

Biennial Student Learning Assessment Report
Department of Political Science
University of Maryland, Baltimore County
June 30, 2016

This document assesses political science student learning outcomes with respect to written communication and application of research methods. It reports data gathered from final papers and final exams attempted by students enrolled in POLI's required, writing-intensive research methods course. Based on these data, it also suggests matters for future departmental consideration.

Data reveal strengths and weaknesses in students' demonstration of each outcome. Analysis of students' written communication finds that students typically perform well at clearly communicating the purpose of a communication and at grounding their claims in appropriate, dutifully documented sources. Many students, however, show weaknesses at proofreading or grammatical command. With respect to application of research methods (an outcome aligned with UMBC's "scientific and quantitative reasoning" functional competency), students exhibit an excellent grasp of the qualities of social-scientific research and also perform particularly well at collecting appropriate data using methods prescribed by an assignment. They appear to struggle, however, with independently aligning a method of data collection to a research question, at least as measured in an exam situation where they have no access to informational resources. Overall, a majority of students performed at what the course instructor deemed a "good" level on 16 of 17 direct measures presented in this report. Three-quarters or more of students performed at an "adequate" level on 12 of 17 direct measures.

Departmental Plan for Assessment Reporting in 2016

POLI's departmental assessment plan identifies the following Student Learning Outcomes (SLOs) and aligns them with UMBC functional competencies (FCs) as indicated in parentheses.

1. Describe and apply basic political science information, concepts, and theories. (FCs #3, 5)
2. Demonstrate effective oral and written communication in political science (FC 1).
3. Apply appropriate research methods to answer questions of a political nature (FCs #2, 3, 5).
4. Examine, evaluate, and construct arguments about political affairs and/or solutions to political problems in ways that demonstrate analytical and critical thinking (FCs #3, 5).

In its approved plan for this current cycle's assessment reporting, POLI proposed to assess SLO #3 and the writing component of SLO #2. POLI's general strategy for assessing these SLOs, excerpted from Table 1 of the official departmental assessment plan, is summarized in Table 1.

Table 1. General strategy for assessing POLI SLOs #2 (writing only) and #3

Goal	Direct Measures	Indirect Measures
Demonstrate effective . . . written communication in political science.	Scoring distributions from final paper rubric used in a sample of three POLI Writing Intensive or other upper-level courses that identify this objective. Courses will be sampled from a list including but not limited to POLI 281, 315, 320, 324, 325, 327, 337, 340, 353, 385, 387, 419, 425, 432, 433, 446, 448, 470, 486, and 488.	Student perceptions of learning as reported on SEEQ 4-question “Learning” battery and/or SCEQ question, “Did you gain new insights, skills or knowledge as a result of this course?” Summary of faculty perceptions of students’ demonstration of this skill as shared in ad hoc assessment-related “brown bag” discussions.
Apply appropriate research methods to answer questions of a political nature.	Scoring distribution from POLI 301 final paper rubric. Scoring distribution from select POLI 301 final exam questions.	Student perceptions of learning as reported on SEEQ 4-question “Learning” battery and/or SCEQ question, “Did you gain new insights, skills or knowledge as a result of this course?” Summary of faculty perceptions of students’ demonstration of this skill as shared in ad hoc assessment-related “brown bag” discussions.

The plan called for doing so using data gathered from the two sections of POLI 301, Research Methods in Political Science, offered in the spring 2016 semester. POLI 301 is an officially designated Writing Intensive class that is currently the only option on the main campus for fulfilling the POLI major’s methods requirement. In light of constraints imposed by the department’s recent assessment plan overhaul, the CAHSS Dean’s and the Provost’s Office agreed to allow this reporting to double as the department’s GEP reporting for 2016.

Table 2, copied from the departmental assessment plan, describes in more specific terms the measures of student learning that would be reported from POLI 301 in 2016. These are all direct measures. As anticipated, Table 1’s indirect measures of student learning are not available to report at this time. This is because the university has not yet made SCEQ scores available for spring 2016 classes, and because the department’s assessment overhaul took place too recently for the department to begin instituting its ad hoc “teaching brown bags.”

Table 2. Spring 2016 assessment strategy

	Functional Competency #1/ POLI SLO #2	Functional Competency #2/ POLI SLO #3
Which of your course goals express the functional competency(ies) (FC) addressed in your course?	“. . . bolster students’ skills in written communications”	“The primary objective is to develop students’ research capabilities.””
How do you <i>evaluate student work</i> to determine how well students have achieved the FC?	Scoring distributions from rubrics applied to the two-part final research paper. Relevant categories concern: <ul style="list-style-type: none"> • Clarity of purpose • Technical writing proficiency (e.g., grammar, word choice, organization) • Selection of appropriate sources • Citation and documentation of sources 	Scoring distributions from rubrics applied to the two-part final research paper. Relevant rubric categories concern: <ul style="list-style-type: none"> • Qualities of social-scientific research questions • Theory and its operationalization • Collection of appropriate data • Selection of appropriate statistics • Interpretation of data analysis • Evaluation of research design and limits of inference Scoring distributions from final exam questions concerning: <ul style="list-style-type: none"> • Choice among methods of data collection not assessed in final research paper

Data Collected for 2016 Assessment Report

Data collection proceeded in accordance with the departmental plan. The bulk of the data come from the class’s two-part final paper.¹ The course syllabus summarized that assignment as follows:

This project addresses a political science research question of your choice. The aim of the project should be to help political scientists better understand and explain some

¹ Prior to beginning this project, students had submitted a three-part paper project on a different research question that employed a different data collection method (survey research) and was slightly smaller in scope, but otherwise worked from a nearly identical handout and set of rubrics.

phenomenon. Your research question must allow you to examine the relationship(s) between variables representing at least two concepts. It must be a question that can be answered empirically using simple statistical analysis of aggregate data on at least 15 countries, states, years or some other unit of interest.²

The detailed (electronic) paper assignment handout students received is attached as Appendix 1. Part 1 of the assignment encompassed an introduction to the research question, a literature review, and discussion of theory, variables, and hypotheses. In part 2 of the assignment, students described their sample and measures, reported and interpreted results of their data analysis, and concluded the paper.

