University of California, Irvine

2010 Assessment of
Lower Division Writing at UCI

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Introduction
This report presents the findings from the 2010 Assessment of Lower Division Writing at UCI. A random selection of 120 papers written in fulfillment of the lower division writing requirement were collected in Spring and Summer 2010 and assessed to determine the quality of student writing achieved through completion of the lower division writing requirement at UCI.

Key Findings
The review of writing products in fulfillment of the lower division writing requirement found the quality of student writing to be fairly similar across lower division writing trajectories. Students appear to be strongest in their writing skills related to the language and style conventions category and weakest in the category of development, evidence, sources, and research. The review of student writing products found that students are able to demonstrate some to satisfactory evidence of writing achievement expected upon completion of the lower division writing requirement.

Humanities Core papers achieved the highest assessment scores in 9 of the 12 writing traits contained within the Lower Division Writing Assessment Rubric, with significant differences observed in 3 of the writing traits, source/evidence credibility and/or relevance, language: eloquence and documentation. Based on overall assessment scores, Humanities Core and Writing 39C Spring papers demonstrated similar levels of writing achievement. Writing 39C papers produced in the Spring demonstrated higher levels of writing achievement than Writing 39C papers produced in the summer either through face-to-face or online instruction. Students who report speaking only English achieved slightly higher, though not statistically significant, scores than their non-English-only counterparts in all 12 of the writing traits contained in the Lower Division Writing Assessment Rubric. The Lower Division Writing Assessment Rubric was found to have high overall reliability.

Overall, the results from this project suggest that while different lower-division writing trajectories seem to yield similar overall writing gains, there are some differences worthy of further investigation. The results of this project unfortunately do not clarify the degree to which the observed differences in writing quality are a function of instructional methods, or characteristics of the student population.

Assessment Design
The 2010 Lower Division Writing Assessment effort sought to refine the assessment rubric used for the 2009 Lower Division Writing Assessment Project, collect information about the quality of student writing produced through the completion of the lower division writing requirement, and determine the impact student's first language has on the quality of student writing. With these goals in mind, this project sought to address the following questions:

• Writing Rubric: To what extent does the Lower Division Writing Assessment Rubric capture the shared writing expectations resulting from completion of the lower-division writing requirement? Is the rubric a reliable instrument?

• Student Writing Skills: What is the quality of student writing produced through completion of the lower division writing requirement? Are there differences in the observed quality of student writing as a function of their lower division writing trajectory? Are there differences in the observed quality of student writing as a function of the instructional method (online vs. face to face) or the quarter in which the course was offered (summer versus spring)?

• Student Background and Writing: To what extent does the quality of student writing vary as a result of the student's language background?

The Lower Division Writing Rubric

In response to the findings and recommendations from the 2009 Lower Division Writing Assessment, modifications were made to the rubric's quality labels, the descriptors for the 12 writing traits, the labels given to the 4 larger writing categories, and the location of the writing traits within the 4 larger writing categories. These modifications were made to more clearly capture the differences in quality scores, and to more accurately capture the writing expectations related to critical thinking and the use of evidence and research.

A random selection of 120 papers produced in the second lower division writing course were collected during the Spring Quarter and Summer 10-Week Session of the 2009-2010 academic year - Humanities Core (30), Writing 39C: Argument and Research (60), FIP (US11: Persuasion and Social Change, US13: Environmental Studies, and US15: Consciousness) (30). The Writing 39C papers were randomly selected from the Spring 2010 courses (20), Summer 2010 10 Week Session face-to-face courses (20), and Summer 2010 10 Week Session online courses (20).

Twelve readers, all with significant writing instruction experience and a strong commitment to better understanding the quality of student writing produced through completion of UCI's lower division writing requirement, assessed a random sample of papers from the lower division writing courses.
Eight of the readers, Angela Beckett, Libby Bevans, Emily Brauer, Chieh Chieng, Kat Eason, Dan Matlock, Ryan Ridge, and Matt Seybold, have served as instructors with the Composition Program. A ninth reader, Abraham Romney, has served as an instructor with both the FIP and Composition Programs. A tenth reader, Brook Haley, has served as an instructor with the Humanities Core Program. An eleventh reader, Elaina Taylor, has served as an instructor for upper division writing at UCI. The twelfth reader, Jackie Rhodes, is an Associate Professor of English and former Upper Division Writing Director at CSU San Bernadino, and served as our writing expert external to UCI.

In preparation for the Lower Division Writing Assessment, Jonathan Alexander, Campus Writing Coordinator, and Lynda Haas, Associate Director for Composition, reviewed papers to locate sample papers reflecting a range of writing quality based on the rubric's twelve writing traits. On September 15, 2010, the first morning of the assessment, Jonathan Alexander and Lynda Haas led the readers in reviewing the goals of this assessment effort, the Lower Division Writing Assessment Rubric, displayed in Table 1, and 4 sample papers. On the second day of the assessment, the group collectively reviewed and discussed 2 additional sample papers to strengthen agreement of what constitutes achievement of the 12 writing traits contained in the Lower Division Writing Assessment Rubric. Because this assessment was predicated on the notion that student writing produced in fulfillment of the lower division writing requirement should be able to demonstrate achievement of these 12 writing traits, neither the assignment prompts nor the course within which a given paper was produced were provided to the readers.

After the initial training session, the readers were divided into 4 reading teams, with all members of a given reading team reading the same set of papers. All papers were read by three readers, with each individual reader assigning a score for each of the 12 writing traits contained within the rubric. As the papers were scored, Natalie Schonfeld monitored and tabulated the results. In order to strengthen inter-rater reliability, for any paper where the difference between the overall scores assigned by the three readers was greater than 5, one of the readers was asked to re-read the paper in question to confirm the score they initially assigned to the paper in question.

