

**Florida Gulf Coast University
Second Monitoring Report
September 2007**

1. Comprehensive Standard 3.5.1

The institution identifies college-level competencies within the general education core and provides evidence that graduates have attained those competencies.

Recommendation 6 (Undergraduate Programs)

While the institution established goals for student performance for each of the general education competencies, the institution did not provide sufficient evidence to demonstrate that assessment results are used to improve student attainment of the competencies.

The institution should provide evidence demonstrating that assessment results are used to improve graduates' attainment of the college-level competencies within the general education core.

2. History of the Recommendation and Institutional Response

Recommendation 6 (Visiting Committee Report)

The Committee recommends that the institution provides evidence that graduates have attained college-level competencies within the general education core.

Excerpt from Visiting Committee Report (May 10, 2005)

Comment: The institution has identified college-level competencies within its general education core; and, in fall 2004, a faculty survey was undertaken to determine which courses in the General Education Program address the ten general education student learning goals the University has established. Subsequently, the General Education Council identified four learning competencies that underlie and are key to achieving the University's undergraduate student learning outcomes. These competencies include written communication, oral communication, quantitative reasoning, and critical thinking/problem solving. In March 2005, the Council more fully elucidated the core competencies in these four areas by enumerating a series of specific measurable objectives within the four competencies.

The General Education Council has initiated a process to determine where the Student Learning Goals for the General Education Program currently occur in the curriculum. A survey instrument is being developed to provide data for the Quality Enhancement Plan (QEP) and the General Education Council that will be useful in the process of assessment of student learning in general education as well as baseline for the QEP. In addition, the instrument will be used to gather data that reveal the extent to which the four general education competencies it has established are addressed throughout the undergraduate curriculum. A timeline for implementation of the survey has been established that begins on April 1, 2005 with

the development of the instrument and concludes on May 2, 2005 with the beginning of data analysis.

The General Education Council is contracting with an external provider to select and implement a comprehensive student assessment instrument. It is consulting with ACT to review the four competencies to determine where testing instruments might be applicable. The Council has determined that three of the four competencies can be assessed with the use of ACT testing instruments. For the fourth competency, oral communication, the Council is considering methods for creating a rubric that all faculty can employ in courses which focus on this competency. In order to refine this rubric, the Committee has identified a number of outside organizations that are willing to share rubrics and other methods for assessing oral communication skills. The Council is also identifying other Florida institutions of higher learning that have standardized their method of assessing oral communication and is working with faculty across the University to gather current models for assessing oral communication.

While the Committee notes progress in addressing concerns of the Off-Site review, its review indicates that the institution has not provided evidence that graduates have attained those competencies that it has identified for general education. The Council has established a schedule of activities and deliverables relative to the implementation of the assessment of general education, and the schedule concludes with the analysis of assessment data in December 2006. The Committee finds that this timetable extends too far into the future with respect to the reaffirmation process and should be shortened to produce the analysis of assessment data and evidence of program improvement no later than September 2006.

Recommendation 6: The Committee recommends that the institution provides evidence that graduates have attained college-level competencies within the general education core.

Institutional Response to the Visiting Committee Report (August 2005)

As noted above in the report of the Visiting Committee, FGCU adopted four General Education competencies (quantitative reasoning, oral communication, written communication, and critical thinking), which are the focus of the University's assessment of General Education. The assessment activities described below are designed to generate evidence of program improvement and evidence of attainment of the competencies by students.

Faculty Survey

To provide a context for the assessment activities, the university administered in April, 2005, a faculty survey to determine the extent to which the four General Education competencies are addressed throughout the undergraduate curriculum. The survey established baseline data to provide information regarding where in the curriculum, and at what depth and breadth, the competencies are addressed. As we assess and revise General Education requirements, future administrations of the survey should reveal changes that correlate with curricular revision. In addition, the survey offered faculty an opportunity to express their concerns regarding the General Education Program. Among the issues raised were (a) the importance of teaching higher level skills in the General Education Program; (b) the need to reference the

competencies in all classes and to communicate to students expectations with respect to the competencies; (c) the importance of using best practices in assisting students to attain the competencies; and (d) the need to ensure that distance learning students are afforded the same opportunity to master the competencies as traditional students. These issues will be addressed in a long-term plan for enhancement of the General Education Program.

Assessment: External Test

In order to obtain objective data regarding the extent to which FGCU students have attained the General Education competencies, the General Education Council identified the ACT Collegiate Assessment of Academic Proficiency (CAAP) test for use in evaluating the university's General Education Program. The Council mapped three of the four competencies to three CAAP modules: writing skills, mathematics, and critical thinking. The CAAP test will be administered in September 2005 to a minimum of 200 students in sections of the required senior capstone course, IDS 3920: University Colloquium. The test, which is nationally normed, will enable the university to set benchmarks governing expectations for attainment of the competencies by students.

