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FGCUScholars

Improving Writing, Critical Thinking, and
Information Literacy in the Majors
at Florida Gulf Coast University

Quality Enhancement Plan

Submitted to the Southern Association of Colleges
and Schools

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Part I. Executive Summary

Florida Gulf Coast University's next Quality Enhancement Plan, FGCUScholars, will strengthen undergraduate student learning by assisting students in developing stronger writing, critical thinking, and information literacy skills within their majors, ultimately leading to stronger senior capstone projects. FGCU was established with the idea that students would develop as scholars within their disciplines and that their studies would culminate in a scholarly project. Our concept of scholarship is based on an expanded definition of research derived from the Council on Undergraduate Research (CUR); within CUR, undergraduate research is defined as "An inquiry or investigation conducted by an undergraduate student that makes an original intellectual or creative contribution to the discipline." The definition of research that derives from the CUR has been expanded at FGCU using Boyer's ideas as proposed in *Scholarship Reconsidered* (1990). In this work, scholarship is defined as "A variety of creative work carried on in a variety of places . . . its integrity measured by the ability to think, communicate, and learn" (15). The senior capstone projects provide students with the opportunity to complete scholarly work within their disciplinary field, including such areas as, to borrow from Boyer, "the scholarship of *discovery*; the scholarship of *integration*; the scholarship of *application*; and the scholarship of *teaching*" (16). As different disciplines engage different kinds of scholarship, each undergraduate program works to develop scholars of their students as appropriate to that discipline and has students demonstrate their learning in the senior capstone course required in every program.

FGCUScholars, our next QEP project, will focus on the skills of writing, critical thinking, and information literacy within the major, creating or refining coursework so that students explicitly develop these skills as they move towards the scholarly project completed in the senior capstone course. Our project responds to a variety of learning outcomes assessments that have been conducted over the last several years at FGCU and to feedback from employers and the needs of post-baccalaureate programs. The concept of students completing a major project in the senior capstone was written into our founding mission statement which explains that undergraduate students will complete "a senior project or paper, in

order to synthesize the work done in the curriculum” What we have discovered through our internal assessments, though, is that while students may be proficient in their disciplinary or content knowledge at the end of their studies, they continue to need improvement in the ability to express that knowledge in a scholarly way through high levels of writing, critical thinking, and information literacy. Additionally, feedback from employers to a survey conducted by Hart Research Associates (2013) strongly indicates the need for students to develop “analytic, problem solving, and communication skills” along with the ability to “conduct research and use evidence-based analysis” (22). By focusing our QEP on the skills of writing, critical thinking, and information literacy within the major, we will respond not only to our internal assessments of student learning but also to employers’ needs and the expectations of graduate and professional programs.

FGCUScholars has been developed so that it will impact the General Education Program and all undergraduate programs and will lead to stronger capstone scholarly projects in the majors.

The goal of Florida Gulf Coast University’s Quality Enhancement Plan (QEP) is to strengthen undergraduate student learning in relation to the skills of writing, critical thinking, and information literacy within the majors, with a specific focus on demonstrating these skills in senior capstone projects.

Three Program Objectives used to determine the achievement of this goal include:

- Program Objective 1: Integration of the QEP vertically (across all four years) and horizontally (in multiple General Education courses and multiple courses in the majors) as it builds towards the capstone experience;
- Program Objective 2: Identification, refinement, or creation of coursework within each major, such as gateway courses and research methods courses, that allow students to explicitly develop the skills of writing, critical thinking, and information literacy within their disciplines; and
- Program Objective 3: Development of final scholarly projects in the capstone course that provide evidence of higher levels of writing, critical thinking, and information literacy.

FGCU's Quality Enhancement Plan is designed to include meaningful and sustainable assessments of student learning; to offer added value to faculty and programs; to include strong coordination and support and balance coordination with faculty and program responsibility; to leverage the existing talent and expertise of faculty, programs, and centers; and to create opportunities and possibilities for cross-disciplinary collaboration.

The plan derives from the mission of the university, which states that "Outstanding faculty uphold challenging academic standards and balance research, scholarly activities, and service expectations with their central responsibilities of teaching and mentoring. Working together, faculty and staff of the University transform students' lives" The plan was developed from an inclusive and thoughtful process and was based on assessment of our students' learning. The end result of FGCUScholars will be improved written communication, critical thinking, and information literacy skills within the majors and as evidenced in the capstone projects.

FGCU has begun implementing necessary aspects of the QEP during the planning process. Two years before launching our QEP (2013-2014), we conducted a survey of all undergraduate program leaders to discern the level of explicit teaching of writing, critical thinking, and information literacy within the courses in the program, including the capstone course. We gathered faculty from across the campus to analyze and discuss the results of this survey and to begin conversations within every undergraduate program about the course or program revisions that will be needed to launch the QEP. In the year before launching our QEP (2014-2015), we hope to establish the Office of Undergraduate Scholarship and name Faculty Scholars in broad disciplinary areas; these scholars will expand the reach of the QEP into all majors. The Faculty Scholars will be responsible for coordinating the assessment of the scholarly project in the capstone courses in their areas. We will connect this conversation to work being completed in the General Education Program as it is revised to meet state mandates so that we will be able to build a basis for our QEP in the first two years of an undergraduate's study. In the year before we launch the QEP, we also hope to begin to gather baseline data on student learning.

Once launched, the QEP will include refining curriculum and instruction and continuing to gather baseline data regarding student learning of writing, critical thinking, and information literacy in the first year. In years two through five (AY 2016-2017 to AY 2019-2020), we will assess student learning in the refined curriculum, which will allow us to revise our teaching and learning practices and assessment strategies and demonstrate the value added between the first year in college and the capstone projects and the increase in learning that results from the unfolding of the QEP on our campus.

Part II. Introduction

Institutional Background

Opened at the turn of the twenty-first century, Florida Gulf Coast University is a unique institution of higher education with emphases on student engagement and student success. As our current mission statement explains, we have borrowed from the best traditions of the past while also seeking to break new ground in our emphasis on student learning:

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. (Approved Jan 19, 2010 by BOT)

With a commitment to balancing the intellectual, social, and professional expectations of our students, Florida Gulf Coast University has created academic programs that provide our students with an avenue to success at a time of great global, technological, social, and environmental change. Indeed, one of the more unique aspects of Florida Gulf Coast University is the emphasis on sustainability education and civic engagement; our current mission statement notes that FGCU “continuously pursues academic excellence, practices and promotes environmental sustainability, embraces diversity, nurtures community partnerships, values public service, [and] encourages civic responsibility” As a result, our first Quality Enhancement Plan, which ran from 2005-2010, focused on enhancing the development of an ecological perspective and fostering community involvement.

In our desire to balance tradition with innovation, we have created academic programs at the undergraduate level that allow our students to participate in an educational journey that assists them in mastering the skills and content knowledge necessary for their success in life and work and in demonstrating their mastery of these abilities in a capstone project, a requirement of all undergraduate programs. As noted in the university’s founding mission statement, in the capstone course, we strive to provide students with the opportunity to connect the various elements of their learning into a coherent whole:

Undergraduate students will have a mentor/advisor who will guide them during a senior project or paper, in order to synthesize the work done in the curriculum and prepare the students to organize ideas from across disciplines in a final research document.
(Founding Mission Statement, Approved by the Board of Regents November 20, 1992)

The notion of synthesizing the learning that has occurred over the years of a student's journey is elaborated in one of our Guiding Principles:

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. (Approved by the Deans Council June 18, 1996)

We have developed several opportunities for students to synthesize their learning with students from other majors, including the development of interdisciplinary cores within the Colleges of Arts and Sciences, Business, and Health Professions. In addition, all undergraduate students are required to complete the University Colloquium: A Sustainable Future, an interdisciplinary course designed to reflect upon the concept of sustainability from multiple perspectives; because students from all majors gather together in this course, a great deal of cross-disciplinary synthesis occurs during the conversations and discussions that are at the heart of the pedagogy for the course. While students have also been expected to develop an integration and synthesis of their learning within their disciplines in a required capstone course, faculty members have recently expressed a desire to create an integrated learning experience that begins in the General Education Program and continues through the upper level courses in each major. This desire was reiterated in the discussions about revising the General Education Program in the 2012-2013 academic year.

In the 2011-2012 academic year, a Faculty Senate Task Force was created to review the current list of student learning outcomes and to narrow that list from the nine learning goals that had been developed in 1997 when the institution opened to a more manageable list that would allow each program to meaningfully assess student learning for the purposes of continuous improvement. The idea also was to create student learning outcomes that would be measured across all four years of study, along with

specialized learning outcomes that would relate just to the major. The task force defined student learning outcomes as follows:

University-wide learning outcomes are those that are integrated into the instructional curriculum of every program such that students will be able to demonstrate their learning regarding that outcome and faculty will be able to assess that learning for the purposes of program improvement. (Faculty Senate Outcomes and Assessment Task Force Report, March 20, 2012)

The conclusion of this inclusive, year-long process was the determination that three areas of student learning should be taught and assessed in every degree program and across all four years of study at FGCU:

- communication skills,
- critical thinking skills, and
- content/discipline knowledge and skills.

The task force concluded that each undergraduate degree program would develop measurable student learning outcomes in each of the three areas, as relevant to the student learning needs of that program, and to assess those outcomes on a regular basis in order to improve student learning. The emphasis on the key skills of communication and critical thinking are in line with national trends and with responses from the professional sphere: employers want students who can think critically and communicate effectively.

Fortunately, because of the timely nature of the creation of Florida Gulf Coast University, most programs had developed learning outcomes in these areas shortly after we opened and had been assessing those outcomes in order to meet the expectations of state requirements, professional accrediting bodies, and the Southern Association of Colleges and Schools—and, more importantly, to demonstrate our commitment to student success and engagement.

Process for Identifying the Quality Enhancement Plan

Florida Gulf Coast University's commitment to key student learning outcomes, including especially critical thinking and effective communication, to the integration of learning experiences, and to assessment for continuous improvement is evident in the process that we underwent to identify a topic for our Quality Enhancement Plan. Because we started early on the development of our Quality Enhancement

Plan, we were able to use a three year process to select a topic and develop a focus for the plan, gaining widespread feedback and support for the plan. We began with a QEP Topic Selection process in the first year (Academic Year 2011-2012) and concluded with a QEP Topic Development process over the next two years (Academic Years 2012-2013 and 2013-2014). Faculty, staff, students, and administrators had ample opportunity to participate in both processes, providing ideas, feedback, and suggestions as the process unfolded. Most importantly, we emphasized the importance of being inclusive in this process: all programs and all undergraduate students would be touched by this plan as we sought to develop a QEP that impacted the entire undergraduate student population.

The year-long process used to select a topic began with the creation of a QEP Selection Committee, a call to all faculty, staff, and students to submit ideas and suggestions, a selection of four possible topics for further development, and then review of the developed topics by the committee, which made a recommendation to the Provost. The QEP Selection Committee was a university-wide group of faculty, staff, administrators, and students whose intent was to facilitate a transparent and inclusive process for the selection of a topic for the University's next QEP. The committee worked openly to solicit ideas broadly from the university community, identify those with the greatest potential for success, and ensure that proposals recommended for consideration by the university met the criteria necessary for compliance with SACS Core Requirement 2.12 and Comprehensive Standard 3.3.2. The Quality Enhancement Plan Selection Committee was chaired by Dr. Linda Serro, Director of the FGCU Teaching, Learning, and Assessment Initiative and included representation from the Faculty Senate, the Staff Advisory Council, Student Government, the Deans Council, the Assessment Council, the Office of Undergraduate Studies, and university Department Chairs. The committee included the following members.

