Assessment of Student Writing in W Courses: August 2009 Update on Nursing

A Project of the General Education Oversight Committee, University of Connecticut

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This report is an addendum to the 2008 GEOC report: *W Course Assessment at the University of Connecticut* (http://geoc.uconn.edu/Assessment%20Documents/W-Assessment-Report_AY0708.pdf). That earlier report introduced the goals, methods, and findings of a 2008 assessment of student writing across three departments: Art History, Human Development and Family Studies, and Political Science. This update focuses on direct assessment of student writing collected in fall 2008 from five sections of NURS 3215W/Nursing Research.

The methods for collecting, rating, and evaluating the Nursing papers were parallel to those employed in the earlier study. (See the 2008 report for details on guiding assumptions and study methods.) There were, however, two departures from the earlier methods: (1) We could not do the cross-departmental qualitative discussions because only one department was involved in this round; as a substitute, the three Nursing raters read from the Art History, HDFS and Political Science batches and discussed what they saw there. (2) We did not redo the earlier statistical analysis of the combined, cross-departmental data set (that is, on research questions related to UConn student writers in general rather than in specific departmental cohorts); we are waiting to collect papers from two additional departments before re-analyzing the cumulative data set. This report focuses on the Nursing writing alone, yet we note where patterns in student writing from Nursing resonate or conflict with the patterns in student writing from the other UConn departments studied during the first round of assessment.

Forty-one samples of student writing were collected from five different W sections taught by five different instructors. Approximately two thirds of students invited to participate in the study allowed us to collect their final papers and the grades for those papers, a consent rate consistent with those for the other three departments.
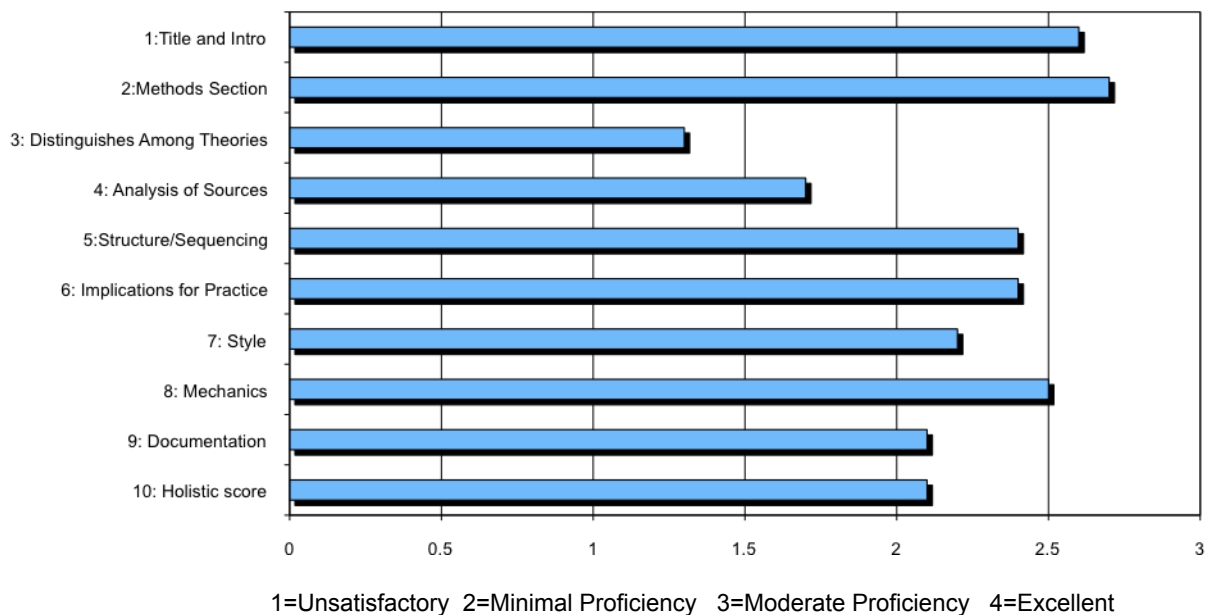
All of the Nursing student samples were the same genre, the Integrative Literature Review, and while the assignment varied somewhat across sections, all instructors required students to read and evaluate at least five sources on a topic and present a synthesis of their findings.

Page length for the Integrative Literature Reviews ranged from 9 to 25 with a mean of 14. The number of sources cited ranged from 5 to 22 with a mean of 10. A fuller evaluation of how students used sources is included in the Deep Audit section of this report.

Rubric Scoring for Nursing

During spring 2009 Professor Thomas Long worked with the faculty in the School of Nursing to construct a rubric for scoring student writing. The Nursing rubric featured four criteria common to earlier rubrics (style, grammar/mechanics, documentation/citation, holistic score) and six criteria that the department judged most important for writing in the discipline. The Nursing rubric, like the HDFS rubric from 2008, was customized to one genre: the literature review. (For the full rubric, see the Appendix.) An abbreviated version is included the table below that reports the mean score for each item on a four-point scale: 1=Unsatisfactory; 2=Minimal Proficiency; 3=Moderate Proficiency; 4=Excellent.