Administering the CAAP test in the Colloquium will provide data on the success of both native and transfer students. During the fall 2005 semester, the test results will be analyzed by the General Education Council. During the spring 2006 semester, benchmarks will be identified, and recommendations for program enhancements will be developed, reviewed, and approved for implementation in summer/fall 2006. Initially, particular attention will be paid to those General Education courses required of all students, i.e., Composition I and II, and Statistics. In future years, the CAAP test will be linked with the ACT college entrance exam in a pre- and post-test process to evaluate FGCU's success in educating students with respect to two competencies: quantitative reasoning and written communication.

As a member of the State University System of Florida, FGCU is participating in the state's recently approved Academic Learning Compacts (ALC) program, which is designed to ensure that graduates of baccalaureate programs attain competencies in their major in addition to mastering general education competencies, namely communication and critical thinking. The CAAP test will be used for the ALC program as well, thus enhancing FGCU's commitment to assessing student attainment of the General Education competencies.

Assessment: Internal Test, Oral Communication

In the absence of appropriate external tests for oral communication, the General Education Council developed a rubric to be used internally to measure attainment of oral communication skills by students. The rubric was developed after reviewing similar instruments and processes at other institutions. A panel of FGCU faculty will observe oral presentations in classes to determine program strengths and weaknesses in accordance with the competencies identified in the rubric.

The rubric was piloted in July 2005 in the College of Business capstone course, GEB 4890: Business Strategy. Four members of the General Education Council observed student presentations, used the rubric to assess the level of oral communication, and established initial inter-rater reliability. Subsequently the reviewers analyzed the information in order to revise the rubric. The reviewers rated presentations with great

conformity and, overall, were very pleased with the rubric's effectiveness. Consequently only minor modifications in the rubric were necessary; they include adding a short set of directions at the top of the rubric, conflating two overlapping indicators into one, and providing a space for optional notes.

In early fall 2005, to assess competency in oral communication, the university will employ the rubric in approximately five sections of the required senior capstone course, IDS 3920: University Colloquium. Administering the rubric in the Colloquium will provide data on the success of both native and transfer students. During late fall 2005 semester, the test results will be analyzed by the General Education Council. During the spring 2006 semester, benchmarks will be identified, and recommendations for General Education Program enhancements will be developed, reviewed, and approved for implementation in summer/fall 2006. Because of the importance the university's academic programs place on oral communication, requiring a speech course in the General Education Program is already being discussed.

Conclusion

The Visiting Committee recommendation with respect to Comprehensive Standard 3.5.1 will be met through: (a) analysis of the data provided by the above-mentioned assessment instruments, (b) development of benchmarks that enable the university to determine the extent to which students have attained the competencies, and (c) implementation by fall 2006 of program enhancements to ensure that students attain the competencies at benchmark levels.

The assessment activities already underway will be a lead-in to a long-term plan for enhancement of learning in FGCU's General Education Program. In September 2005, the General Education Council will inaugurate a university-wide conversation on the effectiveness of the General Education Program with a presentation to the Faculty Senate. The conversation will take place over the 2005-06 academic year and will involve faculty, advisors, students, and administrators. Addressing faculty concerns, including those expressed in the survey described above, will be an important consideration. In broad outline, the conversation will address the purpose and mission of the program; examine the existing curriculum in detail; consider recommendations for curricular and other modifications consistent with best practices; and, lead to the establishment of a long-term, on-going assessment program for General Education designed to monitor and enhance student learning.

Excerpt from Notification Letter from the President of the Commission dated January 6, 2006

Although the institution has developed a plan for assessing general education competencies, the plan has not been fully implemented. Consequently, the institution should provide evidence that its plan to assess the college-level competencies has been fully implemented. The report should include evidence of the assessment of the competencies as well as evidence that the results of the evaluations have been used to improve the graduates' attainment of those competencies.

Institutional Response to Commission Request (First Monitoring Report, September 2006)

The institution described how it implemented actions proposed in its August 5, 2005 response to the visiting committee report. Specifically the first monitoring report noted the implementation of a cyclical plan for assessing student mastery of general education competencies on an annual basis. This effort was led by the university's General Education Council, a Faculty Senate committee that also includes representatives of the administration and student government. This plan consists of the following: (a) setting goals for student performance; (b) assessment of student performance; (c) analysis of assessment data to determine how well students are meeting goals; and (d) implementing any needed curricular changes that assist students to meet the performance goals. To this end, the ACT Collegiate Assessment of Academic Proficiency (CAAP) test and the FGCU oral communication rubric will be used annually in the upper division course, IDS 3920: University Colloquium, a graduation requirement for all students.

