

Cluster Four Annual Report

2014-2015 Academic Year

June 2, 2015

Cluster Four Coordinator, Skip Hyser

Cluster Four Annual Report
2014-2015 Academic Year

A. Introduction: Overall Summary of the Cluster

Enrollments in all Cluster Four courses continue to be strong during this past academic year. Summer course offerings and enrolled students have plateaued at about 200 for American Experience courses and just under 200 students in Global Experience courses. An overwhelming majority of summer Cluster Four classes are offered online. The breakdown for summer 2015 is included in the Statistical Profile section of this report.

Christine Demars of CARS presented the assessment findings for Cluster Four. Since the revision of both tests – American and Global Experiences – there has been little change in the results of the tests. In fact, the assessment tests demonstrated results that students who took any of the cluster classes showed “value added” by doing better on the assessment test than those students who had not taken a Cluster Four class. Students with dual enrollment credit scored about the same on the assessment test as students who have not taken a Cluster Four course. This is a problem.

During spring semester 2015, the Political Science Department voted unanimously to continue the prohibition of transfer credit for POSC 225 once a student has matriculated at JMU. Furthermore, they also determined that transfer credit for POSC 225 would not be accepted for General Education credit, nor for major or minor program credit, nor for elective credit.

The Cluster Four Committee decided to examine each assessment test in the next academic year with the idea of removing some questions (perhaps ones that do not perform well) and replacing these questions with new ones. The committee emphatically stated they do not want completely new tests; rather, they recommend a tweaking of the existing tests. Those committee members teaching in the Global Experience will review the global test, and those committee members teaching in the American Experience will review the American test. It has been a number of years since the committee reviewed the tests, so it is time.

The involvement of Cluster Four faculty in General Education include the following: Phil Heap (Economics) completed his second year as chair of the General Education Council (GEC) and was re-elected to a second term. Bernie Kaussler served as the Cluster Four representative on the General Education Council. Kathleen Ferraiolo (Political Science) was a finalist for the General Education Distinguished Teacher Award. Lamont King (History) served again as Cluster Four’s representative on the General Education Distinguished Teacher Award Committee. Bernie Kaussler continues to direct the Semester in Scotland Program where students take four General Education courses during their summer in Edinburgh and St. Andrews. Cluster Four Committee member Phil Heap (Economics) served on the General Education Student Conference Committee with fellow members Gretchen Hazard (Cluster One), Dennis Beck (Cluster Two), Scott Paulson (Cluster Three), Georgia Polacheck (Cluster Five), Kathy Clarke (Library).

Kevin Borg, Chris Davis and Steve Reich received a General Education Summer Grant “Collaboration on Very Recent History for Cluster 2 and 4 Faculty” that allowed about 15 faculty from the Department of History and the Department of Justice Studies to discuss topics that get limited coverage in HIST 225, JUST 225 or HIST 102 – historical events since 1980.

B. Cluster Objectives

Cluster Four Objectives

Courses in Cluster Four require students to think critically about their own society and its relationship to the larger global community. These courses develop responsible and enlightened global citizenship by examining a wide variety of the processes that shape the human experience.

The American Experience

- GHIST 225 U.S. History
- GPOSC 225 U.S. Government
- GJUST 225 Justice and American Society

Students completing an American Experience course of Cluster Four will be able to identify, conceptualize and evaluate:

- Social and political processes and structures using quantitative and qualitative data
- Key primary sources relating to American history, political institutions and society
- The nature and development of the intellectual concepts that structure American political activity
- The history and operation of American democratic institutions
- The history and development of American society and culture
- The history and development of American involvement in world affairs

The Global Experience

- GAFST 200: Introduction to Africana Studies
- GANTH 195: Cultural Anthropology
- GECON 200 Macroeconomics
- GGEOG 200 Geography: The Global Dimension
- GPOSC 200 Global Politics
- GSOCI 110 Social Issues in a Global Context

Students completing a Global Experience course in Cluster Four will be able to identify, conceptualize and evaluate:

- Basic global problems
- Global political, social, cultural and economic systems that shape societies
- The issues involved in analyzing societies different from one's own
- Theoretical models used in studying global problems
- The strengths and limitations of solutions to global problems across and within cultures

C. Assessment Report

Spring 2015, Cluster 4 Assessment Report

This analysis of Cluster Four assessment data addresses three specific questions:

1. Do students learn or develop more if they have taken more cluster-related courses; 2. What is the relationship between course grades and outcomes; and 3. Do students change over time in school?

