Assessing General Education at the University of Florida

A report to the General Education Committee

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Table of Contents

General Education – SACS Core Requirements and Standards

From:
Resource Manual for the Principles of Accreditation http://sacscoc.org/pdf/Resource%20Manual.pdf

CR 2.7.3 – General Education (pp. 18-20)

In each undergraduate degree program, the institution requires the successful completion of a general education component at the collegiate level that (1) is a substantial component of each undergraduate degree, (2) ensure breadth of knowledge, and (3) is based on a coherent rationale. For degree completion in associate programs, the component constitutes a minimum of 15 semester hours or the equivalent; for baccalaureate programs, a minimum of 30 semester hours or the equivalent. These credit hours are to be drawn from and include at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. The courses do not narrowly focus on those skills, techniques, and procedures specific to a particular occupation or profession. If an institution uses a unit other than semester credit hours, it provides an explanation for the equivalency. The institution also provides a justification if it allows for fewer than the required number of semester credit hours or its equivalent unit of general education courses.

Four Key Principles:

1. General education courses are college-level and comprise a substantial component of each undergraduate degree.
2. In order to promote intellectual inquiry, general education courses present a breadth of knowledge, not focusing on skills, techniques, and procedures specific to the student's occupation or profession.
3. General education is based on a coherent rationale.
4. The general education component constitutes a minimum number of semester hours, or its equivalent, and courses are to be drawn from specific academic areas.

Publications:

1. In its publications, an institution is obligated to clearly designate the specific general education courses included in the three areas of knowledge: humanities and fine arts, social and behavioral sciences, and natural sciences and mathematics.

2. Publications should clearly indicate or direct students in their options for selecting general education courses and, in particular, those considered pure humanities/fine arts according to the SACS definition. (According to SACS, courses in basic composition that do not contain a literature component, courses in oral communication, and introductory foreign language courses are skill courses and not pure humanities courses. Therefore, for purposes of meeting this standard, none of these may be the ONE course designated to fulfill the humanities/fine arts requirement in CR 2.7.3.)

3. The institution should indicate how it ensures that all students follow the pathway for the selection of general education courses as described in its publications.

Assessment of institutions by the Commission:

1. The Commission's review committee will evaluate whether credit hours that constitute the general education program at an institution are
    a. drawn from and include at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics,
    b. include at least one pure humanities course, and
    c. include courses that do not narrowly focus on those skills, techniques, and procedures specific to a student's particular occupation or profession.

(The review committee will analyze and report on each of the above elements in its determination of compliance with CR 2.7.3.)

Notes and Questions for Consideration:

1. Institutions should have criteria for evaluating courses for inclusion in the core curriculum.
2. What evidence is found of an institutional rationale for general education that serves as the basis for including selected courses?
3. How does the institution ensure that the student's breadth of knowledge acquired through the general education component of the degree program is sufficient and appropriate to its mission?
4. What measures does the institution use to ensure that general education represents a substantial component of the undergraduate degree program?
5. What process is used to ensure that general education courses support the goals of the general education component?
6. What criteria does the institution use to assure that the required skill level meets collegiate standards?
7. Do all undergraduate degree programs include at least one course from the three required areas of study?
8. Does the institution designate in its publication those general education courses that are considered pure humanities/fine arts?
9. How has the institution validated that the courses that the institution designates as pure humanities/fine arts are in accord with CR 2.7.3?
10. How does the institution direct students in their choice of general education courses? Is it clear for students how the general education course work should be followed both via advising and the publications?
11. How does the institution ensure that all students follow the pathway for the selection of general education courses as described in its publications?
12. How does the general education program apply to transfer students, distance and correspondence education programs, etc.?

Required Documentation:

1. Description of and rationale for general education
2. Publications that consistently describe the general education requirements

3. Documentation that shows how the institution makes it clear to students the specific options for general education requirements, including mapping those designated general education courses that are considered pure humanities/fine arts according to SACS.

Other types of documentation:

1. List of general education outcomes
2. Documentation of the institution's procedure for selecting courses that meet general education requirements
3. Documentation that general education courses incorporate student learning outcomes associated with general education
4. Documentation on exceptions and policies and procedures for the acceptance of general education transfer courses

3.5.1 – General Education Competencies (pp. 66-67)

The institution identifies college-level general education competencies and the extent to which students have attained them.