(a) setting goals for student performance

The Council mapped three of the four competencies to three CAAP modules: writing skills, mathematics, and critical thinking. A fourth competency in oral communication was assessed using an internally developed scoring rubric.

(b) assessment of student performance

The CAAP test was administered in fall 2005 to approximately 185 students in nine sections of the required senior capstone course, IDS 3920: the University Colloquium. Test results indicated that FGCU students scored at or near the national norm for all students taking these tests. The Oral Communication assessment was administered to students in six sections of the University Colloquium. Students' average score was 11.4 out of a possible 20 or 57%. This was found to be weak.

(c) analysis of assessment data to determine how well students are meeting goals

Negative factors associated with FGCU student performance on CAAP and the internally developed Oral Communication assessment were determined to include the college profile of incoming students and lack of motivation with regard to test performance since there were no incentives provided to stimulate performance or student attention. Additionally, with regard to CAAP, students were required to take the entire three-hour test at one time thus introducing test fatigue as a factor as well. Based upon these results a decision was made to set benchmarks on these three tests at the national mean and to set the benchmark for average student performance on the Oral Communication assessment at 14 or 70%.

(d) implementing any needed curricular changes that assist students to meet the performance goals

As a result of the initial assessments detailed above, a number of curricular changes were scheduled to be introduced in the fall of 2006. Focusing on the required FGCU mathematics curriculum, the mathematics faculty have reviewed the final examinations of students who took General Education mathematics courses in

spring 2006 to identify specific areas where students did not perform well. These areas were the ability to read and interpret real-world problems, and to master basic mathematical operations, which link to the following Quantitative Reasoning Competency skills: (a) solve mathematical problems, (b) analyze and interpret quantitative data, and (c) make valid inferences from data. The mathematics faculty have agreed to emphasize these skill areas in General Education mathematics courses beginning in fall 2006.

The writing program faculty beginning in fall 2006 will give additional emphasis in the required General Education English composition courses (ENC 1101 and ENC 1102) to the following two Written Communication Competency skills: (a) employ the conventions of standard written English (which addresses usage/mechanics), and (b) organize and relate ideas and information with coherence, clarity, and unity (which addresses rhetorical skills). The faculty have included these emphases in the syllabi for the two English composition courses.

The General Education Council selected the General Education course, HUM 2510: Understanding the Visual and Performing Arts, which is required of all students taking General Education, as the focus for enhancing students' critical thinking skills. The course requires two successive critical analysis essays, the first involving the analysis of a work from the visual arts, and the second requiring an analysis of a piece from the performing arts. The faculty teaching the course have agreed to emphasize the use of critical thinking skills in the analysis required by the essays, and have revised the essay grading rubric to reinforce this focus. In the past, the essays in this course were marked holistically. Beginning in fall 2006, faculty will specifically evaluate and provide feedback on the students' mastery of four skills embraced by the General Education Critical Thinking Competency: defining key concepts; organizing and synthesizing information; identifying assumptions and implications; and, drawing reasoned inferences. In addition, the faculty will ensure that there is pedagogical linkage between the two essays. In the past, the first essay often was not graded before the second one was due; henceforth students will be provided with feedback on the first essay in time for them to demonstrate improvement on the second essay. Finally, the faculty have included information regarding the importance of critical analysis and thinking on the course syllabus.

With regard to Oral Communication, the Council identified the most fundamental skills within the General Education Oral Communication Competency for emphasis in the University Colloquium beginning in fall 2006. Faculty will provide extra focus on the following skills: (a) select a topic and develop it for a specific audience and purpose, with respect to diverse perspectives, and (b) organize and deliver a clear and effective presentation, with command of verbal and nonverbal communication. Several other actions will be taken to improve students' oral communication skills. First, to emphasize to students the importance of improving their oral communication skills, the rubric will be shared with them in advance. In addition, an oral presentation, which hitherto has been optional in ENC 1102: Composition II, will now be required. Students, who normally take this course in their sophomore year (at least a year before taking the Colloquium), will thus acquire more experience and get more feedback regarding their performance that will enable them to improve their speech skills in advance of assessment in the Colloquium. Finally, a course that includes public speaking, SPC 1600: Fundamentals of Communication, has been added as an elective to the General Education curriculum. This course will provide

General Education students with another option for honing their oral communication skills.

Finally, the assessment of results also led to several other actions described in the first monitoring report. Among these were a university-wide conversation on the meaning of general education within FGCU's curriculum, the development of a strategic plan for general education, use of program review, and the further implementation of Academic Learning Compacts or ALCs. ALCs are a State of Florida requirement that universities must certify each baccalaureate recipient as having completed a program with clearly articulated core student learning expectation and corresponding robust assessments in content/discipline knowledge, communication and critical thinking skills.