The following summary highlights the findings for each inquiry.

Do students learn or develop more if they have taken more cluster-related courses?

Students who had taken at least one of the American Experience courses scored higher than students who had not taken an American Experience course, with students who transferred (mostly dual-enrollment) a course scoring about the same as those who have never enrolled in an American Experience course, as has been true most years except 2014. Students who had taken one or more of the Global Experience courses scored higher than students who had no Global Experience course. Students with transfer credit again scored lower than those students who had not taken a Global Experience course.

What is the relationship between course grades and outcomes?

Overall, there appears to be a moderate relationship between course grades and outcomes. Students who score high on the assessments also do well in the courses. There was some fluctuation in course-specific correlations compared to previous years.

Do students change over time in school?

We expect that students who have completed a course in the cluster will perform better on the assessment in their sophomore/junior year than they did in their freshman year. Students who completed an American Experience course at JMU scored 38 standard-score-points higher on the standardized scale than they did as freshmen, compared to a gain of only 17 standard-score-point for those who had not completed the American Experience requirement (due almost entirely to students currently enrolled in the course). Students who completed a Global Experience course at JMU scored 57 points higher on the standardized scale than they did as freshmen, compared to a gain of 51 standard-score-points for those who had not completed the Global Experience requirement (if we include currently-enrolled students in the not-completed group).

Cluster Four Assessment Report

Spring 2015

909 students participated in the American Experience assessment and 939 participated in the Global Experience assessment on the spring 2015 assessment day.

The American Experience test 2 was administered for the first time in fall 2009. The Global Experience test 1.1 has been administered since spring 2009.

Learning goals

American Experience

Students completing an American Experience course in Cluster Four will be able to identify, conceptualize and evaluate:

- Social and political processes and structures using quantitative and qualitative data
- Key primary sources relating to American history, political institutions and society
- The nature and development of the intellectual concepts that structure American political activity
- The history and operation of American democratic institutions
- The history and development of American society and culture
- The history and development of American involvement in world affairs

Global Experience

Students completing a Global Experience course in Cluster Four will be able to identify, conceptualize and evaluate:

- Basic global problems
- Global political, social, cultural and economic systems that shape societies
- The issues involved in analyzing societies different from one's own
- Theoretical models used in studying global problems
- The strengths and limitations of solutions to global problems across and within cultures

Assessment Results

The tables in the following sections list the assessment results for Spring 2015. Scores are reported as number of items correct, often called unstandardized scores, as well as standard scores that use a common scale for ease of interpretation. For example, SAT scores are reported as standard scores ranging from 200 to 800. Standard scores are also more useful because test lengths often change with the introduction of new test items. The unstandardized scores should be helpful to faculty who are familiar with the test content; these faculty members will have the necessary context to interpret what it means to score, for example, 22 correct out of 40 items. Other audiences, though, will not know enough about the test content to be able to meaningfully use the unstandardized scores because the meaning of the percent correct depends on the difficulty of each item on the test. The standardized scores are independent of test difficulty. The standardized score scale was chosen to have a mean of 500 and a standard deviation of 100 for incoming freshmen tested in the fall of 1999 and 2000 combined for the American Experience and fall 2000 for the Global Experience. The newer tests (American Experience 2 and Global Experience 1.1) have been equated back to this standard scale. Using this scale should help avoid misinterpretations of number correct or percentage scores. The standard scores must still be interpreted in the context of faculty expectations, though. Most faculty would agree that a 10-point difference in standardized scores is too small to be meaningful and a 100-point difference is large enough to be meaningful, but faculty judgment is needed to interpret many intermediate score differences.