Rubrics used to collect data for this report and to grade Parts 1 and 2 of the paper are attached as Appendices 2 and 3. The rubrics defined five levels of mastery (excellent, good, adequate, minimally acceptable, and poor/failing) of each specific aspect of the paper they scored. With the exception of technical writing proficiency, each of the concepts and skills listed in table 2 was assessed in only one of these two parts of the paper.³

Paper assignments did not enable assessment of students' judgment in selecting a method of data collection best suited to a research question, as paper assignments prescribed the method. Given this circumstance, a direct measure of that aspect student learning was collected from responses to one question on the final exam. The specific question was the sixth of seven short-answer questions presented to students about a hypothetical research project. After an extension of the original research question was described, a question challenged students to name the six methods of data collection taught in POLI 301 and to identify whether each typically yielded quantitative or qualitative data. Following that, the key question (question f) asked:

f). Which method should you employ when investigating Bishop's assumption? Say what that method of data collection involves and provide two examples of the kind of data you might collect while using it. Explain why you are recommending it. (10 points)

The instructor scored the question on a 0-10 scale, with the possibility of half-points included. Table 3 describes the scoring scheme:

Table 3. Scoring scheme for direct measure from final exam

Score range	Description of answer
0	No answer attempted.
$0 < x < 2$	Score range not used.
$2 \leq x < 5$	Proposes an inappropriate method and falls short on clarity, completeness and/or logic, thus demonstrating virtually no mastery of the relevant course material.
$5 \leq x < 7$	Proposes an inappropriate method, but at least briefly and logically addresses full question.

² The syllabus also offered the option of seeking the instructor's permission to employ a different method of data collection, but no students followed up on this option.

³ Although several students exercised the option on the handout of revising Part 1 for extra credit, those revised results are not included in this reporting.

$7 \leq x < 8.5$	Proposes an acceptable method but not the best one and answers other parts of questions in a mostly complete, clear, and logical fashion. Alternatively, proposes the best method but full answer needs significant improvement in its clarity, completeness, and/or logic.
$8.5 \leq x \leq 10$	Proposes the best method and provides at least mostly clear, complete, and logical answers to other parts of the question.

In all, data were collected on 49 POLI 301 students who submitted Part 1 of the final paper, 46 students who submitted Part 2 of the final paper, and 47 students who attempted the common final exam.⁴ Perhaps notably, these counts reflect some attrition from the 60 students (maximum enrollment) that began the semester, an issue this report later revisits.

SLO #2: Effective Written Communication/FC #1 Written Communication

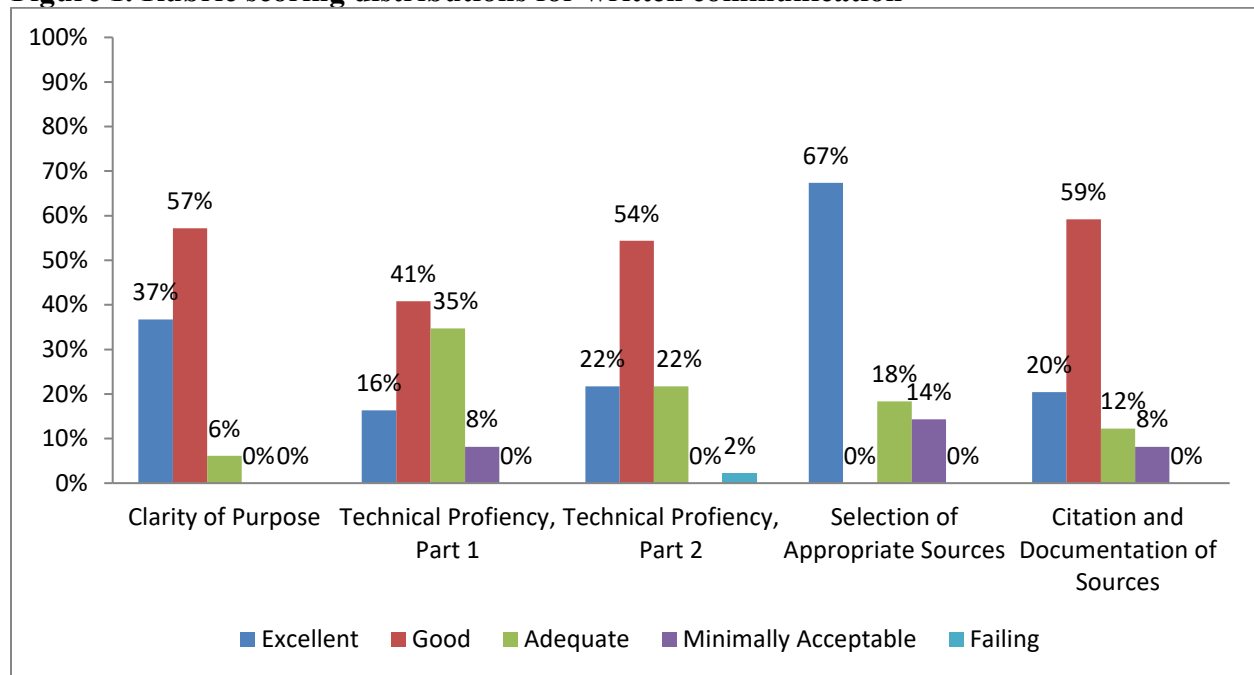
Drawing from descriptions of UMBC FC #1, the POLI assessment plan elaborates as follows on what it means for students to “demonstrate effective oral and written communication in political science” (SLO #2):

Most fundamentally, effective oral and written communication presents information, ideas, and arguments clearly and coherently in correct English grammar. It abides by conventions pertaining to the specific nature of the communication (i.e., its purpose, audience, and format) (FC 1). Effective communication is based on appropriate sources, and it acknowledges and documents its sources (FC 1).

Figure 1 presents distributions of student achievement for each indicator of the effectiveness of students’ written communication.

⁴ A 48th student who took a different, makeup version of the final exam is excluded.

Figure 1. Rubric scoring distributions for written communication



These results show that POLI 301 students perform ably in clearly communicating to the reader the research question a paper addresses and the significance of that question. All students demonstrated at least adequate mastery of this aspect of written communication, and 94 percent demonstrated “excellent” or “good” mastery of this skill. The modal (57%) level of achievement was “good,” meaning that the paper’s introductory section clearly identified the research question and addressed its significance, but might have better facilitated the reader’s understanding of these matters with some elaboration.