3. Request of the Commission Related to CS 3.5.1 (Undergraduate Programs), Recommendation 6

Excerpt from Notification Letter from the President of the Commission dated January 9, 2007

While the institution established goals for student performance for each of the general education competencies, the institution did not provide sufficient evidence to demonstrate that assessment results are used to improve student attainment of the competencies.

The institution should provide evidence demonstrating that assessment results are used to improve graduates' attainment of the college-level competencies within the general education core.

4. Institutional Response to Commission Request of January 9, 2007 (Second Monitoring Report)

FGCU has now fully implemented its cyclical plan for assessing student mastery of the General Education competencies on an annual basis. Central to this implementation has been the use of results from these assessments to foster improvements in student attainment of the competencies. Led by the University's General Education Council, a Faculty Senate committee that also includes representatives of the administration and student government, this effort has included, the following: (a) assessments of student learning through scores on the CAAP test and on the internally developed Oral Communication Rubric [1]; (b) analysis of the results of these assessments [2] leading to curricular change to

improve student attainment of the competencies; (c) changes to the curriculum to foster student attainment of the general education competencies; and (d) further student testing indicating student learning improvement on 3 of the 4 competencies. The rest of this report is dedicated to the documentation of the process leading to these conclusions.

CAAP Test Spring 2007

In the spring of 2007, FGCU once again conducted CAAP testing of students. Based on the experiences of the initial round of testing in fall 2005 that were again confirmed in fall 2006, a number of changes were made to the testing process to gain a more accurate view of student achievement. These two initial rounds of testing produced strong evidence of testing “noise” that obscured true student performance: including lack of student motivation, test fatigue, and temporal distance from exposure to the material. To mitigate these factors, testing was brought forward to the point of contact in the general education curriculum where students were exposed to the curricular changes described above. Students were only required to take the test module for a particular skill, e.g., quantitative reasoning associated with the class subject matter, rather than all three test modules, i.e., quantitative reasoning, written communication, and critical thinking. This cut the overall time of the testing from three hours to forty-five minutes thus reducing the possibility of test fatigue playing a major role in testing outcomes.

In addition, testing was embedded in the course to stimulate motivation - though the form of incentive varied widely from class to class since faculty were given the freedom to decide what incentives they might or might not offer to students participating in the CAAP testing. For example, in one section of College Algebra, students were allowed to substitute their score on the CAAP quantitative reasoning

test for either their midterm or final exam score. In one section of Statistics, the CAAP test was counted as a quiz. Instructors in the Colloquium class IDS 3920 gave students who took the CAAP critical thinking test module extra credit for class participation. In some cases, e.g., in some sections of English Composition, faculty chose not to provide incentives. The testing occurred during regular class meetings throughout the latter half of the spring semester.

A. Attainment of Quantitative Reasoning Competency

As described above, analysis in spring 2006 of CAAP results from testing conducted in fall of 2005 revealed greater curricular emphasis was needed in terms of sharpening the following skills: *(a) solving mathematical problems, (b) analyzing and interpreting quantitative data, and (c) making valid inferences from data.*

(a) solve mathematical problems

Mathematics faculty have emphasized problem solving in the following general education mathematics classes: MAC1105 College Algebra, MAC1147 Pre-Calculus, and MAT 2311 Calculus I. Depending upon the class and the instructor, one or more of the following strategies have been employed to facilitate and enhance student mastery of the concepts behind problem solving proficiency:

Class notes are posted in advance of a lecture/lab so students can bring problems to class to be worked through together; students are presented with homework problems using MathZone a software tutoring program that provides students with step-by-step problem-solving tips, multiple similar problems to solve, and online grading and feedback. Students utilize a Classroom Performance System in the lecture that involves a personal response pad that allows them to answer questions

during class through means of a “clicker”. This interactive system allows students to select answers, then transmits them to the instructor, and tallies them. The instructor then knows what percent of students in the class understand the concept and what percentage do not understand. Lab sessions involve board work, group exercises and other forms of interaction. Students also are encouraged to seek supplemental instruction, where small group and individual attention is provided to improve problem-solving skills. Indeed the number of students seeking such help continues to grow. The average grade point for students in this class who sought assistance was about .4 greater than for students who did not seek support [3].

Included here is a sample syllabus [4] from MAC 1105 College Algebra that describes what was covered in class, lecture notes [5] demonstrating how materials are covered in class, screen shots of the MathZone [6] product showing its student-focused problem-solving features, MathZone exercises [7] and other examples of student work [8] [9] used to provide feedback and facilitate the learning process. The classroom instruction in conjunction with the student assignments demonstrates a continuum whereby students become more proficient in problem solving.