The sections below summarize the data in a variety of ways. First, basic information is provided about test and subtest reliability and how students performed in general. Then, scores are summarized by number of cluster courses taken, the relationship between course grades and scores is explored, score differences over the first two years at JMU are compared, and the number of students meeting the faculty's expectations or standards is presented.

Scores & Reliability

The table below shows the number correct and standardized scores (as explained above) for spring 2015. It also shows a reliability estimate, Cronbach's coefficient alpha (α). Reliability refers to the degree to which the scores are free from random error. In general, reliabilities above .70 are considered adequate for program evaluation or research. For evaluation of individual students, reliabilities closer to .80 are desirable. It is not unexpected to see subscore reliabilities that are much lower than total score reliabilities because on shorter scales there is less opportunity for errors to cancel out when averaged across items.

Scores for All Tested Students Spring 2015

	N	Reliability (α)	Number Correct Average	Number Correct SD	Standard Score Average	Standard Score SD
American Experience Total (40 items)	909	.82	24.23	6.33	529.01	116.73
Objective 1 (8 items)		.38	5.56	1.42		
Objective 2 (8 items)		.46	4.44	1.73		
Objective 3 (10 items)		.49	5.99	1.96		
Objective 4 (10 items)		.60	5.17	2.14		
Objective 5 (10 items)		.54	6.69	1.92		
Objective 6 (10 items)		.52	6.37	1.90		
Global Experience Total (32 items)	939	.76	23.24	4.65	583.41	109.05
Objective 1 (4 items)		.19	3.16	0.83		
Objective 2 (11 items)		.53	7.88	1.97		
Objective 3 (6 items)		.35	5.11	1.02		
Objective 4 (6 items)		.51	4.24	1.43		
Objective 5 (5 items)		.30	2.84	1.24		

I. Average scores for students taking 0 or 1 or more courses. Do students learn or develop more if they have taken more cluster-related courses?

Students who have completed the relevant course in the cluster should score or perform higher than students who have not taken the course. Students were classified based on courses recorded in the university records. Students who took the course as AP or transfer credit are reported separately. To show that the mean scores fluctuate somewhat each year, scores are shown in the tables below for the previous two years as well.

American Experience Scores by Courses Taken, Spring 2015

#of Courses	N	Mean	SD	Standard Score Mean	Standard Score SD
American requirement not completed	261	22.34	6.02	494.20	110.97
Not currently enrolled	170	21.48	5.69	478.34	104.94
Enrolled in an Amer. course	91	23.95	6.31	523.84	116.33
American requirement complete at JMU	420	23.79	5.91	520.99	108.87
requirement met by AP credit	140	30.74	4.10	649.14	75.54
requirement met by Transfer credit	88	21.53	5.30	479.40	97.73
Dual-Enrollment	81	21.70	5.26	482.53	96.97
Other Transfer ^a	7				
Total	909	24.23	6.33	529.01	116.73

^a Because there were only 7 students with non-dual-enrollment transfer credit, no mean is reported.

Global Experience Scores by Number of Courses Taken, Spring 2015

# of Courses	N	Mean	SD	Standard Score Mean	Standard Score SD
Global requirement not completed	326	22.75	4.76	571.84	111.50
Not currently enrolled	171	22.06	5.05	555.71	118.40
Enrolled in an Global course	155	23.50	4.30	589.64	100.76
Global requirement complete at JMU	527	23.76	4.60	595.54	107.92
requirement met by AP credit ^a	13				
requirement met by Transfer Credit ^b	73	21.93	3.99	552.68	93.75
Dual-Enrollment	30	22.43	4.22	564.43	98.93
Other Transfer ^a	43	21.58	3.84	544.49	90.22
Total	939	23.24	4.65	583.41	109.05

^a Because there were only 13 students with AP credit, no mean is reported.

