Aligning Measures to Strengthen the Value of a Liberal Education

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Samford University

How to Build an Assessment Program in One Year: Samford in 2016

• Private University

- Total enrollment 5,600, Undergraduate ca. 3,600
- Expanded professional programs in past decade
- General education almost entirely in Howard College of Arts and Sciences
 - GenEd Core
 - GenEd Distributed



Samford in 2016 Continued

• Assessment

- Inconsistent centralization of data collection
- Little shared understanding of assessment's purpose and methodology
- New Associate Provost of Institutional Effectiveness in place
- Purchase of Taskstream, Aqua
- Not yet populated with Assessment Plans or data
- SACSCOC Reaccreditation visit scheduled for AY 2016-17
 - Reviewer confusion over structure of Samford GenEd

Building an Assessment Model in One Year

• Gen Ed Pilot

- Creation of Outcomes
 - Task Force in place for assessment of GenEd Core
 - Need development of plan for GenEd Distributed
 - Initial draft of outcomes for each distribution area developed by Dean and Vice Provost
 - Draft outcomes shared with department chairs and selection of faculty for tuning according to disciplinary needs, course outcomes
- Recruitment of College Director of Assessment (later Associate Dean of Assessment)
- Creation of working group

Getting Started

- Central Challenges
 - Skepticism
 - Limited 'know-how'
- Guiding Principles
 - Assessment should be *meaningful & elegant*
 - Go slowly, give feedback, repeat
 - Provide variety of training and support opportunities

Building a General Education Assessment Program

See "General Education Assessment Overview"

Constructing Assessment Programs in the Majors

Oct. Submit Reports

Sept. Workshop – Construct Assessment Report

April Workshop – Score Work & Plan Report

> March Review of Plans – Feedback

Feb. Workshops – Construct Assessment Plans

Feb. – Workshop #1, Writing Student Learning Outcomes (SLO's)

- Distinguish between effective and ineffective SLO's
 - "Students will understand the elements of a good chemistry experiment."

OR

- "Students will explain the elements of a good chemistry experiment."
- Write SLO's
 - Template: Student will [perform some cognitive task] [with some element of knowledge].
 - "Students will diagram the logical flow of an argument presented in a selected philosophical treatise."

Feb. – Workshop #2, Developing an Assessment Plan

- Explain and apply assessment concepts
 - Direct vs. Indirect Measures
 - Validity
- Modify a standard assessment strategy
 - Evaluate late in the program
 - Evaluate student work
 - Score with a rubric

What is wrong with this picture?

- SLO: Students will apply sociological theory to interpret a selected social problem
- Measure: Invite all students in the major to complete an online quiz about contemporary social problems.

March – Review of Plans

- Assessment plans submitted
- Review & feedback

Assessment Plan Review: HCAS, 2016-17



	Meets Expectations	Requires Revision	Score/Level
Student Learning Outcomes	Assessment plan includes at least two measurable outcomes. Each outcome specifies observable actions that students will undertake in order to demonstrate an expected level of learning. Articulated outcomes are appropriate as program-level expectations for student learning.	The assessment plan requires revision for one or more of the following reasons: (1) there are an insufficient number of outcomes, (2) the provided outcomes are not uniformly student-focused, (3) at least one of the provided outcomes is vague and difficult or impossible to measure, or (4) the expected level of learning is not appropriate for program-level outcomes.	
Description of Measures	"Details/ Description" is sufficiently detailed and describes a measurement process that has face validity. "Benchmark" specifies that X percent of students will perform at Y level. The expected level of performance is clearly indicated and appears appropriate for the degree program. A rubric may be attached, but with or without a rubric the measures description should make clear how students are scored and what those scores mean in terms of what students are able to do.	The description of measures is missing some important element or contains one or more of the following flaws: (1) "Details/Description" is vague so that the steps in the measurement process are unclear, (2) the description of measures raises validity concerns, (3) provided benchmark expressed as an average, (4) the expected level of performance is not clearly appropriate for the degree program, (5) description of measures does not clearly indicate how student performance will be scored and what the scores mean.	

April – Workshop #3, Score Work & Plan Report

- Score student work
 - Calibrate rubric

Students will apply concepts from the 80's studies scholarly tradition to interpret a case or problem.

	Exemplary	Proficient	Fair	Poor	No Evidence
	4	3	2	1	0
80's studies concept	Student is able to summarize one or more relevant disciplinary concepts and accurately applies disciplinary concepts to the presented case or problem. The implications of the application for interpreting the presented case or problem are considered in some detail.	summarize one or more relevant disciplinary concepts and accurately applies disciplinary		Student is able to identify one or more relevant 80's studies concepts, but fails to explain the substance or importance of those concepts.	Student's response fails to identify relevant social science disciplinary concepts.

April – Workshop #3, Score Work & Plan Report Contd.

• Score student work

• Calibrate rubric

Genesis and Abacab Kelly S

Genesis released Abacab in September of 1981. The whole album and the title track in particular announced a musical shift. Genesis was formed in 1967 and throughout the 70's evolved into a successful and influential "prog rock" band. Prog rock is marked by complicated melodies and instrumentation as well as lyrics that sound profound ethical and social themes. Peter Gabriel was instrumental in the "prog rock" or "art rock" direction the band took during this period. This is particularly evident in Gabriel's contribution to *Selling England by the Pound*, which complained of the impact of commercialism on England's culture. Released on *Foxtrot* in 1972, "Supper's Ready" lasting 23 minutes and comprising seven movements also illustrates the prog rock genre.

April – Workshop #3, Score Work & Plan Report Contd.

