of meetings and pertinent information included on FGCU SACS Review website for public access)	QEP Committee Chair; QEP Committee
February 24	Meeting with Dr. David Carter, Associate Executive Director, Commission on Colleges, and staff institutional contact	SACS Leadership Team; SACS Steering Committee; QEP Committee
March 1, 2, and 4	Focus group interviews with three groups of faculty and administrators	QEP Committee Chair; Accreditation Liaison
March 31	Meeting with Deans Council	QEP Committee Chair
April 2	Meeting with Faculty Senate	QEP Committee Chair
April 22	Discussion of topic refinement	SACS Steering Committee
April 27	Approval of refined QEP topic/ title	SACS Leadership Team
June 8	Informational QEP report sent to Provost	QEP Committee Chair
June 15	Development of QEP budget	QEP Committee
June 17	Informational e-mail sent to Deans regarding QEP	QEP Committee Chair
June 18	QEP definitions developed	QEP Committee
June 18	Informational e-mail sent to faculty regarding QEP and requesting feedback on QEP definitions	QEP Committee Chair
June 29	Meeting with SACS Leadership Team	QEP Committee Chair
August 31	Meeting with SACS Leadership Team	QEP Committee Chair
August-September	College Meetings (Professional Studies, Health Professions, Arts and Science, Education, Business)	QEP Committee representatives
September 16	Meeting with Styles & Ways/Connections Faculty Coordinator Jim Wohlpart	QEP Committee Chair
September 17	Meeting with Senate	QEP Committee Chair
September 24	Meeting with Staff Advisory Council	Accreditation Liaison
October 5	Presentation of QEP budget to Provost	QEP Committee Chair
October 6	Update FGCU Board of Trustees on reaffirmation efforts including QEP	Provost

October 9	Approval of QEP budget	Leadership Team
October 15	Campus wide email update on QEP	
October 16	Meeting with consultant (Dr. Tom Marcinkowski)	QEP Committee
October 20	University Forum (all faculty, staff, students invited) to review plan, definitions, executive summary, and definition of student learning	President, Provost, QEP Committee, Office of Planning and Institutional Performance
October 21	Meeting with Grants and Research team	QEP Committee Chair
October 22	University Forum (all faculty, staff, students invited) to review plan, definitions, executive summary, and definition of student learning	President; Provost; QEP Committee; Office of Planning and Institutional Performance
November 9	Approval of QEP budget by SACS Leadership Team	QEP Committee Chair
November 16	Meeting with General Education Task Force	QEP Committee Chair
December 5	Campus wide email updates on QEP	QEP Committee Chair
December 9	FGCU Board of Trustees Workshop on Strategic Plan (includes items related to reaffirmation and the QEP)	Provost; Associate Vice President for Planning and Institutional Performance
January (various dates)	Finalization and Approval of the QEP Plan (review by Executive Group, Deans Council, Faculty Senate, Staff Advisory Council, Student Government, SACS Steering Committee, and Leadership Team)	QEP Committee Chair
January 18	Update FGCU Board of Trustees on reaffirmation efforts including QEP	Provost

Appendix G: Overview of QEP Process



Appendix H: List of Acronyms

American Association for Higher Education (AAHE)
Center for Civic Engagement (CCE)
College of Arts & Sciences (CAS)
College of Business (COB)
College of Education (COE)
College of Health Professions (CHP)
College of Professional Studies (CPS)
Community Service Attitudes Scale (CSAS)
Environmental Literacy and Citizenship Assessment Instrument (ELCAI)
Environmental Protection Agency (EPA)
Florida Gulf Coast University (FGCU)
Full-Time Equivalent (FTE)
Institutional Review Board (IRB)
International Environmental Education Programme (IEEP)
Long Range Planning and Institutional Effectiveness Committee (LRPIEC)
Long Range Planning Committee (LRP)
National Survey of Student Engagement (NSSE)
Other Personnel Services (OPS)
Planning and Institutional Performance (PIP)
QEP Advisory Committee (QEPAC)
Quality Enhancement Plan (QEP)
Southern Association of Schools and Colleges (SACS)
State University System Student Assessment of Instruction (SUSSAI)
Student Assessment of Instruction (SAI)
Undergraduate Curriculum Team (UCT)
United Nations Conference on Environment and Development (UNCED)
United Nations Education Programme (UNEP)
United Nations Educational, Scientific, and Cultural Organization (UNESCO)
World Commission on Environment and Development (WCED)
World Summit on Sustainable Development (WSSD)