Note: This standard addresses college-level competencies within the general education core; it does require a specific course to address each competency. In addition, there is no requirement regarding when the institution must determine student attainment of competencies.

Notes and Questions for Consideration:

1. Since general education requirements are central to educational programs, this standard assumes that the institution will define specifically which competencies are appropriate to the goals of its general education program and consistent with principles of good practice.
2. The institution is responsible for identifying measures to determine the extent to which students have attained those competencies during their course of study as well as the extent to which students have actually attained those competencies.
3. What are the specific college-level competencies within the general education program?
4. What evidence is available to show the extent to which students have attained these competencies?
5. What evidence exists that demonstrates that the institution identifies competencies that are college-level?
6. What criteria does the institution use to set an acceptable benchmark for student attainment of competencies?

Required Documentation:

1. Identification of competencies
2. Justification that all competencies are at the college level and the degree to which students have attained them are acceptable
3. Evidence of the extent to which students of undergraduate degree programs have attained the college-level competencies

The Assessment and Institutional Effectiveness Process for General Education

General Education Mission?

From https://catalog.ufl.edu/ugrad/current/advising/info/general-education-requirement.aspx

Common collective knowledge about the world enables us to communicate, to make informed decisions about many aspects of our lives, to understand and to participate fully as informed citizens in local, national and global matters.

Competency in composition, the humanities, physical and biological sciences, mathematics, and social and behavioral sciences, enables us to better understand ourselves, our neighbors, other cultures and times, and the principles governing the natural world and the universe. In general education courses, students gain fresh perspectives, methods and tools for understanding the traditional and the newly discovered.

The general education curriculum is organized around seven major content areas: composition, diversity studies, humanities, international studies, mathematics, physical and biological sciences, and social and behavioral sciences.

Outcomes were revised in 2011-12.

DRAFT Assessment Plan for General Education at the University of Florida

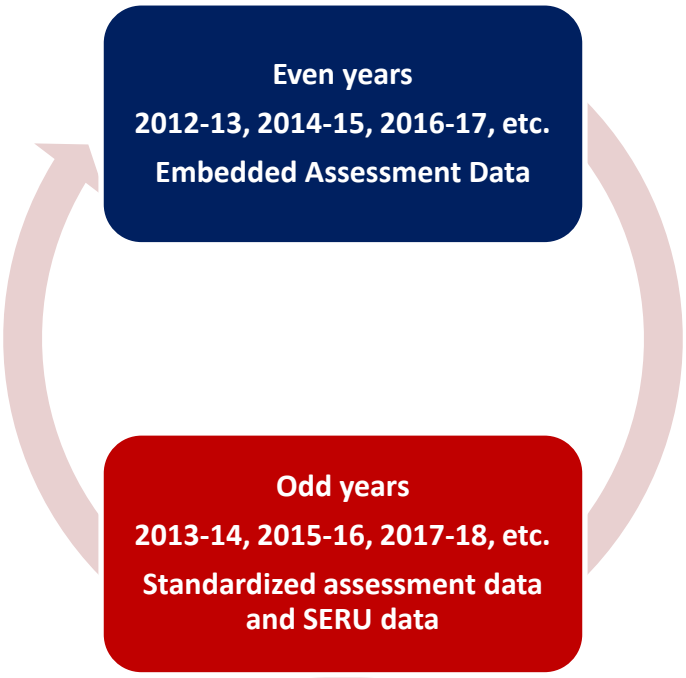
Years	Assessments	Data collected	GE Modifications	ADDITIONAL ACTIONS
2010-11	Math and Writing Requirements	Grade distributions for writing (Communication) and Math Percentage/numbers of students meeting the requirements.	None	None
2011-12	Math and Writing Requirements	Grade distributions for writing (Communication) and Math Percentage/numbers of students meeting the requirements.	General Education Assessment Subcommittee revises SLOs	Gen Ed Committee approves new SLOs and category definitions in April-May, 2012
2012-13	Math and Writing Requirements NEW: *ETS Proficiency Profile* or *CAAP* NEW: Embedded course assessments	Percentage/numbers of students meeting the requirements Fall 2012 - Pilot assessment of critical thinking component by using O/S/U evaluation of those SLOs by means of in class assignments; Gen Ed committee investigates the possibility of utilizing standard external exam as assessment instrument in Spring 2013. Spring 2013 and beyond - assess all Gen Ed SLOs for a sample of Gen Ed courses using internal and external instruments. Cost up to $20K each year (accounting for inflation and sampling more than 500 if necessary).	TBA	General Education Common Courses developed (per state statute) Gen Ed Committee: an external test as a requirement in some sections of Gen Ed courses, but not in all sections of that course chosen for the sample. New condition for general education courses: your course may be selected for assessment in any year.
2013-14	Math and Writing Requirements *ETS Proficiency Profile or CAAP*	Percentage/numbers of students meeting the requirements External test results – sample, N = 500	TBA	General Education Common Courses prepared with embedded assessments of the SLOs
2014-15 onward	Math and Writing Requirements *Embedded course assessments*	Percentage/numbers of students meeting the requirements Internal data collected from embedded course assessments, multi-stage interval sampling method	TBA	New General Education General Education Common Courses are implemented with new embedded SLOs. Review of external assessments.