- Score student work
 - Calibrate rubric
 - Tally results

Student	Rev.1	Rev. 2	Average	Comments
AA	3	3	3	Good discussion of Glam Rock, but how did GR
				influence later artists?
BB	3	4	3.5	
CC	2	3	2.5	
DD	2	2	2	"Breakfast Club" does highlight themes about social
				inequality and teen angst - but how specifically does
				the film do this?
EE	3	3	3	
FF	3	4	3.5	
GG	3	3	3	
HH	3	4	3.5	Pat Benatar's contribution to changing gender norms
				could have been more thoroughly developed.
II	4	4	4	
IJ	3	3	3	

April – Workshop #3, Score Work & Plan Report Contd.

• Plan Report

- Summarize results " _____ percent scored at or above ____ on the rubric."
- Circulate results and discuss among program faculty
- Prepare to offer improvement actions.
 - What do results say about how instruction and curriculum might be improved?
 - Faculty insights are integral to assessment process.

Data	Use				
Directions:		Please provide data-informed decisions based on the dissemination, analysis and use of the data relevant to this outcome.			
Text:	difficu Georg stude review provid	nce from this year's assessment indicates that students have Ity constructing a suitable 80's studies research question. Dr. ge will introduce a new exercise in his methods course, whereby nts will construct a paper prospectus and work through a peer v process. The prospectus and peer review will be designed to le students additional opportunity to practice constructing a resear ion that is of appropriate in scope and rooted in the scholarly ure.			

Sept. – Workshop #4, Construct the Assessment Report

- Reviewed material from the third workshop
- Encouraged chairs to:
 - Plan for faculty discussion
 - Use results for program improvement
 - Document the process

Mathematics

A Case Study

Mathematics Major Assessment: Proof Writing

Learning Outcome: Students will be able to write a valid proof of a mathematical statement.

	Exemplary	Proficient	Marginal	Poor	Rating
	4	3	2	1	
Method and Audience Includes consideration of audience and proper choice of proof technique	Demonstrates a thorough understanding of audience and uses a proof structure that is appropriate and clear to the reader.	Demonstrates adequate consideration of audience and use of a proof structure that is appropriate and clear to the reader. (e.g. proof structure is correct but needlessly complicated)	Demonstrates awareness of audience but uses a proof structure that is inappropriate or is used in a flawed way.	Demonstrates minimal attention to audience or proof structure.	
Content Development Includes uses of hypotheses, logic and reasoning	Hypotheses are used correctly and explicitly, and sound and cohesive mathematical reasoning is used throughout.	Hypotheses are used correctly but must be inferred or the mathematical reasoning is lacking in a minor way.	Hypotheses are used incorrectly or the mathematical reasoning is flawed through omission or error.	Hypotheses are largely ignored and mathematical reasoning is absent or seriously flawed.	
Disciplinary Conventions Includes following formal and informal rules inherent in the expectations for writing in mathematics	Notation is skillfully used; Terminology and theorems are flawlessly defined or referenced.	Notation, terminology and theorems are used correctly with only a few exceptions. (e.g. Used incorrectly or used correctly without proper definition or reference.)	Notation, terminology and theorems are used, but are often used incorrectly.	There is some attempt to used notation, terminology and theorems but they are largely omitted or incorrectly used.	
Syntax and Mechanics	Uses graceful language that skillfully communicates meaning to readers with clarity and fluency, and is virtually error-free.	Uses straightforward language that generally conveys meaning to readers. The language has few errors.	Uses language that generally conveys meaning to readers with clarity, although writing may include some errors.	Uses language that sometimes impedes meaning because of errors in usage.	

Evaluators are encouraged to assign a zero to any work sample that does not meet level 1 performance

Evaluators must assign a whole number rating (i.e., no use of 1.5, 2.5, or 3.5).

Mathematics Major Assessment: Quantitative Problem Solving

Learning Outcome: Students will be able to appropriately use mathematical methods to solve quantitative problems.

	Evaluators are encouraged to	assign a zero to any work sample th	lat does not meet level 1 periorma		I
	Exemplary	Proficient	Marginal	Poor	Rating
	4	3	2	1	
Representation Ability to convert relevant information into an appropriate mathematical model	Skillfully converts relevant information into an insightful mathematical portrayal in a way that contributes to a further or deeper understanding. Calculations attempted are	Competently converts relevant information into an appropriate and desired mathematical portrayal. Calculations attempted are	Completes conversion of information but resulting mathematical portrayal is only partially appropriate or accurate. Calculations attempted are	Completes conversion of information but resulting mathematical portrayal is inappropriate or inaccurate. Calculations are	
Calculation	essentially all successful and sufficiently comprehensive to solve the problem. Calculations are also presented elegantly (clearly, concisely, etc.)	essentially all successful and sufficiently comprehensive to solve the problem.	either unsuccessful or represent only a portion of the calculations required to comprehensively solve the problem.	attempted but are both unsuccessful and are not comprehensive.	
Interpretation Ability to think critically about the quantitative results and interpret them in the context of the original problem	Provides a completely accurate explanation of results in the context of the problem including all relevant units.	Provides a largely accurate explanation of results in the context of the problem with only minor errors related to units.	Provides a somewhat accurate explanation of results in the context of the problem, but with errors that reveal a lack of conceptual understanding that lead to the inaccuracies.	Attempts but does not provide an accurate or coherent explanation of the results in the context of the problem.	
Communication Ability to communicate both the process of the work and the conclusion in a clear and precise way	Presentation is clear, concise, organized in a logical fashion, and includes verbal, numeric, graphic, geometric, and algebraic elements, as appropriate.	Presentation is organized in a logical fashion, but one aspect of the presentation is unclear.	Presentation is organized in a logical fashion, but several distinct aspects of the presentation are unclear.	Presentation lacks logical organization.	

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Evaluators must assign a whole number rating (i.e., no use of 1.5, 2.5, or 3.5).