Table 1: Lower Division Writing Assessment Rubric

	CATEGORY	4 Proficient Evidence	3 Satisfactory Evidence	2 Some Evidence	1 Insufficient Evidence
Rhetorical Knowledge	Focus	High degree of focus is evident throughout	Generally good focus	Weak or inconsistent focus	No clear focus
	Thesis	Clearly significant, sophisticated, and/or nuanced thesis	Generally significant, sophisticated and/or nuanced thesis	Somewhat significant, sophisticated, and/or nuanced, but flawed	Insignificant, simplistic, and/or incoherent thesis
	Expertise on Topic	Illustrates expert knowledge throughout (positions him/herself as expert)	Generally good grasp of topic, sometimes expert	Intermittent or inconsistent familiarity with topic	Limited or no familiarity with topic
	Rhetorical Awareness (genre/audience)	Consistently shows understanding of essay (genre) conventions and academic (audience) expectations	Generally shows good rhetorical awareness of genre and audience	Inconsistent rhetorical awareness of genre and audience	Little or no rhetorical awareness of essay (genre) and academic (audience) expectations
Development, Evidence, Sources, and Research	Critical Thinking: Development of Ideas	Critical thinking is consistently evident throughout the development of the essay; multiple points of view have clearly been considered	Some evidence of critical thinking is evident in the development of the essay; multiple points of view are considered	Inconsistent demonstration of critical thought in the development of the essay; multiple points of view not clearly evident	Little or no critical thought; development of essay is based on opinion or basic summary; may recapitulate the work of others without qualification
	Sources/Evidence: Credibility and/or Relevance	Sources/evidence used are credible and/or relevant	Sources/evidence used are generally credible and/or relevant	Sources/evidence used are intermittently credible and/or relevant	Sources and evidence chosen are not credible for genre/audience or relevant to subject
	Sources/Evidence: Integration	Effectively introduces and situates source material	Introduces and situates most of the source material	Sporadically introduces some source material	Fails to introduce source material
Structure, Organization	Paragraphs	Paragraphs have a unitary purpose, internal coherence and organization	Paragraphs sometimes have internal coherence and organization	Paragraphs inconsistently demonstrate internal coherence and organization	Paragraphs do not demonstrate internal coherence and organization
	Structure, Order	Organization enhances the development of ideas and is effective	Ordering of paragraphs is generally logical and generally supports the development of ideas	Ordering of paragraphs is somewhat logical, but may also be formulaic or sporadic in helping to develop ideas	Lacking organization; ordering of paragraphs does not help develop ideas
Language & Style Conventions	Language: Correctness	Error-free, idiomatically correct prose that conveys meaning clearly	Generally error-free,-idiomatic prose that usually conveys meaning clearly	Errors and non-idiomatic sentence constructions intermittently impede meaning	Errors and non-idiomatic sentence constructions impede meaning
	Language: Eloquence	Tone, style, and word choice is credible and enhances the reading experience.	Tone, style, and word choice is generally credible and adds to the reading experience	Tone, style, and word choice are sometimes detracting and inconsistently add to the reading experience	Tone, style, and word choice detract from readability

	Documentation	Documentation style is evident and appropriate	Documentation style is generally evident and appropriate	Documentation style is inconsistently evident and/or inappropriate	Documentation style is absent or inappropriate

Table 2 displays the reliability coefficients for the 12 individual writing traits and the overall assessment scores by course and for all the lower division writing products assessed for this project.

Table 2: Alpha Reliability Coefficient Values by Writing Trait and Overall Assessment Score

	Writing Trait	39C Spring (n=20)	39C Summer (n=20)	39C Online (n=20)	FIP (n=30)	Humanities Core (n=30)	ALL (n=120)
Rhetorical Knowledge	Focus	.276	.530	.645	.280	.616	.522
	Thesis	..512	.553	.716	.348	.610	.562
	Expertise on topic	.562	.660	.737	.677	.687	.658
	Rhetorical Awareness (genre/audience)	.572	.816	.702	.314	.712	.668
Research	Critical Thinking: Development of Ideas	.468	.590	.641	.016	.745	.545
	Source/Evidence: Credibility and/or Relevance	.157	.644	.558	.259	.658	.530
	Source/Evidence: Integration	.639	.745	.436	.564	.468	.582
Structure, Organization	Paragraphs	.375	.710	.507	.412	.445	.509
	Structure, Order	.431	.662	.586	.672	.629	.595
Language & Style Conventions	Language: Correctness	.415	.522	.486	.397	.568	.510
	Language: Eloquence	.396	.529	.615	.371	.517	.482
	Documentation	.583	.489	.383	.370	.433	.509
OVERALL SCORE		.769	.781	.774	.767	.777	.775

The overall reliability coefficients for the lower division writing products and for each of the courses suggest that the rubric has high overall reliability. At the same time, the reliability coefficient values for the twelve writing categories by course and across lower division writing products suggest that further refinement is needed in order to strengthen inter-rater reliability. In reviewing the reliability coefficients by course, the findings suggest that the Lower Division Writing Assessment Rubric is most reliable in its ability to capture the writing quality of Summer Writing 39C and Humanities Core papers, and least reliable in its ability to capture the writing quality of FIP papers. When
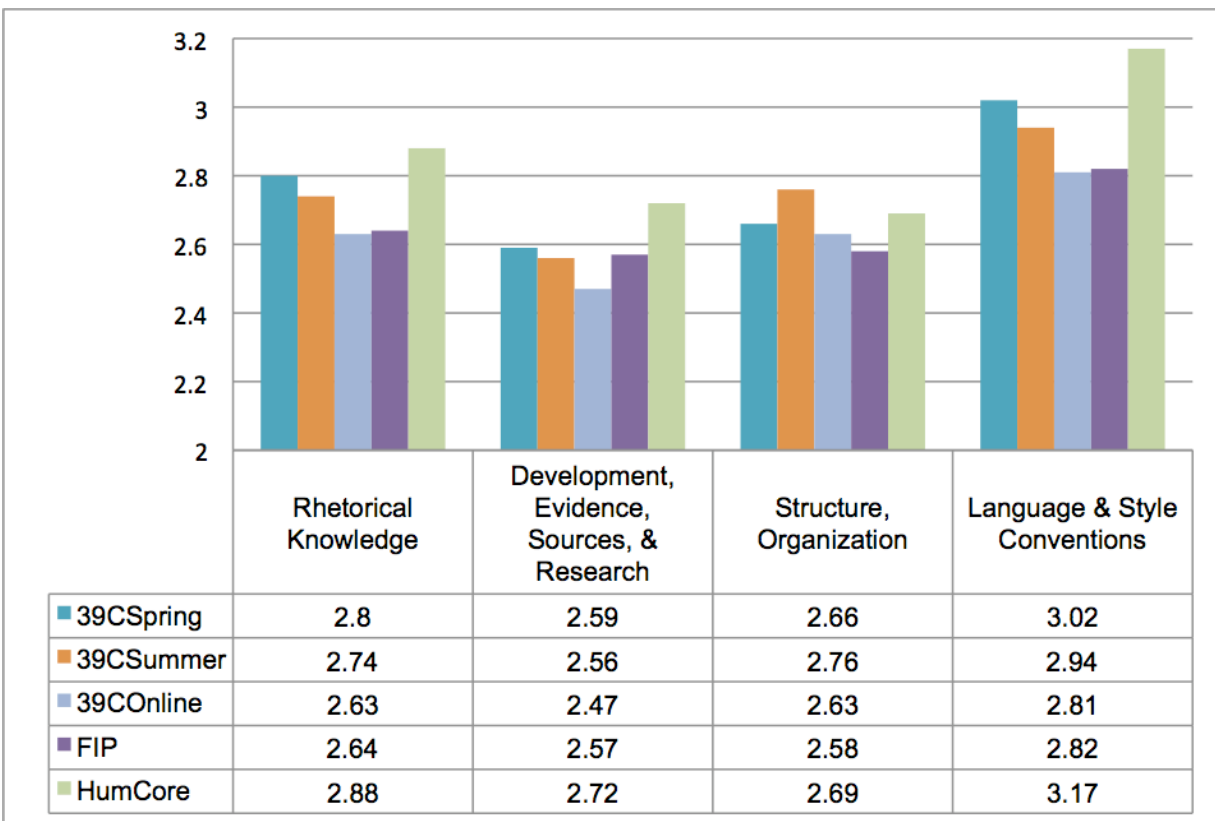
reviewing the reliability coefficients across courses, the values suggest that the rubric is most reliable in its ability to capture writing quality associated with the rhetorical knowledge category and least reliable in its ability to capture writing quality associated with the language and style conventions category.