Assessment Rotation:

Even years – Collect embedded assessment data

Odd years – Collect standardized assessment data and indirect assessment data from SERU

Proposed General Education Assessment Data Collection Rotation



Estimating a Sample Size for the ETS Proficiency Profile

From Craig Bowen, Assistant Director, Institutional Planning and Research

Based on our discussion on Friday, here are some possible sample sizes you might consider for administering the ETS Proficiency Profile (EPP) to a simple random sample of undergraduate students as a way to get a baseline measure of student general education competencies (as measured by the EPP). In addition to the sample sizes and their associated confidence intervals, the table includes the corresponding percentiles from the sample of reporting institutions that were used as a basis for generating the sample sizes.

Sample Size	95 % Confidence Interval for the Population Mean Total Scaled Score	Percentiles of Upper and Lower Bounds of Confidence Interval for Freshmen Test Takers
100	441.0 to 449.0	46^{th} to 69^{th}
200	442.2 to 447.8	46^{th} to 58^{th}
300	442.7 to 447.3	46^{th} to 58^{th}
400	443.0 to 447.0	50^{th} to 58^{th}
500	443.2 to 446.8	50^{th} to 58^{th}
1,000	443.8 to 446.2	50^{th} to 58^{th}
1,500	444.0 to 446.0	50^{th} to 58^{th}
2,000	444.1 to 445.9	50^{th} to 58^{th}

Here are some assumptions I made to generate the sample sizes:

1. A 95% confidence interval is desired for the population mean total scaled score for the EPP. This is the ***CI*** referenced in equation *(1)* below.
2. A standard deviation for individual student scaled scores of 20.0. This is based on an estimate in which the standard deviations for individual student scores were 21.4 for seniors and 19.9 for freshmen from 43 doctoral research institutions for senior students (26 institutions for freshmen) that participated in testing of the EPP in between 2006 and 2011, based on 23,463 senior students and 4,015 freshmen students. This is the ***s*** referenced in *(1)* below.
3. A mean of individual student scaled scores of 445.0. This is based on an estimate in which the mean individual student scores were 450.2 for seniors and 441.1 for freshmen from 43 doctoral research institutions for senior students (26 institutions for freshmen) that participated in testing of the EPP in between 2006 and 2011, based on 23,463 senior students and 4,015 freshmen students. This is the $\overline{x}$ referenced in *(1)* below.

4. Because sample sizes (this is the ***n*** referenced in *(1)* below) will be small relative to the population, no finite population corrections were made. However, even though sample sizes are larger than 50, t-values were used instead of Z values when generating the confidence intervals in order to be more conservative (i.es, have wider CIs).