- Linda Serro (Chair)
- Win Everham (Faculty Senate)
- Claude Villiers (Faculty Senate)
- Tom Bevins (Faculty Senate)
- Patricia (Pi) Rice (Staff Advisory Council)
- Keishla Negron-Acevido (Student Government)

- Jim Wohlpart (Dean of Undergraduate Studies)
- Tony Barringer (Council of Deans representative)
- Mary Ann Zager (Department Chairs representative)
- Barbara Stites (Assessment Council representative)

Meeting on a regular basis throughout the fall 2011 and spring 2012 semesters, the committee worked collegially and collaboratively to solicit and recommend interesting topics relevant to the university's mission.

A two-phase selection process was employed to identify the next Quality Enhancement Plan topic. During the first phase, in September and early October of 2011, the committee solicited ideas from the university community using a template on the university website. Individuals or groups were invited to suggest appropriate topics along with the following information:

1. What the proposed topic is designed to address and what it is intended to achieve.
2. The topic's relationship to the university's mission and to the university strategic plan.
3. The university student learning outcomes or general education competencies the topic will address.

The QEP Selection Committee reviewed the forty submitted topics against the stated criteria and worked to determine whether or not the topic had a broad base of support across the university. At the end of the first phase, four broad topics were identified as potential QEP topics:

- Enhancing Student Learning through Technology
- Undergraduate Research and Scholarship
- Writing, Critical Thinking, and Literacy across the Curriculum
- Student Success and Engagement.

Descriptions of these four initial topics can be found on the QEP Topic Selection website

(<http://www.fgcu.edu/QEP/generalinformation.html>). Teams were then identified to further develop these four general topics.

During the second phase of the selection process, a more detailed description of the proposed QEP topics was requested for development. The criteria for evaluating these more detailed descriptions included the following:

- The use of institutional data/assessment in development of the proposed topic;
- How the proposed topic will make a significant contribution to student academic success and achievement of student learning outcomes;

- A description of the resources that will be needed to implement the proposed topic and their likely return on the institution's investment;
- The likelihood of project goals being achieved within four years of implementation;
- The proposed topic's links to institutional mission and the goals of the university strategic plan;
- The potential for assessment of project goals through quantitative and/or qualitative measures;
- The magnitude of support within the university community for implementation of the proposed topic.

Teams were asked to complete their proposals by the middle of January, 2012, for committee review. The committee convened in February to analyze the proposals and provide to the Provost and Vice President for Academic Affairs a list of strengths for each proposal, as well as areas of concern. The Provost then made the final selection in March of 2012 of FGCU's QEP Topic—writing, critical thinking, and information literacy—and announced that topic to the university community before the end of the spring 2012 semester.

Shortly after the Provost's announcement, the QEP Steering Committee was formed and a broad timeline was announced:

- the 2012-2013 academic year would be spent reviewing best practices and current literature, presenting information and getting feedback from the university community regarding this research, and developing a preliminary focus to the plan; and
- the 2013-2014 academic year would be spent gathering further feedback from the university community, finalizing the focus of the plan, developing the implementation and assessment plans, creating a timeline as well as the budget, and sending the QEP forward to administration for review.

The Quality Enhancement Plan Steering Committee that provided leadership in the development of the QEP topic again included broad based support from all areas on campus, including especially faculty and students. Representatives from all five colleges and the library were included on the committee in order to maintain contact with the faculty across the university. In addition, leaders within Student Government

regularly attended Steering Committee meetings in order to be apprised of progress and to participate in developing the focus for the plan. The committee members included:

Kevin Aho	College of Arts and Sciences
Tom Bevins	College of Health Professions and Social Work
Carol Bledsoe	Writing Center
Anne-Marie Bouche	College of Arts and Sciences
Anna Carlin	Library Services
Peter Cuderman	Student Government President
Sarah Davis	Colloquium
Kris De Welde	General Education
Jackie Greene	College of Education
Billy Gunnels	College of Arts and Sciences
Anna Haney-Withrow	College of Arts and Sciences
Megan Just	Student Representative
Carrie Kerekes	Lutgert College of Business
Tanya Kunberger	U.A. Whitaker College of Engineering
Jameson Moschella	University Housing/FYRE Program
Stacey Parker	Center for Academic Achievement
Linda Rowland	College of Arts and Sciences
Linda Serro	College of Education
Jim Wohlpart (Chair)	Dean of Undergraduate Studies
Anne Young	Advisor, College of Health Professions and Social Work

In the first part of the Steering Committee's work, three working groups were created for each of the areas of the Quality Enhancement Plan: writing, critical thinking, and information literacy. Specialists in these areas facilitated the work of these groups, which involved not only Steering Committee members but also members of the broader university community who had knowledge of these areas. These working groups reviewed best practices and scholarship on each of their areas and produced a review document for the entire Steering Committee. This information was then shared and discussed at the end of the fall 2012 semester and a plan was developed to use this information to create a variety of models for the QEP.

The first working group that was convened focused on writing. The faculty generated what they considered a general approach to developing writing at FGCU that would provide opportunities for different methods of meeting that approach. The general interest was to integrate writing into the disciplines, allowing students to learn how to write well in their chosen field of study. Writing in the first two years would provide a foundation for this later writing. Two items emerged from this proposal. In

terms of administrative support, the desire was for creating some kind of center or institute that would be responsible for providing oversight of the QEP—not to control courses and curriculum but to support the faculty as they developed their programs in response to the QEP. (The focus of the discussion in this proposal was on the writing piece, but this center or initiative would need to work more broadly with critical thinking, information literacy, and assessment; it would also have an important role in professional development.) In terms of curriculum development, the faculty proposed that Composition II would be a foundational course in the QEP and would thus need additional resources; but there was also a move (which was strongly supported by the committee in the discussion) to include writing early on in the Junior year within the major that would build on the work completed in Composition II (and other General Education courses). The courses in the major could focus on reading, research, and writing in the disciplines and thus assist students in more clearly expressing their work as scholars in their fields. At this point, discussion ensued about the role of the capstone course in each major where students are expected to develop a scholarly project which includes writing, critical thinking, and information literacy.

The second working group focused on reviewing literature and best practices and developing models for critical thinking. The research that was reviewed by the faculty working group generated a five part definition for critical thinking. According to this definition, critical thinking involves, first, “thinking about how we think.” This entails identifying background assumptions and presuppositions that may influence our thoughts. Second, it involves critically assessing whether or not these assumptions are valid, accurate or sound. Third, it involves uncovering the social, cultural, and historical contexts from which these assumptions emerge and engaging them from multiple perspectives. Fourth, it remains consistently open to revision and self-correction. And finally, it involves taking some form of focused, practical action on the basis of critical reflection (Nosich 2005; Moore and Parker 2011; Brookfield 2012; Bean 2011; Dewey 1998). From this definition, the group developed three possible models for the QEP at FGCU: the Integrative Approach (where critical thinking would be integrated across the curriculum), the Solo Approach (where a single course would be developed), and the Pedagogical Methods approach (where the focus would be on curricular and pedagogical design). The general discussion regarding this

model led to a consensus that FGCU should develop an integrative model for our QEP—both horizontal integration (across a student’s year of study) and vertical integration (across all four years of study). In addition, there was some agreement that specific courses could be identified that would include an emphasis on critical thinking, so the “solo” approach could be a part of the “integrative approach.”

The third working group focused on information literacy. Common definitions of information literacy mention possession of an integrated set of skills, knowledge of resources from which to retrieve information, and the ability to analyze and use information (Association of College and Research Libraries 2000; Burkhardt, MacDonald & Rathemacher 2003; Gibson 2008; Rockman 2004). The Association of College and Research Libraries (ACRL) (2000) defines information literacy as the ability to “recognize when information is needed and . . . locate evaluate and use effectively the needed information” (Grassian & Kaplowitz, 2001). According to the research, information literacy includes the skills, dispositions, and abilities necessary to be a productive individual in a “technologically sophisticated global society” (Rockman, 2004, 25). Significantly, information literacy skills are often talked about in proximity to discussions of lifelong learning and the ability to perform well in the modern workplace. ACRL (2000) explains that “Information literacy forms the basis for lifelong learning. It is common to all disciplines, to all learning environments, and to all levels of education. It enables learners to master content and extend their investigations, become more self-directed, and assume greater control over their own learning.” In terms of potential models for teaching and assessing information literacy, the Boyer Commission (1998), ACRL (2000), and Grassian & Kaplowitz (2001) advocate for an integrated curriculum where information literacy strategies are taught and standards are woven into “curricular content, structure and sequence.” This integrative approach offers multiple possibilities for students to use critical thinking skills, to become skilled users of information sources, and to increase personal responsibility for learning. An integrated approach provides multiple and consistent opportunities for students to seek, evaluate and manage information gathered from multiple sources and to practice discipline-specific research methods.

After each of these working groups presented their research and possible models, the Steering Committee began to synthesize the work completed and to develop a focus for the plan. The conversation began to center around the concept of allowing students to enhance their work as scholars in their fields, and specifically to advance the ability of our students to improve their writing, critical thinking, and information literacy skills as they move through their programs and towards the capstone projects. The concept of undergraduate research that has been adopted at FGCU has been broadened to include scholarship more generally. According to the Council on Undergraduate Research (CUR), the nationally recognized body that organizes work on undergraduate research, undergraduate research is defined as “An inquiry or investigation conducted by an undergraduate student that makes an original intellectual or creative contribution to the discipline.” At FGCU, we have broadened our understanding of research to include scholarship more generally, using Boyer’s *Scholarship Reconsidered* (1990). The inquiry or discovery based mode of teaching and learning, centered around student involvement in research and scholarship, has been used as a locus to advance their learning. As noted by the CUR, this mode of teaching and learning “develops critical thinking, creativity, problem solving and intellectual independence” as well as “increases retention” and “provides effective career preparation,” key indicators of success at Florida Gulf Coast University. The focus of our QEP, then, became the development of “FGCUScholars” within the major with a specific focus on writing, critical thinking, and information literacy.

The QEP Steering Committee agreed that there was a great deal of overlap and consonance across the models and that this level of agreement could lead to the development of a strong focus for FGCU’s QEP. However, the committee also agreed that we were ready to share our work with the broader community so that we could get feedback from the university about how to move forward as we focused the plan. A subcommittee agreed to convene to discuss how the various proposals and models could be reshaped so that they could be presented in open faculty forums. The reshaping process included the development of a statement of guiding principles for the QEP that would open the door for faculty in a variety of disciplines to see how they could integrate their teaching and learning in the broader QEP.

Several principles that were discussed included: creating ownership across the university in all undergraduate programs; integrating the QEP horizontally and vertically; creating meaningful and sustainable assessments; and offering possibilities rather than being prescriptive.

Two faculty forums were held during the spring 2013 semester to provide the faculty, staff, and students with the information that the Steering Committee and the working groups had gathered and developed. Over fifty faculty attended the two forums and strongly supported the definitions of writing, critical thinking, and information literacy that had been developed and demonstrated interest in the various models that had been proposed. The attendees suggested that the Steering Committee was moving in the right direction as it began to focus on improving the skills of writing, critical thinking, and information literacy in our graduates, with a particular eye toward developing these skills in specific courses in the major and in the capstone projects. The Steering Committee convened after the forums to discuss the feedback and, at that point, to begin to clarify that the focus of the QEP would be on improving our students' writing, critical thinking, and information literacy skills within the major as they become scholars in their fields.

In the fall of 2013, the QEP Steering Committee worked with the program leaders for all undergraduate programs to complete a survey concerning the teaching and learning of writing, critical thinking, and information literacy. The results of that survey were distributed to the university community. Additionally, with a team of faculty beyond the QEP Steering Committee, we completed a qualitative analysis of the QEP Survey results. Those results yielded useful information on program definitions of high quality writing, critical thinking, and information literacy. We did see a great deal of agreement across the 33 undergraduate programs that completed the survey on their definition of these skills. With a high response rate (33 of 51 undergraduate programs responded), the Steering Committee was able to begin drafting an implementation plan and an assessment plan, which were then shared in open faculty forums in spring 2014. The draft QEP Implementation and Assessment Plans were received very positively, with some excellent feedback and input. Changes were then made and the information was shared broadly with the university community. The final piece was the development of a budget,

which happened at the end of the spring 2014 semester, bringing the QEP development process to a close.