^b Most (61) of the transfer students had credit for GECON

American Experience Scores by Courses Taken, Spring 2014

#of Courses	N	Mean	SD	Standard Score Mean	Standard Score SD
American requirement not completed	267	21.88	5.67	485.70	104.52
Not currently enrolled	179	21.58	5.82	480.17	107.31
Enrolled in an Amer. course	88	22.49	5.33	496.95	98.22
American requirement complete at JMU	452	23.69	5.63	519.12	103.80
requirement met by AP credit	139	28.82	4.62	613.65	85.23
requirement met by Transfer credit	72	22.75	6.03	501.83	111.11
Dual-Enrollment	64	22.88	6.16	504.14	113.41
Other Transfer ^a	8				
Total	930	23.86	5.96	522.32	109.78

^aBecause there were only 8 students with non-dual-enrollment transfer credit, no mean is reported.

Global Experience Scores by Number of Courses Taken, Spring 2014

# of Courses	N	Mean	SD	Standard Score Mean	Standard Score SD
Global requirement not completed	390	22.05	4.92	555.44	115.28
Not currently enrolled	233	21.52	5.03	542.98	117.80
Enrolled in an Global course	157	22.83	4.66	573.94	109.20
Global requirement complete at JMU	821	23.16	4.96	581.64	116.34
requirement met by AP credit ^a	22	--	--	--	--
requirement met by Transfer Credit ^b	104	20.23	5.27	512.88	123.51
Dual-Enrollment	41	21.12	5.78	533.80	135.35
Other Transfer ^a	63	19.65	4.87	499.25	114.21
Total	1337	22.64	5.05	569.27	118.47

^a Because there were only 22 students with AP credit, no mean is reported.

^b Most (90) of the transfer students had credit for GECON

American Experience Scores by Courses Taken, Spring 2013

#of Courses	N	Mean	SD	Standard Score Mean	Standard Score SD
American requirement not completed	307	23.12	5.85	508.57	107.86
Not currently enrolled	205	22.99	5.90	506.14	108.67
Enrolled in an Amer. course	102	23.38	5.78	513.47	106.57
American requirement complete at JMU	517	24.18	5.60	528.17	103.23
requirement met by AP credit	111	30.38	4.80	642.39	88.45
requirement met by Transfer credit	80	22.50	5.49	497.18	101.24
Dual-Enrollment	68	22.50	5.72	497.19	105.36
Other Transfer ^a	12	--	--	--	--
Total	1015	24.40	2.99	532.29	110.38

^aBecause there were only 12 students with non-dual-enrollment transfer credit, no mean is reported.

Global Experience Scores by Number of Courses Taken, Spring 2013

# of Courses	N	Mean	SD	Standard Score Mean	Standard Score SD
Global requirement not completed	334	22.38	4.49	563.15	105.37
Not currently enrolled	206	22.34	4.74	562.31	111.13
Enrolled in a Global course	138	22.43	4.12	564.39	96.51
Global requirement complete at JMU	681	23.07	5.14	579.41	120.40
requirement met by AP credit ^a	13	--	--	--	--
requirement met by Transfer credit ^b	52	23.19	5.25	582.33	123.24
Total	1090	22.89	4.94	575.15	115.85

^aBecause there were only 13 students with AP credit, no mean is reported.

^bOnly 6 of the students with transfer credit were dual-enrollment.

II. Correlations between test and course grades

What is the relationship between course grades and outcomes?

A moderate, positive relationship should exist between course grades and cluster scores/ratings if both course grades and the cluster test assess the objectives of the cluster.

These correlations give an idea of how much each course has in common with the cluster objectives measured on the test. Correlations can range from -1 to 1. Correlations close to 0 indicate no relationship, while correlations closer to 1 indicate a very high relationship between test scores and course grades (negative numbers would indicate those who scored high on the test had lower grades). In this context, correlations of about .3 seem good and correlations of .4 seem fairly high.

