Year-Long Study, Humanities Core Course

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Testing Critical Thinking and Measuring Stated Learning Outcomes

Purpose

Humanities Core Course's 2014 study directly builds upon the research of previous studies at UCI. Jonathan Alexander's study demonstrated that student's weakest area in writing was in the demonstration of "Critical Thinking" skills. I sought to evaluate the extent to which our paper samples demonstrated and improved upon their critical thinking skills. I also posed the research question to what extent were students meeting our stated learning outcomes? In addition to these questions, I wanted to investigate a student's entire body of work in contrast with studies which evaluate the capstone research project or an isolated handful of papers. Would students demonstrate at least a sufficient capacity in each category, particularly towards the end of their writing portfolios in Essays 6-8 when their writing is theoretically at its most developed? Students also responded to a series of self-reflective questions about the writing process in Fall, Winter, and Spring quarters to better understand the student's relationship with her/his writing and to evaluate to what extent their experiences were consistent with the statistical findings of this study. Interestingly, self-reflective responses correlate with the statistical evaluations of the various skill sets. The trend towards improvement in the student portfolio matched with the student's experience and self-awareness of their writing process; students also identified what they felt to be their own areas of weakness and these also correlate with the statistical findings.

Methods

The question of critical thinking was addressed through three distinct rubrics and methods of evaluation. Our most tangible iteration of evaluating student papers is our Essay Grading Rubric: every single student paper was assessed with this sheet. I also developed a targeted Frequency Analysis checklist for every student paper, based on areas of weakness determined from previous studies. This sheet served to highlight some of the least tangible and most challenging aspects of writing for students. The third rubric was our learning outcomes statement on the course website, pared down to a useable rubric for readers outside of Humanities Core. This rubric attended to student development, with one used per student Portfolio. In the total student's portfolio, did the material represent at least a satisfactory demonstration of these outcomes? To meet a relative degree of objectivity in assessment, we had a team of 8 readers from a variety of writing based departments. Our readers were: Giovanna Fogli, Susan Morse, Jared White, Laurie Dickmeyer, Ian Jensen, Ian Litwin, Rosanna Nunan, and Writing Director Larisa Castillo.

Assessment Rubric I: Grade Range -- Score on a Scale of 1-5, 5 as highest. Place the score value in the top row for each category ("Conceptual," "Rhetorical," etc.). Papers may partially fall in the B and C range for a category, but you will need to determine a whole number score based on the student's performance overall in that category.

5 = Mastery: highly demonstrates performance in this category.

4 = Beginning Mastery: consistently demonstrates performance, but could improve in this area.

3 = Satisfactory: a satisfactory ability in this particular skill set.

2 = Limited: a limited demonstration in this particular skill set, but it is present somewhere in the sample paper.

1 = Insufficient: does not demonstrate this particular skill in the paper.

Humanities Core Course Grading Rubric for Final Essays

Grades	Conceptual	Rhetorical	Thesis	Development and Support	Structuring	Language
5 / A	has cogent analysis, shows command of interpretive and conceptual tasks required by assignment and course materials: ideas original, often insightful, going beyond ideas discussed in lecture and class	commands attention with a convincing argument with a compelling purpose; highly responsive to the demands of a specific writing situation; sophisticated use of conventions of academic discipline and genre; anticipates the reader's needs for information, explanation, and context	essay controlled by clear, precise, well-defined thesis; is sophisticated in both statement and insight	well-chosen examples; uses persuasive reasoning to develop and support thesis consistently; uses specific quotations, statistics, aesthetic details, or citations of scholarly sources effectively; logical connections between ideas are evident	Well-constructed paragraphs; appropriate, clear, and smooth transitions; arrangement of organizational elements seems particularly apt	uses sophisticated sentences effectively; usually chooses words aptly; observes professional conventions of written English and manuscript format; makes few minor or technical errors
4 / B	shows a good understanding of the texts, ideas and methods of the assignment; goes beyond the obvious; may have one minor factual or conceptual inconsistency	addresses audience with a thoughtful argument with a clear purpose; responds directly to the demands of a specific writing situation; competent use of the conventions of academic discipline and genre; addresses the reader's needs for information, explanation, context	clear, specific, arguable thesis central to the essay; may have left minor terms undefined	pursues explanation and proof of thesis consistently; develops a main argument with explicit major points with appropriate textual evidence and supporting detail	distinct units of thought in paragraphs controlled by specific, detailed, and arguable topic sentences; clear transitions between developed, cohering, and	a few mechanical difficulties or stylistic problems (split infinitives, dangling modifiers, etc.); may make occasional problematic word choices or syntax errors; a few spelling or punctuation errors or a cliché; usually presents quotations effectively, using appropriate format

