University of California, Irvine

**2011 Assessment of
Upper-Division Writing at UCI**

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Introduction
This report presents the findings from the Summer 2011 Assessment of Upper-Division Writing at UCI. A random selection of papers from Arts 118W, Education 179W, English 106W, History 100W, Sociology 180AW, and Writing 139 were collected in Spring 2011 and assessed using a common scoring rubric to determine the quality of student writing achieved through completion of the upper-division writing requirement at UCI. Differences across courses as well as student characteristics were examined.

Key Findings
The analysis of upper-division student writing products found that students are able to demonstrate some evidence of writing achievement that would be expected in fulfillment of the upper division writing requirement. Overall, students appear to be strongest in their writing skills related to the use of language and style conventions and weakest in their ability to demonstrate structure and development through their writing.

Significant differences in writing quality were observed between upper-division courses, with papers produced in History 100W being strongest in all four categories of the Upper-Division Writing Assessment Rubric and Education 179W papers being weakest in all four categories. This assessment effort confirmed the need for continued discussion about the goals of upper-division writing across disciplines and the degree to which writing and research expectations are communicated to students and used to shape the writing assignments and activities provided to students through their upper-division writing courses. No significant differences in writing quality emerged as a function of students' language or enrollment status. This year marks the second year where no significant differences were observed as a function of enrollment status in contrast to the first two years' Upper-Division Writing Assessment efforts, where significant differences were observed. The Upper-Division Writing Assessment Rubric was found to be a reliable tool overall. Nonetheless, the findings from this project continue to suggest the need for continued modifications and refinements to the critical thinking and use of evidence/research writing categories.

Overall, this project underlined the complexity associated with achieving clarity on the shared writing skills and techniques across disciplines, specifically as they relate to critical thinking and the use of evidence/research, and the need for course writing assignments that provide students with the opportunity to practice, achieve, and demonstrate those shared writing skills and abilities, specifically those associated with the use of evidence/research and critical thinking and analysis.

Assessment Design
The Campus Writing Coordinator sought to assess student writing produced in upper-division writing courses for the fourth consecutive year, with the intention of assessing writing produced in Arts, Education, Social Sciences and Humanities in Summer 2011. The 2011 Upper-Division Writing Assessment efforts sought to build upon the efforts of the previous three years to create and solidify the Upper-Division Writing Assessment Rubric, collect information about the quality of student writing produced in upper-division writing courses, and determine whether such student characteristics as first language and enrollment status (transfer vs. direct from high school) impact the quality of student writing. With these goals in mind, this assessment effort sought to answer the following questions:

- Writing Rubric: Does the Upper-Division Writing Assessment Rubric capture the writing skills and techniques shared across and unique to academic disciplines? Is the rubric a reliable instrument?

- • Student Writing Skills: What is the quality of student writing produced in fulfillment of the upper-division writing requirement? Are there differences in the observed quality of student writing as a function of the upper-division writing course?

- • Student Background and Writing: Does the quality of student writing vary as a result of the student's language status and whether they transferred to UCI or came here directly from high school?

The Upper-Division Writing Assessment Rubric
In response to discussions with the assessment readers in 2010, minor modifications were made to the rubric's quality labels. The four levels of quality, (0) insufficient, (1) some, (2) satisfactory, and (3) proficient, and descriptions for each of the rubric's writing categories are presented below.