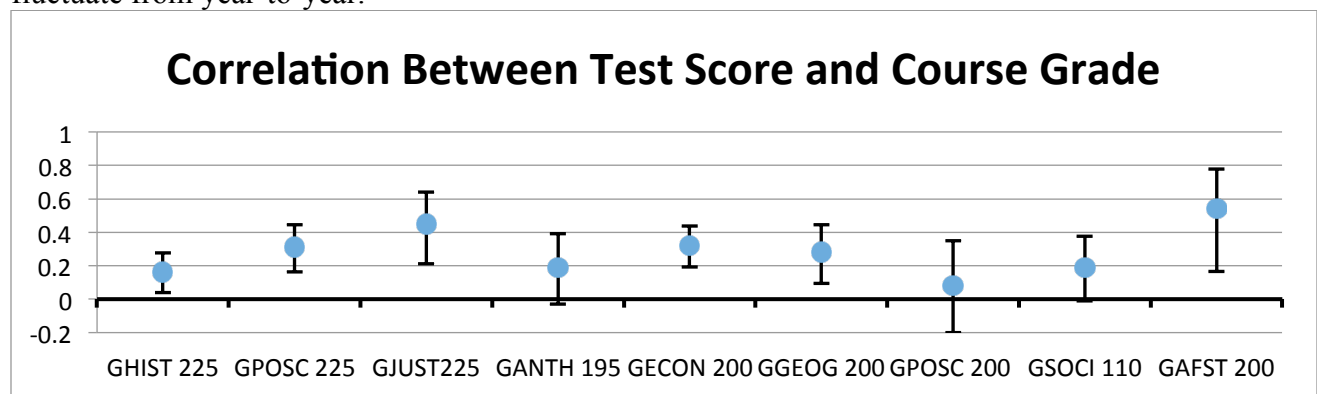
Correlations between Grades and Assessment Scores

Course	2015		2014		2013		2012		2011		2010	
	n	corr	n	corr	n	corr	n	corr	n	corr	n	corr
GHIST 225	257	.16	286	.35	329	.25	267	.16	162	.37	220	.27
GPOSC 225	161	.31	166	.36	190	.50	176	.37	89	.41	167	.55
GJUST225 ^a	12	--	11	--	11	--	14	--	5	--	2	--
GANTH 195	81	.19*	124	.43	121	.35	115	.34	115	.28	138	.49
GECON 200	206	.32	347	.20	278	.26	255	.23	255	.36	244	.29
GGEOG 200	106	.28	159	.43	98	.28	140	.33	140	.17	138	.38
GPOSC 200	51	.08*	94	.42	49	.54	74	.31	74	.47	77	.45
GSOCI 210	--	--	--	--	--	--	--	--	11	--	77	.27
GSOCI 110	96	.19*	145	.35	144	.19	131	.34	131	.34	35	.47
GAFTS 200	23	.54	29	-.04*	38	.19*	31	.45	31	.30*	28	-.06*

*Correlation is **not** significantly different from zero, $p > .05$.

^aOver the past 5 years combined, 55 Justice Studies students were matched to course grades. The correlation between grades and assessment scores was 0.45 in this combined group.

The graph below illustrates instability in the correlations due to sampling error. The error bands show the 95% confidence band around the correlation estimates. This helps to explain why the correlations fluctuate from year-to-year.



III. Pre-post Comparisons

Do students change over time in school? (value added or longitudinal change)

Students who have completed a package in the cluster by their sophomore/junior year should show marked improvement on the cluster test as compared to their freshmen year.

Below is a table revealing the same group of students' (standardized and unstandardized) averages and standard deviations on the Cluster Four test at the beginning of their freshman year and at the midpoint of their sophomore year. Only students who had taken the test as both freshmen and sophomores/juniors were included.

