

General Education Assessment

FALL 2009
ANALYSIS and REFLECTION

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**Division of Natural Sciences and
Mathematics**

Chaminade University

Program Assessment Timeline

Task	Timeframe	Method	Participants
Decide on nature of GE assessment instrument	Spring 09	Discussion in Divisional and Discipline Meetings	Dean, Faculty
Construct draft instruments	Summer 09	Collate questions	Dean, Faculty
Review draft instruments	Fall 09	Tasking at August 09 Faculty Retreat	Faculty
Appoint GE Assessment Coordinator	Fall 09		Dean
Decide schedule of test administration	Summer 09		Dean and GE Assessment Coordinator
Deliver tests	Fall 09	Provision of test materials to participating faculty, grading and review by GE assessment Coordinator	GE Assessment coordinator and faculty
Assemble data for report to faculty	Winter 2009	Document for distribution at January 10 Faculty Retreat	Dean and GE Assessment Coordinator
Review and Reflect	Winter 2009	Tasking at January 10 Faculty Retreat	GE Assessment coordinator and faculty

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1. Science Skills Assessment Instrument Pretest Results, Fall Day 2009

1.1. Background.

Pretests were given to four 2009 Fall Day Classes; BI-101-01-1, BI-115-01-1, BI-131-01-1, and PHY-140-01-1. All assessments were given during the first week of the semester, August 24-28. A total of 52 students took the assessment instrument. Please note that question #16 was omitted because of a typographic error.

1.2. Results.

Section	CLO Evaluated	Mean number correct answers - PRETEST	SD	Mean number correct answers - POSTTEST	SD
I	#1: An understanding of and the ability to recognize and use the Scientific Method;	4.1 out of 8	1.3	tbd	
II	#1: An understanding of and the ability to recognize and use the Scientific Method;	5 out of 13	2.36	tbd	

1.3. Preliminary comments.

Perhaps increase the level of difficulty of questions 1-8, pertaining to the Scientific Method, as students already exhibit a 50% understanding, on average.

2. GE Math 103 (Track B) Pre/post-test, Pilot Results, Summer Bridge, 2009.

2.1. Background.

The test was not available at the beginning of the bridge semester, so it was administered on 10 August 2009 (pre-test) and again 13 August 2009 (post-test). As an incentive, the students were informed that some of the assessment questions would be included on the final, which was 14 August 2009. The sample size is 40 students.

2.2. Results.

CLO Evaluated	Mean number correct answers - PRETEST	SD	Mean number correct answers - POSTTEST	SD
<p>#1. An understanding of basic mathematical principles needed to function effectively in our world;</p> <p>#2. An understanding of basic symbolic reasoning that can be used to describe relationships and patterns found in nature;</p> <p>#3. An understanding of the mathematical tools necessary for success in their selected major.</p>	3.23 out of 10	1.3	4.61 out of 10*	2.20

* $p=0.0001$, indicating a statistically significant improvement in score in the post test relative to pre-test.

2.3. Preliminary Comments.

Upon reviewing the hand- work, it seems that a student would understand the concept behind a question, but would pick an answer rather than complete the work. Many times I saw good “set-up” but little “follow-through.” In my opinion, some students would work on a question to a point, and then try to guess/predict the answer. This trend was prevalent in questions 5 – 8. This disparity may warrant future change in the format or the grading of the instrument.

NB. This draft will be updated with data from administration of Track A and B General Education Math assessments and the Science Assessment Post-test at the end of FD09. Reflection and Action Points will then follow.