The confidence intervals were calculated in this way:

$$(1) \qquad CI = \bar{x} \pm t_{n-1} X \frac{s}{\sqrt{n}}$$

Based on these assumptions, and the calculations above, I would recommend selecting a sample size of either 400 or 500 students selected at random. This will provide a mean score that is at least within 2.0 scale score points with a 95% confidence. This should be sufficient to determine whether scores are changing over time, yet have the same ability to compare with other institutions (i.e., going to a sample of 1,000 does not improve the precision of knowing the percentile rank across other institutions).

Note: The comparative data for the EPP used for the assumptions are available at this URL: http://www.ets.org/proficiencyprofile/scores/compare_data/

Area	UF Institutional Definition	UF Institutional SLO *At the University of Florida, all students will:*
CONTENT	Content is knowledge of the concepts, principles, terminology and methodologies used within the discipline.	Demonstrate competence in the terminology, concepts, methodologies and theories used within the discipline.
COMMUNICATION	Communication is the development and expression of ideas in written and oral forms.	Communicate knowledge, ideas, and reasoning clearly and effectively in written or oral forms appropriate to the discipline.
CRITICAL THINKING	Critical thinking is characterized by the comprehensive analysis of issues, ideas, and evidence before accepting or formulating an opinion or conclusion.	Analyze information carefully and logically from multiple perspectives, using discipline specific methods, and develop reasoned solutions to problems.

CONTENT

Outcome *All students at the University of Florida will:*	**Discipline**	**Courses/Assessments**
Demonstrate competence in the terminology, concepts, methodologies and theories used within the discipline. Performance Indicators: • Applies concepts and principles in the discipline • Knows and uses appropriate terminology in the discipline • Applies discipline-specific methods appropriately	Composition	
	Mathematics	
	Physical/Biological Sciences	
	Humanities (includes the Arts)	
	Social and Behavioral Sciences	

CRITICAL THINKING

Outcome *All students at the University of Florida will:*	**Discipline**	**Courses/Assessments**
Analyze information carefully and logically from multiple perspectives, using discipline specific methods, and develop reasoned solutions to problems. Performance Indicators: • Identifies and summarizes main issues • Uses relevant sources to investigate multiple points of view • Formulates a reasoned point of view and conclusion	Composition	
	Mathematics	
	Physical/Biological Sciences	
	Humanities (includes the Arts)	
	Social and Behavioral Sciences	

COMMUNICATION

Outcome *All students at the University of Florida will:*	**Discipline**	**Courses/Assessments**
Communicate knowledge, ideas, and reasoning clearly and effectively in written or oral forms appropriate to the discipline. Performance Indicators: • demonstrates knowledge of content, audience, and purpose • *Specific to written communication:* Structures written communication and uses language that communicates meaning • *Specific to oral communication:* demonstrates performance through posture, gestures, eye contact and vocal expression	Composition	
	Mathematics	
	Physical/Biological Sciences	
	Humanities (includes the Arts)	
	Social and Behavioral Sciences	

Communication Rubric

	Outstanding	Satisfactory	Unsatisfactory
Content	Skillfully demonstrates knowledge of content, audience, and purpose (responsive to the assigned tasks and demonstrating thorough understanding of practices particular to the specific discipline.)	Demonstrates knowledge of content, audience, and purpose, (with a clear focus on the assigned tasks, and demonstrating consistent use of practices particular to the specific discipline.)	Fails to demonstrate sufficient knowledge of content, audience, and purpose, (lacks a clear focus on the assigned tasks and does not use practices particular to the specific discipline.)
Syntax and Mechanics *Specific to written communication*	Organizational structure is clearly and consistently observable, aided by writer's careful attention to coherence and sophisticated use of transitions. Uses language that skillfully communicates meaning with clarity and fluency, and is virtually error free.	Organizational structure is understood, aided by writer's attention to coherence and use of transitions. Uses language that communicates meaning with fluency, and is nearly error free.	Organizational structure is not observable. Uses language that impedes meaning because of errors in usage.
Delivery *Specific to oral communication*	The speaker (presenter) demonstrates compelling and polished performance through posture, gestures, eye contact and vocal expression.	The speaker (presenter) demonstrates appropriate performance through posture, gestures, eye contact, and vocal expression.	The speaker (presenter) fails to demonstrate appropriate performance through posture, gestures, eye contact, and vocal expression.