Table 1: Upper-Division Writing Assessment Rubric

Category 1: Critical Thinking & Analysis	Category 2: Use of Evidence/Research
3: Proficient: The approach to the assigned topic of study is insightful, and/or creative, persuasive, unique, and worth developing; the level of thinking/analysis is strong; the ideas are clearly communicated with focus and specificity; the topic is considered/addressed from several facets or perspectives; the writer understands discipline-specific methods for producing knowledge; the content is tailored to the disciplinary audience. **2: Satisfactory:** The approach is acceptable, reasonable, thoughtful; the level of thinking/analysis is appropriate; the ideas offered are generally specific and focused, some are insightful, usually communicated clearly; the writer shows an awareness of other facets or perspectives; the writer seems to understand the disciplinary discourse and has taken some care in including content appropriate to the disciplinary audience. **1: Some:** The approach is occasionally adequate; some evidence of thinking/analysis, or an attempt at analysis, is evident; the ideas offered are intermittently delineated, thought-through, and appropriate to the task; the writer attempts to show awareness of at least one other facet or perspective; the writer sporadically shows awareness of the disciplinary discourse and includes content that is relevant to the disciplinary audience. **0: Insufficient:** The approach is inadequate or confusing; little or no evidence of critical thinking and analysis are evident; although some of the ideas may be worthwhile, the level of insight and clarity of presentation are lacking; the writer does not take into account other facets or perspectives, or does so in an inappropriate or simplistic manner; the thinking lacks focus and clarity, illustrates misconceptions; little or no evidence of awareness of the disciplinary audience.	**3: Proficient:** Uses evidence/sources appropriately and effectively, with a clear understanding of the disciplinary audience's expectations; considers (if appropriate) the previous knowledge generated within the discipline (e.g., literature review); evidence/sources used help develop and exemplify the overall argument/purpose of the writer; evidence/sources, including data tables or other visuals, are clearly and accurately represented and smoothly integrated into writer's argument/purpose. **2: Satisfactory:** Generally uses evidence/sources appropriately and effectively, with understanding of the disciplinary audience's expectations; shows awareness (if appropriate) of the previous knowledge generated within the discipline (e.g., literature review); evidence/sources used generally contribute to the overall argument/purpose of the writer; evidence/sources are usually represented accurately and with clarity; evidence/sources, including data tables or other visuals, are often well integrated into writer's argument/purpose (writer controls the ideas, the sources do not). **1: Some:** Evidence/sources have occasionally been used appropriately, and intermittently further the writer's purpose/argument; some evidence of disciplinary expectations for sources/research are evident; evidence/sources are presented with some degree of clarity, with some misreading or simplistic reading; the evidence/sources, including data tables or other visuals, may overwhelm the writer's own voice and purpose; evidence/sources are inconsistently integrated into the prose. **0: Insufficient:** Evidence/sources, if present at all, are used inappropriately, simplistically, or misreading is evident; the writing shows little or no evidence of the writer's understanding of the discipline's expectations for presenting evidence and using sources; evidence/sources, including data tables or other visuals, are mis-matched with the writer's purpose within the prose.

Table 1: Upper-Division Writing Assessment Rubric (continued)

Category 3: Development & Structure	Category 4: Language & Style Conventions
3: Proficient: The prose clearly reflects the genre/discipline's methods of organizing written discourse; the organization is apparent, coherent, and contributes to the overall goals; the insightful, specific, focused development of the main purpose/thesis is effectively organized in paragraphs or sections (as appropriate to the genre/discipline); sophisticated transitional devices help to develop one idea from the previous one or identify their logical relations; the reader is effortlessly guided through the writer's chain of reasoning or progression of ideas.	**3: Proficient:** The writing is styled and eloquent, with an easy flow, rhythm, and cadence; sentences have clear purpose and varied structure; sentences and paragraphing show skill with a wide range of rhetorical, disciplinary, or generic conventions; the writer chooses words for their precise meanings and uses an appropriate level of specificity, illustrating his/her facility with the discipline's discourse; mechanics (spelling, punctuation, grammar, usage, and paragraphing) enhance overall readability and purpose; writing free of errors, evidence of careful editing and proofreading. Correct and appropriate use of citation methods for the discipline and genre.
2: Satisfactory: The prose generally illustrates the writer's understanding of the genre/discipline's methods of organizing written discourse; the organization is usually apparent, coherent, and contributes to the overall goals; the development of ideas is generally insightful, specific and focused, following a logical progression; appropriate transitions connect the ideas and show relations between them; the reader is guided through the writer's chain of reasoning or progression of ideas.	**2: Satisfactory:** The writing is generally appropriately styled and has a flow, rhythm, and cadence; sentences are purposeful and varied in structure; sentences and paragraphing typically show appropriate use of rhetorical, disciplinary, or generic conventions; the writer generally chooses words for their precise meanings and uses an appropriate level of specificity, illustrating his/her understanding of the discipline's discourse; mechanics (spelling, punctuation, grammar, usage, and paragraphing) contribute to overall purpose; writing is almost free of errors, with evidence of editing and proofreading; limited errors do not detract from readability. Correct and appropriate use of citation methods for the discipline and genre.
1: Some: The prose sporadically illustrates the writer's understanding of the genre/discipline's methods of organizing written discourse; the organization is intermittently apparent, coherent, and on occasion, contributes to the overall goals; the development of ideas is somewhat insightful, specific, focused, and logical; transitional devices are inconsistently employed to connect the ideas; the reader can occasionally follow the writer's chain of reasoning or progression of ideas.	**1: Some:** The writing sometimes illustrates aspects of style, rhythm, and cadence appropriate to the discipline/genre; sentences are somewhat varied in structure and occasionally show the writer's understanding of how to use rhetorical, disciplinary, or generic conventions; the writer sporadically chooses words for their precise meanings and uses some level of specificity; mechanics (spelling, punctuation, grammar, usage, and paragraphing) are sometimes detracting from readability and inconsistently contribute to overall purpose; errors occur, and occasionally detract from readability. Some awareness of citation methods for the discipline and genre.
0: Insufficient: The prose does not clearly illustrate the writer's understanding of the genre/discipline's methods of organizing written discourse; organization is random, simplistic or inappropriately sequential, and rarely (if ever) contributes to the overall goals; little or no development of ideas is evident, with limited insight, focus or logic; the writing has little or no internal coherence, using few or inappropriate transitional devices; the reader has difficulty following the writer's chain of reasoning or progression of ideas.	**0: Insufficient:** The writing illustrates little or no ability to use style, rhythm, and cadence; sentences generally lack purpose, with little or no variety in structure; sentences and paragraphing show a lack of understanding of how to use rhetorical, disciplinary, or generic conventions; word choice is typically inappropriate and generalized, showing a limited understanding of disciplinary discourse; mechanics (spelling, punctuation, grammar, usage, and paragraphing) detract (or rarely contribute to) from readability and overall purpose; errors occur throughout, illustrating an inability to control language or a lack of editing and proofreading. Little or no awareness/presence of citation methods for the discipline and genre.