Appendix I: References

- American Association for Higher Education (2004). *Campus progress: Supporting the scholarship of teaching and learning*. (AAHE Publication No. 1-56377-066-0). Washington, DC: Author.
- Bacon, N. A. (1997). *The transition from classroom to community contexts for writing*. Unpublished doctoral dissertation. University of California, Berkeley.
- Batchelder, T. H., & Root, S. (1994). Effects of an undergraduate program to integrate academic learning and service: Cognitive, prosocial cognitive, and identity outcomes. *Journal of Adolescence*, *17*, 314-355.
- Battaglia, P. A. (1995). *The community service and adult education functions of urban two-year colleges: Promising programs in response to inner city problems*. Unpublished doctoral dissertation. University of Wisconsin-Madison.
- The Belgrade Charter: A global framework for environmental education. (1975). *International Workshop on Environmental Education*. Retrieved November 11, 2004 from <http://www.portal.unesco.org/education>
- Bergkamp, V. (1996). *Fanning the embers: Service learning in catholic colleges and universities*. Unpublished doctoral dissertation. University of St. Thomas.
- Berman, G. L. (1999) *Antecedents and strategies for the successful implementation of service learning programs in higher education*. Dissertation Abstracts International, 60(11). (UMI No. 9951867).
- Berson, J. S., & Younkin, W. F. (1998). *Doing well by doing good: A study of the effects of a service-learning experience on student success*. Paper presented at the American Society of Higher Education, Miami, FL.
- Bloom, B. S. (Ed.). (1956). *Taxonomy of educational objectives: The classification of educational goals*. New York: David McKay.
- Bowler, P. A., Kaiser, F. G., & Hartig, T. (1999). A role for ecological restoration work in university environmental education. *Journal of Environmental Education*, *30*(4), 19-26.
- Bingle, G. R., Phillips, M.A., & Hudson, M. (2004). *The measure of service learning: Research scales to assess student experiences*. Washington, DC.: American Psychological Association.
- Bronski, P. (2004). *Stepping towards sustainability: Fostering community-wide environmental awareness, values, and stewardship*. Paper presented at the 14th North American Interdisciplinary Conference on Environment and Community, Empire State College, Saratoga Springs, NY. February 19-21, 2004. Retrieved November 30, 2004 from <http://www.audubonintl.org>

