

Using Grounded Theory in Writing Assessment

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IN *What We Really Value: Beyond Rubrics in Teaching and Assessing Writing*, Bob Broad (2003) argues, “Very rarely do rubrics emerge from an open and systematic inquiry into a writing program’s values” (p. 12). This may be especially true of the rubrics and writing assessment activities of departments, since it is often a single individual or a small committee that is charged with writing assessment. Broad encourages those tasked with writing assessment to “discover, document, and negotiate their evaluative landscape before they move to standardize and simplify it...” (p. 126). In *What We Really Value*, Broad cites the qualitative methodology of grounded theory as a useful approach to writing assessment and builds on grounded theory in his own approach. In “Grounded Theory: A Critical Research Methodology,” Joyce Magnatto Neff (1998) also argues for the value of grounded theory as a way to research writing. Magnatto Neff feels grounded theory “is a promising methodology for composition studies” because it doesn’t require us to simplify the complex acts of writing and teaching (p. 126).

Brian Huot (2002) states that “many writing teachers...feel frustrated by, cut off from, and otherwise uninterested in the subject of writing assessment” (p. 81). This can be doubly true for faculty members in the disciplines, especially if writing assessment is a top-down task. A grounded theory approach is one way to work against this feeling of being cut off from writing assessment. We feel that grounded theory is promising not just for the writing assessment conducted by compositionists but also for writing assessment across the curriculum. In this article we discuss the grounded theory approach, provide an example of the use of grounded theory in a writing assessment activity for a sociology department at a large state university, and review some principles of the grounded theory approach that we believe could be useful for writing specialists who are working with departments across disciplines and for instructors in the disciplines who have been tasked with writing assessment for their department. As a research methodology that emphasizes dialogue, context, and a relationship between analysis and theory building, grounded theory aligns

with interpretive, constructivist trends in writing assessment (Broad, 2002; Guba & Lincoln, 1989; Huot, 2002), and it can be presented to departments across disciplines as an alternative to the more traditional, positivist approach of formulating a rubric, scoring essays, and writing up a report to gather dust in an administrator's file cabinet.

The Grounded Theory Approach

Grounded theory is a systematic generation of theory. It is patterns of social occurrences that often can be derived from the analysis of qualitative data. It is a set of rigorous research procedures leading to the emergence of conceptual categories, allowing qualitative data to be analyzed in a particularly succinct manner (Rhine, 2009). It is also a methodology that ensures that the findings, and subsequent theories derived from those findings, are accurate to the data and not limited by previous research. Pouring your data into someone else's framework offers "little innovation and also may perpetuate ideals that could be refined, transcended or discarded" (Charmaz, 1983, p. 111). The focus and intention of grounded theory is to understand "what is going on" (Glaser & Strauss, 1967, p. 2), not to determine if data can fit into predetermined categories or theories.

While this methodology was established to offer "a systematic set of procedures to develop an inductively derived theory about a phenomenon" (Strauss & Corbin, 1990, p. 24), the approach to analyzing data can be useful to a host of paradigms. While not explicitly created for writing assessment, the approach lends itself perfectly to the analysis of writing, as it allows researchers to assess department-specific writing more clearly (although it can be used for any level of writing assessment and not just limited to department assessment). By utilizing grounded theory for assessing writing, researchers can gain a clearer picture of what is occurring in student writing as well as how faculty are evaluating student writing.

Grounded theory is about discovery (Strauss, 1987), characterized by four primary criteria: fit, relevance, workability, and modifiability (Glaser & Strauss, 1967; Glaser, 1998). These four criteria help to reference the utility of grounded theory in assessing writing. First, "Fit" is determined by how closely the concepts relate to the incident being analyzed. In other words, how well the concepts and categories developed relate to understanding and assessing writing. Since the data is actually faculty reviews of writing, fit is whether the commentaries offered by faculty members are useful in assessing writing in the department. To help with fit, systematic sampling is important to make sure that students who fit the assessment need are a part of the analysis, which in this analysis were sociology majors.

The second component, "Relevance," is an extremely important aspect of assessment. It focuses on the importance that all involved are interested in the conclusions. Simply,

students, faculty, and the researcher analyzing the data must all be interested in the assessment of student writing, establishing its relevance for all involved. Another key aspect of relevance is that writing assessment findings should be useful beyond just research. When utilizing grounded theory, conclusions drawn from writing assessment should have an applied component, such as developing responses to student writing issues and/or writing rubrics that are department specific.