				logically arranged paragraphs	
3 / C	an understanding of the basic ideas and information involved in the assignment; may have some factual, interpretive, or conceptual errors shows	presents an adequate response to the essay prompt; pays attention to the basic elements of the writing situation; shows sufficient competence in the conventions of academic discipline and genre; signals the importance of the reader's needs for information, explanation, and context	general thesis or controlling idea; may not define several central terms	only partially develops the argument; shallow analysis; some ideas and generalizations undeveloped or unsupported; makes limited use of textual evidence; fails to integrate quotations appropriately; warrants missing	some awkward transitions; some brief, weakly unified or undeveloped paragraphs; arrangement may not appear entirely natural; contains extraneous information	more frequent wordiness; unclear or awkward sentences; imprecise use of words or over-reliance on passive voice; some distracting grammatical errors (wrong verb tense, pronoun agreement, apostrophe errors, singular/plural errors, article use, preposition use, comma splice, etc.); makes effort to present quotations accurately
2 / D	shows inadequate command of course materials or has significant factual and conceptual errors; confuses some significant ideas	shows serious weaknesses in addressing an audience; unresponsive to the specific writing situation; poor articulation of purpose in academic writing; often states the obvious or the inappropriate	thesis vague or not central to argument; central terms not defined	frequently only narrates; digresses from one topic to another without developing ideas or terms; makes insufficient or awkward use of textual evidence; relies on too few or the wrong type of sources.	simplistic, tends to narrate or merely summarize; wanders from one topic to another; illogical arrangement of ideas	some major grammatical or proofreading errors (subject-verb agreement, sentence fragments, word form errors, etc.); language frequently weakened by clichés, colloquialisms, repeated inexact word choices; incorrect quotation or citation format
1 / F	writer lacks critical understanding of lectures, readings, discussions, or assignments	shows severe difficulties communicating through academic writing	no discernible thesis	little or no development; may list disjointed facts or misinformation; uses no quotations or fails to cite sources or plagiarizes	no transitions; incoherent paragraphs; suggests poor planning or no serious revision	numerous grammatical errors and stylistic problems seriously detract from the argument; does not meet Standard Written English requirement

Assessment Rubric II: Frequency Analysis Sheet -- Include a check in each box where you see a satisfactory demonstration of that particular writing skill. Leave the box blank if you do not detect a satisfactory demonstration of that particular skill.

Five Indicators of Effective Student Writing: Targeting Areas of Weakness from Previous Studies

Argument	Source Evaluation / Interdisciplinary Engagement	Analysis and Warrants	Structure and Cohesion	Language
Establishes a clear thesis that is responsive to the writing prompt	Integrates primary or secondary sources	Analyzes all of the evidence that is integrated into each paragraph; does not summarize	Paragraphs progress in a manner that develops the essay	Uses academically appropriate language by considering its audience
Pursues this argument in topic sentences and body paragraphs	Demonstrates an understanding of the language of secondary sources	Articulates how the evidence cited supports the main claim of that particular body paragraph	Individual paragraphs maintain cohesion and focus on one main point	Follows MLA style guidelines
Expands the thesis over the course of the paper	Engages with an opposing viewpoint in a secondary source	Demonstrates that the evidence cited is necessary to cite through its analysis and warrants	Paragraphs each prove one distinct aspect of the argument and do not create repetition	Uses MLA documentation style; sources are accurately introduced or otherwise integrated into the essay
Articulates a thesis that shows complexity of thought rather than binary responses	Shows a reading comprehension of sources pertaining to the assignment	Warrants ultimately expand on the main claim offered in the paragraph, thereby leading to the essay's logical progression to the next paragraph	Uses transitional statements, phrases, and terms in between paragraphs and ideas in order to establish logical cohesion and development	Demonstrates evidence of crafting, editing, revising, and conceptualizing the final written product

Assessment Rubric III: Humanities Core Course Outcomes Statement -- Please score on the same scale of 1-5, 5 as the highest number the student's <u>Portfolio as a whole</u> (complete only one per student/Portfolio). Please give your score in the margin next to each category, "Knowledge, Critical Thinking, etc.". Next to each bullet point, include a check mark if you see <u>at least satisfactory evidence</u> of this in the Portfolio. Do not write anything next to bullet points where you do not see this skill present. To what extent does the student meet these outcomes by the year's end, particularly in essays 6-8 (depending on the last papers in your particular Portfolio)?

(Based on the April 2000 Statement from the Council of Writing Program Administrators)

Rhetorical Knowledge

By the end of the first-year experience, students should

- Focus on a purpose in their communicative efforts
- Demonstrate an awareness of audience
- Use conventions of format and structure appropriate
- Adopt appropriate voice, tone, and level of formality
- Be able to identify many genres, such as those representative of philosophical discourses, canonical and non-canonical literature, and documents in the historical record.
- Write in several genres
- Be conscious of disciplinary difference in departmental discourses and methods of inquiry.