- Brunetti, A. J., Petrell, R. J., & Sawada, B. (2003). SEEDing sustainability: Team project-based learning enhances awareness of sustainability at the University of British Columbia, Canada, *International Journal of Sustainability in Higher Education*, 4(3), 210-217.
- Burton, L. H. (2001). Interdisciplinary curriculum: Retrospect and prospect. *Music Educators Journal*, 87(5), 17-22.
- Campus Compact. Retrieved on November 11, 2004 from <http://www.compact.org/membership>
- Carson, R. (1962). *Silent Spring*. New York: Houghton Mifflin.
- Cloonan, P., Davis, D., & Burnett, C. (1999). Interdisciplinary education in clinical ethics: A work in progress. *Holistic Nursing Practice*, 13(2), 12-19.
- Commoner, B. (1972). *The closing circle*. New York: Alfred A. Knopf.
- Corcoran, P. B., & Wals, A. E. (2004a). The problematics of sustainability in higher education: An introduction. In P. B. Corcoran & A. E. Wals (Eds.), *Higher Education and the Challenge of Sustainability* (pp. 3-6). Norwell, MA: Kluwer Academic.
- Corcoran, P. B., & Wals, A. E. (2004b). The promise of sustainability in higher education: An introduction. In P. B. Corcoran & A. E. Wals (Eds.), *Higher Education and the Challenge of Sustainability* (pp. 91-95). Norwell, MA: Kluwer Academic.
- Corporation for National and Community Service. Retrieved on May 3, 2004 from <http://www.nationalservice.org/about/index.html>
- Cortese, A. D. (1992). Education for an environmentally sustainable future, *Environmental Science and Technology*, 26(6), 1108-1114.
- Dewey, J. (1938). *Experience and Education*. New York: Touchstone.
- Driscoll, M.P. (1994). *Psychology of learning for instruction*. Needham Heights, MA: Allyn & Bacon.
- Dunn, R. (2001). Two sides of the same coin or different strokes for different folks? *Teacher Librarian*, 28(3), 9-13.
- Ehrlich, T. (Ed.). (2000). *Civic responsibility and higher education*. Connecticut: Oryx Press.
- EPA (1999a) *Environmental education advances quality education*. EPA-171-F-98-016.
- EPA (1999b) *Environmental education improves our everyday lives*. EPA-171-F-98-015.

- Eyler, J. S., Giles, D. F., Stenson, C. M., & Gray, C. J. (2001). *At a glance: What we know about the effects of service learning on college students, faculty, institutions and communities, 1993-2000* (3rd ed.). National Service Learning Clearinghouse. Retrieved December 28, 2004 from http://www.servicelearning.org/wg_php/pub_form/
- Eyler, J.S., & Giles, D.F. (1999). *Where's the learning in service learning?* San Francisco: Josey-Bass.
- Eyler, J.S. (1993). Comparing the impact of two internship experiences on student learning. *Journal of Cooperative Education*, 29(3), 41-52.
- Faculty Guide to Service-Learning. (2001). Retrieved November 30, 2004 from <http://www.floridacompact.org/resources/files/facultyguideecc.pdf>
- Fien, J. (2002). Advancing sustainability in higher education, *International Journal of Sustainability in Higher Education*, 3(3), 243-253.
- Florida Gulf Coast University (n.d.). FGCU service learning handbook. Retrieved January 21, 2005, from <http://www.fgcu.edu/connect/hand01.html>
- Furco, A. J. (2004). *The educational impacts of service-learning: What do we know from the Research?* Paper presented at the National Service Learning Conference, Orlando, FL.
- Gray, M. J., Ondaatje, E. H., Fricker, R. Geschwind, S., Goldman, C.A., Kaganoff, T., Robyn, A., Sundt, M., Vogelgesang, L., & Klein, S. P. (1998). *Coupling service and learning in higher education: The final report of the evaluation of the learn and serve America, higher education program*. The Rand Corporation.
- Herremans, I., & Reid, R. (2002). Developing awareness of the sustainability concept. *The Journal of Environmental Education*, 34(1), 16-20.
- Introduction to service-learning toolkit: Readings and resources for faculty*. (2000). Providence, RI: Campus Compact.
- Juhn, G., Tang, J., Piessens, P., Grant, U., Johnson, N., & Murray, H. (1999). Community learning: The reach for health nursing program-middle school collaboration. *Journal of Nursing Education*, 38(5), 215-221.
- Kohl, J. (1996). Student experiences with service learning in a business ethics course. *Journal of Business Ethics*, 15, 45-57.
- Kolb, D. (1976). *The learning styles inventory: Technical manual*. Boston: McBer.
- Kolb, D. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliff, NJ: Prentice Hall.