At the conclusion of the Lower Division Writing Assessment, all readers were asked to provide written feedback about this assessment experience and the Lower-Division Writing Assessment Rubric.[1] In addition, Jonathan Alexander and Lynda Haas engaged the readers in a discussion about the quality of the lower-division writing papers they assessed and the rubric. The readers spoke positively about the rubric's clarity and consistency in describing writing quality, and suggested that further refinements in defining critical thinking would likely strengthen the rubric. Specifically, some readers suggested that greater distinction be made within the rubric between the development of ideas and the presentation of multiple viewpoints.

Student Writing Skills
The lower division writing quality results, as defined by the 4 overarching categories contained within the Lower Division Writing Assessment Rubric, are presented in Graph 1.

Graph 1: Lower Division Writing Assessment Results

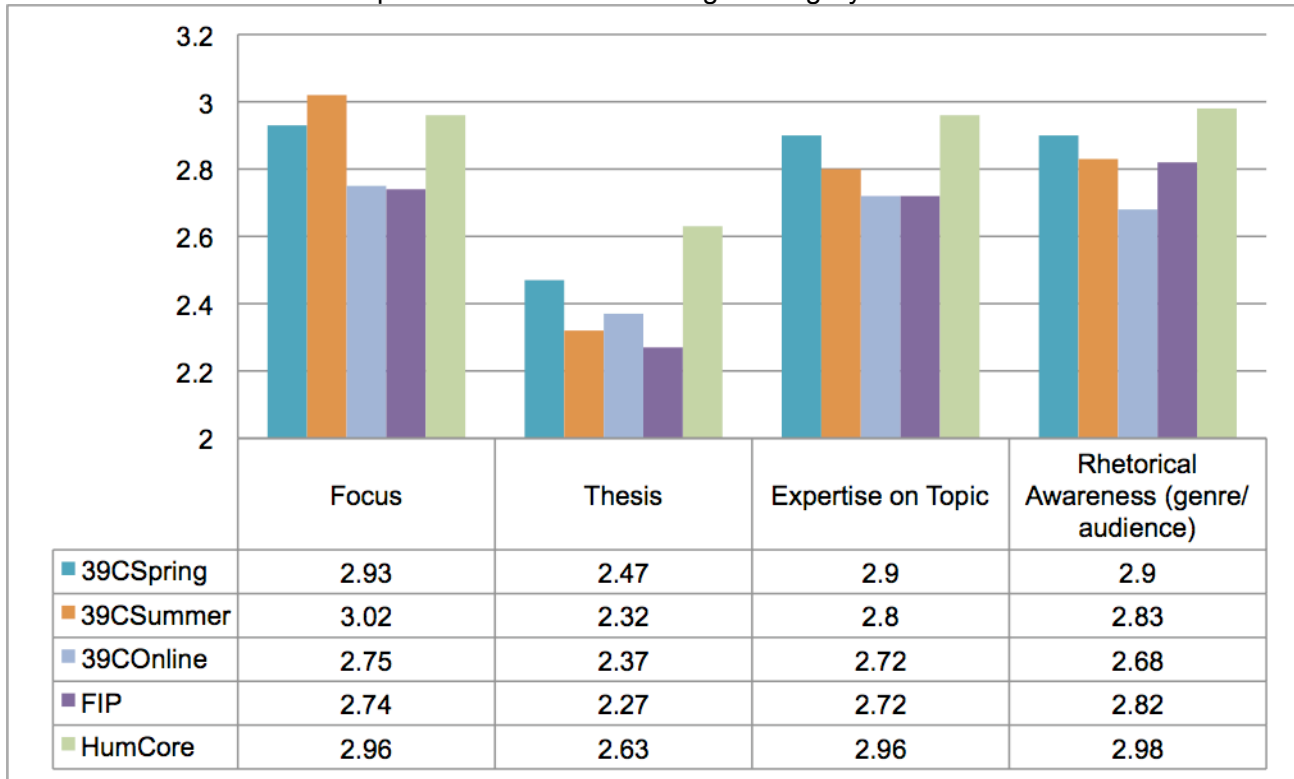|	Rhetorical Knowledge	Development, Evidence, Sources, & Research	Structure, Organization	Language & Style Conventions
39CSpring	2.8	2.59	2.66	3.02
39CSummer	2.74	2.56	2.76	2.94
39COnline	2.63	2.47	2.63	2.81
FIP	2.64	2.57	2.58	2.82
HumCore	2.88	2.72	2.69	3.17

In reviewing the assessment results, the Humanities Core papers emerged as strongest in three of the four categories contained within the Lower Division Writing Assessment Rubric. In contrast, the Writing 39C online papers emerged as weakest in three of the four categories. As these four

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[1] The reader feedback comments about the 2010 Lower Division Writing Assessment Project are located in Appendix A.
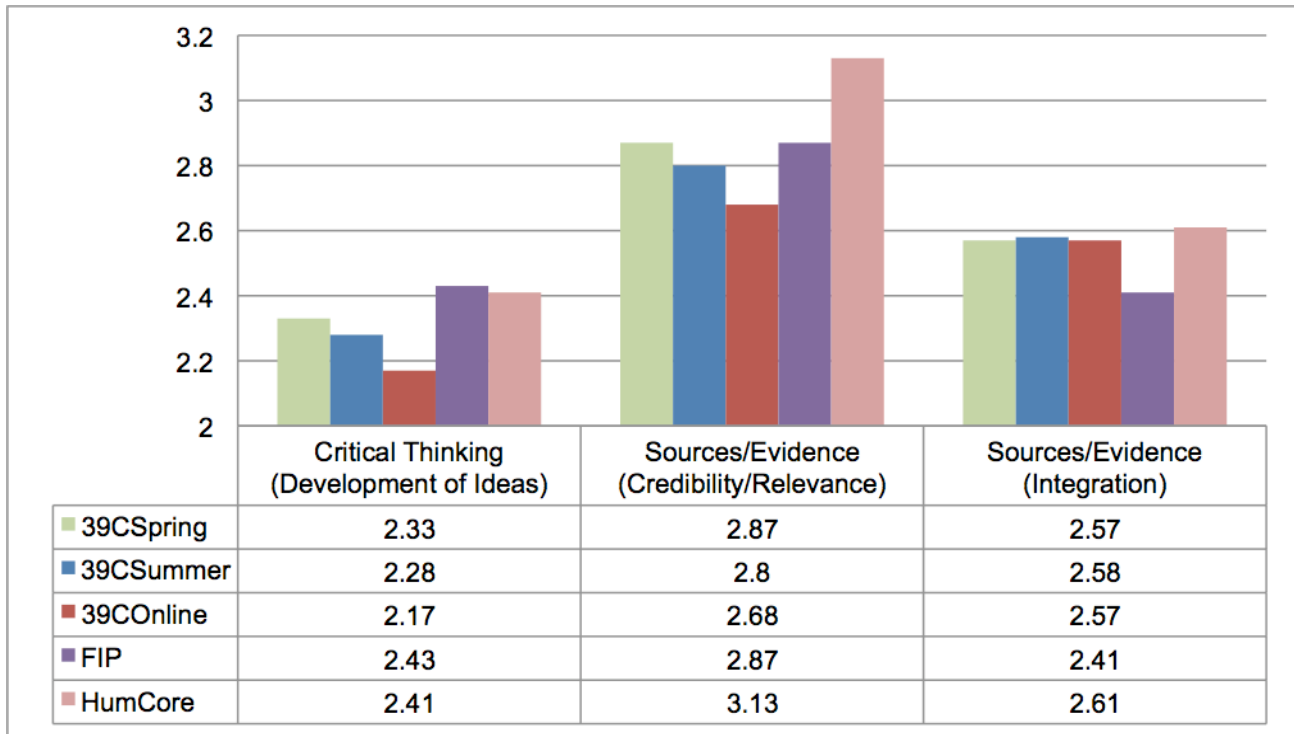
categories represent 12 distinct writing traits, Graphs 2 through 5 detail the individual writing traits contained within the four categories to allow for a more thorough analysis of differences in writing quality as a function of students' lower-division writing trajectory.