Critical Thinking, Reading, and Writing

By the end of the first-year experience, students should

- Use writing and reading for inquiry, learning, thinking, and communicating
- Understand a writing assignment as a series of tasks, including finding, evaluating, analyzing, and synthesizing appropriate primary and secondary sources
- Be familiar with many methods of approaching close reading texts in the humanities, such as causal analysis, comparison and contrast, narrative analysis, rhetorical analysis, etc.
- Differentiate primary and secondary sources and also understand situations where those categories are problematic.
- Integrate the language and ideas of others appropriately into their own arguments.
- Paraphrase the claims in an argument from another source
- Formulate appropriate counterarguments

Knowledge of Conventions

By the end of first-year experience, students should

- Develop knowledge of genre conventions ranging from structure and paragraphing to tone and mechanics
- Practice appropriate means of documenting their work
- Control such surface features as syntax, grammar, punctuation, and spelling

Conclusions

Results: Stated Learning Outcomes

When using our Humanities Core Course's Learning Outcomes Statement, the category of "Critical Thinking, Reading, and Writing" was the weakest. This is compatible with previous studies of composition students at both UC Irvine and on the national level. This Critical Thinking, Reading, and Writing category included the following markers: "integrating the language and ideas of others appropriately into their own arguments," and "formulating appropriate counterarguments." These two markers are actually overlapping indicators of critical thinking inasmuch as they represent a weakness in the engagement of another voice or position in light of their own.

Numerical Results (for 34 Portfolios):

Rhetorical Knowledge 3.76 / 5

Critical Thinking, Reading, and Writing 3.52 / 5

Knowledge of Conventions 3.79 / 5

Results, Grading Rubric

The results of assessing the student papers with Humanities Core Course's Grading Rubric identified the "Rhetorical" category as the weakest at 3.46 out of 5 points. According to the rubric, a level 5/A level essay for the "Rhetorical" category "commands attention with a convincing argument with a compelling purpose[, is] highly responsive to the demands of a specific writing situation[, shows a] sophisticated use of conventions of academic discipline and genre[, and] anticipates the reader's needs for information, explanation, and context." The highest scoring category was the "Language" category at 3.98 out of 5. Thus the more concrete features of the language category were more attainable for first-year composition student than the more challenging aspects of the "Rhetorical" category.

<u>Numerical Results (for 210 papers):</u>

Conceptual = 3.69 / 5

Rhetorical = 3.46 / 5

Thesis = 3.55 / 5

Development and Support = 3.55 / 5

Structuring = 3.59 / 5

Language = 3.98 / 5

Results, Frequency Analysis

I addressed the slippery category of "Critical Thinking" by targeting select skill sets in student writing. In terms of the frequency analysis rubric, students scored higher in the "Language" category rather than any other, again suggesting that at least by the end of the year, more students than not are demonstrating proficiency in the language category. Statistically, the greatest area of weakness as a whole was the "Analysis" category. Yet at the more specific level, the sub-categories that were weakest were: "engages an opposing viewpoint" at 17%, "thesis non-binary" at 30%, and "understands the language of secondary sources" at 33%. Certainly, these are tied to the next lowest marker: "uses warrants, and demonstrates a logical progression of ideas" at 35%. Each of these are demonstrations of critical thinking inasmuch as they highlight the inherent difficulty of engaging with a voice other than one's own. A student's difficulty in formulating a non-binary thesis statement is directly related to the student's ability in formulating warrants which serve to advance the key claim. Perhaps we can see these as correlative problems. They both relate to the ability to articulate themselves complexly and to acknowledge opposing viewpoints. They also certainly appear to fall under the category of what we would call "Critical Thinking," except they are pinpointed to specific skill sets.

<u>Numerical Results (for 206 completed sheets):</u>

<u>Argument</u>	establishes a clear thesis	0.58
	pursues argument	0.53
	expands thesis	0.48
	thesis non-binary	0.3
		0.4725
<u>Source Evaluation</u>	integrates sources	0.74

	understands language of secondary source	.33
		0.17
	engages opposing viewpoint	0.61
	reading comprehension of sources	0.4625
		0.39
Analysis	analyzes evidence	0.45
	evidence supports claim	0.43
	evidence is necessary	0.35
	warrants, logical progression	0.405
Structure	paragraphs progress	0.52
	individual paragraph cohesion	0.53
	each par. Proves a distinct point	0.39
	transitions (par., sent., ideas)	0.44
		0.47
Language	Appropriate language	0.61
	MLA guidelines	0.62
	Source integration	0.52
	Evidence of revision, crafting, drafting	0.47
		0.555

Application Methods:

Possible Methods of Addressing These Areas of Weakness in the Classroom:

The results of this study suggest that we should continue to strive to target areas of weakness in the classroom. In any given class period, one or a handful of interrelated skill sets could be directly identified and practiced in order to encourage improvement. There are of course many instructor exercises on our resource page which already align with these goals. When able, we can continue to work towards teaching to these areas of weakness on sample essays, lecture notes, assigned texts, and secondary sources.