(b) analyze and interpret quantitative data

Statistics 2023 is a required course of all FGCU students. This course focuses additional attention on the ability of a student to analyze and interpret data to solve problems. Students are first taught how to summarize and describe data. This is done through lecture and then by working through examples in class in small groups. Students use MathZone similarly to the way it is employed in MAC1105 (see above). Students are also encouraged to seek additional help through supplemental instruction where small group and individual tutorial assistance leads to student

success. The average grade point for students in this class who sought assistance was about .75 greater than for students who did not seek support [10]

Provided here is documentation of the nature of instruction used to foster these skills, including a syllabus [11], lecture notes [12], MathZone homework assignments [13], examples of student work [14], and exams [15]. These materials show how students develop an appreciation of statistics and its application in the analysis and interpretation of data.

(c) make valid inferences from data

Once again, STA 2023 Statistics, a required class for all FGCU students, was chosen to emphasize attainment of this skill. Students were presented with a series of analyses chosen to provide the understanding of the process used to make valid inferences from data. Among these were: methods for testing the differences in variance between samples, testing differences between means, and hypothesis testing. Real-world problems are used extensively to facilitate mastery of the concepts. MathZone is used to provide students with multiple examples of the concepts and supplemental instruction provides small-group and individual attention as needed.

Included here are examples of the class sessions [16] dedicated to this purpose, assignments given to students [17] to master the underlying concepts, and the results of student work [14]. Again, the documentation provided clearly shows the linkages in the learning process.

These examples illustrate how the first-year CAAP scores identified weaknesses in quantitative reasoning that led to curricular change focused on addressing these weaknesses. They demonstrate the actual learning improvements made as a result of the assessment. Did these curricular enhancements lead to improved learning as demonstrated through CAAP testing? Results of testing that occurred in spring 2007 affirm that more students exceeded the national benchmark (see Table 1 below, page 13).

- **Quantitative Reasoning**

The quantitative reasoning component of CAAP tests mathematics including problems in basic and college algebra. Nine sections of MAC 1105, MAC 1147, MAC 2311, and STA 2023 totaling 238 students were tested. Overall results showed statistically significant improvement. From a combined mean score of 57.2 for the cohort tested in late 2005, scores for the cohort tested in spring 2007 rose to 59.6 (see Table 3, page 19). This average exceeded the goal of equaling the national mean (58) and was statistically significantly higher than the national mean. This represents a significant improvement over the initial average scores achieved in fall 2005. Subscores showed improvement with basic algebra and college algebra components both surpassing the national mean.

Table 1.

Mean CAAP scores for FGCU and national norms, spring 2007 administration

CAAP score	FGCU sample		National norm		Effect*
	Mean	N (SD)	Mean	N (SD)	
Mathematics (t=8.498, df=237, p<0.001)	59.6	238 (2.6)	58.1	28738 (4.0)	0.38
Basic Algebra	16.5	238 (2.5)	15.3	28738 (2.5)	0.48
College Algebra	15.9	238 (2.1)	15.1	28738 (2.7)	0.30
Critical Thinking	62.9	184 (4.8)	62.7	12097 (5.4)	0.04
Writing (t= -7.834, df=208, p<0.001)	62.0	209 (4.0)	64.2	29610 (4.8)	-0.46
Usage	16.3	209 (2.0)	17.1	29610 (2.3)	-0.35
Rhetorical	15.8	209 (2.5)	17.1	29610 (2.5)	-0.52

NOTE: Single sample t-tests were run comparing sample scores to the national norm for Writing, Mathematics, and Critical Thinking; one-tailed significance levels are indicated above where p is less than .001.

Our conclusion is that there is a clear linkage between the weakness determined through CAAP testing, changes to the curriculum to address the observed weakness, and subsequent improvement seen in the recent round of testing.

Plan for Further Improvement

Based on the improvement among students tested this year, the College of Arts and Sciences has recommended greater use of small-group sessions that incorporate lecture and lab to stimulate further student/faculty interaction. At a cost of \$111K, including about \$30K for instructional technology, the university agreed to renovate space in the former library as a SCALE-UP laboratory specifically for math and statistics courses following the highly successful North Carolina State University model <http://www.ncsu.edu/PER/scaleup.html>. Beginning with the fall 2008 semester, students are now sitting at small-group tables and have lab components of their course

integrated with the lecture so that group-problem solving techniques can be expanded to more students [18].

B. Attainment of the Critical Thinking Competency

Perhaps the most complex of the four FGCU-defined general education competencies, critical thinking, requires integration of skills associated with quantitative reasoning, written communication and oral communication.

Contemporary thought on general education suggests that this skill cannot easily be acquired only in the lower division general education curriculum, but should occur throughout the curriculum. FGCU has once again taken the approach of results driven actions to link the products of student assessment with curricular changes leading to improvement of student attainment of this general education competency.