A random selection of papers produced in Spring Quarter 2011 in Arts 118W, Education 179W, English 106W, History 100W, Sociology 180AW, and Writing 139 were collected for the 2011 Upper Division Writing Assessment Effort.

Nine readers, all with significant writing instruction experience and a strong commitment to better understanding the quality of student writing produced through UCI's upper-division writing requirement, assessed the quality of a random sample of writing products produced in 6 different courses. Eight of the readers, Emily Brauer, Kat Eason, Loren Eason, Brook Haley, Dan Matlock, Abraham Romney, Matt Seybold, and Elaina Taylor, serve as instructors for lower-division writing courses at UCI and have served as readers in previous Upper-Division and Lower-Division Writing Assessment efforts. A ninth reader, Brian Thill, serves as the Writing Director for the Humanities Core Program.

In preparation for the Upper-Division Writing Assessment on August 18 and 19, 2011, the Campus Writing Coordinator communicated with faculty from Arts, Education, English, History, and Sociology to discuss the four writing categories contained within the rubric and their respective discipline-specific writing expectations. In preparation for the assessment of upper-division writing, Jonathan Alexander reviewed papers produced in all six of these courses and selected 10 papers reflecting both a range of writing quality based on the rubric's four categories and the distinctive nature of writing as a function of these academic disciplines to be used in the training of the assessment readers.

The first morning of the assessment started with a group discussion about the projects' goals, the lessons learned from the previous three years' assessment efforts, and the distinctive nature of academic writing as a function of its disciplinary frame. The assignment prompts were not provided to the readers, based on the view that student writing produced in upper-division writing courses should rhetorically situate itself, and that it should be able to stand on its own, in that it addresses the aims, goals, and contexts for the writing. As a result, the success of this assessment effort required some discussion about the distinct disciplinary conventions and organizational methods associated with academic writing in Arts, Education, English, History, Sociology, and Humanities. Following this discussion, the readers reviewed the assessment rubric and assessed 5 sample papers. The assessment readers then had a lengthy discussion about the quality scores assigned to each of the sample papers in order to achieve consensus on the elements within the papers which demonstrated evidence of achievement of the four writing categories contained within the Upper-Division Writing Rubric. Because there was such a high degree of consistency in the assessment scores the readers gave to these five sample papers, no additional sample papers were reviewed as part of this assessment effort.