The FGCU QEP Topic and the Institutional Mission, Vision, and Strategic Plan

As noted, Florida Gulf Coast University opened in 1997 with an emphasis on student success and engagement. FGCUScholars, our next QEP, supports the mission, vision, and values of the institution with our focus on innovative undergraduate education and our culture of assisting students in becoming scholars in their disciplines. It also advances specific state-mandated Performance Based Funding Metrics connected to student retention and persistence to graduation. The Founding Mission statement, approved by the Florida Board of Regents on November 20, 1992, states that “Florida Gulf Coast University . . . has, as its primary mission, undergraduate education, with a broad range of programs in arts and sciences, business, environmental science, computer science, education, nursing/allied health, and social services.” The focus on undergraduate education has not changed in the eighteen years of FGCU’s existence. The current FGCU Vision statement, approved by the FGCU Board of Trustees on January 19, 2010, states that “Florida Gulf Coast University will achieve national prominence in undergraduate education” As a major component of FGCU’s emphasis on undergraduate education, every undergraduate degree program includes a capstone course where students are expected to produce a major scholarly project that synthesizes their learning. Such an emphasis on the integration and synthesis of student learning existed with the inception of the university; the Founding Mission Statement declares that “Undergraduate students will have a mentor/advisor who will guide them during a senior project or paper, in order to synthesize the work done in the curriculum and prepare the students to organize ideas from across disciplines in a final research document.”

Over time, the focus in the capstone courses has been on the integration of knowledge and learning within the disciplines. The current FGCU Academic Catalog states that “Each program provides a capstone educational experience totaling three credit hours These seminar courses integrate skills and knowledge gained from particular programs and broaden student’s awareness and understanding of the disciplines related to their chosen field” (www.fgcu.edu/Catalog/capstone.asp). The capstone courses

that have been developed within each major address student learning relevant to that particular discipline, allowing students to synthesize their knowledge and learning and to express this learning in a major capstone project.

Significantly, during the QEP Topic selection process, faculty did not express concern about student learning of disciplinary knowledge. Indeed, one of the QEP Topics that was put forth was to further advance undergraduate research at FGCU across all disciplines in order to build on this key strength. In considering and getting feedback about this proposal, the Selection Committee found that there was not widespread concern about student learning of the content within their disciplines, but there was concern about students' abilities to communicate their learning clearly and effectively, utilizing a high level of critical thinking and information literacy skills. The faculty concern has been borne out in the learning outcomes assessments that we have completed, which have shown at all levels – from the first year through the fourth – that student writing and critical thinking are not at a level that satisfies the faculty. Faculty have also discerned embedded within the assessment of writing a particular difficulty with gathering, analyzing, and using credible sources of information.

Creating an atmosphere of enhanced student learning within the disciplines is also a primary emphasis within FGCU's current Strategic Plan (2010-2015) and thus the topic for our QEP directly relates to our institutional planning efforts. Goal 1: Academic Excellence emphasizes the role of student research and scholarship, stating that:

- FGCU will pursue academic excellence by offering diverse, high quality degree programs and unique opportunities for student research, engagement, and leadership.
- Student learning will be designed to include unique opportunities for research, student engagement, and leadership.

Strategy 5 of the first goal states that FGCU will “Provide special opportunities for students to pursue studies, research, and scholarship at FGCU.” In order to create synergies for the student scholarship being conducted within each major, FGCU began planning the creation of an Office of Undergraduate Research

and Scholarship in 2013. This office might play an integral role in the development of the Quality Enhancement Plan.

In the 2012-2013 academic year, the Board of Governors and the Florida state legislature enacted performance metrics for the State University System (SUS). Those metrics include, among other things: (1) Academic Progress Rate (2nd year retention rate for students with a grade point average above a 2.0), (2) Six Year Graduation Rate, and (3) Percent of Bachelor's Degrees without Excess Hours. In the 2013-2014 academic year, FGCU scored well in most metrics, but scored very poorly in Academic Progress Rate and Six Year Graduation Rate. Increasing the retention of our First Time in College (FTIC) students and the persistence of those students towards timely graduation has become a primary focus of the institution. In order to improve on these performance metrics, we plan to escalate our efforts on several high-impact practices as outlined by AAC&U, including, most relevant to this discussion, writing-intensive courses, undergraduate research, common intellectual experiences, and capstone courses. The topic of our QEP dovetails nicely with our institutional focus on high-impact practices and will assist in improving our score on these metrics. Ultimately, funding for the SUS will depend upon the Performance Based Funding Metrics and thus our QEP is timely in that it will assist us in these broader efforts.

FGCUScholars thus flows out of the vision, mission, and strategic plan of Florida Gulf Coast University, supports the metrics established by the state for Performance Based Funding, and enhances the culture we have created regarding student learning. As described in the next section, our QEP also addresses key findings in our assessment of student learning outcomes and responds to national discussions about undergraduate education.

Part III. Rationale

National Context and AAC&U

Opening at the turn of the twenty-first century, Florida Gulf Coast University has created programs focused on student success and engagement. As a relatively young institution of higher education, we have had the opportunity to create programs that meet the needs of the new millennium. The latest survey of employers by the Association of American Colleges and Universities (AAC&U), “It Takes More Than a Major: Employer Priorities for College Learning and Student Success” (Hart Research Associates 2013), concludes that “*Employers recognize capacities that cut across majors as critical to a candidate’s potential for career success, and they view these skills as more important than a student’s choice of undergraduate major*” (22). The report’s key findings state that “*Across several areas tested, employers strongly endorse educational practices that involve . . . such things as collaborative problem-solving, research, senior projects, community engagement, and internships*” (28). AAC&U’s report supports the type of educational journey we have designed at Florida Gulf Coast University which includes collaborative learning as a cornerstone to our pedagogical practices, civic engagement and service learning as a graduation requirement, and, most relevant here, a senior capstone project that allows students to produce a major scholarly project relevant to their disciplinary field.

Embedded within the production of the senior capstone projects at FGCU are the key skills of written communication, critical thinking, and information literacy. Several recent surveys of employers conclude that these skills are of central importance in a college education. A recent article in *Forbes* magazine notes that the number one skill that employers seek is critical thinking which is defined as “Using logic and reasoning to identify the strengths and weaknesses of alternate solutions, conclusions, or approaches to problems” (Casserly 2012). In a survey from the National Association of Colleges and Employers, problem-solving or critical thinking skills and written communication skills ranked second and third in terms of the attributes employers seek in candidates; when skills are rated for their relevant

importance, the results again emphasize the skills of writing, critical thinking, and information literacy (*Job Outlook 2013*).

Skill/Quality	Weighted Average*
Ability to verbally communicate with persons inside or outside the organization	4.63
Ability to make decisions and solve problems	4.51
Ability to obtain and process information	4.43

* 1 = Not at all important; 5 = Extremely important

Finally, the AAC&U survey in 2013 by Hart Research Associates of 318 employers with 25 or more employees concludes the following about these skills:

- “[E]mployers indicate that they prioritize critical thinking, communication, and complex problem-solving skills over a job candidate’s major field of study when making hiring decisions.” (4)
 - More specifically, of the employers surveyed, 93% agree that the development of skills is more important than the selected major; 59% strongly agree (4).
- “Few [employers] say *less* emphasis should be placed on any of the learning outcomes tested, but employers overall are most likely to believe there is a need to increase the focus on active skills such as critical thinking, complex problem-solving, communication, and applying knowledge to real-world settings.” (7)
 - More specifically, 82% of employers stated that more emphasis should be placed on critical thinking; 80% on communication skills; and 72% on the location, organization, and evaluation of information from multiple sources (8).

Because a senior capstone project is one important way to develop and assess student learning of these skills, a great deal of emphasis within organizations such as AAC&U and the Council on Undergraduate Research (CUR) has been placed on these projects. Seventy-nine percent of employers surveyed by Hart Research Associates agreed that students should “Complete a project prior to graduation that demonstrates their knowledge and skills” (10).

Internal Assessment of Student Learning

Significantly, while FGCU has developed programs for the twenty-first century, our assessment of student learning indicates that for the key learning outcomes of written communication, critical thinking, and information literacy our students do not graduate having attained the level of learning that we desire. Our assessment of these skills begins in General Education where we analyze student essays for the skills of written communication and information literacy at the end of Composition II using the AAC&U rubric for Written Communication (VALUE Rubrics: Written Communication). For the skill of critical thinking, we assess student work in a required course in our General Education program called HUM 2510 Understanding Visual and Performing Arts; in this course students must learn a great deal of content knowledge about various art forms and then apply that knowledge in their analysis of specific artworks. We have adapted the AAC&U rubric for Critical Thinking for this assessment (VALUE Rubrics: Critical Thinking). For these assessments in General Education, our aspirational goal for students is that they will achieve at the level of Milestone 2, the second of four levels of achievement. To build on our assessments of student learning in the General Education Program, we have also instituted a university-wide assessment of capstone projects using the same AAC&U rubrics; for this assessment we expect these upper level students to achieve between Milestone 3 and Capstone 4, the highest levels of achievement on the rubric.

We have completed our assessments of writing and information literacy in the Composition II course over the last four years. In all cases, the average score that students achieve approximates the Milestone 2 level (a score of 2.0). In most cases the specific category of “Sources and Evidence” receives the lowest score; in the Composition assessment, the category of “Sources and Evidence” focuses on students’ abilities to gather, analyze, and appropriately use relevant, high quality information.

Composition II Courses (FTICs)	Context and Purpose of Writing	Content Development	Genre and Disciplinary Conventions	Sources and Evidence	Control of Syntax and Mechanics	Average
Spring 2010	1.95	1.95	1.86	1.69	1.96	1.88
Spring 2011	2.07	1.82	1.97	1.93	1.94	1.94
Spring 2012	1.86	1.82	1.71	1.70	1.80	1.78

Spring 2013	1.92	1.69	1.78	1.76	1.84	1.80
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While student scores approximate the aspirational 2.0 threshold we have set for students at the end of their first year in college, we have not been able to raise it to that level on a consistent basis. Assessment of student work at the senior level demonstrates improvement (value added), but average scores fall below the Milestone 3 level (with a score of 3.0), lower than we would like. Over the last two years we have completed our university-wide assessment of capstone projects using the same AAC&U rubric for Writing:

Capstone Courses (Seniors)	Context and Purpose of Writing	Content Development	Genre and Disciplinary Conventions	Sources and Evidence	Control of Syntax and Mechanics	Average
Spring 2012	2.9	2.6	2.6	2.4	2.6	2.7
Spring 2013	3.1	2.7	2.7	2.6	2.8	2.8

Again, as with our lower level students, the specific area where students consistently score the lowest is in information-literacy – the ability to gather, analyze, and appropriately use research and information.

Similar results occur in our assessment of critical thinking. We have adapted the AAC&U rubric on critical thinking for the assignments we have been assessing, adding a score of “lower range” for students who do not meet the criteria for critical thinking and eliminating the highest range of the rubric, a score of “4,” because this is the achievement level expected of graduating seniors. Our aspirational goal is for students to score around an average of a 2.0 at the end of the General Education Program. The rubric levels are described as follows:

- Lower Range: Fails to identify or evaluate key concepts and/or underlying relationships and/or assumptions and implications; synthesizes information poorly; draws inappropriate or no inferences.