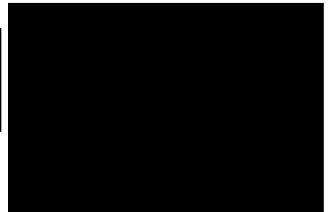
In its first round of CAAP testing, FGCU students showed weakness with regard to analysis of elements of an argument, evaluation of an argument, and extension of an argument. As a result, FGCU faculty in the humanities agreed to focus additional attention on the following: defining key concepts, organizing and synthesizing information, identifying assumptions and implications, and drawing reasoned inferences. This has been accomplished through the introduction of linked essays in the required HUM 2510 course: Understanding the Visual and Performing Arts [19]. Here provided are examples of the materials employed in the class [20] to cultivate critical thinking and the products of several essays demonstrating student mastery [21] of the concepts.

Given, however, that critical thinking is dependent upon facility with quantitative reasoning, written communication, and oral communication, it was determined that attention to the integration and synthesizing of these skills in the University

Colloquium class IDS 3920 was appropriate and meaningful [22]. Consequently a module on critical thinking was developed in spring 2007 to complement the work done in HUM 2510 [23]. This module was piloted in 10 sections of the required University Colloquium enrolling 184 students. Students in these sections were given assignments that demonstrated their understanding of and use of critical thinking skills [24]. The examples of student work [25] included in this report are instructive because they amply illustrate the linkage among the four FGCU student competencies. These same students then took the critical thinking module of the CAAP test. Those who took the test received extra credit for their participation.

CAAP Test Spring 2007

Click box to play media file.
For example of student work (ref 25
above) ----->



- Critical Thinking

Test results showed that students who had been enrolled in the classes with the critical thinking module scored higher than the initial group tested in fall 2005. The initial 2005 cohort tested returned an average critical thinking score of 60.6, below the national mean of 62.7. The students tested in spring 2007 however slightly exceeded the national mean by 0.2 with an average score of 62.9 (see Table 1, page 13). Our conclusion is that there is a clear linkage between the weakness determined through CAAP testing, changes to the curriculum to address the observed weakness, and subsequent improvement seen in the recent round of testing.

Plan for Further Improvement

The addition of the recently developed Critical Thinking Module to University Colloquium IDS 3920 has been very effective in improving scores on the critical thinking portion of the CAAP test and facilitating attainment of the national mean benchmark. Using both HUM 2510 and IDS 3920, required courses, for instilling

critical thinking skills ensures student exposure at key points in the general education experience (i.e., beginning and capstone). It is the General Education Council's intention to introduce the critical thinking module to all University Colloquium sections in the coming year.

C. Attainment of the Oral Communication Competency

The results of the testing of oral communication skills in fall 2005 using the internally developed oral communication rubric indicated greater emphasis was needed on skills involving topic selection and development, organization and delivery, and verbal and non-verbal communication. Faculty teaching English Composition 1102, a required course, agreed to include an oral presentation in an effort to ensure development of oral communication skills in the general education curriculum.

Similarly, SPC 1600: Fundamentals of Communication, was also added as a general education *elective*.

Faculty teaching ENC 1102 introduced a number of assignments [26] to prepare students with these skills. In most cases, students were assigned to a group and with their colleagues given a topic to develop with reference to organization, content, presentation and engagement after class review of what constitutes an effective oral presentation and effective oral communication skills. This usually involved a review of the Oral Communication Rubric [1] and discussion of its constituent elements. In some cases, students were given writing assignments in the form of notebook entries [27] or discrete essays [28] to supplement their class discussions of oral presentations. Class presentations were often evaluated by other students [29] and the faculty member [30] who provided feedback to the student presenters. The class presentations counted toward the grades received in the class and provided the learning experience students required before being assessed with the oral rubric.

Subsequently, nine sections of ENC 1102 were selected to test students using FGCU’s Oral Communication Rubric [1]. Sixty-six students were scored on the rubric during spring 2007 by pairs of observer/scorers from the FGCU General Education Council and the Communication and Philosophy Department. Many of these individuals had participated in the development of the rubric itself, or had participated in scoring during previous administrations of the rubric. Several of these observers also participated in the study reported in the First Monitoring Report that showed the instrument had a very high inter-rater reliability (Cronbach’s alpha over .75) [31]. Results of the current round of oral presentation assessments showed that the average score improved by 11% from 11.4 to 12.7 (i.e., within the scoring rubric’s range of “meets expectations”). 12.7 equals 64% of the 70% proficiency target (14 of 20 total) previously set by the General Education Council in 2005. Table 2 (below) compares the average scores included in the First Monitoring Report with those obtained in the current round of testing. The overall mean obtained in the current 2007 round of testing was significantly higher ($p < .05$) than that obtained in the initial 2005 round and again shows improvement linked to curricular change as a result of assessment. The Section A (topic development) scores on the scoring rubric (see Table 2, below) were also significantly higher than in the first-round of testing.

Table 2.