After the training session on the morning of August 18, 2011, readers were divided into 3 reading teams, with all members of a given team reading the same set of papers. All papers were read by three readers, with each individual reader assigning a score for each writing trait contained within the rubric. As papers were scored, Natalie Schonfeld monitored and tabulated the results. Based on the discussions and feedback from the 2010 assessment readers, none of the papers were read more than once by any of the readers.[1]

Table 2 displays the reliability coefficients for both the individual writing categories and the overall quality scores, by course and for all upper-division writing products assessed for this project. The overall reliability coefficients for all upper-division writing papers and for each of the courses

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[1] During the 2010 Upper-Division Writing Assessment Effort, readers shared the concern that the re-reading of papers beyond the initial assessment read-as part of our efforts to increase inter-rater reliability-might create a dis-incentive for readers to assess a paper as particularly strong or weak.

suggest that the rubric has high overall reliability. In reviewing the reliability coefficients by course, the findings suggest that the Upper-Division Writing Assessment Rubric is most reliable in its ability to capture the writing quality of Sociology 180W and History 100W papers, and least reliable in its ability to capture the quality of writing in English 106W papers. When reviewing the reliability coefficients across courses, the values suggest that the rubric is most reliable in its ability to capture students' ability to demonstrate the use of evidence and research through their writing and least reliable in its ability to capture students' ability to organize their writing as captured by the development and structure category.

Table 2: Alpha Reliability Coefficient Values by Rubric Category and Overall

	Category 1: *Critical Thinking & Analysis*	Category 2: Use of *Evidence & Research*	Category 3: *Development & Structure*	Category 4: *Language & Style Conventions*	OVERALL
Arts 118W (n=10)	.373	.135	.427	.567	.626
Education 179W (n=15)	.616	.735	.408	.813	.723
English 106W (n=15)	.580	.340	.634	.665	.576
History 100W (n=10)	.779	.726	.821	.604	.829
Sociology 180W (n=15)	.907	.792	.763	.885	.893
Writing 139 (n=25)	.271	.638	.683	.506	.658
ALL PAPERS (n=90)	.682	.709	.676	.704	.778