There is much variation in the technical proficiency of POLI 301 students’ writing. At both points of measurement, the modal achievement level (41% for Part 1 and 54% for Part 2) was “good,” indicating papers with “few” grammatical errors (though always some, according to the course instructor) that were written in mostly “crisp, clear, well-organized and flowing prose.” Across both measurements, roughly one-fifth of students wrote at the “excellent” level. Consistent with impressions frequently voiced among the POLI faculty, a critical mass of students (43% at the first measurement and 24% at the second) either lacks the time and care for proofreading or the command of English grammar to demonstrate this skill at an “excellent” or “good” level. According to the course instructor, papers earning an “adequate” rating for purposes of the class most definitely would not have been “adequate” in a professional setting. Grammatical errors typically drove shortcomings in technical proficiency, most especially regarding possessive nouns, incomplete sentences, use of commas and semicolons, and capitalization. There is evidence of some improvement between measurements.

Most (two-thirds) students excelled at locating a minimum number (seven) of scholarly sources on which to base their literature reviews. Most also successfully confined any use of non-scholarly sources to appropriate areas: not shown in figure 1, scores in the “scholarly literature review” section of the rubric included as one aspect of the rating whether students demonstrated

the ability to discriminate between scholarly and non-scholarly sources in choosing what to review. It was only at the “adequate” level (22%) or below (10%) that students might have erred in this work, and according to the course instructor, in practice, “adequate” ratings almost never resulted from source quality problems.

The vast majority (79%) of papers contained few if any errors in citing sources when appropriate and using a consistent citation style similar to one of three acceptable formats (APA, Chicago, or MLA). Sloppiness in citation formatting was quite common, however, as far more students (59 versus 20%) earned the “good” rating, in which citation formatting “departs slightly from the correct one,” rather than the “excellent” rating. Although all students attempted in some way to cite their sources, the 20 percent that did so inconsistently, informally, or without providing some essential piece of information, such as a journal title, needed to locate a source, may present some concern – whether out of lack of time or care in following the style guides offered to them, or inadequate training at the high school level.

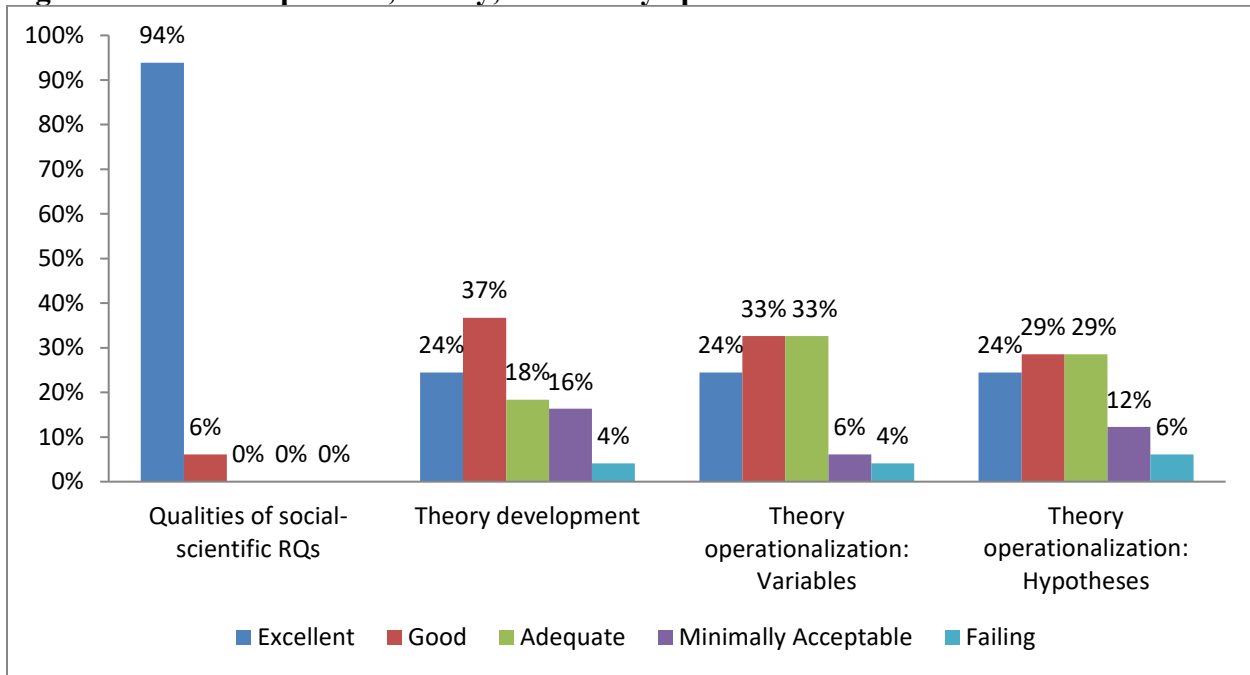
SLO #3: Apply Appropriate Research Methods/FC #2 Scientific and Quantitative Reasoning

Drawing in part from the description of UMBC FC #2, the departmental assessment plan elaborates as follows on SLO #3:

All POLI students are trained to retrieve relevant scholarly and other information (FC 5) and to apply scientific research methods involving the collection, analysis, and interpretation of quantitative and/or qualitative data (FC 2). Students use these skills to answer questions about the political world based on theory and empirical evidence. Among other things, an appropriate research method is logically suited to the nature of the question that is posed or to the hypotheses to be tested. Its successful application involves correct execution of the particular research technique(s) being employed and accurate interpretation of results. It also involves critical evaluation of conclusions suggested by research results, in light of theory (FC 2 &3), the quality of sources (FC 5), and/or the scientific limitations of the method(s) employed (FC 2).

The first of several measures of student learning in this area assesses students’ mastery of key qualities of the social-scientific research questions. POLI 301’s final paper prompted students to demonstrate, through their choice of research question, that they could discriminate between empirical and normative questions, between explanatory and other types of social-scientific research, and between the aggregate and individual levels of analysis. As shown in the first set of bars in Figure 2, the overwhelming majority (94%) of students could do all these things. The rest, who all achieved at the “good” level, proposed empirical, explanatory research questions that while easily adapted to aggregate units as required by the assignment, were asked about individuals. This high achievement is unsurprising given that most students secured the instructor’s approval of their question prior to writing their paper.