- Leopold, A. (1949). *A Sand County almanac*. New York: Oxford University Press.
- Mabry, J. B. (1998). Pedagogical variations in service-learning and student outcomes: How time, contact and reflection matter. *Michigan Journal of Community Service Learning*, 5, 32-47.
- MacNeil, J. (1987). *World Commission on Environment and Development*, Oxford: Oxford University Press.
- McElhaney, K. A. (1998). Student outcomes of community service learning: A comparative analysis of curriculum-based and non curriculum-based alternative spring break programs. *Unpublished doctoral dissertation*. University of Michigan.
- McKeown-Ice, R. (1997). *Environmental literacy and citizenship assessment instrument: Sample packet*. Knoxville, TN: University of Tennessee.
- McTarnaghan, R. E. (2003). *On task, on time: The development of Florida Gulf Coast University*. Fort Myers, FL: Florida Gulf Coast University.
- Miller, A. (1987). Cognitive styles: An integrated model. *Educational Psychology*, 7, 251-268.
- Miriam, S. B., & Caffarella, R. S. (1999). *Learning in adulthood: A comprehensive guide*. (2nd ed.). San Francisco: Jossey-Bass.
- Mitton, C., & Guevin, T. (2003). Building commitment to sustainability through habitat restoration, *International Journal of Sustainability in Higher Education*, 4(3), 250-256.
- Morton, K., & Troppe, M. (1996). From the margin to the mainstream: Campus Compact's project on integrating service with academic study. *Journal of Business Ethics*, 15(1), 21-33.
- National Campus Compact (2004). Glossary. Retrieved May 5, 2004 from <http://www.compact.org/aboutcc/glossary/glossary.html>
- National Report Card (1998). National Environmental Education and Training Foundation, Retrieved September 15, 2004 from <http://www.neetf.org/reportcard/index.htm>
- National Report Card (1999). National Environmental Education and Training Foundation, Retrieved September 15, 2004 from <http://www.neetf.org/roper/1999%20Summary.htm>
- Newport, D., Chesnes, T., & Lindner, A. (2003). The "environmental sustainability" problem: Ensuring that sustainability stands on three legs. *International Journal of Sustainability in Higher Education*, 4(4), 357-363.

- Odum, E.P. (1959). *Fundamentals of ecology*. New York: W.B. Saunders.
- Orr, D. (1992). *Ecological literacy education and the transition to a postmodern world*. Albany, NY: State University of New York Press.
- Osborne, R. E., Hammerich, S., & Hensley, C. (1998). Student effects of service-learning: Tracking change across a semester. *Michigan Journal of Community Service Learning*, 5, 5-13.
- Papamarcos, S. D. (2002). The next wave in service learning: Integrative, team based engagements with structural objectives. *The Review of Business*, 22(3), 31-39.
- Parker-Gwin, R. P., & Mabry, J. B. (1998). Service-learning as pedagogy and civic education: Comparing outcome for three models. *Teaching Sociology*, 26, 276-291.
- Pike, L., Shannon, T., Lawrimore, K., McGee, A, Taylor, M., & Lamoreaux, G. (2003). Science education and sustainability initiatives: A campus recycling case study shows the importance of opportunity. *International Journal of Sustainability in Higher Education*, 4(3), 218-226.
- Posner, G. J. (1995). *Analyzing the curriculum (2nd ed.)*. New York: McGraw-Hill.
- Promoting Education, Public Awareness, and Training: Agenda 21:Chapter 36 (1992). Conference on Environment and Development (UNCED), Rio de Janeiro.
- Reich, R. (n.d.). *Confusion about the socratic method: Socratic paradoxes and contemporary invocations of Socrates*. Retrieved June 9, 2004, from <http://www.ed.uiuc.edu/EPS/PES-Yearbook/1998/reich.html>
- Report Assessing Environmental Education in the U.S. and the Implementation of the National Environmental Education Act of 1990 (1998). EPA –171-R-96-001.
- Report and Declaration of the Presidents' Conference (1990). *The role of universities and university presidents in environmental management and sustainable development*. Tufts European Center, Talloires, France, October 4-7, 1990.
- Sadler, B. (1988). *Impact assessment, developing planning, and international assistance in post Brundtland perspective*. Proceedings of the International Workshop on Impact Assessment for International Development, International Association for Impact Assessment, Vancouver, 775-787.
- Samples, K. (n.d.). *The Socratic method*. Retrieved June 9, 2004, from <http://www.str.org/free/studies/socratic.htm>
- Secretariat of UNESCO and Secretariat of UNEP (1987). *International strategy for action in the field of environmental education and training for the 1990s*. United Nations Educational, Scientific, and Cultural Organization, Paris, France and the United Nations Education Programme Nairobi, Kenya.