At the conclusion of the Upper Division Writing Assessment, all readers were asked to provide feedback about this assessment experience and the Upper-Division Writing Assessment Rubric. Much of the discussion with the readers upon completion of the assessment of upper-division writing papers centered on the use of sources and research in the papers. Many of the readers commented that while many of the papers used sources, they were often used ineffectively or were not relevant to the argument of the paper. The readers discussed how, in many instances, it seemed that the writer was controlled by the sources, that their read of these papers suggested that students struggled with how to use the sources they cited in the development of their argument.
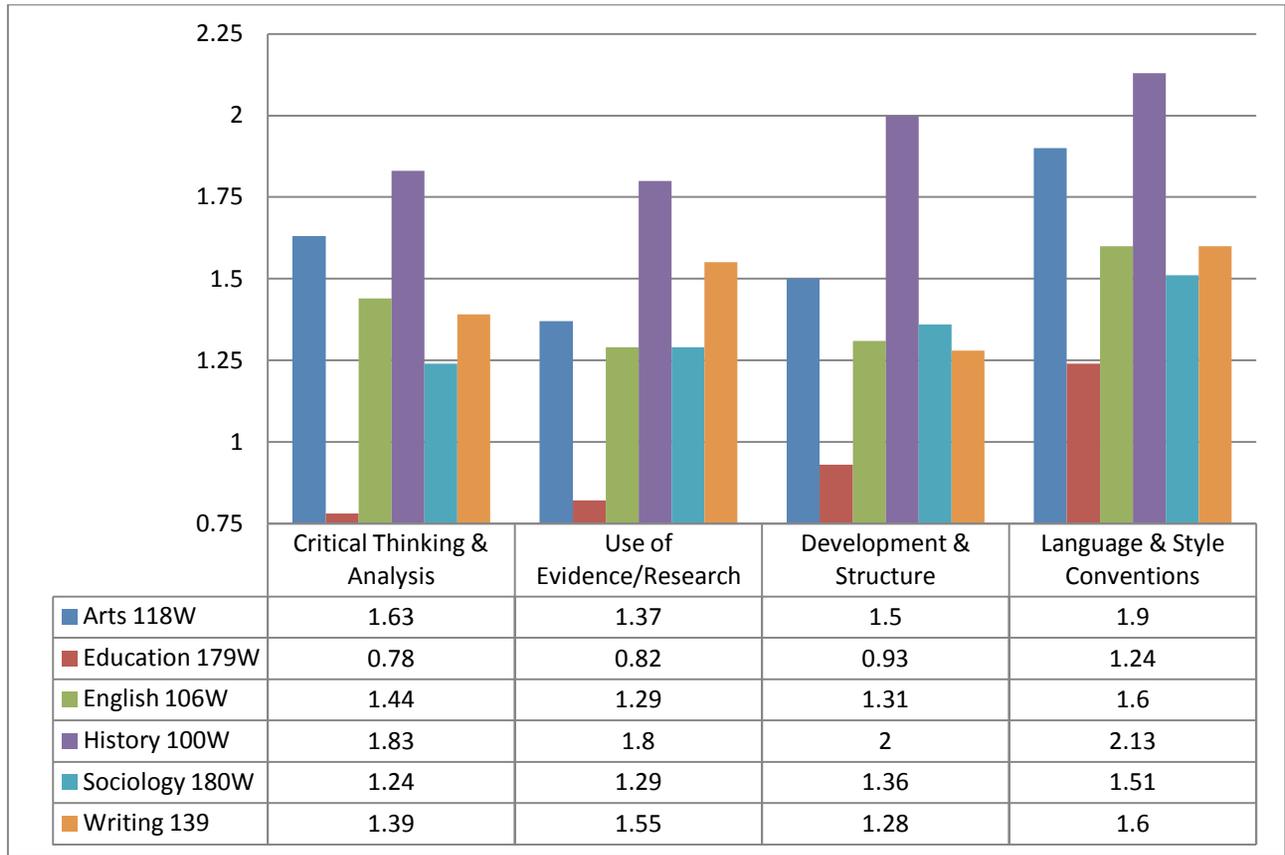
In discussing possible revisions to the Upper-Division Writing Assessment Rubric, the readers suggested making further distinctions between critical thinking and evidence, while acknowledging the ways in which these two categories intersect. Revisions to these two categories would allow for readers to assess the logic of the writer versus the logic of the use of a source in the development of the writer's argument. They suggested that the critical thinking category should capture ways in which sources are used to develop the writer's argument. They noted how, in a number of the papers, students seemed to misread a source and the need for the rubric to be modified in order that such misreadings be captured through the assessment scores; specifically, they suggested that a misreading of a source in a paragraph would reflect an evidence issue whereas a misreading of a source that plays out across the entire paper would reflect a critical thinking issue.   The readers also noted that many of the papers seemed to fall short in their ability to consistently maintain development and structure throughout versus at the paragraph or section

level. Through this discussion of the rubric, the readers also suggested that critical thinking in writing is not necessarily distinct as a function of academic discipline.

Student Writing Skills

The upper-division writing quality results, as defined by the Upper-Division Writing Assessment Rubric, are presented in Graph 1.

Graph 1: Upper-Division Writing Assessment Results

	Critical Thinking & Analysis	Use of Evidence/Research	Development & Structure	Language & Style Conventions
Arts 118W	1.63	1.37	1.5	1.9
Education 179W	0.78	0.82	0.93	1.24
English 106W	1.44	1.29	1.31	1.6
History 100W	1.83	1.8	2	2.13
Sociology 180W	1.24	1.29	1.36	1.51
Writing 139	1.39	1.55	1.28	1.6

The assessment results found the History 100W papers to be strongest in all four categories contained within the Upper-Division Writing Assessment Rubric in contrast to the Education 179W papers which were found to be weakest in all four categories. Papers produced in Education and Sociology were weakest in the critical thinking and analysis category while papers produced in Arts, English, and History were weakest in the use of evidence and research category. All papers, regardless of course, were strongest in the language and styles conventions category. An ANOVA was performed to determine if the observed differences in writing quality as a function of upper-division writing course were significant. The level of significance selected for this analysis was $p<.05$. The results, presented in Table 4, show there are significant differences in the quality of student writing both by writing category and overall as a function of course. The assessment

results for the Education 187 are significantly lower both by writing category and overall in contrast to the assessment results associated with all other courses from which papers were collected for the 2011 Upper-Division Writing Assessment effort. [2]