Figure 2. Research question, theory, and theory operationalization



The next three measures of student learning pertain to students’ command of theory and two key stages of its operationalization: the representation of concepts with variables and the derivation of hypotheses. Figure 2 presents scoring distributions. Across all three measures, very few students failed to demonstrate any learning in these areas; most of those failing scores, the course instructor reports, resulted from incomplete papers. In each case, 80 to 90 percent of papers demonstrated at least “adequate” achievement. Within that range, however, scores varied considerably. The modal student (37%) developed theory at a “good” level, meaning that students’ “theories” suggested a “largely correct” understanding of theories’ content and role, but may have needed minor clarifications or elaboration. For both steps in theory operationalization, equal proportions of students scored at the “good” or “adequate” level. The most salient quality differentiating “excellent,” “good,” and “adequate” performances was the degree of command demonstrated over the process of translating the abstract into the observable.

Paper rubrics scored students twice in their identification of appropriate data with which to test their hypotheses: once with respect to the indicators they collected and once with respect to case selection for their sample. Students generally performed very well in this area, with none failing and very few performing below an “adequate” level. The modal student (50%) demonstrated “excellent” performance in the presentation of appropriate indicators, a rating that captured not just the likely validity of those indicators, but also the clarity of indicator definitions and sources. The modal student (52%) demonstrated “good” performance in sampling, meaning that the cases selected, the process of case selection, and the student’s speculation about the sample’s representativeness were all “mostly clear, complete, and correct, and mostly reasonably suited” to the research question.

Figure 3. Collection of appropriate data

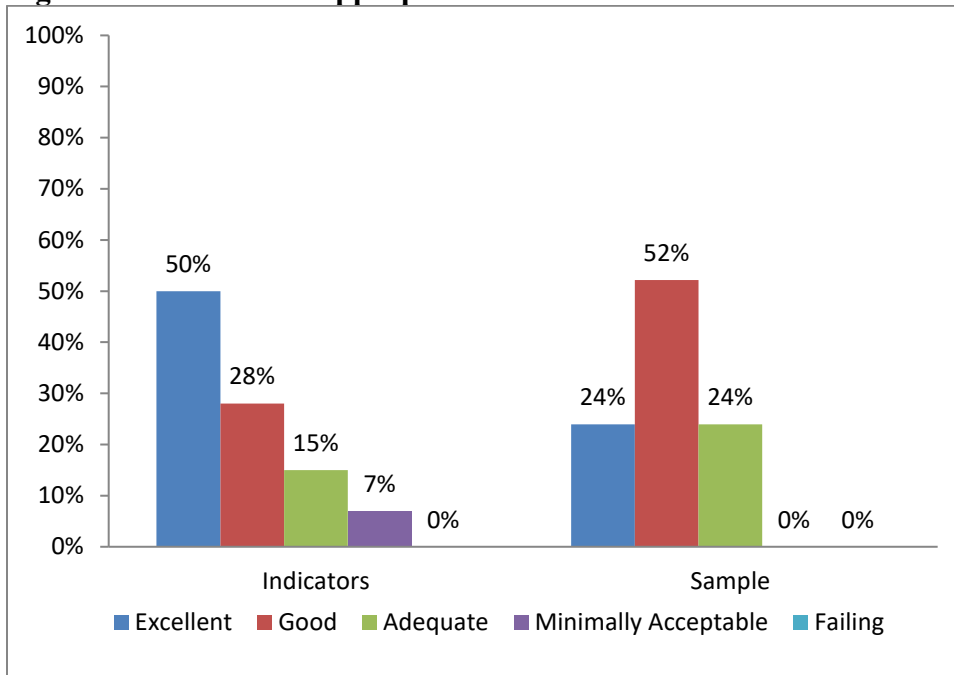
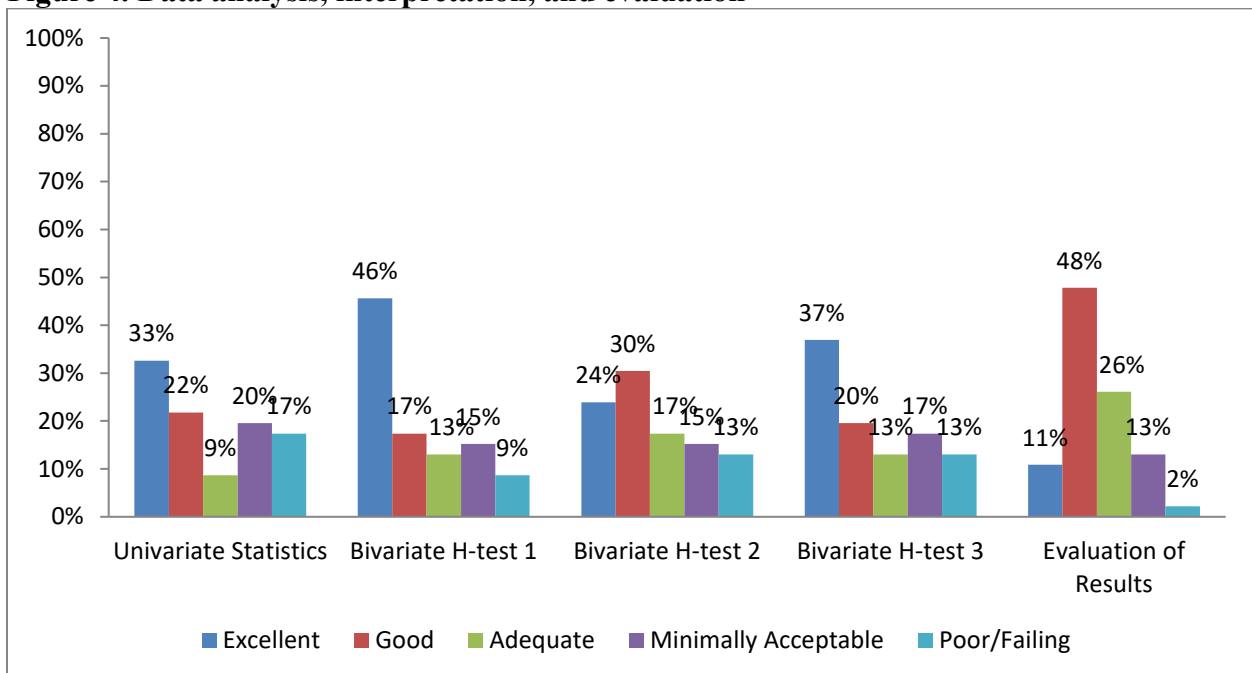


Figure 4 presents scoring distributions of indicators of the appropriateness of the statistics students select to compute, the accuracy of interpretations of statistical results, and student performance at critically evaluating their conclusions in the context of their full paper and course material.