FINAL draft approved by GE Assessment Committee on 4/23/2012

Critical Thinking Rubric

	Outstanding	Satisfactory	Unsatisfactory
Explanation of Issues	Clearly identifies and summarizes main issues and successfully explains why they are problems or how they create questions; identifies embedded or implicit issues, addressing their relationship to each other.	Identifies and summarizes the main issues, but does not explain why they are problems or how they create questions.	Fails to identify, summarize, or explain the main problem or question. Represents the issues inaccurately or inappropriately.
Evidence/Analysis	Skillfully uses high quality, credible, relevant sources to thoroughly (systematically and methodically) investigate and analyze multiple alternate points of view, revealing important differences or similarities within the topic.	Uses credible, relevant sources to question and analyze alternate points of view, revealing differences or similarities within the topic.	Fails to demonstrate use of sources to support ideas. Shows little to no awareness of evidence and bases analysis on a single source or unclear evidence.
Conclusion	Discusses implications and conclusions comprehensively, considering all relevant data and evidence. A clear and precise point of view and conclusion are formulated and presented.	Discusses implications and conclusions, considering most but not all the relevant data and evidence. A clear point of view or conclusion is presented.	Fails to formulate and clearly express a clear point of view and does not consider the evidence and data when forming judgments.

Approved by GE Assessment committee 4/23/2012

Content Knowledge Rubric

	Outstanding	Satisfactory	Unsatisfactory
Concepts/Principles	Skillfully and insightfully interprets and applies concepts and principles in the discipline.	Interprets and applies concepts and principles in the discipline.	Fails to interpret and apply course concepts and principles in the discipline.
Terminology	Demonstrates knowledge and appropriate use of terminology within the discipline.	Demonstrates knowledge of terminology within the discipline.	Fails to demonstrate sufficient knowledge of terminology used within the discipline.
Methodologies	Demonstrates knowledge of and appropriate application of methods used within the discipline.	Demonstrates knowledge of methods used within the discipline.	Fails to demonstrate sufficient knowledge of methods used within the discipline

GE Assessment Committee Rubric Revisions April 23, 2011

Assessing General Education – Signature and Template Assignments

from *Academic Program Assessment Workshop*, SACS Commission on Colleges 2011 Annual Meeting, Orlando, Florida
Mary J. Allen, mallen@csub.edu December 3, 2011

Consider integrating **signature assignments** into the curriculum, i.e., assignments designed to assess specific learning outcomes. Assignments might be developed as "threshold, milestone, or capstone assessments" [AAC&U (2005) *Liberal Education Outcomes: A Preliminary Report on Student Achievement in College*].

Consider **template assignments**--signature assignment templates that individual faculty fill in differently. For example, to assess student mastery of a General Education science outcome, *Students who complete the GE program can use concepts from the sciences to describe or explain natural phenomena*, faculty who teach GE science courses may agree to use this template as a final exam question:

On a field trip to _____ you notice _____. Using concepts you have learned in this course, describe/explain _____.

Example:
On a field trip to Yosemite you notice that rock strata are significantly tilted and that layers vary from light brown to dark grey. Using concepts you have learned in this course, explain why the strata are tilted and why they vary in color.

Embedded Assignments and Course Activities Strengths and Weaknesses	
Potential Strengths	**Potential Weaknesses**
• Can provide direct evidence of student mastery of learning outcomes. • Out-of-class assignments are not restricted to time constraints typical for exams. • Students are generally motivated to demonstrate the extent of their learning. • Can provide authentic assessment of learning outcomes. • Can involve CSL or other fieldwork activities and ratings by fieldwork supervisors. • Can provide a context for assessing communication and teamwork skills. • Can be used for grading as well as assessment. • Faculty who develop the procedures are likely to be interested in results and willing to use them. • The evaluation process should directly lead faculty into discussions of student learning, curriculum, pedagogy, and student support services. • Data collection is unobtrusive to students.	• Requires time to develop and coordinate. • Requires faculty trust that the program will be assessed, not individual teachers. • Reliability and validity generally are unknown. • Norms generally are not available.