Table 3: Comparison of Mean Assessment Scores by Upper-Division Writing Course

	Arts 118W (n=10)	Education 179W (n=15)	English 106W (n=15)	History 100W (n=10)	Sociology 180W (n=15)	Writing 139 (n=25)	ALL PAPERS (n=90)
Critical Thinking & Analysis**	1.63	.78	1.44	1.83	1.24	1.39	1.35
Use of Evidence/ Research**	1.37	.82	1.29	1.80	1.29	1.55	1.35
Development & Structure**	1.50	.93	1.31	2	1.36	1.28	1.34
Language & Style Conventions**	1.90	1.24	1.60	2.13	1.51	1.60	1.62
OVERALL SCORE **	6.4	4.78	5.64	7.77	5.40	5.81	5.66

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

The writing quality of the papers assessed in 2011 was lower than hoped for. The 2011 quality assessment scores were comparable to the assessment scores that emerged through both the 2008 and 2009 Upper-Division Writing Assessment efforts. As displayed in Table 4, 17% of all papers assessed were found to be satisfactory or better in their ability to demonstrate achievement of the four writing categories with 60% of the papers produced in History 100W being assessed as demonstrating satisfactory or proficient evidence overall. Conversely, nearly one fourth of all papers assessed were found to be insufficient in their ability to demonstrate achievement of the four writing categories, with nearly two thirds of the papers produced in Education 187 being assessed as insufficient overall.

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[2] It should be noted that in the discussion with the readers at the conclusion of the 2011 Upper-Division Writing Assessment Effort, a number of the readers shared their perception that the editorial format of the Education 187W papers did not allow for students to demonstrate their ability to achieve the writing skills and contained within the Upper-Division Writing Assessment Rubric.

Table 4: Upper Division Assessment Score Distribution by Writing Category

Quality Scores by Category	1	2	3	4	OVERALL
Arts 118W (n=10)					
Insufficient (0-.99)					
Some (1-1.99)	7 (70%)	9 (90%)	8 (80%)	5 (50%)	9 (90%)
Satisfactory (2-2.99)	3 (30%)	1 (10%)	2 (20%)	5 (50%)	1 (10%)
Proficient (3)					
Education 179W (n=15)					
Insufficient (0-.99)	9 (60%)	10 (67%)	8 (20%)	1 (7%)	10 (67%)
Some (1-1.99)	5 (33%)	2 (13%)	6 (40%)	13 (87%)	4 (27%)
Satisfactory (2-2.99)	1 (7%)	3 (20%)	1 (7%)	1 (7%)	1 (7%)
Proficient (3)					
English 106W (n=15)					
Insufficient (0-.99)	2 (13%)	2 (13%)	3 (20%)		2 (13%)
Some (1-1.99)	11 (73%)	11 (73%)	9 (60%)	9 (60%)	12(80%)
Satisfactory (2-2.99)	2 (13%)	2 (13%)	3 (20%)	6 (40%)	1 (7%)
Proficient (3)					
History 100W (n=10)					
Insufficient (0-.99)	1(10%)	1(10%)			1(10%)
Some (1-1.99)	4 (40%)	3 (30%)	4 (40%)	2 (20%)	3 (30%)
Satisfactory (2-2.99)	4 (40%)	5 (50%)	5 (50%)	7 (70%)	5 (50%)
Proficient (3)	1 (10%)	1 (10%)	1 (10%)	1 (10%)	1 (10%)
Sociology 180W (n=15)					
Insufficient (0-.99)	4 (27%)	5 (33%)	4 (27%)	3 (20%)	5 (33%)
Some (1-1.99)	8 (53%)	6 (40%)	8 (53%)	4 (27%)	9 (60%)
Satisfactory (2-2.99)	3 (20%)	4 (27%)	2 (13%)	8 (53%)	1 (7%)
Proficient (3)			1 (7%)		
Writing 139 (N=25)					
Insufficient (0-.99)	2 (8%)	3 (12%)	3 (12%)	4 (16%)	4 (16%)
Some (1-1.99)	19 (76%)	14 (56%)	17 (68%)	14 (56%)	16 (64%)
Satisfactory (2-2.99)	4(16%)	8 (32%)	5 (20%)	7 (28%)	5 (20%)
Proficient (3)					

[a] Category 1 is "Critical Thinking and Analysis"; Category 2 is "Use of Evidence/Research"; Category 3 is "Development and Structure"; Category 4 is "Language and Style Conventions".