Figure 4. Data analysis, interpretation, and evaluation



The scoring distribution labeled “Univariate Statistics” corresponds to the category labeled “Measures of Central Tendency and Dispersion” on the Part 2 rubric. The assignment called for students to present an appropriate measure of central tendency (mean, median, or mode) and dispersion (standard deviation, range, or variation ratio) for each variable in their dataset. This required students to demonstrate command over levels of measurement and their relationship to statistical selection, as well as the ability to compute the relevant statistics in Excel. The modal student (33%) performed at the “excellent” level, clearly presenting appropriate statistics for all variables, with no inappropriate statistics. The majority (55%) of students performed at the “excellent” or “good” level. Many students (37%), however, performed below the adequate level. Typically, these students fit one of three profiles: they identified which statistics would have been appropriate but did not appear to have actually computed them, they conflated univariate with bivariate data analysis by presenting such statistics for subgroups only, or they skipped that part of the paper.

Students received three scores of their ability to select and interpret statistics useful for bivariate hypothesis testing, one for each of the three hypothesis tests they were required to present in the paper. The three techniques POLI 301 taught were cross-tabulation, comparison of means, and the correlation coefficient. Most students (63%) correctly or largely correctly chose, computed, and interpreted a test of their main hypothesis, which pertained to the relationship between the dependent variable and key independent variable. The modal performance was rated as “excellent.” There is some falloff in quality of subsequent hypothesis tests, which may be due in part to some students’ admirable attempts to test for more complex relationships than posited in the main hypothesis, but in each case the majority of students perform at least at the “good” level. Of some concern, however, is the 24-30 percent of students that on any given test showed little to no command of this skill.

The paper’s final section called for students to summarize their findings, revisit their research question, and, most importantly, discuss their confidence in and generalizability of their results. Discussion prompts in the assignment pressed students to demonstrate critical thinking and applied knowledge of course material on sample representativeness, measurement validity, alternative rival hypotheses, the difference between correlation and causation, and the strengths and weaknesses of different methods of data collection and analysis. The vast majority (85%) of students performed at least at the “adequate” level, meaning that they offered “a critique of the research guided at least in part by the discussion prompts and evidence and suggesting some understanding of methodological concepts employed in the prompts.” The modal student (48 percent) achieved at a “good” level, addressing “discussion prompts in a fashion that is mostly clear, complete, thoughtful, and consistent with evidence, demonstrating or suggesting understanding of most methodological concepts employed in the prompts.”

The last measure of students’ application of appropriate research methods pertains to selection of a method of data collection. It comes from the final exam question described earlier in this report. Table 4 presents two distributions of scores. One uses the scoring scheme described in table 3. Another translates these scores into the achievement levels used for the paper.

Table 4. Selection of appropriate method of data collection

Score Range	Percent (Count)	Mastery	Percent (Count)
0	2.1 (1)	Poor (<6)	42.6 (20)
2-4.5	25.5 (12)	Minimally Acceptable (6-6.5)	21.3 (10)
5-6.5	36.2 (17)	Adequate (7-7.5)	10.6 (5)
7-8	14.9 (7)	Good (8-8.5)	12.8 (6)
8.5-10	21.3 (10)	Excellent (9-10)	12.8 (6)

Students performed very poorly. They scored a mean of 5.9 points, though with considerable variation (a standard deviation of 2.5 points). Individual scores ranged from 0 to 10 points, with a median of 6. A large majority, 64 percent, failed to demonstrate at least “adequate” achievement. The modal student (43%) demonstrated “poor” mastery.

The course instructor offered some interpretations. Most importantly, answers suggested that many students understood themselves to be addressing a different research question than the one specified in the text directly preceding question f. As a result, scores also seem to be picking up how carefully students read a relatively long, multi-part question, and thus are likely to understate student learning in this area. Another contributing factor may have been students’ limited recall of the six methods of data collection from which they were to choose. Immediately preceding question f, question e prompted students to name those methods. Nearly a quarter of test-takers failed to name the method that was best for answering question f.

Plan for Discussion of Results and Potential Changes

This assessment report will be shared immediately with the department’s full-time faculty. Its results will be discussed during the first faculty meeting of the new academic year (September 2016) and in subsequent monthly meetings as necessary. The department will report to CAHSS by March 15, 2017, as required, on any changes to the curriculum, course, or student learning outcomes that emerge from those discussions.

The POLI Assessment Committee, which includes the spring 2016 POLI 301 course instructor, plans to raise in that discussion at least three salient issues that these data appear to present: student attrition, the demands of the POLI 301 workload, and poor grammar in student writing. Meanwhile, the course instructor has committed to consider (involving to some extent a second POLI 301 instructor) whether these results should prompt any pedagogical changes. Below, the report elaborates on those three issues ripe for departmental discussion.

Student attrition. Counts of students submitting either part of the final paper or attempting the final exam fall well short of the number (60) that began the semester in POLI 301. This attrition comprises two students who dropped the class, five students who withdrew from the class, one student who enrolled in but never attended the class (apparently due to an administrative error on the university’s part), and 3-6 students who, despite remaining enrolled in the class, did not submit one or both parts of the final paper or the final exam. If this level of attrition is higher than that found in other classes, it may present a special concern because POLI 301 for the last few years has been students’ only option on the main campus for fulfilling the major’s methods

requirement. The questions raised are: Is this level of attrition consistent with that observed in other classes? If it is higher than in the typical class, what can be done to improve retention?

Demands of the POLI 301 workload. POLI 301 course instructors have long recognized the class as having a very high “DFW rate” (referring to grades) relative to other classes they teach. This is unsurprising given that students cannot self-select into POLI 301 as they can with most other POLI classes. Still, the absolute value of that rate presents a concern. In theory, it may contribute to delayed graduation, changes of declared or intended major, and diminished enthusiasm for skills that POLI faculty hope the students will employ in future classes and independent research. In the spring 2016 semester, POLI 301 posted a DFW rate of 28 percent (1 D, 10 F’s, 5 W’s). One critical correlate of a D or F in POLI 301 is simply whether students attempt each paper. Of the 11 students earning D’s or F’s in POLI 301, 8 failed to submit at least one paper assignment and two more turned in extremely incomplete final papers. Consistent with the instructor’s impressions from prior years, some of these students look like they may have given up on the class toward the end, even though grades on prior assignments by no means doomed them to failing the class, while other students from the very start neglected to submit most assignments and barely appeared in class. For students that fit the former profile, this raises the question: Is the workload of POLI 301, which under both instructors requires two multi-stage original research projects, unrealistic for a three-credit upper-level class? Both instructors have maintained this workload for years and have long prided themselves on running a research “boot camp,” but say that they have found themselves asking this question of each other.