Graph 2: Rhetorical Knowledge Category Results

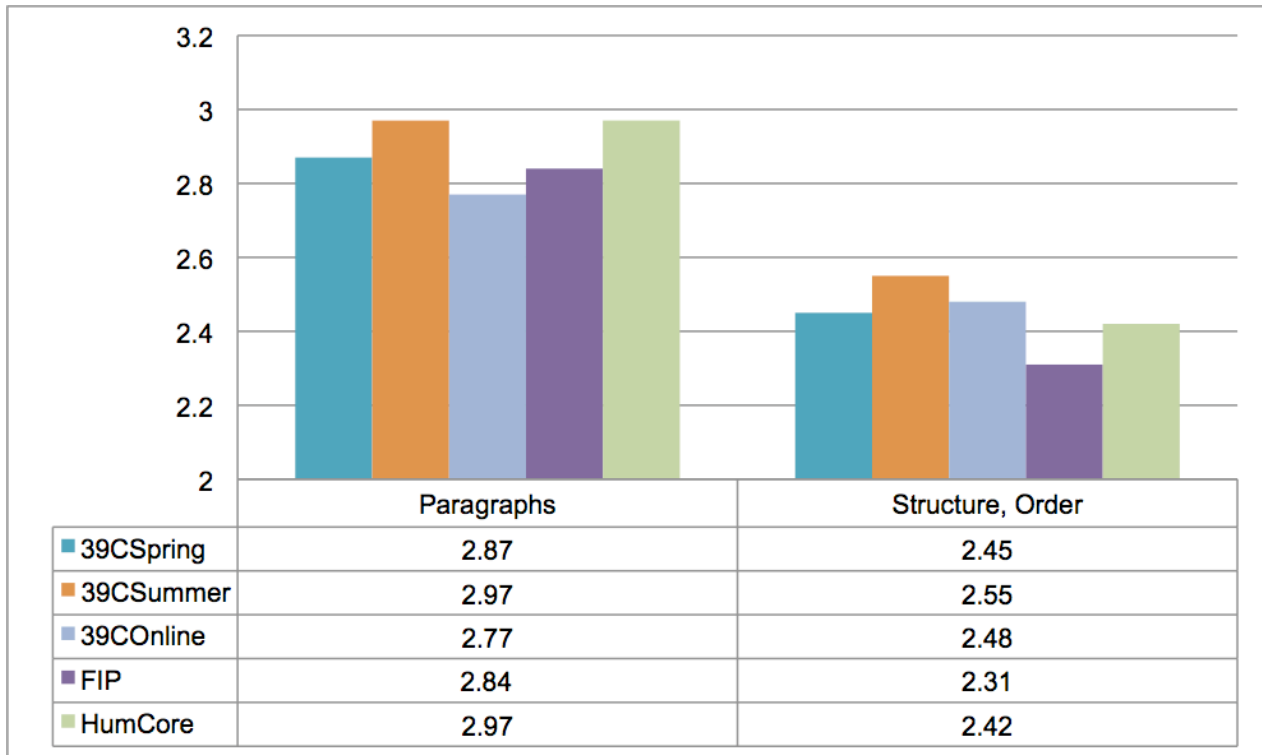|	Focus	Thesis	Expertise on Topic	Rhetorical Awareness (genre/ audience)
39CSpring	2.93	2.47	2.9	2.9
39CSummer	3.02	2.32	2.8	2.83
39COnline	2.75	2.37	2.72	2.68
FIP	2.74	2.27	2.72	2.82
HumCore	2.96	2.63	2.96	2.98

As displayed in Graph 2, the Humanities Core papers were strongest in three of the four rhetorical knowledge writing traits, while Summer Writing 39C papers were strongest in the focus writing trait. Overall, the differences in writing quality as a function of course associated with these four writing traits appear to be relatively small.

Graph 3: Development, Evidence, Sources & Research Category Results

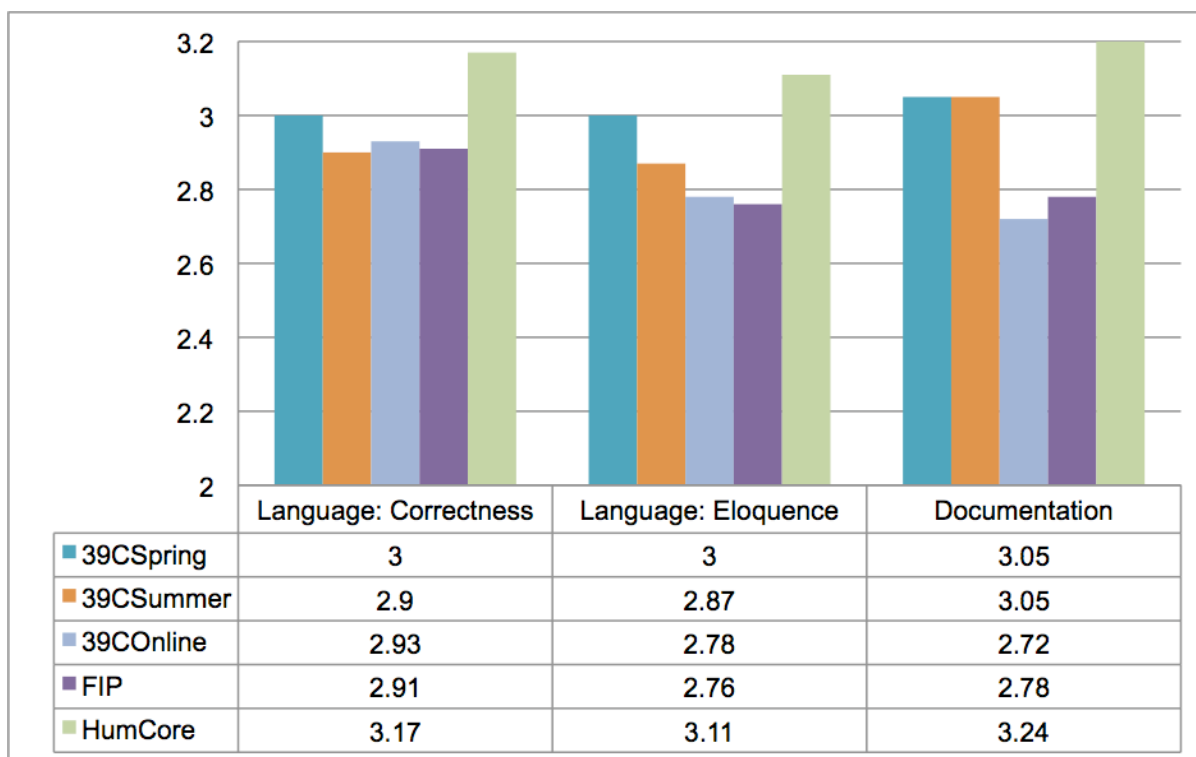|	Critical Thinking (Development of Ideas)	Sources/Evidence (Credibility/Relevance)	Sources/Evidence (Integration)
39CSpring	2.33	2.87	2.57
39CSummer	2.28	2.8	2.58
39COnline	2.17	2.68	2.57
FIP	2.43	2.87	2.41
HumCore	2.41	3.13	2.61