- Benchmark 1: Identifies and evaluates some key concepts, assumptions and implications and underlying relationships; synthesizes some information; occasionally draws appropriate inferences.
- Milestone 2: Defines key concepts. Identifies and evaluates underlying relationships effectively; identifies assumptions and implications; synthesizes information well; draws reasoned inferences.
- Milestone 3: Accomplished and creative use of critical thinking skills, including a high level of defining key concepts, organizing and synthesizing information, identifying assumptions and implications, and drawing reasoned inferences.

Within the General Education program, our assessment suggests that most of our students score between a Benchmark 1 and Milestone 2, with scores improving over the last year as a result of changes to the Understanding Visual and Performing Arts course.

HUM 2510 (General Education)	Lower Range	Benchmark 1	Milestone 2	Milestone 3
Fall 2011	19%	51%	22%	8%
Fall 2012	4%	43%	43%	9%

In 2012-2013, as a pilot, we used the same rubric to score the senior capstone projects completed in required courses at the end of every undergraduate major. While students did have higher overall scores than those attained in the assessment of the General Education Program, students did not achieve above Milestone 3 as desired.

Capstone Courses (Seniors)	Lower Range	Benchmark 1	Milestone 2	Milestone 3	Capstone 4
Spring 2013	0%	12.5%	75%	12.5%	0%

Again, while students made gains in their learning of almost one level, they are not scoring on average above Milestone 3 and towards the score of 4, which is the Capstone score. Our goal is to move the achievement of our graduating seniors in writing, critical thinking, and information literacy towards an average score of 3.5 – between a Milestone 3 level and a Capstone 4 level.

National Survey of Student Engagement

While students have not achieved at a level that meets our goals, aspirational as they are, we have instituted programs and created learning opportunities for students to develop their writing, critical thinking, and information literacy skills. Florida Gulf Coast University has participated in the National Survey of Student Engagement (NSSE) over the last several years (2003, 2005, 2008, and 2010); the results of this survey demonstrate that FGCU provides students with more opportunities to work on their writing and critical thinking than other institutions in our comparison group (southeast public universities and those in our Carnegie class). So, while our students are not graduating with skill development at the level we desire, we have provided a foundation for getting there.

In terms of written communication skills, student respondents from FGCU on the most recent NSSE (2010) report that as seniors they write more than senior level students at peer institutions. The results also suggest that as students progress in their academic careers they are writing a higher number of longer papers than they did early in their academic careers. These responses are encouraging as they suggest that we have a foundation for achieving our goals in this Quality Enhancement Plan, though we have room for improvement.

	Florida Gulf Coast University	Southeast Public Universities	Carnegie Class
Written papers of fewer than 5 pages	First Year – 3.02 Senior – 2.88	First Year – 2.85 Senior – 2.82	First Year – 3.03 Senior – 2.96
Written papers of 5 to 19 pages	First Year – 2.05 Senior – 2.56	First Year – 2.14 Senior – 2.42	First Year – 2.24 Senior Year – 2.52
Written papers 20 pages or more	First Year – 1.24 Senior – 1.72	First Year – 1.30 Senior Year – 1.62	First Year – 1.33 Senior – 1.64

During the current year, how much writing have you done? 1 = None; 2 = 1-4 papers; 3 = 5-10 papers; 4 = 11-20 papers; 5 = More than 20 papers

In terms of critical thinking skills, the results for FGCU are even stronger, as follows:

	Florida Gulf Coast University	Southeast Public Universities	Carnegie Class
Analyzing ideas, experiences, theories	First Year – 3.25 Senior – 3.36	First Year – 3.12 Senior – 3.27	First Year – 3.10 Senior – 3.26
Synthesizing ideas, information, experiences, etc.	First Year – 3.01 Senior – 3.18	First Year – 2.92 Senior – 3.07	First Year – 2.91 Senior – 3.07
Making judgments about the value of information, arguments, etc.	First Year – 3.10 Senior – 3.10	First Year – 2.94 Senior – 3.03	First Year – 2.95 Senior – 3.04
Applying theories or concepts	First Year – 3.21 Senior – 3.32	First Year – 3.07 Senior – 3.25	First Year – 3.05 Senior – 3.24

During the current year, how much has your coursework emphasized these activities? 1 = None; 2 = Some; 3 = Quite a bit; 4 = Very much

Not only does FGCU match up well with those in the southeast but it also matches up well with those in its Carnegie class. Students report that between their first year and their senior year, coursework more

strongly emphasizes critical thinking skills, and they report development of higher order skills such as analyzing ideas, experiences, and theories; synthesizing ideas, information, and experiences; and applying theories and concepts (only the category of “making judgments” remains steady).

Conclusion

Florida Gulf Coast University was founded with a strong emphasis on undergraduate education and particularly on the development of a strong liberal education. Following the work of the Association of American Colleges and Universities’ Liberal Education and America’s Promise (LEAP) project, FGCU has developed and assessed essential learning outcomes, created authentic and meaningful assessments, and worked to broaden our reach to all students. We have also engaged in a large number of LEAP’s High-Impact Practices, including senior capstone courses. Our goal has been to create an educational journey for our students that not only prepares them for work, but also prepares them for life. As we note in one of our Guiding Principles, “The University is dedicated to the highest quality education that develops the whole person for success in life and work.” As such, while the perspective of employers apparent in AAC&U’s latest survey is important, it is only one piece of a larger puzzle.

That larger piece is about life-long learning, about developing engaged citizens, and about transforming students so that they have the opportunity for meaningful lives. The emphasis in our Quality Enhancement Plan on enhancing the skills of writing, critical thinking, and information literacy within the majors and especially as evidenced in the products of the capstone projects will allow students to become active and engaged citizens who have the abilities to keep learning throughout their lives. In so doing, students demonstrate their curiosity and wonder at the world from within their chosen discipline; they demonstrate their ability to locate, evaluate, and meaningfully use information; and they demonstrate their ability to consider ideas deeply, to analyze those ideas, and to work towards synthesizing and applying those ideas to real world situations. All of these characteristics are essential to becoming not only scholars in their fields but also engaged citizens and life-long learners.

Part IV. Literature Review

After the general topic of writing, critical thinking, and information literacy had been identified for Florida Gulf Coast University's next Quality Enhancement Plan, the Steering Committee convened to discuss how to move forward with gathering and sharing information, including reviewing literature related to this general topic and analyzing best practices. We also agreed that we wanted to broaden participation in this part of the Quality Enhancement Plan project in order to begin to build capacity and broad ownership on campus. The Steering Committee created three working groups, one each for the three areas of the QEP, and then worked to add other faculty, staff, and students outside of the QEP Steering Committee to these working groups. The charge of these inclusive groups was to gather information and begin to consider how we might define writing, critical thinking, and information literacy within our QEP and, more importantly, how we might begin to focus our general topic. Each of the working groups developed a review of literature for their area which was shared with the broader Steering Committee and with the university at large during our faculty forums.

Review of Literature: Writing

What is Writing?

As we sought to define writing for the purposes of our QEP, we reviewed two different approaches. The first approach, Writing to Learn, is focused on a particular set of pedagogical strategies that use writing as more than a way to communicate; writing becomes a way to foster critical thinking and to explore learning. Writing to Learn activities are often short, impromptu and low stakes ("Writing to Learn"). In contrast, Writing in the Disciplines gives students practical writing tasks, often formal papers, that allow them to practice writing skills and to learn and practice the writing conventions within a particular area of study ("What is Writing in the Disciplines?"). Within the broad scope of our QEP topic, Writing in the Disciplines provided us with a way to conceptualize writing in connection to critical thinking and information literacy.

Within this framework, we identified three potential types of writing courses: writing *focused* courses, writing *intensive* courses, and writing *enriched* courses (adapted from Taylor and Peterson 7). Composition I and Composition II are examples of writing *focused* courses, the main objective of which is to teach the skill of writing (7). Writing *intensive* courses, the main objective of which is to teach specific course content using writing as the primary method of student engagement and assessment, could be sophomore and junior level courses within the major that would build on the work completed in Composition I and II (and other General Education courses). The courses in the major could focus on reading, research, and writing in the disciplines and thus assist students in more clearly expressing their work as scholars in their fields. Writing *enriched* courses, the main objective of which is to teach specific course content using writing as one major method of student engagement and assessment, would be the capstone courses in each major where students are expected to develop a scholarly project which includes writing (7). This type of writing encourages students to grapple with ideas so they begin to internalize new ways of thinking.

Why is Writing Important for FGCU students?

Writing is crucial to learning, not just in the writing classroom, but in all classrooms. Ideally, writing must be sustained throughout the curriculum for students to sufficiently develop their skills. According to Tim N. Taylor and Greg Peterson, “Writing stimulates thought and challenges students to communicate their ideas, so writing represents a valuable learning tool for any classroom. Writing is simply one of the best ways to provoke, evaluate, and assess student learning. Incorporating writing . . . promote[s] deeper discussion and understanding of course concepts” (4). Thus, writing is a catalyst for synthesis and understanding of course content.

Further, according to Taylor and Peterson, “writing stimulates critical thinking” (4). Taylor and Peterson go on to explain the value of writing beyond the composition classroom: “No matter the discipline or major, writing assignments and exercises can be used to stimulate understanding and increase critical understanding of course content. The act of writing requires students to play and work

with ideas and concepts learned in the course. Writing promotes active thinking because not only must students think about course content when writing, but they must also do something with their ideas. Writing forces students to think about ideas and put them into action” (4).

Dan Berrett supports this concept when he explains that Composition I and II do not provide enough exposure to writing practice for students to fully acquire and develop their writing skills: “We know you can’t get it right in 15 or 16 weeks It’s so highly developmental that we can’t assume students will somehow learn it once and apply it brilliantly in the upper levels of the curriculum” (Berrett A5). We know writing is a powerful learning tool, but the acquisition of writing skills is an ongoing process. Berrett goes on to say, “Writing works exceedingly well as both a way to access learning and a means of deepening that learning, according to experts who study its effects on students” (A4). “That’s because writing is uniquely able to ‘make thinking visible,’ says Julie A. Reynolds, associate director of undergraduate studies at Duke University. ‘It lays bare students’ thinking, showing how well they grasp the subject matter in ways that a multiple choice or short answer test—or even a discussion section—simply can’t” (Berrett A4).

In *Writing in the Senior Capstone*, Masiello and Skipper (2013) note that “writing activities can meet general course goals in intellectual development, such as helping to improve skills in critical thinking, mastery of disciplinary content, and oral and written communication. Writing projects in the senior capstone also can promote personal attributes that employers seek (e.g., collaboration, independence, innovation)” (ix). In reviewing the theory and research behind the senior capstone, they note that “Establishing a theoretical foundation helps instructors create a stronger, clearer, and ultimately more coherent set of practices that will benefit student learning and increase the likelihood that instructors will achieve their curricular objectives” (xi). Within the purview of the capstone course at FGCU, we have developed a theoretical framework that focuses on creating an opportunity for students to demonstrate the skills that are necessary for employment or post-graduate education. The *Framework for Success in Postsecondary Writing* has defined these skills as follows:

- Rhetorical knowledge – the ability to analyze and act on understandings of audiences, purposes, and contexts in creating and comprehending texts;
- Critical thinking – the ability to analyze a situation or text and make thoughtful decisions based on that analysis, through writing, reading, and research;
- Writing processes – multiple strategies to approach and undertake writing and research;
- Knowledge of conventions – the formal and informal guidelines that define what is considered to be correct and appropriate, or incorrect and inappropriate, in a piece of writing; and
- Ability to compose in multiple environments – from traditional pen and paper to electronic technologies. (1)

At FGCU, writing has always been conceived of in a developmental fashion with a focus on key learning attributes (context and purpose, genre and disciplinary conventions, writing processes, and critical thinking). The focus of our QEP will allow us to refine our approach to teaching writing across all four years of study and within the majors and to connect that teaching to critical thinking and information literacy.