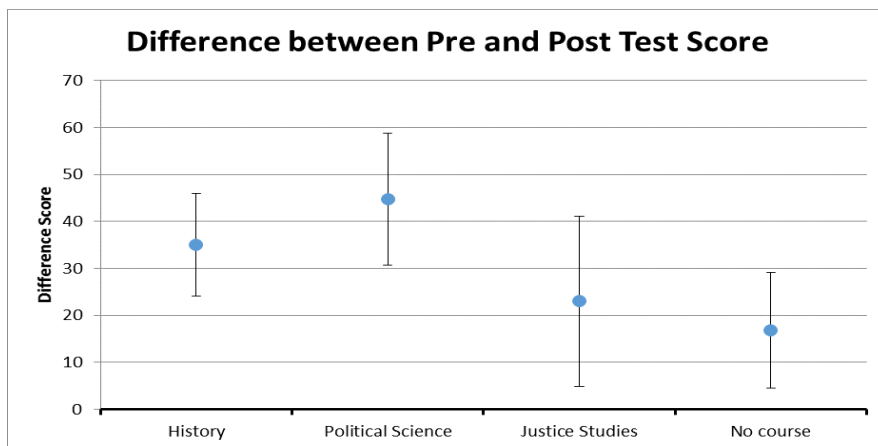
American Experience Change over Time, Spring 2015*

Level of Analysis	N	Fall Group ^a (Pre) Standard Score and SD	Fall Group (Pre) Raw Score and SD	Spring Group (Post) Standard Score and SD	Spring Group (Post) Raw Score and SD	Difference in Standard Score
JMU Course completers	333	493.27 (102.72)	22.29 (5.57)	531.66 (100.31)	24.37 (5.44)	38.39
GHIST 225	211	484.26 (100.49)	21.80 (5.45)	519.27 (99.95)	23.70 (5.42)	35.01
GPOSC 225	119	507.83 (107.21)	23.08 (5.82)	552.58 (100.10)	25.50 (5.43)	44.75
GJUST 225 (2010-2015) ^a	48	486.46 (103.16)	21.85 (5.64)	509.44 (103.93)	23.17(5.64)	22.98
No courses	161	504.39 (101.28)	22.89 (5.50)	521.20 (106.76)	23.80 (5.79)	16.81
Not Enrolled	92	505.80 (104.42)	22.97 (5.67)	506.24 (102.69)	22.99 (5.57)	0.44
Currently Enrolled	69	502.51 (97.66)	22.78 (5.30)	541.14 (109.54)	24.88 (5.95)	38.63

*pre-post correlations (for calculating CI) were: JMU completers = .69, GHIST = .67, GPOSC = .72, GJUST = .81, No courses = .71

^aMultiple years of Justice Studies were combined due to small sample size.

The graph below illustrates instability in the pre-post differences due to sampling error. The error bands show the 95% confidence band around the estimates of the pre-post differences.



Global Experience Change over Time, Spring 2015

Level of Analysis	N	Fall Group (Pre) Standard Score and SD	Fall Group (Pre) Raw Score and SD	Spring Group (Post) Standard Score and SD	Spring Group (Post) Raw Score and SD	Difference in Standard Score*
JMU Course Completers	408	547.17 (109.44)	21.43 (4.49)	603.77 (103.45)	24.11 (4.41)	56.60
GANTH 195	60	545.90 (101.49)	21.38 (4.16)	601.25 (84.09)	24.00 (3.58)	55.35
GECON 200	153	560.99 (104.51)	22.00 (4.28)	617.17 (105.35)	24.68 (4.49)	56.18
GGEOG 200	85	514.16 (123.55)	20.08 (5.07)	574.18 (116.91)	22.85 (4.99)	60.02
GPOSC 200	40	579.93 (113.56)	22.78 (4.65)	652.90 (77.64)	26.20 (3.31)	72.97
GSOCI 110	74	539.26 (93.51)	21.11 (3.83)	588.27 (99.65)	23.45 (4.25)	49.01
GAFST 200***	18	--	--	--	--	--
2013-2015	74	522.73(109.13)	20.743(4.47)	568.95(111.66)	22.62 (4.76)	46.22
No courses	204	532.07 (108.54)	20.81 (4.45)	583.46 (103.12)	23.24 (4.40)	51.39
Currently Enrolled	109	527.25 (99.36)	20.61 (4.07)	589.67 (94.89)	23.50 (4.05)	62.42
Not Enrolled	95	537.60 (118.49)	21.04 (4.86)	576.34 (111.90)	22.94 (4.77)	38.74