NURSING SCIENCE RUBRIC	Means (based on 41 papers)
1. Title conveys subject and focus of the integrative literature review, and the introduction adequately introduces the clinical issue and the research question.	2.6
2. Research methods section adequately explains how the student undertook searching and selecting a minimum of 5 peer-reviewed research articles.	2.7
3. The integrative review clearly distinguishes among articles' respective theories and methods.	1.3
4. Integrative review goes beyond a simple summary of the articles cited in order to analyze and evaluate the articles.	1.7
5. Structure, sequencing and transitions are coherent, logical and appropriate to a lit review.	2.4
6. The integrative review clearly and logically derives implications for clinical practice from the articles reviewed.	2.4
7. Prose style (e.g. avoidance of first-person voice), tone, terminology/language choices, and other semantic features are appropriate to academic writing in nursing science.	2.2
8. Grammar usage, sentence structure, punctuation and spelling are consistent with standard professional usage.	2.5
9. Adheres to APA format in text and on references page.	2.1
10. Holistic score: Assessment of the paper as undergraduate writing in nursing science.	2.1

1:Title and Intro	
2:Methods Section	
3: Distinguishes Among Theories	
4: Analysis of Sources	
5:Structure/Sequencing	
6: Implications for Practice	
7: Style	
8: Mechanics	
9: Documentation	
10: Holistic score	

1=Unsatisfactory   2=Minimal Proficiency   3=Moderate Proficiency   4=Excellent

In the overall/holistic scoring, most of the student writing clustered in the low-middle range, just above minimal proficiency. 85% of the reviews met at least minimal proficiency for advanced undergraduate writing in nursing science. Within that 85%, 55% were judged "minimally proficient," 30% "moderately proficient," and none excellent. That none of the reviews received an overall excellent score suggests that the rubric scorers set a very high (perhaps too high) standard for excellence in undergraduate writing.

Two rubric items were rated as below minimally proficient and the rest were between minimally proficient and moderately proficient. Readers saw good-faith attempts to master nursing science discourses, including language, genre, and format. As suggested by the low scores on items 3 and 4 and confirmed by qualitative observations and deep audits, students were weakest on *evaluating the research reported in sources* and *distinguishing the theoretical and methodological differences among sources*. Students were strongest in *identifying a clinical issue* and *describing their methods for conducting the review*.

While grammar may not be as strong as it should be, it is clearly not the most serious writing problem for Nursing students (a finding that is consistent with results from the three departments studied in 2008). In only 2 or 3 of the 41 papers did poor grammar seriously impede meaning. Students had the most trouble grasping theory, evaluating sources, and finding their intellectual footing as apprentice health science researchers. In terms of Bloom's Taxonomy (Revised), students demonstrated minimal to moderate proficiency in factual knowledge, comprehension, and application; however, they struggled with analysis, evaluation, and synthesis/creation.

Instructor Grades in Relation to Holistic Rubric Scores

We noted a significant gap between the mean rater holistic score and the mean instructor paper grade. The mean rubric holistic score, a measure of overall quality for advanced undergraduate writing in Nursing, was 2.1, just above minimal proficiency, or approximately a C- in traditional grading; the mean instructor grade for those same papers was 3.5, or a B+ on a traditional grading scale. Similarly wide gaps of 0.9, 1.1 and 1.3 between mean holistic paper scores and

instructor paper grades were discovered in the other three departments, but the Nursing gap was the widest at 1.4.

Qualitative Observations

After the rubric scoring was completed, five readers (three from Nursing, two from English) held open-ended discussions to reflect on what might not be captured by the rubrics. The first discussion focused on the Nursing papers alone; the second was keyed to comparisons across the Art History, HDFS, Nursing and Political Science batches of student writing.

The most persistent observation that emerged from those discussions was that the Nursing student papers resembled book reports more than integrative literature reviews. That is, students did dutiful summaries and walked readers through summaries of sources but they either sidestepped or struggled with unpacking the theoretical assumptions of those sources. Most did not draw out salient themes across sources, evaluate the research articles critically, or "bring it all together" to the degree that raters thought undergraduates should. This largely echoes findings from the rubric scoring. Readers speculated that most students did not fully grasp the assignment—did not understand what an "integrative literature review" is.

The most salient finding *not* captured by the rubrics was that the Nursing students evinced an ethic of care in their writing: they seemed to understand and appreciate that their research could address relevant social and clinical problems and improve patient care. This motive for research and writing is a strength to build upon.

Other notable themes that emerged through discussions of the student writing:

- Nearly every student followed the basic genre conventions for the literature review: they employed the expected sections in the appropriate sequence.