Mean oral communication rubric scores, fall 2005 and spring 2007 administrations

Oral communication score	2005 FGCU sample		2007 FGCU sample		Effect*
	Mean	N (SD)	Mean	N (SD)	
Total score ($t=2.13$, $df=363$, $p<0.017$)	11.36	33 (3.41)	12.67	66 (2.41)	0.48
Section A score (topic development)	5.74	33 (1.87)	6.71	66 (1.38)	0.63
Section B score (clear & effective delivery)	5.63	33 (1.73)	5.95	66 (1.29)	0.22

NOTE: Significance levels for independent samples t-tests are one-tailed.

Plan for Further Improvement

While the results obtained (see above) show significant improvement over those included in the First Monitoring Report, we would like to see the average score reach the 70% threshold originally set by the General Education Council. Current analysis of results obtained this year suggests the key to that is further improvement in the area of clear and effective delivery. Progress occurred there but not of the same magnitude as that evinced for topic development. Consequently, in the coming year additional work to enhance this skill will be included in the course curriculum.

D. Attainment of Written Communication Competency

Analysis of the results of the first round of CAAP testing in fall 2005 noted weakness with regard to use of conventions of standard written English and the ability to organize and relate ideas and information with coherence, clarity, and unity. As a result, required general education English Composition classes (ENC 1101 and 1102) were targeted to place greater emphasis on these skills. Faculty within the English department have introduced a number of changes to these classes to improve student attainment of this competency. Among these are greater emphasis on the use of a writing rubric [32], peer evaluation, development of a writing portfolio [33], and revision of multiple drafts. Students are encouraged to make use of the university writing center for additional assistance [34]. Indeed in the last few years alone, the number of students making use of the writing center's services has increased by an average of 36%. Students who have made use of the writing center have earned grade points that are on average .3 above those of students in the same course who do not make use of the center [35].

Documentation describing how these changes have been implemented includes class methods, student exercises and assignments [36] used to reinforce classroom

instruction, and examples of student performance [37] [38] related to these exercises and assignments. These documents again show the linkages in the learning process demonstrating the use of assessment to foster curricular change leading to improved student learning.

CAAP Test Spring 2007

- Written Communication

Twelve sections of English Composition II totaling 209 students were administered the written communication module of the CAAP test. Unfortunately, test results showed that students did not score higher than the scores reported in our First-Monitoring Report.

Table 3.

Mean CAAP scores for FGCU samples, fall 2005 and spring 2007 administrations

CAAP score	2005 FGCU sample		2007 FGCU sample		Effect
	Mean	N (SD)	Mean	N (SD)	
Writing	63.0	185 (4.7)	62.0	209 (4.0)	-0.23
Usage	16.6	185 (2.3)	16.3	209 (2.0)	-0.14
Rhetorical	16.6	185 (2.5)	15.8	209 (2.5)	-0.32
Mathematics (t=-8.0, df=342, p<0.001)	57.2	184 (3.4)	59.6	238 (2.6)	0.81
Basic Algebra	15.1	184 (2.5)	16.5	238 (2.5)	0.56
College Algebra	14.0	184 (2.2)	15.9	238 (2.1)	0.89
Critical Thinking (t=-4.66, df=369, p<0.001)	60.6	185 (5.2)	62.9	184 (4.8)	0.46

NOTE: Independent samples t-tests were run for the Writing, Mathematics, and Critical Thinking test scores; one-tailed significance levels are indicated above where less than .001.

Our analysis of the situation suggests that the curricular changes introduced last fall, emphasizing further attention upon mechanics and rhetorical skills is not the whole

key to student improvement. The CAAP modules chosen test only certain elements of written communication and did not include any actual student written work. Moreover, only a few English Composition faculty chose to embed the CAAP test in their course as an assessment tool, thus lack of student motivation may also have affected the results.

Plan for Further Improvement

Faculty believe there is ample evidence of the iterative process of writing and development in the materials included here as examples of student learning and improvement. Unfortunately, these processes are not captured in a multiple choice answer format such as that found on the CAAP modules employed by FGCU. Consequently, FGCU will include a writing sample as part of its future testing of students. In addition, faculty will embed the writing sample as part of the course to ensure that students are adequately motivated to succeed [39]. College of Arts and Sciences faculty have been developing such an assessment for the last three years and believe it would do an effective job of assessing not only writing skills but also several of the university's learning outcomes for students. Also, this summer the Writing Center sponsored a one-day Summer Writing Institute focused upon student assessment using digital or e-portfolios integrating them with the University's Course Management System, Angel.

Report Supporting the Conditions of “Good Cause”

1) The institution has demonstrated significant recent accomplishments in addressing non-compliance.