Overall, the findings suggest that while the majority of students are able to demonstrate some evidence of writing achievement that would be expected in fulfillment of the upper-division writing requirement, few demonstrate satisfactory or proficient achievement of writing as defined by the Upper-Division Writing Assessment Rubric. Overall, the upper-division writing papers were strongest in the area of language and style conventions and lowest in the area of development and structure. When reviewing the assessment scores by course, the papers produced in all courses, with the exception of Writing 139, were lowest in the writing categories of critical thinking and analysis or use of evidence and research. Significant differences were observed in the quality of

writing students produced as a function of their upper-division writing course, with papers produced in Education 178W being least successful in their ability to demonstrate achievement of the writing categories contained in the Upper-Division Writing Assessment Rubric. These results point to the need to consider the structure and scope of the writing assignments provided to students and the degree to which assignments allow and require students to both achieve and demonstrate the level of writing expected upon completion of the upper-division writing requirement. As noted by the readers at the conclusion of the assessment, further instruction around the use of evidence and sources would likely benefit students' writing skills and ultimately their ability to demonstrate their abilities here. While the readers noted that there are improvements in what students seem to be able to demonstrate through their upper-division writing courses, the majority of papers produced in upper-division writing courses continue not to meet expectations.

Student Background and Writing
In order to better understand the writing quality in the sample of Arts 118W, Education 179W, English 106W, History 100W, Sociology 180AW, and Writing 139 papers, data was collected both about students' enrollment and language status. As displayed in Table 5, the majority of papers assessed, both overall and by course, were produced by direct entrants from high school. Because of the small number of transfer student papers in the sample, relative to the large number of transfer students in both Humanities and Social Sciences (where most of these papers were produced), the Spring 2011 enrollments for all courses were reviewed to ascertain whether the assessment sample was representative of the enrollment status of students enrolled in these courses. No significant differences emerged between course enrollments and the paper samples used for this assessment project as it pertains to student enrollment status.

Table 5: Enrollment Status by Upper-Division Writing Course

Enrollment Status	High School	Transfer
Arts 118W (n=10)	8 (80%)	2 (20%)
Education 179W (n=15)	10 (67%)	5 (33%)
English 106W (n=15)	11 (73%)	4 (27%)
History 100W (n=10)**	6 (75%)	2 (25%)
Sociology 180W (n=15)**	8 (57%)	6 (43%)
Writing 139 (n=25)	20 (80%)	5 (20%)
All Papers	63 (72%)	24 (28%)

**missing enrollment status data

Table 6 shows that the majority of students whose papers were assessed for this study were non-Native English speakers. For two of the six courses, Arts 118W and English 106W, the majority of papers assessed were produced by students who grew up in English only households.

Table 6: Language Status by Upper Division Writing Course

Language Status	English Only	English & Another Language/Another Language Only
Arts 118W (n=10)	10 (100%)	(0%)
Education 179W (n=15)	4 (27%)	11 (73%)
English 106W (n=15)	9 (60%)	6 (40%)
History 100W (n=10)**	4 (50%)	4 (50%)
Sociology 180W (n=15)**	5 (36%)	9 (64%)
Writing 139 (n=25)	11 (44%)	14 (56%)
All Papers	43 (49%)	44 (51%)

**missing language data

An analysis of variance was performed to identify the effects of enrollment status, and language status, respectively, on the four individual writing categories and the overall writing assessment scores. The level of significance selected for these analyses was $p < .05$. The results from the analysis of variance concerned with the effect of enrollment status on writing quality, displayed in Table 7, show that there are no significant differences in writing quality as a function of enrollment status. During the first two years of Upper-Division Writing Assessment efforts, significant differences as a function of enrollment status emerged, with students who enrolled at UCI directly from high school demonstrating a significantly higher quality of writing than their transfer student counterparts. It is unclear why this pattern has not held across the four years' worth of assessment efforts for Upper-Division Writing. Potentially, the fact that no significant differences as a function of enrollment status emerged in both the 2010 and 2011 Upper-Division Assessment efforts may be the result of changes in the instruction of Upper-Division Writing or may be a function of the different academic disciplines and courses from which upper-division writing papers have been selected in each year's assessment efforts. In both 2010 and 2011, the majority of the upper-division writing papers assessed came from academic schools with high percentages of transfer enrollments.