The results displayed in Graph 3 found the Humanities Core papers to be strongest in two of the three writing traits contained in the development, evidence, sources and research category, while the FIP papers were strongest in the critical thinking trait. In contrast, the Summer Writing 39C online course papers were found to be weakest in two of the three writing traits contained within this category.

Graph 4: Structure and Organization Category Results

	Paragraphs	Structure, Order
■ 39CSpring	2.87	2.45
■ 39CSummer	2.97	2.55
■ 39COnline	2.77	2.48
■ FIP	2.84	2.31
■ HumCore	2.97	2.42

The Writing 39C Summer papers were found to be strongest in the two writing traits contained in the structure, organization category as displayed in Graph 4. It is interesting to note that all the papers were assessed as being stronger in the paragraph writing trait and weaker in the structure, order writing trait.

Graph 5: Language and Style Conventions Category Results

	Language: Correctness	Language: Eloquence	Documentation
■ 39CSpring	3	3	3.05
■ 39CSummer	2.9	2.87	3.05
■ 39COnline	2.93	2.78	2.72
■ FIP	2.91	2.76	2.78
■ HumCore	3.17	3.11	3.24

The Humanities Core papers were found to be strongest in the three writing traits contained in the language and style conventions category as presented in Graph 5. It is interesting to note that all the papers, with the exception of those assessed from the Spring Writing 39C courses, were stronger in the language correctness trait than in the language eloquence trait.

The assessment results displayed in Graphs 1 through 5 found the Humanities Core papers to be stronger than the FIP, Spring Writing 39C, and Summer Writing 39C online papers in all four categories. Regardless of the lower division writing course, all papers were found to be strongest in the language and style conventions category. The Writing 39C papers-Spring, Summer, and Online- and FIP papers were weakest in the development, evidence, sources, and research category while the Humanities Core papers were weakest in the structure and organization category.

Because the goal of this project was to better understand the quality of student writing as a function of the lower-division writing trajectory, an ANOVA was performed to determine if the observed differences in writing quality were statistically significant. The level of significance selected for this analysis was $p < .05$. The results, presented in Table 3, show that while there are no significant differences in the overall quality of student writing as a function of their lower-division writing trajectory, there are significant differences in writing quality associated with both the research and language categories. Humanities Core papers were significantly better in the source/evidence: credibility and/or relevance writing trait as well as two of the writing traits contained within the language and style conventions category: language: eloquence and documentation. There is, however, no evidence to suggest that this difference is a result of the fact that Humanities Core is a year-long course. For all three writing traits where significant differences were observed, the papers assessed from the Spring Writing 39C courses achieved

higher scores in all three traits than those produced in FIP, also a year-long course. That said, because 2010 marks the second year that significant differences were observed in the source/evidence: credibility and/or relevance, and documentation writing traits an investigation into both the expectations and instructional approaches associated with the selection and demonstration of the credibility/relevance of one's' sources and the documentation of sources is worthy of discussion and study by the Lower Division Writing Committee.

Table 3: Comparison of Mean Assessment Scores by Lower-Division Writing Trajectory

	CATEGORY	39C Spring (n=20)	39C Summer (n=20)	39C Online (n=20)	FIP (n=30)	Humanities Core (n=30)
Rhetorical Knowledge	Focus	2.93	3.02	2.75	2.74	2.96
	Thesis	2.47	2.32	2.37	2.2.7	2.63
	Expertise on topic	2.9	2.8	2.72	2.72	2.96
	Rhetorical Awareness (genre/audience)	2.9	2.83	2.68	2.82	2.98
Research	Critical Thinking: Development of Ideas	2.33	2.28	2.17	2.43	2.41
	Sources/Evidence: Credibility and/or Relevance *	2.87	2.8	2.68	2.87	3.13
	Sources/Evidence: Integration	2.57	2.58	2.57	2.41	2.61
Structure & Organization	Paragraphs	2.87	2.97	2.77	2.84	2.97
	Structure, Order	2.45	2.55	2.48	2.31	2.42
Language & Conventions	Language: Correctness	3	2.9	2.93	2.91	3.17
	Language: Eloquence *	3	2.87	2.78	2.76	3.11
	Documentation **	3.05	3.05	2.72	2.78	3.24
OVERALL SCORE		33.33	32.97	31.62	31.87	34.59

**p<.01, *p<.05

In Tables 4A-D, the distribution of assessment scores assigned to each paper by the three readers are displayed. These results show that 50% or more of all Spring Writing 39C paper reads yielded a score of 3 or higher in eight of the twelve writing traits. In contrast, 50% of all FIP paper reads yielded a score of 3 or higher in only two of the twelve writing traits.