Theoretical Framework and Best Practices

According to John Bean (2011), Peter Elbow and Pat Belanoff (2003), and Anne Herrington, Charles Moran, and Susan Bunche (1992), the most successful strategies for teaching writing use assignments and activities that build in stages with early, frequent and thoughtful instructor feedback. These texts provided examples of assignments and course design that require students to complete small writing tasks that later inform a larger research project, or to complete and submit the stages of a larger assignment as smaller assignments in themselves (for example, a thesis statement, an outline or pre-writing, an initial draft, a summary of secondary research, and a final paper would each be submitted and graded as individual assignments). Bean extends this concept to the overall curriculum within a discipline, explaining “the key is to integrate into early and middle courses in the major the instructional

modules and scaffolding assignments that prepare students for capstone projects in their senior year” (253). In other words, students develop competency in the knowledge and skills required for expert writing in a discipline by learning and practicing such knowledge and skills step-by-step through beginning, intermediate, and advanced courses.

Scholars of the teaching of writing emphasize the importance of considering student approaches to writing. Research has demonstrated a significant gap between professors’ ideas about how students approach writing assignments and what students actually do when completing a writing assignment. According to Marsella, Hilgers, and McLaren (1992), students’ approaches to writing are typically determined by three factors: the professor’s specifications for the assignment, strategies for academic writing that have worked for the student in the past, and a web of external competing priorities like coursework, jobs, family, and belief systems (178). While professors use writing to foster their students’ learning, students approach writing by trying to find the “most efficient way to complete [an] assignment and get the highest grade” (Marsella, Hilgers, and McLaren 181). This difference in the objectives for completing a writing assignment seem fundamental to many of the challenges of teaching writing, including those related to collaboration or peer response. Faculty successfully narrowed the gap between instructor and student approaches by treating assignments in stages, providing meaningful feedback, and giving students opportunities to practice strategies for writing and collaboration (187). For the writing element of the QEP, these approaches could be used intensively in the writing *focused* courses such as Composition II and other General Education courses. Utilizing these strategies and a common vocabulary not only in Composition but in other general education courses will reinforce the skills and help students see the relevance of writing beyond the Composition classroom.

Departmental communities must then work together to create curriculum that focuses on the appropriate skills for their discipline. As Bean posits in *Engaging Ideas*, “When disciplinary faculty appreciate the complexity of academic research writing in general, and the specialized practices of their own disciplines in particular, they see why the skills required for undergraduate research need to be taught within the major” (262). While Composition and General Education courses can provide the

foundation for the development of strong writing skills, it is in the capstone course that these skills can be brought to fruition. The capstone course could then become the place where all the elements of the FGCU Scholars initiative can culminate: in a discipline-specific scholarly project which includes elements of writing, critical thinking, and information literacy.

Conclusion

Based on the literature reviewed, a model integrating writing instruction throughout the curriculum and within individual disciplines will provide a solid skill base for student success in their majors and, ultimately, in the capstone courses. Introducing students to university-level writing skills in Composition courses provides a foundation, but incorporating those skills and continued practice of these skills within a student's major field of study will add meaning and value and also give students an opportunity to use and apply writing skills in ways that are practical and meaningful and that span the lifetime of their university education. Our vision of an integrated plan for writing instruction includes

- Writing *focused* courses, such as Composition I and II.
- Writing *intensive* courses, such as sophomore and junior level classes within the major.
- Writing *enriched* courses, such as the capstone course.

Some adaptation of these definitions could be used in our QEP as we integrate the skills of writing, critical thinking, and information literacy. Based on best practices, shared responsibility and alignment of writing instruction and assessment could be developed between Composition faculty and faculty members in various disciplines.

Review of Literature: Critical Thinking

What is Critical Thinking?

Critical thinking has been one of the core learning outcomes in American higher education since the late nineteenth century when the progressive educator and philosopher John Dewey (1859-1952) started to theorize the relationship between critical thinking in education and the development and

survival of free and democratic societies. For Dewey, the school or university is a social institution that not only introduces the student to new forms of knowledge and vocational skills, but teaches them how to “live their lives” in a way that nourishes and cultivates the unique interests and needs of the student for the good of society as a whole. Central to this idea of self-cultivation is what Dewey, in his book *How We Think* (1998), calls “reflective thinking,” which he defines as “the kind of thinking that consists in turning a subject over in the mind and giving it serious and consecutive consideration.” (3). The central aim of this kind of thinking is to be able to critically distinguish between *mere* opinions or acculturated beliefs that individuals may have about particular subjects from forms of knowledge that have a strong logical coherence and a more demonstrable (or evidentiary) form of certainty. The upshot is a conception of critical thinking as a form of “metacognition” or “thinking about how we think” (Moore and Parker 2012).

In a review of key literature on critical thinking, this notion of metacognition involves a number of overlapping aspects. First, it entails identifying background assumptions and presuppositions that may influence and distort our conceptions of truth and knowledge. Second, it involves critically assessing whether or not these assumptions are valid, accurate, or sound. Third, it involves uncovering the social, cultural, and historical contexts from which these assumptions emerge and engaging them from multiple perspectives. Fourth, it remains consistently open to revision and self-correction. And finally, it may entail some type of focused, practical, and civically engaged action based on critical reflection (Bean 2011; Bok 2006; Brookfield 2012; Moore and Parker 2011; Nosich 2005)

The Role of Critical Thinking at FGCU

At a time when they are bombarded with information from Internet sources like Wikipedia, from Twitter and Facebook, and from various blogs and media outlets, students must develop the ability to critically assess and differentiate *mere* opinion and belief from sound, evidence-based knowledge and reasoning. One of the Guiding Principles at Florida Gulf Coast University is to teach students how to be “informed and engaged citizens” in a way that is “committed to advancing democratic ideals.” Central to

this guiding principle is critical thinking. The Delphi Report (Facione 1990) has a summary statement that captures the extent to which critical thinking is foundational to a well-rounded liberal arts education in general and to educational missions for institutions such as FGCU in particular. It reads: “Critical thinking is essential as a tool of inquiry. As such, critical thinking is a liberating force in education and a powerful resource in one’s personal and civic life. While not synonymous with good thinking, critical thinking is a pervasive and self-rectifying human phenomenon. The ideal critical thinker is habitually inquisitive, well-informed, trustful of reason, open-minded, flexible, fair in evaluation, honest in facing personal biases, prudent in making judgments, willing to reconsider, clear about issues, orderly in complex matters, diligent in seeking relevant information, reasonable in the selection of criteria, focused inquiry and persistent in seeking results which are as precise as the subject and circumstances of inquiry permit” (Facione 1990).

From this, we can see that critical thinking is a skill that not only allows students to develop well-informed opinions, make intelligent decisions, and identify the best course of action in various situations in life. It also enables students to recognize faulty or manipulative reasoning in others (Moore and Parker 2011, 2). Moreover, it is a skill that is common to all academic disciplines—from mathematics, business, and philosophy, to physics, history, and literature—insofar as the core concern is to identify and question various uncritical assumptions and recognize how knowledge in that particular discipline is understood and interpreted as being legitimate (Brookfield 2012; Maki 2004).

Different Theoretical Approaches

Insofar as it is applied in different ways in different disciplinary contexts, critical thinking is not a monolithic term. In *Teaching for Critical Thinking* (2012), for example, Stephen Brookfield identifies a number of different theoretical approaches including those found in philosophy and logic, natural science, pragmatism, psychotherapy, and critical theory. The most influential of these theoretical paradigms are those found in philosophy and in the natural sciences. In philosophy, the aim is to assess the nature of arguments (both deductive and inductive), test arguments for strength, soundness, and validity, identify

logical fallacies, rhetorical fallacies, and valid inferences, and become fluent in a number of different kinds of reasoning and logic including deductive, inductive, formal, informal, and analogical. In the natural sciences, the aim of critical thinking is to identify as clearly as possible the relationship between cause and effect. The method, in this regard, is largely hypothetical and deductive, that is, one formulates a question; develops a hypothesis based on this question; makes predictions based on the logical consequences of this hypothesis; tests the hypothesis by conducting experiments; and analyzes the results of the experiment to see if they support the hypothesis.

Our aim here is to follow the model of Bloom's taxonomy with the understanding that critical thinking encompasses three mutually interdependent domains, the "cognitive," the "affective," and the "psychomotor." These domains should not be understood as separate and distinct from one another but part of an integrated whole that is central to learning. The cognitive domain focuses on critical comprehension, application, analysis, and evaluation of knowledge in specific disciplinary contexts; the affective domain cultivates the student's capacity for empathy, emotional connectedness, and openness to diverse perspectives; and the psychomotor domain develops the ability to use, understand, and tune into sensory-motor cues in order to respond and react to various phenomena in appropriate ways. Taken together, these three domains constitute a more robust, comprehensive, and holistic view of critical thinking that brings together aspects of the whole person. It also allows for a deeper and more balanced metric of assessment that is student-centered. Rather than focusing strictly on mastering theoretical and discipline-specific content, this approach develops assignments that cultivate broad practical and interdisciplinary skills essential not only to higher order forms of critical thinking but to the growth and development of the student body in general.

Within the purview of the Quality Enhancement Plan, we will focus our teaching and learning on the cognitive domain of Bloom's taxonomy. Our qualitative analysis of our QEP Survey suggests that the general skills outlined in this domain fit into the type of critical thinking that our programs develop in relationship to student scholarly work. Key concepts that were discerned in the qualitative analysis of the QEP survey included the ability to analyze an issue; the ability to state an informed opinion or thesis; the

ability to solve problems and develop solutions; the ability to find and use information; the application of theory; the selection of relevant knowledge; the ability to synthesize information; and the ability to evaluate ideas and information. This qualitative analysis fits with Bloom's taxonomy with its focus on moving towards higher order cognitive abilities: from knowledge, understanding, and application to analysis, synthesis, and evaluation.

Possible Critical Thinking Models for FGCU

There are a number of possible models that the university can use to develop student-centered critical thinking skills across the curriculum. One possible model, an "integrative approach," would follow John Bean's suggestion in *Engaging Ideas* (2011) that good writing is at the heart of critical thinking. Using carefully designed writing assignments and research projects, students can begin to integrate and apply the key skills of critical thinking. Writing assignments could be structured in ways that require students to recognize and define problems; identify, construct, and critically assess arguments; gather and evaluate relevant evidence; and anticipate counter arguments. And, given that FGCU requires a capstone course or senior seminar for all of its majors, there is an opportunity to assess critical thinking competency at the end of their coursework. (In the Philosophy capstone course, for instance, there is a "Philosophy Rewrite" assignment where students take a writing assignment from an earlier course, perhaps Composition I or II, critically assess it on the basis of relevant critical thinking criteria, and rewrite the paper accordingly.)

Another possible model is what might be called, the "solo approach" designed around a stand-alone critical thinking course required for all FGCU students (e.g. Moore and Parker, 2012). This could be viewed as an introduction to critical thinking that focuses specifically on the nature of technically sound and clear writing, identifying rhetorical devices and fallacies in reasoning, and testing arguments for their validity and truth-value. There are a number of possible advantages to this approach, one being standardization. Using a common text and assignments, faculty could draw on a uniform set of assessment and testing materials to evaluate competencies. The biggest advantage of the solo approach,

however, is also its biggest drawback. There are clear limitations to a fixed set of assessment measures as well as isolating critical thinking from the curriculum as a whole. The approach may allow faculty to gather a consistent set of data and compare student performance over time. But such an approach may compel faculty to “teach to the assessment” and prevent students from seeing how these skills apply across disciplines or address deeper questions regarding implicit biases, cultural context, and the mission of a liberal arts education in general. It may also diminish opportunities for different approaches to pedagogy and student-centered learning.