Summary of Progress

At the time of the on-site review in spring of 2005, FGCU had determined four student general education competencies (quantitative reasoning, oral communication, written communication, and critical thinking) but had not yet implemented a system for determining student attainment of these general education competencies. This led to the Visiting Committee’s recommendation that the institution provide evidence that graduates have attained college-level competencies within the general education core.

Subsequent to that finding, the General Education Council of the University Faculty Senate identified ACT’s Collegiate Assessment of Academic Proficiency (CAAP) as an appropriate instrument to assess student progress on three of the four general education competencies allowing for tracking progress against both internal benchmarks and national norms. In addition, university faculty developed an internal rubric for assessing the fourth competency, oral communication, and statistically confirmed the instrument’s suitability based on analysis of its validity and reliability.

The first assessments of students using these instruments followed in fall 2005 and results were subsequently used to set benchmarks for gauging student progress in attainment of the competencies, and, more importantly, to discover areas of student performance which necessitated curricular changes to further student improvement. All these actions were detailed in the University’s First-

Monitoring Report submitted to the Commission in September 2006 and are described on pages 5-7 of the current report.

In a letter from the Commission dated January 9, 2007, this progress was duly noted:

While the institution established goals for student performance for each of the general education competencies, the institution did not provide sufficient evidence to demonstrate that assessment results are used to improve student attainment of the competencies.

The institution should provide evidence demonstrating that assessment results are used to improve graduates' attainment of the college-level competencies within the general education core.

Since this recommendation, FGCU has worked diligently to implement improvements to its general education curriculum based on assessment results. Results of the assessments have identified weaknesses in the curriculum which have led to positive changes in specific required general education courses affecting the sciences and the humanities (see current report pages 8-16). These changes to the learning environment have resulted in measurable and statistically significant improvements in less than two years, affecting quantitative reasoning, critical thinking, and oral communication. Although not as clearly successful with our writing competency, we believe the processes that have been put into place and which are now a part of our culture of assessment will yield the desired result in the very near future.

- 2) The institution has documented that it has the “potential” to remedy all deficiencies within the extended period as defined by the Committee on Compliance and Reports; that is, that the institution provides evidence which makes it reasonable for the Commission to assume it will remedy all deficiencies within the extended time defined by the Committee on Compliance and Reports**

FGCU believes it has met or exceeded all the benchmarks set by the Commission since its reaffirmation in December 2005. FGCU believes it is now in substantial compliance with Comprehensive Standard 3.5.1 and presents this report as evidence in support of that belief. FGCU is certain that should this report be found lacking in any respect, any such inadequacy could be resolved within the COC-specified timeframe.

- 3) The institution provides assurance to the Commission that it is not aware of any other reasons, other than those identified by the Commission on Colleges, why the institution could not be continued for “good cause.”**

FGCU affirms it is not aware of any reason why the institution could not be continued for “good cause.”

Concluding Statement

While this has been an arduous journey for a university of our young age, it has been rewarding to us as professionals and most importantly to our students. We are committed to sustaining what we have thus far achieved and are confident we will experience further success in improving student learning as we continue to grow and move forward in our development.

Supporting Documents List

- [1] Oral Communication Rubric
- [2] Analysis of Results – Assessment of Student Learning
- [3] Grade Points Awarded – MAC 1105
- [4] College Algebra Syllabus
- [5] Algebra Lecture Notes
- [6] Screen Shots from MathZone
- [7] Mathzone Exercises
- [8] Algebra Test With Instructor Feedback
- [9] Algebra Homework Examples
- [10] Grade Points Awarded – STA 2023
- [11] STA 2023 Syllabus
- [12] Statistics Lecture Notes
- [13] Statistics Homework Assignments
- [14] Statistics Homework Example
- [15] Statistics Exam Example
- [16] Statistics Lecture Notes - Hypothesis testing
- [17] Statistics Student Assignments - Hypothesis testing
- [18] Scale-up Lab Photos
- [19] HUM 2510 Instructor Statement
- [20] HUM 2510 Class Materials
- [21] Sample Student Essays
- [22] Critical Thinking Skills Applied IDS 3920: Instructor Statement
- [23] Critical Thinking: Materials for IDS 3920
- [24] Critical Thinking Skills: Student Assignments
- [25] Examples of Student Work: B & C
- [26] Oral Communication In ENC 1102
- [27] Example Student Notebook
- [28] Example Student Essays
- [29] Student Peer Evaluation
- [30] Faculty Feedback to Student
- [31] Oral Communication: Rubric Scoring Interrater Reliability
- [32] Writing Rubric
- [33] Writing Portfolio Assignment (see highlighted text)
- [34] The Writing Center (see highlighted text)
- [35] Writing Center Usage Data
- [36] Student Exercises and Assignments (see highlighted text)
- [37] Examples of Student Performance: Peer & Instructor Feedback
- [38] Student Work – Showing Improvement
- [39] Summary of Meeting Recording Improvements Planned