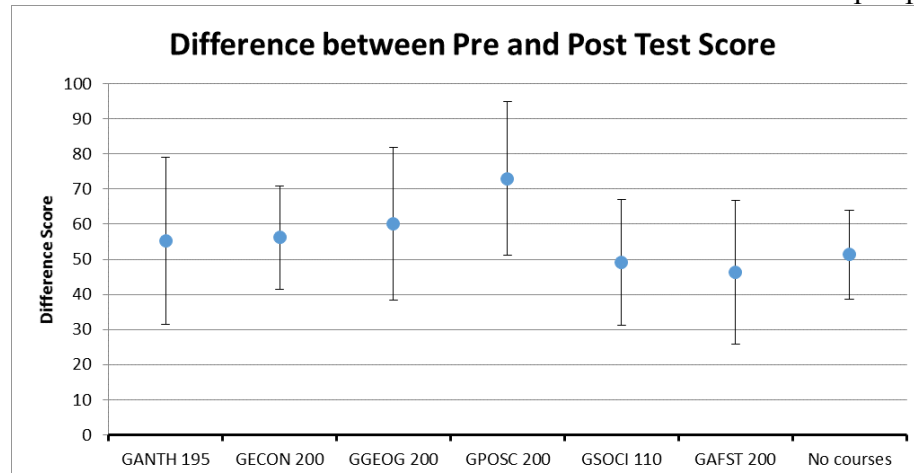
* Cohen's *d* effect size can be approximated by dividing the difference by 100 because the standard deviation is approximately 100 in the pre-test group.

** pre-post correlations (for calculating CI) were: all completers = .65, GANTH = .50, GECON = .61, GGEOG = .64, GPOSC = .79, GSOCI110 = .67, no course = .62

*** Since only 18 students had credit for GAFST, no mean or correlation is reported. Three years are combined instead.

****22 students had credit for multiple classes, so the sum of individual courses exceeds number of students with JMU credit.

The graph below illustrates instability in the pre-post differences due to sampling error. The error bands show the 95% confidence band around the estimates of the pre-post differences.



IV. Meeting a standard (expectation)

Do students meet faculty expectations?

A substantial number of students who have completed the Cluster should meet the competency or academic standard.

This analytical strategy is not applicable to Cluster 4.

Appendix A: Item-Total Correlations and Item Difficulty (Proportion Correct)

AMERICAN EXPERIENCE SPRING 2015

<u>Item</u>	<u>Item Difficulty</u>	<u>Item-Total Correlation</u>	<u>Item</u>	<u>Item Difficulty</u>	<u>Item-Total Correlation</u>
item1	0.80	0.31	item21	0.76	0.44
item2	0.57	0.19	item22	0.74	0.44
item3	0.28	0.18	item23	0.61	0.40
item4	0.52	0.25	item24	0.93	0.33
item5	0.87	0.30	item25	0.58	0.29
item6	0.87	0.24	item26	0.65	0.39
item7	0.91	0.32	item27	0.73	0.32
item8	0.74	0.27	item28	0.88	0.23
item9	0.36	0.16	item29	0.70	0.26
item10	0.58	0.33	item30	0.67	0.34
item11	0.60	0.32	item31	0.48	0.41
item12	0.51	0.38	item32	0.46	0.21
item13	0.70	0.37	item33	0.53	0.34
item14	0.66	0.29	item34	0.18	0.09
item15	0.76	0.33	item35	0.31	0.15
item16	0.29	0.13	item36	0.41	0.22
item17	0.47	0.10	item37	0.41	0.27
item18	0.73	0.40	item38	0.32	0.28
item19	0.84	0.31	item39	0.68	0.22
item20	0.61	0.49	item40	0.53	0.32