A final model, a “pedagogical methods” approach, could also be developed. With this model, instead of focusing specifically on writing assignments, faculty could develop a suite of model assignments and classroom activities that foster critical thinking skills in a way that can be implemented in content-specific contexts across all courses and programs (e.g., Maki 2004; Bean 2011; Nosich 2005). For example, every faculty member should have multi-step, problem-solving assignments in courses. Faculty could be taught how to structure these assignments in ways that explicitly strengthen and develop the critical thinking aspect of these assignments. In art courses, for instance, a student may be asked to develop a creative project for a studio assignment, and the instructor could restructure the assignment to add critical thinking features, e. g. a post-project analysis that asks students to reflect on their own process and what they would do differently, or where their decisions and choices could have been improved.

The same kind of approach could be applied to whole courses. Students could start courses with an assessment that they design by themselves based on what they know about the subject matter and how they could learn more about it. The course might end with a reflective assessment of their critical thinking process throughout the course, their own contribution to the process, and what they would do differently.

Conclusion

Although the three models—the integrative, the solo, and the pedagogical methods approaches—are not mutually exclusive, based on the literature review and feedback from faculty, the committee decided that

for the QEP the integrative approach would be the best model for teaching and assessing critical thinking across the curriculum, using both horizontal integration (across the student's year of study) and vertical integration (across all four years of study). A consensus developed during the faculty forums that specific courses, such as Composition I and II, gateway courses, and capstone courses could be identified as having critical thinking as a central learning outcome, along with writing and information literacy.

At the 2013 Conference on College Composition and Communication (4Cs), John Bean discussed in his presentation "Transfer of Learning and Backward Design: Rethinking the Articulation of Writing Assignments Between First-Year Composition and General Education Courses" the importance of increasing complexity in critical thinking skills as students advance in their educational journey. He provided a handout that notes that scholars have determined, "after extensive research in the nature of expertise in many domains of knowledge, that the single most distinguishing characteristic of those who gain expertise in a variety of skills domains are those who continually assign themselves more and more complex problems to solve. For educators, this translates to a need for students to experience sequenced writing assignments within and across courses in which skills required to complete the task build upon previously acquired skills" (Beaufort 184). Bean thus reinforces the idea of connecting writing, critical thinking, and information literacy and offering a developmental approach to these skills.

Review of Literature: Information Literacy

What is Information Literacy?

Definitions for information literacy date back to 1914 and have evolved over the decades, but all definitions contain some common elements. Each definition mentions possession of an integrated set of skills, knowledge of resources from which to retrieve information and the ability to analyze and use information (Association of College and Research Libraries, 2000; Burkhardt, MacDonald & Rathemacher, 2005; Gibson, 2008; Rockman, 2004). Currently, the Association of College and Research Libraries (ACRL) (2000) defines information literacy as the ability to "recognize when information is needed and ... locate, evaluate and use effectively the needed information." Grassian & Kaplowitz

(2001) encourage the addition of the individual in contemporary definitions; they advocate for the inclusion of dispositions like persistence, attention to detail, and caution in accepting information. However, according to all definitions whether academic or personal, information literacy includes the skills, dispositions, and abilities necessary to be a productive individual in a “technologically sophisticated global society” (Rockman 2004, 25).

Why is Information Literacy important for FGCU Students?

The 21st century has been proclaimed the Information Age characterized by a constant barrage of information from a plethora of sources. This explosion of information makes it nearly impossible for students to learn everything needed for a lifetime of success during their years of formal schooling. Therefore, teaching students to be information seekers and managers is a practical twenty-first century educational goal and necessary personal disposition. The ability to find, analyze, and use information is essential in a democratic society and global culture since information literacy skills equip one for a lifetime of independent learning and personal empowerment. The findings in Education Testing Service’s 2006 Information and Computer Technology Literacy Assessment indicate most of the 6,300 high school and college students tested did not demonstrate basic information literacy skills. The results of this and other national assessments challenge universities to create opportunities for their students to learn, reinforce, and use information literacy skills.

Information literacy skills are often talked about in proximity to discussions of lifelong learning and the ability to perform well in the modern workplace. ACRL (2000) explains that “Information literacy forms the basis for lifelong learning. It is common to all disciplines, to all learning environments, and to all levels of education. It enables learners to master content and extend their investigations, become more self-directed, and assume greater control over their own learning.” Information Literacy was recognized at a national level in 2009 when President Obama proclaimed October National Information Literacy Awareness month, saying, “An informed and educated citizenry is essential to the functioning of

our modern democratic society, and I encourage educational and community institutions across the country to help Americans find and evaluate the information they seek, in all its forms.”

Theoretical Framework and Best Practices

Many learning theories exist which explain how people learn and no single theory or theorist can be singled out as having the complete answer to this question. However, the all-inclusive learning theory of constructivism describes the process of creating meaning from a variety of sources and experiences which is integral to information literacy pedagogy. Constructivism embraces elements from a number of learning theorist from Dewey (2009), Vygotsky (1978), to Pau and Elder (2006). The Boyer Commission Report (1998), *Reinventing Undergraduate Education*, recommends capstone experiences and projects that engage students in “framing of a significant question or set of questions, the research or creative exploration to find answers, and the communication skills to convey the results” (27). As the foundation for life-long learning and personal empowerment, information literacy pedagogy is deeply supported by the constructivist learning theory and its conceptual framework that knowledge is actively constructed out of the learner’s experiences in the world. Constructivism also embraces the role of affect in its principles as learners are more likely to become cognitively engaged when they are researching something which has personal meaning. This tenant of constructivism supports the inclusion of the individual in contemporary definitions of information literacy embraced by Grassian & Kaplowitz (2001). The ACRL Information Literacy Standards for Higher Education integrate self-directed learning, active engagement on the part of the learner, and the construction of new knowledge from a variety of resources and experiences into each of its five standards. The ACRL Standards for information literacy are widely accepted and used in institutions of higher learning throughout the United States as the basis for information literacy instruction and evaluation.

Linking theory and practice enables educators to improve curricular content and to develop new and effective instructional approaches. The Boyer Commission Report (1998) challenges universities to structure courses to create student-centered learning environments based on inquiry where problem

solving becomes the focus and where information literacy competencies are required for success. The Boyer Commission (1998), ACRL (2000), Grassian & Kaplowitz (2001) advocate for an integrated curriculum where information literacy strategies are taught and standards are woven into “curricular content, structure and sequence.” This integrative approach offers multiple possibilities for students to use critical thinking skills, to become skilled users of information sources, and to increase personal responsibility for learning. An integrated approach provides multiple and consistent opportunities for students to seek, evaluate and manage information gathered from multiple sources and to practice discipline-specific research methods.

ACRL has written best practices for information literacy programs that include recommendations that information literacy be fully articulated within the curriculum, building from entry level skills up through more complex concepts through a student’s career, while being embedded in regular coursework within each academic program, discipline and course (Association of College and Research Libraries 2012). These best practices also recommend that assessment of student learning be carried out in multiple ways, including pre/post tests, portfolio assessments, quizzes , and observation.

In “Information Literacy and Higher Education: A Toolkit for Curricular Integration,” Jarson (2010) highlights different delivery methods of instruction for information literacy: comprehensive information literacy plans, course-integrated library instruction, discipline specific information literacy, embedded librarianship, and first-year experience programs. He reviews College of DuPage’s Information Literacy Across the Curriculum (ILAC) program which cites several elements as characteristics of a successful ILAC program; they

- connect to the goals and educational philosophy of the College;
- receive library and college administrative support and financing;
- engage discipline and library faculty in a common goal of information literate students;

- rely on a set of information literacy standards to establish curriculum and assess learning, like the Association of College and Research Libraries Information Literacy Competency Standards for Higher Education (2000);
- consist of a sequential progression of learning opportunities that are linked to the core curriculum across academic programs or disciplines;
- assess learning at all levels: pre- and post at the institutional, program/discipline, and course levels; and
- enjoy a sustained infrastructure of staffing and technical support.

With the support of a grant, Carleton College integrated Information Literacy into the curriculum and has made public their reports on how faculty in the disciplines can create their own rubrics, learning outcomes, and assignments to teach information literacy

[\(http://apps.carleton.edu/campus/library/about/infolit/projects/mellon/mellonoverview/\)](http://apps.carleton.edu/campus/library/about/infolit/projects/mellon/mellonoverview/).

Conclusion

Based on the literature and best practices, an integrated model of teaching and assessing information literacy throughout the curriculum and within student's regular coursework is the most successful and effective method. Contextualizing information literacy skills and concepts within a student's major field of study or chosen coursework adds meaning and value to those skills and also gives students an opportunity to use and apply information literacy skills within their disciplines. An integrated information literacy program at FGCU might include:

- Information literacy competencies based on the ACRL Information Literacy Competency Standards for Higher Education with tiered expectations for freshman, sophomore and junior/senior levels;

- Introduction and practice of Information Literacy concepts and skills through librarian-led sessions, classroom lecture and activities, online modules, and research and writing assignments, most often as part of regular coursework; and
- Assessment of Information Literacy competency through varied means including authentic performance assessments of research papers or portfolios using rubrics and standardized tests.

Most importantly, a successful Information Literacy program would include shared responsibility for the teaching and assessment of information literacy between library faculty and faculty members outside of the library and the integration of the skills of information literacy with writing and critical thinking.

V. Implementation Plan, Timeline, and Coordination

FGCUScholars, FGCU's next Quality Enhancement Plan, will advance the skills of writing, critical thinking, and information literacy within the majors. Based on our review of the literature and of best practices, in order to implement our QEP we will designate courses within the curriculum, including General Education courses and courses in the major, that will explicitly advance these skills. In order to ensure that our QEP has a strong foundation, we have already laid the groundwork for a successful launch. In 2013-2014, we completed a survey of undergraduate programs in order to discern the level of explicit teaching of writing, critical thinking, and information literacy that is occurring within the majors. We also convened faculty who teach Composition I in order to develop consistency in the assignment and grading of first year students' writing; while Composition I will not be part of the QEP, the course provides a foundation for student development of the skills central to the QEP. In 2014-2015, we hope to open the Office of Undergraduate Scholarship and name the Faculty Scholars associated with the office. We also hope to name the Composition Instructors who will be paired with the Faculty Scholars as we transform the curriculum in select Composition II courses to be more disciplinary based. Finally, we hope to provide resources to the English Program to further develop upper level writing courses that are offered to a variety of majors.

Central to the implementation of our QEP will be the designation of courses as "scholarly-focused" and "scholarly-enriched." We have defined these courses as follows:

- **Scholarly-focused**: in these courses, the main objective is to assist students in becoming scholars in the discipline through producing a scholarly work that utilizes the skills of writing, critical thinking, and information literacy; the course includes the teaching of these skills as they relate to the discipline;
- **Scholarly-enriched**: in these courses, the main objective is to teach specific course content in the discipline; a secondary component to the course is the inclusion of the production of a

scholarly work that utilizes the skills of writing, critical thinking, and information literacy as a method of student engagement and assessment.

A central component to the implementation of the QEP will be the designation of courses as scholarly-focused or scholarly-enriched so that faculty and students more intentionally engage in a learning process that advances the goals of the QEP.

Courses within the General Education Program that will be a part of the Quality Enhancement Plan include all courses that are scholarly-focused and scholarly-enriched. This includes Composition II (which is a scholarly-focused course) and other relevant courses designated as writing intensive (which are scholarly-enriched and which are formerly known as “Gordon Rule”). As faculty refine or enhance lower level courses, elements of these courses that are relevant to the skills central to the QEP (writing, critical thinking, and information literacy) will be made explicit and will provide a foundation for the learning that will occur in the majors. These elements will be linked directly to the learning goals and outcomes of the QEP in relation to advancing writing, critical thinking, and information literacy and will be connected to the QEP Assessment Rubric. Library faculty will become integral partners in the development of information literacy materials and assessments.