Poor grammar in student writing. POLI faculty have long bemoaned substandard student writing, but have rejected as infeasible several potential departmental solutions. The POLI 301 experience – which admittedly may not be typical because the instructor supplies a very detailed outline for the paper – suggests that the help students most need with their writing is something colleges may have little experience teaching: the fundamentals of English grammar typically taught in elementary schools. It is difficult to tell to what extent grammatically problematic papers result from lack of care versus lack of knowledge on the students’ part, but the POLI 301 instructor suspects that both are in play, varying across students in their mix. This raises the questions: In other classes, is this also the salient weakness in student writing? If so, where can be students be directed for appropriate remedial assistance? Is there anything professors can do to encourage students to proofread their work more carefully?

Conclusion

Unsurprisingly, students vary in the extent to which they demonstrate learning outcomes. The typical student does this at a good level of proficiency, although a notable minority fails to demonstrate some key skills or to persist in the class through its final assignments. Perhaps under-recognized has been the exemplary performance of those minorities of students meeting the class’s high bars for excellence. Experience and grading distributions indicate that ratings across indicators are correlated at the individual level. Papers earning an overall rating of “excellent” (18% of Part 1 and 28% of Part 2 final paper submissions) show a high level of readiness for graduate-level research. Consideration of changes in response to this report should keep in mind the needs of that full range of students.

Appendix 1. POLI 301 Final Paper Instructions

[Letterhead deleted]
Organization of Political Science Research Project

Note for all parts: Whenever you use information from a source, you must cite it parenthetically in the text and include with your paper a Works Cited section with full citation information in Chicago, APA, or MLA format.

PART 1 (7-10 double-spaced pages (not counting notes and references))

Introduction

This section tells what your paper is about and why your reader should care. It should:

- Introduce and clearly state your research question
- Explain why your question is important to answer
- Share any background information your reader may need to understand your question and its importance

Literature Review

This section places your study within the context of previous research. It should:

- Tell us (and document) how extensively studied your research topic has been, including whether other scholars have attempted to answer your question or a closely related question
- Describe what scholars do and do not yet know that is relevant to your research question – you should be discussing the findings of specific studies and the methods those studies employed
- State what your study will contribute to this existing literature
- Cite and use a minimum of 7 scholarly sources
- Describe your literature search strategy, naming databases and key search terms

Theory

This section offers a tentative, general answer to your research question and the rationale for that answer. It should:

- Specify (and if necessary, define) the key concepts involved in your research question
- Discuss the relationship(s) you expect to observe among your key concepts
- Fully explain the logic behind those expected relationships

Variables and Hypotheses

This section translates the relationships between concepts proposed in your theory into a set of testable predictions about relationships between variables. (You will test these predictions in part 2.) It should:

- Identify the variables you are using to represent the key concepts in your theory
- Specify what type of variable (dependent, independent, intervening, antecedent) each is
- Identify and define the types of all the other variables that will be involved in your hypotheses
- Formally specify and clearly label at least 3 hypotheses that you will test
- Disclose anything your reader needs to know (that for whatever reason did not seem appropriate for your theory section) to understand why you are testing those particular hypotheses

Note: Your hypotheses need to include at least 4 different variables. One of the hypotheses should involve the relationship between your dependent and key independent variable, while the others should involve at least two of the following:

- An intervening variable
- An alternative rival hypothesis

- An additional explanatory factor
- An alternative indicator of a key concept

PART 2 (9-12 double-spaced pages (not counting notes or references))

Sample

This section describes the cases you are studying. It should:

- Identify the unit of analysis and your number of cases
- Explain why and how you chose the cases that you did
- Assess to what extent (and why) your sample is likely to represent the underlying population

Measures

This section describes your dataset. It should:

- Define the indicators you are using to measure each variable in your data
- Identify the *specific* source from which you obtained data (*Note*: data sources need not be part of a works cited list, but text or footnotes must include all information the reader needs to evaluate and locate your source, including who collected the data, where you obtained the data, and (if obtained online) a full URL)
- Present appropriate measures of central tendency and dispersion for each indicator

Results

This section reports results of your hypothesis tests. For each hypothesis in turn, it should:

- Specify the statistical technique you are using
- Show and interpret the specific statistics you computed
- Discuss to what extent your evidence is consistent with the hypothesis

Discussion and Conclusion

This section should:

- Summarize what you set out to study and what you found
- Say what those findings suggest about the answer to your research question
- Discuss your confidence in your answer to your research question, your study's limitations, and how well you think your conclusions generalize beyond your study. Please specifically address:
 - The degree to which you think your sample represents the underlying population;
 - Whether you suspect any problems with the validity of your measures;
 - The appropriateness of the method of data collection and analysis you employed;
 - Whether you have evidence of causation;
 - Things a more comprehensive study should have considered to increase your confidence in your conclusions, such as additional explanatory factors or alternative rival hypotheses;
 - Anything else that you think is an important strength or weakness of your study.
- Discuss the larger implications of your results: Now that we know what we do from your study, what should happen next?

Excel Spreadsheet

On BB only, submit a copy of your Excel spreadsheet (with all data and statistical analyses).

EXTRA CREDIT OPTION

You may earn extra credit points on your Part 2 grade by submitting it as part of a full POLI Project Paper with a memo detailing your revisions to Part 1. See BB assignment link for details.

Appendix 2. Rubric for Part 1 of POLI 301 Final Paper

<https://blackboard.umbc.edu/webapps/rubric.do/course/manageRubrics?dispatch=view&con...>

POLI 301 Research Methods in Political Science (01.23.58/...