- Senge, P. (1990). *The fifth discipline*. Doubleday-Currency: New York.
- Sigmon, R. L. (1996). *Journey to service-learning*. Washington, D.C.: Council of Independent Colleges.
- Smith-Sebasto, N. J. (1995). The effects of an environmental studies course on selected variables related to environmentally responsible behavior, *The Journal of Environmental Education*, (26), 4, 30- 35.
- Snyder, S. (2001). Connection, correlation, and integration. *Music Educators Journal*, 87(5), 32-39.
- Strage, A. (2000). Service-learning: Enhancing student learning outcomes in a college-level lecture course. *Michigan Journal of Community Service Learning*, 7, 5-13.
- Strand, K., Marullo, S., Cutforth, N., Stoecker, R., & Donohue, P. (2003). *Community based research and higher education*. San Francisco: Jossey Bass.
- The Talloires Declaration. (1990). Retrieved November 30, 2004 from http://www.ulsf.org.programs_talloires_report.html
- Thomas, I. (2004). Sustainability in tertiary curricula: What is stopping it from happening? *International Journal of Sustainability in Higher Education*, 5(1), 33-47.
- UNEP. (1972). Declaration of the United Nations conference on the human environment, Stockholm, Sweden. Retrieved December 1, 2004 from <http://www.unep.org/Documents/Default.asp?DocumentID=97&ArticleID=1503>
- UNESCO. (1977). *Final report*. Paper presented at the Intergovernmental Conference on Environment Education, Tbilisi, Republic of Georgia, USSR.
- University of Colorado at Boulder. (1995). *What is service learning?* University of Colorado at Boulder Service Learning Handbook.
- University leaders for a sustainable future. Retrieved November 30, 2004 from <http://www.ulsf.org>
- Vogelgesang, L. J., & Astin, A. W. (2000). Comparing the effects of service-learning and community service. *Michigan Journal of Community Service Learning*, 7, 25-34.
- Wals, A., & Jickling, B. (2002). “Sustainability” in higher education: From doublethink and newspeak to critical thinking and meaningful learning, *International Journal of Sustainability in Higher Education*, 3(3), 221-232.
- Warburton, K. (2003). Deep learning and education for sustainability. *International Journal of Sustainability in Higher Education*, 4(1), 44-56.
- Ward, S. (2000). *Transforming the instructor: Service-learning integrated in the community college classroom*. Paper presented at the annual meeting of American Educational Research Association in New Orleans, LA.

- Watson, G., & Glaser, E. M. (1980). *Watson-Glaser critical thinking appraisal*. San Antonio, TX: Psychological Corporation.
- What is experiential education? (2002). Retrieved May 5, 2004 from: <http://www.aee.org/ndef.html>
- Wolfe, V. (2001). A survey of environmental education of students in non-environmental majors at four-year institutions in the USA. *International Journal of Sustainability in Higher Education*, 2(4), 301-315.
- World Commission on Environment and Development. (1987). *Our common future*. WCED, United Nations, New York: Oxford University Press.
- Wright, T. (2002). Definitions and frameworks for environmental sustainability in higher Education. *International Journal of Sustainability in Higher Education*, 3(3), 203-220.
- Zhang, L. (2003). Contributions of thinking styles to critical thinking dispositions. *The Journal of Psychology*, 137(6), 517-544.