Table 4A: Rhetorical Knowledge Category Score Distribution

Quality Scores by Trait	Focus	Thesis	Expertise on topic	Rhetorical Awareness
39C Spring*(20 papers, 60 reads)*				
Insufficient Evidence (1-1.99)	(5%)	4 (20%)		
Some Evidence (2-2.99)	6 (30%)	9 (45%)	7 (35%)	8 (40%)
Satisfactory Evidence (3-3.99)	13 (65%)	7 (35%)	13 (65%)	11 (55%)
Proficient Evidence (4)				1 (5%)
39C Summer*(20 papers, 60 reads)*				
Insufficient Evidence (1-1.99)		6 (30%)	1 (5%)	1 (5%)
Some Evidence (2-2.99)	9 (45%)	11 (55%)	8 (40%)	9 (45%)
Satisfactory Evidence (3-3.99)	9 (45%)	3 (15%)	10 (50%)	10 (50%)
Proficient Evidence (4)	2 (10%)		1 (5%)	
39C Online*(20 papers, 60 reads)*				
Insufficient Evidence (1-1.99)		3 (15%)		
Some Evidence (2-2.99)	10 (50%)	13 (65%)	11 (55%)	14 (70%)
Satisfactory Evidence (3-3.99)	10 (50%)	4 (20%)	9 (45%)	6 (30%)
Proficient Evidence (4)				
FIP*(30 papers, 90 reads)*				
Insufficient Evidence (1-1.99)	2 (7%)	8 (27%)		3 (10%)
Some Evidence (2-2.99)	15 (50%)	17 (57%)	18 (60%)	12 (40%)
Satisfactory Evidence (3-3.99)	11 (37%)	5 (17%)	11 (37%)	14 (47%)
Proficient Evidence (4)	2 (7%)		1 (3%)	1 (3%)
Humanities Core*(30 papers, 90 reads)*				
Insufficient Evidence (1-1.99)		2 (7%)		
Some Evidence (2-2.99)	14 (47%)	16 (53%)	11 (37%)	9 (30%)
Satisfactory Evidence (3-3.99)	14 (47%)	11 (37%)	19 (63%)	21 (70%)
Proficient Evidence (4)	2 (7%)	1 (3%)		

Table 4B: Development, Evidence, Sources, and Research Category Score Distribution

Quality Scores by Trait	Critical Thinking: Development of Ideas	Sources/ Evidence: Credibility and/or Relevance	Sources/ Evidence: Integration
39C Spring *(20 papers, 60 reads)*			
Insufficient Evidence (1-1.99)	4 (20%)		5 (25%)
Some Evidence (2-2.99)	11 (55%)	10 (50%)	7 (35%)
Satisfactory Evidence (3-3.99)	5 (25%)	8 (40%)	7 (35%)
Proficient Evidence (4)		2 (10%)	1 (5%)
39C Summer *(20 papers, 60 reads)*			
Insufficient Evidence (1-1.99)	4 (20%)	2 (10%)	2 (10%)
Some Evidence (2-2.99)	12 (60%)	9 (45%)	11 (55%)
Satisfactory Evidence (3-3.99)	4 (20%)	8 (40%)	7 (35%)
Proficient Evidence (4)		1 (5%)	
39C Online *(20 papers, 60 reads)*			
Insufficient Evidence (1-1.99)	5 (25%)		1 (5%)
Some Evidence (2-2.99)	14 (70%)	13 (65%)	13 (65%)
Satisfactory Evidence (3-3.99)	1 (5%)	7 (35%)	5 (25%)
Proficient Evidence (4)			1 (5%)
FIP *(30 papers, 90 reads)*			
Insufficient Evidence (1-1.99)	5 (17%)		2 (7%)
Some Evidence (2-2.99)	20 (67%)	16 (53%)	24 (80%)
Satisfactory Evidence (3-3.99)	4 (13%)	13 (43%)	6 (20%)
Proficient Evidence (4)	1 (3%)	1 (3%)	
Humanities Core *(30 papers, 90 reads)*			
Insufficient Evidence (1-1.99)	3 (10%)		1 (3%)
Some Evidence (2-2.99)	20 (67%)	7 (23%)	20 (67%)
Satisfactory Evidence (3-3.99)	7 (23%)	23 (77%)	8 (27%)
Proficient Evidence (4)			1 (3%)

Table 4C: Structure and Organization Category Score Distribution

Quality Scores by Trait	Paragraphs	Structure, Order
39C Spring(20 papers, 60 reads)		
Insufficient Evidence (1-1.99)	1 (5%)	3 (15%)
Some Evidence (2-2.99)	8 (40%)	12 (60%)
Satisfactory Evidence (3-3.99)	10 (50%)	5 (25%)
Proficient Evidence (4)	1 (5%)	
39C Summer(20 papers, 60 reads)		
Insufficient Evidence (1-1.99)		1 (5%)
Some Evidence (2-2.99)	8 (40%)	14 (70%)
Satisfactory Evidence (3-3.99)	12 (60%)	5 (25%)
Proficient Evidence (4)		
39C Online(20 papers, 60 reads)		
Insufficient Evidence (1-1.99)		3 (15%)
Some Evidence (2-2.99)	10 (50%)	11 (55%)
Satisfactory Evidence (3-3.99)	9 (45%)	6 (30%)
Proficient Evidence (4)	1 (5%)	
FIP(30 papers, 90 reads)		
Insufficient Evidence (1-1.99)		10 (33%)
Some Evidence (2-2.99)	16 (53%)	14 (47%)
Satisfactory Evidence (3-3.99)	13 (43%)	6 (20%)
Proficient Evidence (4)	1 (3%)	
Humanities Core (30 papers, 90 reads)		
Insufficient Evidence (1-1.99)		2 (7%)
Some Evidence (2-2.99)	12 (40%)	22 (73%)
Satisfactory Evidence (3-3.99)	18 (60%)	6 (20%)
Proficient Evidence (4)		

Table 4D: Language and Style Conventions Category Score Distribution

Quality Scores by Trait	Language: Correctness	Language: Eloquence	Documentation
39C Spring(20 papers, 60 reads)			
Insufficient Evidence (1-1.99)			
Some Evidence (2-2.99)	7 (25%)	5 (25%)	7 (35%)
Satisfactory Evidence (3-3.99)	12 (60%)	14 (70%)	12 (60%)
Proficient Evidence (4)	1 (5%)	1 (5%)	1 (5%)
39C Summer(20 papers, 60 reads)			
Insufficient Evidence (1-1.99)		1 (5%)	
Some Evidence (2-2.99)	8 (40%)	8 (40%)	6 (30%)
Satisfactory Evidence (3-3.99)	11 (55%)	11 (55%)	13 (65%)
Proficient Evidence (4)	1 (5%)		1 (5%)
39C Online(20 papers, 60 reads)			
Insufficient Evidence (1-1.99)			2 (10%)
Some Evidence (2-2.99)	8 (40%)	10 (50%)	8 (40%)
Satisfactory Evidence (3-3.99)	12 (60%)	10 (50%)	10 (50%)
Proficient Evidence (4)			
FIP(30 papers, 90 reads)			
Insufficient Evidence (1-1.99)			1 (3%)
Some Evidence (2-2.99)	15 (50%)	17 (57%)	15 (50%)
Satisfactory Evidence (3-3.99)	14 (47%)	13 (43%)	13 (43%)
Proficient Evidence (4)	1 (3%)		1 (3%)
Humanities Core(30 papers, 90 reads)			
Insufficient Evidence (1-1.99)			
Some Evidence (2-2.99)	5 (17%)	5 (17%)	5 (17%)
Satisfactory Evidence (3-3.99)	25 (83%)	24 (80%)	20 (67%)
Proficient Evidence (4)		1 (3%)	5 (17%)

Overall, the findings suggest that the majority of students are able to demonstrate some to satisfactory evidence of achievement of the writing traits contained within the lower division writing assessment rubric. Based on the assessment results, students who fulfilled the lower division writing requirement through Spring Writing 39C or Humanities Core were strongest in the rhetorical knowledge and development, evidence, sources, & research category while students who completed the lower-division writing requirement through the Summer Writing 39C or Writing 39C online were strongest in the structure and organization category. Statistically significant differences in 3 of the 12 writing traits were observed the quality of writing students produced as a function of the lower division writing trajectory. Because 2010 represents the second year when significant differences have been observed in the quality scores associated with source/evidence: credibility and/or relevance and documentation, further study on this issue is needed as it is unclear if the quality scores reflect differences in writing instruction, in the scope of the course's writing assignments related to the utilization, selection, and documentation of evidence, or the students who choose one lower division writing trajectory over another. Most importantly, the results of this project suggest that students are able to demonstrate the some to satisfactory evidence of writing achievement expected upon completion of the lower division writing requirement.