Name Description Rubric Detail	POLI Project Part 1				
	Levels of Achievement				
Criteria	Excellent	Good	Adequate	Minimally Acceptable	Failing
Nature of Research Question	Poses an empirical, explanatory RQ suited for study with aggregate data	Poses an empirical, explanatory RQ that can be easily adapted to study with aggregate data	Poses an empirical, explanatory RQ not suited nor easily adapted for study with aggregate data	RQ is empirical or explanatory, but not both	RQ is missing, too unclear to evaluate, or is neither empirical nor explanatory
Located minimum # of scholarly sources?	Clearly yes	Yes, if counting borderline scholarly material	Almost or maybe (info may be needed to confirm status of small # of sources)	No, but does cite some scholarly sources	No (No scholarly sources cited or lacks sufficient info to judge)
Literature Search Strategy	Uses appropriate library databases and appropriate concepts	Uses appropriate library databases and some relevant concepts	Uses library databases; may also use inappropriate databases or may need more detail	Description of search strategy lacks sufficient information to evaluate	No search strategy described
Scholarly Literature Review	Correctly differentiates between scholarly and non-scholarly literature, written	Appears to correctly differentiate between scholarly and	Displays some elements of an excellent scholarly literature review, may need minor to	Displays at least one element of an excellent scholarly lit review, may show confusion	Literature review is missing or lacks sufficient

Criteria	Levels of Achievement			
	Excellent	Good	Adequate	Minimally Acceptable
	<p>in a way that clearly answers questions posed by assignment and does not read simply as a series of summaries</p>	<p>non-scholarly literature and answers questions posed by assignment; may need minor additional supporting detail OR improvement in writing in style of a scholarly lit review rather than a series of summaries</p>	<p>moderate improvement in multiple areas, major improvement in one area's answer or supporting detail, or may show minor confusion in differentiating types of sources</p>	<p>over scholarly vs. non-scholarly sources or need major improvement in multiple areas' answers and supporting detail</p>
<p>Contribution to Existing Lit</p>	<p>Clearly describes nature of existing literature, in manner consistent with characterization of that literature and course lessons on ways in which research can contribute to an existing lit</p>	<p>Describes contribution to existing lit in a way that is mostly clear, mostly consistent with literature review, and/or mostly consistent with course lessons</p>	<p>Literature review contains evidence that student understands how to assess contribution, but discussion of the contribution is not sufficiently explicit; OR a mostly explicit discussion may include a notable inconsistency with literature review or course lessons</p>	<p>Does not state contribution to existing literature</p>
<p>Citation Format</p>	<p>Very few if any errors in citing</p>	<p>Very few if any errors in citing</p>	<p>Inconsistent in citation of sources,</p>	<p>An effort has been made to cite</p>
				<p>information to evaluate</p>
				<p>Works cited page is</p>

		Levels of Achievement			
Criteria	Levels of Achievement				
	Excellent	Good	Adequate	Minimally Acceptable	Failing
Clarity of Intro and Purpose	sources when needed in the correct Chicago, APA, or MLA format	sources when needed; format departs slightly from correct one, but contains essential info needed to locate source	application of correct formatting, and/or provision of essential info	sources, but in-text citations are mostly or totally missing; OR works cited page is missing much essential info needed to locate source	missing or sources are not cited at all
	Clearly discusses the research question and its significance, providing appropriate background	Clearly identifies the research question and addresses significance; may benefit from some elaboration	Clearly identifies the research question but does not address significance; OR identifies a somewhat clear research question and addresses significance	Identifies or implies a research question that needs further elaboration to understand with confidence	Discussion of research question and its significance is missing or too unclear to discern
Theory	Correctly uses "theory"; Clearly and logically specifies key concepts in the research question, the anticipated relationship(s) between them, and the chain of reasoning leading to that proposition	Largely correct in use of "theory"; Relates key concepts in the research question and supplies some rationale, but may need to complete some links in the chain of reasoning and/or minor clarifications of concepts or propositions	Identifies concepts and propositions relevant to answering the research question and shows some ability to reason about them, but a critical area of the discussion may need improvement in its clarity, completeness, correctness, or correspondence to	Some understanding of the components and role of a theory is discernible, but key components of theory are missing or have been fundamentally misapplied	Discussion of theory is missing, too unclear to understand, or shows fundamental confusion over the nature and/or role of theories

Criteria	Levels of Achievement				Failing
	Excellent	Good	Adequate	Minimally Acceptable	
Variables	Identifies variables that clearly and logically correspond to theory; Consistently demonstrates correct understanding of what a variable is; Correctly identifies all variable types used in the paper	Identifies variables that correspond (at least) reasonably closely to theory; Demonstrates correct understanding of variables and variable types in most or all cases; Correctly differentiates between independent and dependent variables	Identifies variables that are (at least) related to ideas in theory, may show incomplete or inconsistent command over the definition of a variable or some key variable types.	Demonstrates some correct understanding of relationships to concepts in theory, and/or different variable types, but mastery of relevant lessons is questionable due to clarity problems, missing information, or considerable incorrect usage of variable types	Discussion of variables is missing, too unclear to understand, or shows fundamental confusion over the definition and role of a variable
Hypotheses	Succinctly and completely specify directional relationships between variables, clearly & logically derived from and corresponding to discussion of theory and variables	Specify directional and concrete or mostly concrete relationships that correspond to discussion of theory and/or variables	Predict relationships based on theory, but need greater specificity or concreteness OR to resolve a notable inconsistency with discussion of theory and/or variables	Show some understanding of what a hypothesis is, but missing information, clarity problems, or substantial problems in correspondence with discussion of theory and/or variables hinders evaluation	Hypotheses are missing, too unclear to understand, or show fundamental confusion over what a hypothesis is

		Levels of Achievement			
Criteria	Excellent	Good	Adequate	Minimally Acceptable	Failing
Technical Writing (Grammar, Spelling, Etc)	Contains very few if any grammatical, spelling, or word choice errors; written in crisp, clear, well-organized and flowing prose	Contains few if any grammatical, spelling, or word choice errors; written in crisp, clear, well-organized and flowing prose	Written communication is clear, but needs moderate corrections to or improvement in grammar, spelling, word choice, crispness, organization and/or flow	Paper generally gets its point across, but reader must wade through multiple and/or serious errors in or struggles with grammar, spelling, word choice, crispness, organization and/or flow	Serious and systematic errors in grammar and/or other aspects of technical writing make it difficult to understand the paper
Additional Considerations	There is an important way not captured by this rubric in which this paper represents excellent research (e.g., extra effort or complexity)	There is a way not captured by this rubric in which this paper represents good research (e.g., extra effort or complexity)	n/a	There is a way not captured by this rubric in which the paper does not follow directions	There is an important way not captured by this rubric in which the paper does not follow directions

View Associated Items

Print Close Window

Appendix 3. Rubric for Part 2 of POLI 301 Final Paper

<https://blackboard.umbc.edu/webapps/rubric/do/course/manageRubrics?dispatch=view&com...>