- While student writers followed the basic format, many struggled to negotiate among different expectations for academic writing and different authorial stances. Within the framework of the literature review, several other genres seemed to be jostling: the five-paragraph essay, the thesis-driven argument, the disinterested research summary, the personal essay, and the social justice/advocacy call to action. This muddling of genres is typical among student writers (we noted the a similar pattern among student writing in some other departments) but it also suggests that teachers of Nursing W courses need to discuss explicitly how conventions in nursing science assignments compare to the kinds of academic writing that students have been required to do in high school English, Freshman English, and other college courses. Genre theory may be useful in addressing this. Most students seemed to be making good faith efforts to appropriate the style of nursing research and the tone of professional research as they struggled with what was (for them) a new genre.

- For only a few students did research seem an energetic and critical process of discovery; nor did many students draw on personal clinical experience with their topics. This made many of the reviews seem flat—both in authorial voice and in development of ideas from the start to the finish of the review. This led some readers to muse about the timing of NURS 3215W in the Nursing curriculum: Perhaps students could get more experiential and intellectual purchase on a research question if they had first encountered it in a clinical setting.

- About two thirds of students did not articulate a clear *research question* beyond some approximation of "I need to read five articles on a topic and report on them". Even in those cases where students posed a good research question, they often forgot to address or answer it—they treated it as a general topic area or circled back to it loosely in the conclusion.

- Students seemed to understand that nursing care and nursing science are multi-disciplinary—that they include more than just biomedical treatment issues, that there are social dimensions, that social sciences apply, etc. At the same time, many students struggled with distinguishing nursing research from medical and social science research (both in their selection of research articles and in their analysis and evaluation of them) and some misrepresented research from related fields as nursing research. Students may simply be novices on this issue; in addition, explicit or tacit expectations for what counts as "nursing research" may have differed across W sections.

- About 10% of reviews trafficked in troubling stereotypes or included "othering" language that made readers wince (for example, the use of "those people" to refer to people who are poor, infected with a disease, or from minority groups). Student intent did not seem malicious, and often the students seemed to be trying to sound "scientific" when slipping into inappropriate phrasing; often they did this when paraphrasing clumsily from articles dealing with sensitive issues (sexuality; sexual, gender or racial identity; socioeconomic status; etc). While most writers did not engage in such ethically awkward language, the 10% who did signaled the need to teach cross-cultural competencies as they pertain to academic research and the nuances of writing.

- When the Nursing scorers read student papers from Art History (AH), Human Development and Family Studies (HDFS), and Political Science (PS), they noticed that Nursing and HDFS papers seemed to value received knowledge and predictable order while PS and AH papers seemed to value original argument and interpretation. The other disciplines also seemed to allow more idiosyncratic organization.

- Only the Nursing students included an explicit discussion of their literature search and research process.

- Nursing and HDFS required very similar genres—integrated literature reviews in the health and social sciences—but readers found the HDFS reviews more ambitious (requiring a minimum of 10 peer-reviewed sources), stronger on synthesis, and more faithful to APA conventions. Given the similarity of the assignment for both sets of W courses, Nursing and HDFS might consider ways to collaborate and create common teaching resources.

Deep Audits/Use of Sources

Eight literature reviews were selected at random for a detailed evaluation of how students selected and used sources. For each of those eight reviews, the Nursing graduate students read every source in the References sections to assess how well students comprehended, selected, used, and cited their sources. Such deep audits, each of which took two to three hours, allowed for a nuanced analysis of how students were using sources.

In this sub-sample, students used an average of ten sources per review (double the requirement) and an average eight of those were articles in scholarly journals. Students seemed to be reading the full articles (not just abstracts or introductory sections), and they used sources mostly to provide background/contextual information.

We did not detect any reviews bought from paper mills or any cases in which students tried to pass off a bogus or made-up source as legitimate. Of serious concern, however, is that 4 of 8 papers were judged as including at least one example of gross/intentional plagiarism and 6 of 8 as including at least one example of unintentional misuse of sources (some reviews included both kinds). These included the copying of verbatim or nearly verbatim text from a source (without quotation marks or without substantial paraphrasing) and failing to provide page numbers in in-text parenthetical citations.

The deep audits confirmed what the rubric scoring suggested: that students are struggling with how to *use* sources. Raters scored half of the papers overall as "poor/unsatisfactory" in their use of sources, which is about the same as for the other three departments. While students did well in selecting sources and comprehending them, they scored lower in employing them in the review and in orienting readers (that is, helping them discern between the student writer's own ideas and those borrowed from sources). While students did well by not padding their reviews with superfluous sources, they often used sources as a kind of template that stood in for the writer's own analysis and argument, and they rarely used sources to introduce dissenting points of view.

Students in this sub-sample were rated strongest in *selection* of sources and on *reading comprehension* of those sources.

Next Steps

The nursing science rubric created for this assessment will be made available to future W instructors and can be used as one tool for communicating consistent standards for writing across W sections, as well as for evaluating drafts and/or grading final submissions. Also, digital copies of several student literature reviews (of various levels of quality) will be made available to W instructors for use in their teaching.

Most importantly, the results of this assessment will be reported to the entire School of Nursing at its August 28, 2009 retreat. That should be the starting point for an evidence-based discussion among faculty about how writing should be valued, introduced, taught, and graded across the Nursing curriculum.