Curricula within the **General Education Program** that relate directly to the QEP include:

- **Composition II**—Sections of the second course in the Composition sequence as a scholarly-focused course will be transformed through the Quality Enhancement Plan so that they lay the groundwork for disciplinary-specific scholarship. That is, the course, which is based in argumentation and which focuses on a variety of themes, will be revised so that the themes discussed within discrete sections, and thus the writing that the students engage in, will be geared towards the disciplines: business, health professions, education, engineering, arts, humanities, social sciences, and sciences. These sections will be designated as such within our student registration system so that students can take a section of Composition II in their major area. Because many students do not have a declared major in their first year, about 50% of Composition II sections will be disciplinary focused. The revision process will include a review of the course

objectives and learning outcomes; all sections, regardless of their theme, will meet common objectives and outcomes and will introduce the skills central to the QEP and the assessment of the QEP. The process for this revision will begin in the 2014-2015 academic year, one year before the QEP will begin. Students will be introduced to the QEP Assessment Rubric in the course, which will also be an important site for assessment of student learning in the QEP.

- **General Education Writing Intensive courses**—Relevant courses that are currently designated as writing-intensive courses within the General Education Program (formerly known as “Gordon Rule”) will be designated as scholarly-enriched courses and will teach specific disciplinary content and include assignments that further develop the skills of writing, critical thinking, and information literacy. Students will be made aware of the way in which these courses build on the learning that occurs in Composition I and II and lead to the learning that will occur in the majors.

The Composition II course and the writing-intensive courses in the General Education Program will thus provide a foundation for student learning in our QEP.

In addition to curriculum revision within the General Education Program, all undergraduate majors will include three courses that will continue the explicit learning started in the General Education Program in order to build on this work by making the teaching and learning of writing, critical thinking, and information literacy discipline-specific. That is, faculty in the majors will assist students as they become scholars in their disciplines by making explicit the teaching and learning of these skills as they relate to the major. For the three courses in the program, faculty will target a course taken by students early in the major (a gateway course, an introduction to the major, a research methods or process course, etc.), one other course in the program that students take between the gateway course and the capstone course, and the senior level course taken near the end of their program (generally the senior capstone or senior seminar course, though in some areas this course is a clinical course and a different course will be selected). Every program will clearly designate which course will act as the capstone course for the purposes of outcomes assessment for the QEP.

The curricula within the **Majors** that relate directly to the QEP include:

- **Gateway Courses/Research Methods Courses/etc.** – These courses will be explicitly noted within the course syllabus and in the teaching as scholarly-focused courses that are designed to advance the skills of writing, critical thinking, and information literacy within the discipline. Based on a survey of program leaders, most of the undergraduate programs at FGCU include these types of courses and most of them already teach these skills within this framework. Those programs that do not include a gateway type course will be encouraged to do so, though it will not be a requirement; for those programs without such a course, a similar course that students take early in their program will be designed in this way.

These courses will include several common elements.

- In order for faculty to facilitate the scholarly-focused nature of these courses, we will adopt specific course caps and/or provide grading assistance and other support; these courses require a great deal of close interaction between faculty and students as well as feedback on assignments that feature writing, critical thinking, and information literacy.
- Course instruction on writing, critical thinking, and information literacy within the discipline will be included in these courses, connecting student learning to what has occurred in the General Education Program in relation to these skills.
- These courses will include a scholarly assignment that students will complete that includes writing, critical thinking, and information literacy as key components to student learning and assessment.
- Building on the work completed in Composition II, students will continue to be exposed to the QEP Assessment Rubric used to assess scholarly activities in relation to the skills of writing, critical thinking, and information literacy within the major. This may be the first time that transfer students will be introduced to a scoring rubric, so we recognize that we will need to work with these students to acculturate them to our QEP; such acculturation will happen through workshops and seminars offered through the Writing Center and the Center for Academic Achievement.

The gateway courses might also include a diagnostic assessment that would prepare students for an intentional journey and that would provide an opportunity for intervention.

- **A Second Course within the Major** – At least one other course (or a selection from a group of courses) within the major will be designated as scholarly-enriched, teaching course content using writing, critical thinking, and information literacy as a primary method of student assessment. These courses will facilitate a developmental approach to learning in the QEP and advance the work introduced in the General Education program and the Gateway course. For example, some majors such as those in the Lutgert College of Business require Professional Writing, offered by the Department of Language and Literature, as a part of their degree program, which could be the second course in the major. Additionally, the Department of Language and Literature has proposed adding a Technical Writing course. The second course will allow students to practice the skills in the QEP and continue to advance their learning.
- **Senior Capstone/Senior Seminar** – All undergraduate majors at Florida Gulf Coast University include a senior capstone course or senior seminar course. According to the QEP Survey of Program Leaders, nearly all of those who responded stated that these courses include assignments assessing the skills of writing, critical thinking, and information literacy within the context of the creation of a scholarly product. These courses will explicitly be labeled scholarly-focused courses and will be the primary site for assessment of the QEP. Students in these courses will be expected to complete a major scholarly product, which includes the skills of writing, critical thinking, and information literacy; these courses will connect the learning that students have experienced during their four-year journey as undergraduates. Additionally, students will have the opportunity to share their scholarly product in some fashion. If the senior capstone course within a major is a course such as a clinical, then some other course can be selected to be designated scholarly-enriched.

The developmental approach that is designed into FGCU's QEP will allow programs to enrich the teaching of the skills of writing, critical thinking, and information literacy. In this way, the learning that

students experience will be more intentional, focused, and robust and coherent across their four years of study.

INSERT TIMELINE HERE

In order to coordinate the work of FGCU's QEP, we hope to create an Office of Undergraduate Scholarship (OUS). This office would be centrally responsible for advancing the mission of undergraduate scholarship at FGCU and will need resources to complete this work; in addition, the OUS would house the next Quality Enhancement Plan and have resources designated specifically for this purpose. We hope to create an Advisory Council made up of Faculty Scholars from all the Colleges and the Library; the Faculty Scholars will be centrally responsible for advancing the work of the QEP in their broad disciplinary areas. Finally, the OUS would work closely with other established offices, including the Teaching, Learning, Assessment Initiative (TLAI), the Writing Center, the Center for Academic Achievement (CAA), and the Library.

The Office of Undergraduate Scholarship will be comprised of the following individuals with these responsibilities:

- Director, Office of Undergraduate Scholarship (OUS)
 - Oversee faculty professional development, peer mentoring, student development
 - Coordinate assessment, including working across disciplines in assessing the Capstone courses
 - Advance programs, initiatives, etc. that relate to undergraduate scholarship and the QEP
 - Disseminate QEP work, including undergraduate scholarly projects
 - Responsible for completing QEP Annual Reports and disseminating information to the university community
 - Working with the Faculty Scholars, provide oversight of Undergraduate Scholarship Funds
- Faculty Scholars, Office of Undergraduate Scholarship

- Nine Faculty Scholars will be named to participate in the oversight of the OUS and the advancement of the QEP: four from the College of Arts and Sciences (one each from the natural sciences, social sciences, humanities, and arts) and one from each other college plus one from the library.
- Faculty Scholars will receive course release and a summer stipend
- Primary responsibility for making certain that assessment occurs within the majors in their disciplinary areas (in the CAS) or in their college
 - Participate in conversations about assessment across colleges
 - Work closely with Chairs and Program Leaders in their areas/college
 - Coordinate and participate in interdisciplinary capstone assessment sessions
 - Participate in university-wide capstone assessment sessions
 - Assist with the creation of assessment reports and QEP Annual Reports
 - Attend regular meetings of the OUS
- Coordination with other offices
 - Library, TLAI, CAA, Writing Center
- Facilitating Undergraduate Scholarship, including participating in oversight of Undergraduate Scholarship Funds
- Compositions Scholars
 - 8 Composition Scholars will be paired with the 8 Faculty Scholars from the academic colleges
 - Responsible for Composition II curriculum revisions and oversight
 - Participate in Composition II assessment sessions
 - Participate in Capstone assessment sessions (university-wide or interdisciplinary)
- QEP Lead Faculty in Writing, Critical Thinking, and Information Literacy
 - 1 faculty member from each QEP Area
 - Responsible for participation in and coordination of QEP tasks

- Writing – one faculty member in English will be provided a 1/1 course release
- Critical Thinking – we will hire one Philosophy faculty member who will be provided a 1/1 course release
- Information Literacy – we are requesting a new Librarian hired in this area

Part VI. Program Goals, Learning Outcomes, and Assessment Plan

The goal of Florida Gulf Coast University's Quality Enhancement Plan (QEP) is to strengthen undergraduate student learning in relation to the skills of writing, critical thinking, and information literacy within the majors, with a specific focus on demonstrating these skills in senior capstone projects. Three Program Objectives used to determine the achievement of this goal include:

- Program Objective 1: Integration of the QEP vertically (across all four years) and horizontally (in multiple General Education courses and multiple courses in the majors) as it builds towards the capstone experience;
- Program Objective 2: Identification, refinement, or creation of coursework within each major, such as gateway courses and research methods courses, that allow students to explicitly develop the skills of writing, critical thinking, and information literacy within their disciplines; and
- Program Objective 3: Development of final scholarly projects in the capstone course that provide evidence of higher levels of writing, critical thinking, and information literacy.

In addition, three Learning Goals have been developed related to the focus of the QEP:

- Learning Goal 1: Students will demonstrate proficiency in writing skills
- Learning Goal 2: Students will demonstrate proficiency in critical thinking skills
- Learning Goal 3: Students will demonstrate proficiency in information literacy skills.

Detailed Measures have been developed for the assessment of the Program Objectives and specific Learning Outcomes have been developed for the assessment of the Learning Goals.

We have developed a broad understanding of assessment for our QEP, with designated targets for our Program Objectives. The Measures that we will use to assess our Program Objectives are as follows:

- Program Objective 1: Integration of the QEP vertically (across all four years) and horizontally (in multiple General Education courses and multiple courses in the majors) as it builds towards the capstone experience

- Measure 1: Sections of Composition II will be revised to become scholarly-focused within broad disciplinary areas, as follows: 30% of sections in Year 1 (2015-2016); 40% of sections in Year 2 (2016-2017); 50% of sections in Year 3 (2017-2018)
- Measure 2: In Year 1 (2015-2016), courses designated as writing intensive courses in the General Education Program will be refined to provide explicit teaching and learning of writing, critical thinking, and information literacy and designated on syllabi as scholarly-enriched
- Measure 3: In Year 1 (2015-2016), all undergraduate programs will identify a single course or a selection of courses at the junior level that act as a gateway to the program and designate them as scholarly-focused on syllabi
- Measure 4: In Year 1 (2015-2016), all undergraduate programs will identify a Second Majors course or set of courses that will be explicitly designated on syllabi as scholarly-enriched
- Measure 5: In Year 1 (2015-2016), all undergraduate programs will identify the senior capstone course or another senior-level course as scholarly-focused on syllabi and the site of QEP assessment
- Program Objective 2: Identification, refinement, or creation of coursework within each major, such as gateway courses and research methods courses, that allow students to explicitly develop the skills of writing, critical thinking, and information literacy within their disciplines
 - Measure 1: In Year 1 (2015-2016), 50% of undergraduate programs will identify courses that currently teach the discipline-specific skills of writing, critical thinking, and information literacy and will make this component of the course explicit on their syllabi
 - Measure 2: In Year 1 (2015-2016), 30% of undergraduate programs will make refinements to courses to more explicitly teach discipline-specific writing, critical thinking, and information literacy and make this component of the course evident on their syllabi

- Measure 3: In Year 1 (2015-2016), 20% of undergraduate programs will identify revisions to courses to more explicitly teach discipline-specific writing, critical thinking, and information literacy and make this component of the course evident on their syllabi; any curricular changes requiring review will be taken through the university curriculum revision process in Year 2 (2016-2017)
- Program Objective 3: Development of final scholarly projects in the capstone course that provide evidence of higher levels of proficiency in writing, critical thinking, and information literacy
 - Measure 1: All programs will participate in university-wide assessment (across colleges), interdisciplinary assessment (across similar programs), or program assessment (within the discipline only) of the skills of writing, critical thinking, and information literacy at the senior level
 - Measure 2: Assessment data will demonstrate improvement in student scores between the Composition II course and the capstone course as follows:
 - Baseline data will be collected in Composition II and in all programs in Year 0 (2014-2015) and Year 1 (2015-2016)
 - Assessment data will be collected in the university-wide assessments, interdisciplinary assessments, and program assessments in Years 2 (2016-2017) through 5 (2019-2020) that demonstrates an increase in improved student learning (value-added learning) between Composition II and capstone courses from a difference of 1 point to a difference of 1.5 points during the course of the QEP.