In addition to the assessment results showing some significant differences in the writing quality as a function of the lower division writing trajectory, differences in the quality of student writing were observed within each of the Writing 39C courses as a function of either the quarter when the course was offered or the instructional method. The analysis of the assessment results for the Writing 39C papers found that papers produced in Spring were strongest in three of the four categories contained within the Lower Division Writing Assessment Rubric in contrast to the Writing 39C papers produced in the Summer online course which emerged as weakest in all four categories.   Further, the Writing 39C papers produced in the Spring were strongest in 9 of the 12 writing traits contained within the four overarching writing categories.

In order to determine if the observed differences in writing quality were statistically significant, an ANOVA was performed. The level of significance selected for this analysis was $p < .05$. The results, presented in Table 5, show that there are no significant differences in the quality of student writing as a function of the Writing 39C course type.

Table 5: Comparison of Mean Assessment Scores by Writing 39C Course

	CATEGORY	Writing 39C Spring (n=20)	Writing 39C Summer (n=20)	Writing 39C Online (n=20)
Rhetorical Knowledge	Focus	2.93	3.02	2.75
	Thesis	2.47	2.32	2.37
	Expertise on topic	2.9	2.8	2.72
	Rhetorical Awareness (genre/audience)	2.83	2.68	2.81
Research	Critical Thinking: Development of Ideas	2.33	2.28	2.17
	Sources/Evidence: Credibility/ Relevance	2.87	2.8	2.68
	Sources/Evidence: Integration	2.57	2.58	2.57
Structure & Organization	Paragraphs	2.87	2.97	2.77
	Structure, Order	2.45	2.55	2.48
Language & Conventions	Language: Correctness	3	2.9	2.93
	Language: Eloquence	3	2.87	2.78
	Documentation	3.05	2.72	2.94
OVERALL SCORE		33.34	32.97	31.62

**$p<.01$, *$p<.05$

Overall, no statistically significant differences emerged in the writing quality of papers produced in Writing 39C during different quarters and offered through different instructional methods. Nonetheless, there are observable differences in the assessment scores; papers produced in the Spring were strongest in their ability to demonstrate achievement of the writing traits contained in the Lower Division Writing Assessment Rubric while papers produced in the Summer online course were weakest. It is unclear however whether these differences are a function of the quarter of instruction, the method of instruction, or the students who enrolled in these courses.

Student Background and Writing
In order to better understand the writing quality in the sample of Writing 39C, FIP, and Humanities Core papers assessed for this project, data was collected about students' language background. Table 6 shows that over half of the papers assessed for this project were produced by students who grew up in households where either only another language or both English and another language were spoken.

Language Status	39C Spring (n=20)	39C Summer (n=20)	39C Online (n=20)[1]	FIP (n=30)	Humanities Core (n=30)	ALL (n=120)[1]
English Only	5 (53%)	7 (35%)	5 (25%)	13 (43%)	16 (53%)	48 (40%)
English & Another Language/Another Language Only	14 (53%)	13 (65%)	14 (70%)	17 (57%)	14 (47%)	71 (59%)

[1] Student's language background data was missing for one of the Writing 39C online papers assessment.

An analysis of variance, the results of which are displayed in Table 7, was performed to determine if there were significant differences in writing quality as a result of language background on each of the twelve individual writing categories and the overall writing assessment scores. The level of significance selected for this analysis was $p < .05$. Although the average scores for all twelve writing traits were consistently higher for English only students, no significant differences in writing quality emerged as a function of students' language background.

Table 7: Mean Writing Assessment Values as a Function of Language Status

	CATEGORY	English Only	English & Another/ Another Only
Rhetorical Knowledge	Focus	2.96	2.83
	Thesis*	2.58	2.32
	Expertise on topic	2.90	2.77
	Rhetorical Awareness (genre/audience)	2.93	2.80
Research	Critical Thinking: Development of Ideas	2.36	2.34
	Sources/Evidence: Credibility and/or Relevance	3.01	2.82
	Sources/Evidence: Integration	2.67	2.46
Structure & Organization	Paragraphs	2.90	2.87
	Structure, Order	2.45	2.42
Language & Style Conventions	Language: Correctness	3.08	2.93
	Language: Eloquence	2.97	2.86
	Documentation	3.01	2.94
TOTAL		33.83	32.38

**p<.01, *p<.05

Conclusions and Recommendations

The 2010 Lower Division Writing Assessment was designed with three goals in mind: (1) to assess the degree to which the Lower Division Writing Assessment Rubric captured shared writing expectations across lower division writing courses, (2) to assess the quality of student writing produced through the different trajectories and instructional methods for completion of the lower division writing requirement, and (3) to determine whether students' language background impacts the quality of student writing.

The Lower Division Writing Assessment Rubric, an amalgamation of both nationally and locally used writing rubrics, proved to be a useful tool for assessing the quality of research-based writing, the primary writing genre produced in completion of UCI's lower division writing requirement. In reviewing the reliability coefficients, the rubric proved to be most reliable in capturing the writing quality of Spring Writing 39C and Humanities papers, and most reliable in capturing writing quality associated with the language and style conventions category. While the rubric was found to be a reliable tool for research-based writing products, modifications will further strengthen its ability to effectively capture the quality of student writing. The readers noted that further refinement and definition of critical thinking, as well as greater distinction between the development of ideas and the presentation of multiple viewpoints would serve to further strengthen the rubric. The variability in reliability coefficients by course suggests that rubric modifications here may prove helpful to further understanding student writing skills as well as the shared and unique gains students achieve as a function of their lower division writing trajectory.

The review of student writing products found that students are able to demonstrate some to satisfactory evidence of achievement of the writing expected upon completion of the lower division writing requirement. While writing quality was fairly similar across lower-division writing trajectories, Humanities Core papers achieved the highest scores in 9 of the 12 writing traits contained within the lower division writing assessment rubric. Significant differences were found in 3 of the writing traits with Humanities Core papers demonstrating a higher level of achievement in the source/evidence credibility and/or relevance, the language: eloquence, and the documentation writing traits. Papers produced in Writing 39C Spring were stronger than papers produced in Writing 39C courses offered in the summer, either face-to-face or online, and achieved similar assessment scores to those of Humanities Core papers. Overall, all papers produced in fulfillment of the lower division writing requirement were strongest in the language and style conventions category and weakest in the development, evidence, sources, and research category. These results suggest that while different lower division writing trajectories seem to yield similar overall writing gains, there are some differences worthy of further investigation. The results of this project unfortunately do not clarify the degree to which the observed differences in writing quality are a function of course length, instructional methods, or characteristics of the student population.