GLOBAL EXPERIENCE SPRING 2015

Item	Item Total Correlation	Item Difficulty
Item 1	0.14	0.84
Item 2	0.29	0.60
Item 3	0.16	0.96
Item 4	0.18	0.79
Item 5	0.28	0.92
Item 6	0.26	0.76
Item 7	0.27	0.43
Item 8	0.31	0.75
Item 9	0.34	0.90
Item 10	0.14	0.85
Item 11	0.16	0.85
Item 12	0.21	0.50
Item 13	0.33	0.85
Item 14	0.31	0.83
Item 15	0.21	0.94
Item 16	0.26	0.83
Item 17	0.37	0.79
Item 18	0.26	0.73
Item 19	0.24	0.83
Item 20	0.34	0.76
Item 21	0.31	0.56
Item 22	0.15	0.81
Item 23	0.35	0.70
Item 24	0.30	0.71
Item 25	0.41	0.75
Item 26	0.40	0.58
Item 27	0.33	0.58
Item 28	0.30	0.70
Item 29	0.29	0.66
Item 30	0.22	0.58
Item 31	0.20	0.50
Item 32	0.12	0.40

Appendix B: Item Percent Correct Pre- and Posttest by Course

AMERICAN EXPERIENCE

Course		HIST225		POSC225		NONE*	
N		211		119		92	
Item	Objectives	Pre	Post	Pre	Post	Pre	Post
1	1, 3	79%	78%	81%	84%	79%	80%
2	1, 3	54%	57%	55%	58%	50%	52%
3	1, 4	19%	26%	24%	34%	35%	24%
4	1, 4	58%	55%	53%	50%	49%	46%
5	1, 5	82%	88%	87%	87%	89%	93%
6	1, 5	89%	83%	89%	92%	83%	90%
7	1, 6	89%	93%	86%	93%	90%	95%
8	1, 6	55%	69%	63%	71%	61%	68%
9	2, 3	28%	36%	36%	40%	33%	29%
10	2, 3	48%	51%	51%	59%	55%	61%
11	2, 4	52%	58%	54%	70%	57%	49%
12	2, 4	44%	51%	50%	50%	51%	38%
13	2, 5	67%	62%	76%	88%	73%	68%
14	2, 5	52%	63%	59%	70%	55%	60%
15	2, 6	70%	73%	75%	76%	76%	76%
16	2, 6	29%	27%	33%	27%	32%	28%
17	3	45%	45%	50%	51%	38%	35%
18	3	71%	71%	69%	82%	67%	64%
19	3	78%	83%	75%	90%	86%	83%
20	4	53%	60%	58%	63%	59%	55%
21	4	65%	67%	72%	83%	61%	68%
22	4	64%	76%	62%	86%	70%	73%
23	5	52%	63%	64%	61%	60%	65%
24	5	85%	93%	93%	97%	91%	96%
25	5	53%	59%	59%	64%	57%	53%
26	6	58%	68%	56%	69%	62%	53%
27	6	68%	77%	70%	72%	73%	71%
28	6	84%	90%	88%	86%	88%	92%
29	3	57%	71%	61%	75%	63%	62%
30	4	61%	68%	56%	66%	59%	63%
31	5	39%	58%	43%	45%	45%	38%
32	6	42%	40%	41%	50%	39%	45%
33	3	39%	54%	39%	58%	48%	48%
34	4	10%	14%	13%	13%	13%	25%
35	5	27%	30%	21%	29%	29%	34%
36	6	40%	35%	44%	39%	33%	38%
37	3	37%	33%	46%	55%	46%	39%
38	4	27%	27%	37%	38%	25%	27%
39	5	57%	69%	60%	76%	68%	70%
40	6	54%	48%	61%	56%	51%	43%

*the None group includes only students who have never taken an American course and are not currently enrolled