As also noted in Table 7, there are no significant differences in writing quality as a function of language status though students who grew up in English only households achieved higher assessment scores by writing category and overall than their English and another language and another language only counterparts. These findings are consistent with the findings concerned with the effects of language status on writing quality that emerged in all prior years' worth of Upper-Division Writing Assessment Efforts.

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

Mean Writing Assessment Values and Enrollment Status	High School	Transfer
Critical Thinking & Analysis	1.29	1.36
Use of Evidence/ Research	1.29	1.40
Development & Structure	1.28	1.41
Language & Style Conventions	1.67	1.40
OVERALL SCORE	5.53	5.58
Mean Writing Assessment Values and Language Status	English Only	English & Another/ Another Only
Critical Thinking & Analysis	1.36	1.16
Use of Evidence/ Research	1.38	1.13
Development & Structure	1.35	1.11
Language & Style Conventions	1.63	1.51
OVERALL SCORE	5.72	5.00

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

Conclusions and Recommendations

The 2011 Upper-Division Writing Assessment was designed with three goals in mind: (1) to assess the degree to which the Upper-Division Writing Assessment Rubric captures shared and unique writing skills and techniques across and within academic disciplines, (2) to assess the quality of student writing produced in upper-division writing courses, and (3) to determine whether such student characteristics as first language and transfer vs. high school status impact the quality of student writing. The Upper-Division Writing Assessment Rubric, modified in response to the findings and recommendations of prior Upper-Division Writing Assessment efforts, proved to be a useful tool for assessing the quality of writing produced in these courses. While the rubric was found to be a reliable tool, improvements to the instrument will continue to further strengthen its ability to effectively capture the quality of student writing produced in upper-division writing courses as it relates to both the critical thinking and use of evidence/research categories, as well as across disciplinary genres. The review of student writing showed that students are able to demonstrate some evidence of writing achievement that would be expected in fulfillment of the upper-division writing requirement. The papers were consistently strongest in the use of language and style conventions, with only 17% of the papers demonstrated satisfactory or proficient evidence of achievement of all four writing categories. Further, significant differences in writing quality were observed between upper-division courses, with papers produced in History 100W being strongest in all four categories of the Upper-Division Writing Rubric while Education 179W papers were weakest in all four categories. In looking at the assessment results by course, papers were generally found to be weakest in critical thinking and analysis and/or use of evidence/research. In all previous Upper-Division Writing Assessment Efforts, papers were found to be weakest in their ability to demonstrate critical thinking. Finally, no meaningful differences were observed in the writing quality produced by students as a function of their enrollment status.

In light of these findings, the following recommendations emerge:

There is great value in the distinctiveness of upper-division writing courses as a result of the given discipline's approach to writing. At the same time, there are shared expectations of what writing

skills students should be able to demonstrate upon completion of the upper-division writing requirement. It is critical that faculty teaching upper-division writing achieve clarity around the upper-division writing expectations and provide students with writing instruction and assignments that provide students with the opportunity to learn, practice, achieve, and demonstrate the writing skills and abilities reflected by the Upper-Division Writing Assessment Rubric.

As the past four years of Upper-Division Writing Assessment efforts have shown, there is overlap between the four writing categories contained within the Upper-Division Writing Rubric. In the first two years of Upper-Division Writing Assessment efforts, much of the discussion of the rubric centered around making modifications in order that the rubric be general enough to capture and acknowledge the distinctive writing qualities and expectations of academic genres, but specific enough that it communicate the shared understanding of what constitutes critical thinking, use of evidence/research, structure and development, and language and style conventions in writing. Critical thinking and the use of evidence/research interact and shape one another. At the same time, each of these writing categories represents different skill sets and abilities. Further modifications and refinements to the Upper-Division Writing Assessment Rubric that both acknowledge the distinctions and locations of overlap between the writing categories will prove helpful in our efforts to better understand what students can do and how best to prepare them to best demonstrate their skills in these writing categories.

While significant differences in the quality of writing produced by students as a result of their enrollment status emerged in the first two years' worth of Upper-Division Assessment efforts, no such differences have been observed in either 2010 or 2011 efforts. Because of our interest and commitment to understanding what students are able to demonstrate through their writing, and the impact, if any, of enrollment status as the UCI transfer population continues to grow, it is recommend that writing quality as a function of students' enrollment status continue to be monitored in future writing assessment projects.