Finally, writing quality differed, though not significantly, as a result of students' language background. Overall, papers produced by students who grew up in households speaking only English achieved slightly higher assessment scores on all twelve writing traits contained within the Lower Division Writing Assessment Rubric. While these results are not surprising, in that we would expect for students who grew up in households where English is the primary language to demonstrate higher levels of achievement in writing quality, it is important to note that the differences as a function of language status are rather small and not statistically significant.

In light of these findings, the following recommendations emerge:

The Lower Division Writing Assessment Rubric proved to be a valuable tool for assessing research-based writing products. Refinements to the rubric that serve to further clarify what

constitutes critical thinking and that more clearly distinguish the development of ideas and the presentation of multiple viewpoints will help to strengthen the rubric's overall effectiveness in capturing writing quality produced in fulfillment of the lower division writing requirement.

In addition to any modifications which may be made to the rubric, a greater understanding of the ways in which courses in fulfillment of the lower division writing requirement and their assignments provide students with the opportunity to learn, practice, achieve, and demonstrate the agreed upon lower-division writing skills and abilities, most notably those associated with the use, selection, and documentation of evidence is needed.

There are some differences in the quality of writing produced by students as a result of their language background. This project found that students who grew up in households speaking either only another language or both English and another language achieved slightly lower writing quality scores. While these findings suggest that language background does not seem to be impacting student writing quality as much as perhaps has been generally assumed to be the case, it is recommended that writing quality as a function of students' language background continue to be monitored in future writing assessment projects.

Appendix A

LDW Assessment Reader Notes/Feedback-Summer 2010

What writing courses do you teach?
- WR39B, C; WR139W; UniStudies 84
- 39B, C; FIP
- 39B, C
- 39B, C
- 39B (have taught 39A, C in past)
- 39B, C
- Hum 1A-C; H1A & B; WR39C
- Upper and lower division comp; writing in the public sphere
- WR 39 A, B, C

What suggestions do you have for improving the initial training provided to you as a reader (discussion of rangefinders and the LDW rubric)?
- Adding an additional rangefinder in the first package might help. Perhaps including a written explanation about the logic behind the rubric structure in our pre-assessment packet so that we have a stronger sense of the rubric before day one?
- Clearer reference to language on rubric on part of all parties
- I enjoyed the training and range finding. My only suggestion is that emphasis on upper half vs. lower half positioning of papers potentially defeats the purpose having so many different rating categories
- None. It was thorough and focused
- Review of the types of essays that we'll be grading (just very general)
- Would be helpful to identify how various criteria apply to samples of different rangefinder samples (e.g. papers designing studies vs. HUMCORE)

What suggestions to you have for improving the LDW rubric for future assessments of Lower-Division Writing?
- Accounting for narrowness of view alongside expertise
- Break out analysis/development + multiple viewpoints= from critical thinking
- Consider changing critical thinking category. Category may be ok but the description could be made more concrete so we aren't simply projecting our own concept of critical thinking
- Clearer explanation of "rhetorical awareness"; clarification of "thesis" so that people are looking at the thesis itself for that criteria (not for how it's followed up)
- Gauging specificity; recognizing difference between analytical complexity and acknowledgement of multiple POVs
- Including a stronger place for specificity in the thesis category & separating multiple POV from "critical thought" – both are necessary but it would help to be able to evaluate them as separate categories
- Perhaps reconsider multiple points of view in terms of critical thinking for #3
- Some clarification what's meant by thesis

- The distinction between 2 and 3 in some areas could be clearer- perhaps make the wording stronger- "only intermittently" for a 2 might work. Also, for "paragraphs
  I'd recommend changing the "3" box to "paragraphs often have coherence + organization…"

What were the areas of strength in the writing products you read?
- Documentation, paragraphing, relevance of source material
- Focus, rhetorical awareness, documentation, paragraphs
- Focus was generally solid, as a category; language was solid
- Generally a decent range and quality of sources; good *internal* paragraph coherency
- Grammar, focus, ethos
- Language, expertise, and having strong sources
- Rhetorical confidence, paragraphing
- Some were surprisingly good at integrating sources and dealing with key terms
- The actual writing wasn't that bad- eloquence and correctness were strengths

What were the areas of weakness in the writing products you read?
- Complex critical preparation for and execution of writing goals
- Critical thinking
- Critical thought and structure
- Critical thinking and understanding sources for best possible use
- Others struggled with integration, with developing a complete thesis, and with directing the reader. Papers need to justify themselves more. Why is the topic important? What are the implications? Why should we care?
- Overall structure was a huge problem, analysis, simplistic theses/hypotheses
- Sources, development
- Structure, order, thesis, critical thinking, integration
- Thesis, focus, and critical thinking. To me this seems to be overall purpose in the paper

The Library is currently gathering evidence to assess information literacy. How did the writing products demonstrate the effective use of information to accomplish a specific purpose?
- Acquiring good sources didn't seem to be as big a problem as subordinating source arguments to their own claims
- Clear recognition of the conventions of documentation, most essays chose sources that were relevant, integration & critical approach to sources needs improvement
- Lots of jstor- which is credible but not necessarily timely
- Some papers had a good percentage of print sources
- Strength of source material plus general strength of source integration
- Students are having a very difficult time assessing their sources and being able to summarize the arguments
- The sources were generally strong in credibility & relevance but were either too easily skimmed over or allowed to control the writing from the student
- They found good info, but I think need to know better how to use it and document it
- Weird split- the students who integrated or used info/secondary sources well were excellent/spectacular

Based on your participation in this assessment activity, what changes, if any, might you make in your own teaching?

- Form first, then content!
- I've had some good ideas about how to work with students on integrating sources more rhetorically. I'm going to have them work more on their thesis.
- I think I'm going to really focus on purpose and making this clear
- I was particularly interested in how difficult it was to "shift gears" between various types of essays. While all types seemed to fit the rubric, they did so in slightly different ways. This has helped me to recognize the need to clarify the specific expectations of each essay that I assign.
- Model critical thinking/analysis starting on day one
- More emphasis on broad issues in draft comments
- More emphasis on earlier work on critical analysis based on expressed assignment goals
- Provide more structure + guidance. Open-ended papers are very wandering
- Use of this particular rubric in my LD writing course

Based on your participation in this assessment activity, do you have any recommendations for curricular changes, alterations, or improvements to Lower-Division Writing?

- Emphasize student as early participant in scholarly conversation with sources
- I enjoyed the process- thanks for having us!
- I would like to see the idea of the necessity for clear rubrics and clear expectations for individual assignments emphasized more strongly in teacher training
- Perhaps more guidance on writing sources- usage & integration
- The one thing that seemed really difficult for students to complete effectively was their own studies. Most didn't seem to be able to acknowledge all of the issues in doing their own research.
- The reading would benefit from a higher proportion of experienced readers, although I understand that new teachers benefit from the sessions too