The overall average score in our current Composition II assessments of writing and critical thinking using modified AAC&U rubrics is a 1.8 (on a 4 point rubric); the overall average score in our university-wide assessment of capstone projects is a 2.8 on the same rubrics—a difference of 1.0 point. The goal of our QEP is to move towards a consistent average of 2.0 in Composition II courses and 3.5 in our capstone

courses. The measures that have been developed will allow us to determine if we meet our Program Objectives.

In addition to a comprehensive Program Assessment Plan, we have developed Learning Outcomes that will allow us to assess the achievement of student learning. The Learning Goals and Outcomes for the QEP are as follows:

- Learning Goal 1: Students will demonstrate proficiency in writing skills
 - Learning Outcome 1a: student writing will demonstrate an understanding of context, audience, and purpose
 - Learning Outcome 1b: student writing will demonstrate attention to and execution of the range of conventions particular to a specific discipline, including appropriate organization, content, presentation, formatting, and stylistic choices
 - Learning Outcome 1c: student writing will use appropriate language that communicates meaning to the reader
- Learning Goal 2: Students will demonstrate proficiency in critical thinking skills
 - Learning Outcome 2a: student writing will use appropriate and relevant content that demonstrates analysis and/or synthesis skills suitable for the assignment or task
 - Learning Outcome 2b: student writing will analyze and evaluate the issues, concepts, and/or assumptions relevant to the assignment or task
- Learning Goal 3: Students will demonstrate proficiency in information literacy skills
 - Learning Outcome 3a: student writing will demonstrate the ability to identify and access credible and relevant sources to develop ideas that are appropriate for the discipline
 - Learning Outcome 3b: student writing will demonstrate the ability to communicate, organize, and synthesize information from sources to achieve a purpose.

The Learning Goals and Outcomes are directly aligned with our QEP Assessment Rubric, which has been adapted from AAC&U's Valid Assessment of Learning in Undergraduate Education (VALUE) project,

including specifically elements from the Written Communication, Critical Thinking, and Information Literacy rubrics.

The VALUE project fits with the teaching and learning philosophy at FGCU because it recognizes that “what students and faculty do through teaching and learning constitutes a most complex set of processes; that learning needs to occur across a broader set of outcomes than the current standardized tests measure; and that learning is developmental or emergent over time . . .” (Rhodes, 2010, p. 1). The VALUE rubrics were written with the intention that they would be adapted to reflect individual institutional “missions, cultures, and practices” (Rhodes, 2010, p. 2) much like we have done with the creation of our QEP Assessment Rubric from the three AAC&U rubrics. Within the rubric we have created, we have maintained the performance levels that represent “key characteristics of progressive learning as students move from early in their college experience to the completion of the baccalaureate degree” (Rhodes, 2010, p. 3).

FGCUScholars will include two primary sites of assessment of student learning in relation to the skills of writing, critical thinking, and information literacy: the Composition II course and the senior capstone course. All programs at FGCU must currently assess written communication skills and critical thinking skills and most programs include some component of assessment of information literacy. The assessment completed for the QEP will build on the work already being completed in the programs and allow us to create efficiencies in our assessment and to foster cross-disciplinary conversations about student learning in these areas. We must emphasize: we are not looking to add to the burden of assessment work already being completed in programs but rather to bring a common language to our assessment, some level of coherence across programs where relevant, and resources to the work already being completed. In some cases, programs have robust assessments that originate from their disciplinary accreditations or organizations; those programs will not need to change their assessments though they will be encouraged to participate in university-wide and/or interdisciplinary assessment sessions.

As noted, assessment of FGCU’s Quality Enhancement Plan will begin in the General Education Program and conclude in the Senior Capstone courses in all majors. Within the General Education

Program, we will build on the assessment work that we have been completing over the last several years in relation to written communication skills. Additionally, we have piloted a cross-disciplinary assessment of writing and critical thinking within the capstone courses; this work has provided us with a clear idea of how we could go about creating an assessment process that both respects individual disciplines and programs and allows for some level of cross-disciplinary engagement with assessment. Within the two primary sites of assessment, the Composition II and the capstone courses, the assessment will include direct and indirect assessments of student work and a comparison of the two. Barbara Walvoord (2004) defines these terms as follows: “*Direct* measures directly evaluate student work. Examples of direct measures include exams, papers, projects, computer programs, interaction with a client, or musical performances. *Indirect* measures include asking students or alumni how well they thought they learned, tracking their graduate school or job placement rates, and so on” (p. 3). In FGCU’s QEP, we will complete a direct assessment of capstone projects using the QEP rubric and ask students to assess their own projects using the same rubrics. This process will begin in the Composition II course to familiarize students with the learning outcomes of the QEP and to provide them with a vision of their expected level of attainment when they graduate.

For the capstone projects, we have developed three different types of learning outcomes scoring sessions that program faculty can choose to participate in: university-wide, interdisciplinary, and disciplinary. For the university-wide assessment sessions, we will gather 5-7 diverse programs from different colleges to come together to score student work from these programs. We will conduct a total of 11 university-wide assessment sessions during the five years of the program giving every undergraduate program the opportunity to participate at least once. For the interdisciplinary assessment sessions we will gather 3-5 related programs from the same college (programs in the social sciences, for instance, or in engineering) to come together to score student work from these programs. Within these scoring sessions the QEP rubric might be adapted to fit the conceptualization of learning in those disciplines. We will conduct 15 of these sessions over the five years of the QEP. Finally, for programs with disciplinary-specific assessment needs that come from professional accrediting bodies, we will have disciplinary

assessment sessions within those undergraduate programs; these programs will also be encouraged to participate in a university-wide or interdisciplinary assessment session.

The assessment that will be conducted in the Composition II course and in the university-wide sessions and the interdisciplinary sessions will be an external assessment of student work where we will extrapolate written artifacts from the courses and score these artifacts using the QEP Assessment Rubric. The scorers for the scoring session will not include the instructor for the course, though we will always include someone from the discipline to guide the scoring session for the university-wide and the interdisciplinary assessment sessions. In addition, programs will be encouraged to build ongoing, internal assessment into their programs by having faculty use the QEP Assessment Rubric in the gateway course and the second major course. The scores for these assignments, which will have been given by the faculty member teaching the course, will be collected from Canvas, our learning management platform.

Specific assessment points and processes include:

- **Composition II**—we will continue to refine the work that has occurred in the assessment of written communication skills at the end of the Composition I and II sequence. The assessment will be expanded so that it becomes an assessment of the scholarly practices of our students with a focus on writing, critical thinking, and information literacy. This assessment will include faculty within the discipline but external to the course where we collect student artifacts and will continue to provide us with an assessment of student learning within the General Education program. Students will also complete an indirect assessment of their learning so that we can look at the correlation between the direct assessment completed by faculty and the student perception of their learning. The end result of each scoring session held at the end of the academic year will be an Assessment Report with data and samples of student work with a range of scores; this information will be shared with the Composition faculty so that they can make changes to the curriculum and instruction for the purposes of improved student learning. It will also be shared with the QEP Faculty Scholars for a wider discussion of student learning.

- **Gateway Course**—where possible, a diagnostic assessment will be completed by faculty teaching the Gateway courses in order to provide students with clear indications of areas where they need improvement. This will especially be important for transfer students who will just be introduced to the scholarly journey that is at the heart of the QEP. Resources will be provided to these students to improve any areas of weakness; these resources will be developed and made available through the Writing Center and the Center for Academic Achievement. The Gateway Course will include a major scholarly project, similar to the project that students will be asked to complete in the capstone course, which will allow faculty to introduce students to the rubric and expectations of the scholarly work of undergraduate students. These assignments will be assessed by the faculty teaching the courses, preferably in Canvas; the scores from these assignments will be collected electronically and used by the program faculty in their program reviews.
- **A Second course in the Major**—included in the QEP are three points within the upper level coursework of every major where students will be exposed to teaching and learning centered on the skills of writing, critical thinking, and information literacy (gateway course, second major course, and capstone). The second major course (which could be one particular course or it could be a course from a selection of courses) will include the teaching of content matter with a major assignment that includes writing, critical thinking, and information literacy. The assignment completed in this course that is connected to these skills and the scholarship in the discipline will be scored by the faculty member teaching the course, preferably in Canvas. Again, these scores will be collected and become part of the program reviews.
- **Senior Capstone/Senior Seminar**—every undergraduate major at FGCU includes a senior capstone course. These courses include, or will be refined to include, a major scholarly project that students will complete. These projects will become the primary focus on the learning outcomes assessment of the QEP. The capstone assessment will be similar to the Composition II assessment, with faculty external to the course scoring the student work. In addition, we will complete an

indirect assessment of student learning, asking students to assess their own work using the same rubric as that used for the direct assessment.

The end result of the university-wide and the interdisciplinary assessments will be an Assessment Report with data and samples of student work from a range of scores. In the report, we will correlate the results of the Composition II assessment with the capstone assessment in order to evaluate the value-added learning that has occurred between the first year and the senior year. The Assessment Report will be shared with the Faculty Scholars in the Office of Undergraduate Scholarship and with the program leaders for the programs that participated in the assessment in order to discuss how the programs will improve their curriculum and instruction for the purposes of improved student learning. For the disciplinary-based assessments, the program will also complete an Assessment Report with data, sample student work, and correlations with the Composition II assessments; this report will be shared with the program faculty for the purposes of changing the curriculum and instruction to improve student learning.

Using the modified AAC&U rubric, FGCU will track student scores in the Composition II course and compare those scores to those achieved in the capstone courses. The QEP rubric has retained the four performance levels: Benchmark 1, Milestone 2, Milestone 3, and Capstone 4. As Rhodes (2010) notes: “A benchmark performance reflects the learning skills and abilities of students our faculty members found among their beginning college students” (p. 3). Our aspirational goal is for students to score near Milestone 2 at the end of the Composition II course and then to progress beyond Milestone 3 and towards Capstone 4 in the capstone courses. According to Rhodes (2011/2012), the Capstone 4 score is “where rubric developers hoped their students would be to attain a baccalaureate degree” (p. 4). Again, the Capstone 4 score is aspirational.

The process for assessment of student learning within the QEP will build ownership of the learning goals within and across programs with the ultimate purpose of improving student learning of writing, critical thinking, and information literacy skills. As Barbara Walvoord (2004) notes, “Assessment of student learning can be defined as *the systematic collection of information about student learning,*

using the time, knowledge, expertise, and resources available, in order to inform decisions about how to improve student learning” (p. 2). The ultimate goal of the assessment plan is to improve student learning in the skills of writing, critical thinking, and information literacy within the disciplines by tracking our progress as the assessments unfold and making changes to our curriculum as we learn from this process.

VII. Budget

VIII. Conclusion

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