POLI Project Part 2	
Name Description Rubric Detail	Levels of Achievement
Criteria	Excellent Good Adequate Minimally Acceptable Poor/Failing
Sample	<p>Excellent Sample is clearly and correctly described, explained, and assessed; within class constraints, sample is reasonably suited to RQ</p> <p>Good Discussion of sample and sampling concepts is mostly clear, complete, and correct, and mostly reasonably suited to RQ</p> <p>Adequate Provides reader info necessary for understanding the research, but needs moderate improvement in clarity, completeness, correctness, and/or suitability for RQ</p> <p>Minimally Acceptable Provides some info about its sample and shows some understanding of sampling-related concepts, but much is unclear, incomplete, incorrect and/or inappropriate for RQ</p> <p>Poor/Failing Discussion of sample is missing, too unclear to evaluate, or shows basic confusion about sampling and related concepts</p>
Indicators	<p>Excellent Uses indicators suited to yield reasonably valid results; clearly defines indicators and documents data collection and sources</p> <p>Good Uses indicators suited or mostly suited to yield reasonably valid results; documents data collection; definitions and sources of indicators are at least mostly clear and complete</p> <p>Adequate Uses data aligned with concepts under study; documents data collection; indicator definitions and/or sources may need moderate improvements in clarity and/or completeness</p> <p>Minimally Acceptable Documents data collection; discussion of indicators and sources may contain serious problems with clarity, completeness, or correspondence with concepts under study</p> <p>Poor/Failing Discussion of indicators is too unclear or incomplete to evaluate and/or submission may fail to document data collection</p>
Measures of Central	<p>Excellent Clearly presents (only)</p> <p>Good Clearly presents appropriate stats</p> <p>Adequate Presents some measures of</p> <p>Minimally Acceptable Presentation suggests some</p> <p>Poor/Failing Presentation is missing, too</p>

6/23/2016 12:24 PM

1 of 5

Criteria	Levels of Achievement				
	Excellent	Good	Adequate	Minimally Acceptable	Poor/Failing
Tendency and Dispersion (CT & D)	appropriate stats for all indicators	for most or all indicators while presenting few if any inappropriate stats	CT&D but may need moderate improvement in completeness, command over levels of measurement, and/or appropriate statistical choice	correct understanding of measures of CT&D and their use, but much information is missing, unclear, or incorrect, or may show confusion over univariate stats	unclear to evaluate, or shows basic confusion over the topic
Hypothesis Test 1	Correctly implements an appropriate bivariate statistical technique; presents and interprets the relevant statistics in a clear, correct, thorough, and thoughtful fashion	Implements and interprets an appropriate or acceptable bivariate statistical technique; may need minor correction, clarification, or elaboration	Presents results from a bivariate statistical technique; errs in the selection, implementation, or interpretation of results or is missing some information necessary for evaluating these skills, but yields some relevant info	Correctly selects, implements, or interprets a bivariate statistical technique, but serious errors or omissions limit usefulness of the "test" OR Clearly analyzes and correctly interprets relevant data, but does not employ a formal statistical technique	Test is missing, too unclear to evaluate, or shows fundamental confusion about hypothesis testing
Hypothesis Test 2	Correctly implements an appropriate bivariate statistical technique;	Implements and interprets an appropriate or acceptable bivariate statistical	Presents results from a bivariate statistical technique; errs in the selection, implementation,	Correctly selects, implements, or interprets a bivariate statistical technique, but serious errors or	Test is missing, too unclear to evaluate, or shows fundamental confusion about

Criteria	Levels of Achievement				
	Excellent	Good	Adequate	Minimally Acceptable	Poor/Failing
Hypothesis Test 3	presents and interprets the relevant statistics in a clear, correct, thorough, and thoughtful fashion	technique; may need minor correction, or clarification, or elaboration	or interpretation of results or is missing some information necessary for evaluating these skills, but yields some relevant info	omissions limit usefulness of the "test" OR Clearly analyzes and correctly interprets relevant data, but does not employ a formal statistical technique	hypothesis testing
Hypothesis Test 3	Correctly implements an appropriate bivariate statistical technique; presents and interprets the relevant statistics in a clear, correct, thorough, and thoughtful fashion	Implements and interprets an appropriate or bivariate statistical technique; may need minor correction, or clarification, or elaboration	Presents results from a bivariate statistical technique; errs in the selection, implementation, or interpretation of results or is missing some information necessary for evaluating these skills, but yields some relevant info	Correctly selects, implements, or interprets a bivariate statistical technique, but serious errors or omissions limit usefulness of the "test" OR Clearly analyzes and correctly interprets relevant data, but does not employ a formal statistical technique	Test is missing, too unclear to evaluate, or shows fundamental confusion about hypothesis testing
Evaluation of Research	Addresses all discussion prompts clearly and thoughtfully, maintaining consistency with evidence presented in the paper while	Addresses discussion prompts in a fashion that is mostly clear, complete, thoughtful, and consistent with evidence,	Offers a critique of the research guided at least in part by the discussion prompts and evidence suggesting some understanding of	Offers a reaction to the research guided at least in part by the discussion prompts and suggesting understanding of at least one	Responses to discussion prompts are missing, too unclear to evaluate, conflict substantially with evidence, and/or fail to

Criteria	Levels of Achievement			
	Excellent	Good	Adequate	Minimally Acceptable
Criteria	demonstrating understanding of the methodological concepts employed in the prompts	demonstrating or suggesting understanding of most methodological concepts employed in the prompts	methodological concepts employed in the prompts	methodological concept; may need considerable improvement in clarity, correctness, or consistency with evidence
Technical Writing	Contains very few if any grammatical, spelling, or word choice errors; written in crisp, clear, well-organized and flowing prose	Contains few if any grammatical, spelling, or word choice errors; written in mostly crisp, clear, well-organized and flowing prose	Written communication is clear, but needs moderate corrections to or improvement in grammar, spelling, word choice, crispness, organization and/or flow	Paper generally gets its point across, but reader must wade through multiple errors in or struggles with grammar, spelling, word choice, crispness, organization and/or flow
Additional Considerations	There is an important way not captured by this rubric in which this paper represents excellent research (e.g., extra effort, complexity, or aesthetic appeal).	There is a way not captured by this rubric in which this paper represents good research (e.g., extra effort, complexity, or aesthetic appeal).	n/a	There is an important way not captured by existing criteria in which paper does not follow directions
				There is an important way not captured by existing criteria in which paper does not follow directions