“Workability” is the ability to explain and use the findings through variations, which in the context of writing assessment involves developing categories and themes that apply to all levels of writing. If a paper is of a higher or lower quality, the conclusions derived from the assessment should work for all categories. This is a key component of writing assessment, to be able to compare and contrast a range of student writing by recognizing common strengths and weaknesses. Furthermore, workability can include both fluid and qualitative understanding of writing, such as descriptive explanations of student writing, or the development of rubrics, which is much more common in assessment. This leads to the final aspect, “Modifiability.” An important aspect of assessment is the constant evaluation of the findings, including reevaluating the rubric. A major component of grounded theory is to consistently review the data and continually evaluate the process. For writing, this means both developing rubrics to continue assessment, as well as constantly reassessing student writing using a grounded theory method to make sure the ideas are consistent and to identify any new ideas or issues that arise.

In this context, grounded theory offers an excellent perspective for conducting assessment of writing. Even more important, using grounded theory procedures lends itself to assessing writing specific to a group, such as a department, program, or even general education area. For this discussion, we will elicit key components of the grounded theory methodology that lead to a more formative assessment of student writing within a department, offering explicit examples from student writing assessment in a sociology department.

The Grounded Theory Approach in a Writing Assessment for a Sociology Department

Beginning fall 2007, one of the authors was charged with conducting an assessment of student writing in the sociology department of a large state university. The assessment of sociology student writing resulted from a culmination of factors, including faculty concerns over student writing within the department. Beyond that, the choice to focus on writing was predicated by the department assessment coordinator’s interest in student writing, which stems from a university-wide emphasis on writing development and

assessment, led by the recent hiring of a Writing Across the Curriculum faculty member in the university, the other author.

Methodology

First, it is important to identify the systematic methodology used to compile the data that was analyzed using grounded theory. Over the last three years, choosing different core classes in the sociology program, ten randomly chosen papers were reviewed by five different faculty at the end of each semester. Each paper was assessed twice by different faculty, compiling a total of 60 papers assessed, with a total of 120 individual assessments conducted. The assessments were open-ended evaluations of student writing in which faculty were informed that they should assess the quality of the paper but not grade it. The choice to direct faculty away from “grading” the papers was to limit the emphasis on quantifying assessments. Instead, faculty conveyed, in as much detail as was needed, the quality of the writing and descriptions of both positive and negative components of each paper. It should be noted here that the grounded theory analysis is of faculty assessments of student writing, and not simply student writing itself. A grounded theory assessment is about establishing writing issues and concerns based on what faculty within the department recognize as core issues, both positive and negative. The accuracy of how well students are writing is defined by the faculty, and so a grounded theory analysis is important, for it is the data that will inform the conclusions rather than preconceived notions of writing, whether in the department, the university, or institutions of higher learning in general. As Magnatto Neff (1998) points out, grounded theory includes the subjects of the research as agents (p. 133). In this case, the faculty voices were important since they were primary subjects in the assessment.

Preliminary assessments of student writing helped the first author (who is also the department assessment coordinator) identify important areas of writing that should be the focus of faculty assessments, including five general writing issues (organization, thesis, evidence, grammar, critical thinking) and two issues specific to sociology (sociological imagination, social concepts). Continual evaluation of the data and ultimately the assessment process is important in grounded theory as it helps to inform the analysis and keep the data focused on the relevant and important concepts and ideas. Evaluating which areas were needed to focus on when assessing helped to direct the assessment process for faculty to make sure they were focused on similar ideas that are commonly assessed in writing. It should also be noted that the systematic sampling allowed the findings from the analysis to be applied to all sociology majors at this university, and not just to the sample of students. Using grounded theory to analyze the assessment data of student writing in

the sociology major allowed for faculty to gain a better understanding of “what is going on” with student writing, which would benefit students and the department as a whole in their attempts to teach writing.

Using Grounded Theory: Coding

One of the key aspects of grounded theory is to allow the data to inform us and help determine an accurate portrayal of what is happening. Data-driven understanding, or determining patterns by analyzing the data, is made possible by following a systematic approach to coding the data. This allows researchers to be simultaneously scientific and creative (Strauss & Corbin, 1990, pp. 44–46). For writing assessment, grounded theory allows the researcher to accurately recognize the struggles and strengths of student writing within a specific department. The first step in the process is to “code” the data, which differs from traditional quantitative forms of coding that require assigning numbers to each answer given. Coding, in grounded theory, is about developing conceptual categories to summarize, synthesize, and sort the observations that derive from the data. By not relying on previously established expectations, the researcher allows the codes to fit the data, as opposed to having the data fit codes. “By doing so, they [researchers] gain a clearer rendering of the materials and greater accuracy” of what is being analyzed (Charmaz, 1983, p.112). For writing assessment, this means not relying on a standardized rubric to determine writing in a department, especially when conducting preliminary writing assessment.

The coding process in the study of student writing involves a systematic analysis of faculty assessment of writing. For the assessment of sociology writing, the “initial coding” entailed a focus on one writing area at a time (organization, thesis, evidence, etc), reviewing all of the comments about each topic in each of the 120 assessments. In doing so, the researcher was able to identify common patterns within each area. As Magnatto Neff (1998) points out, in grounded theory research it is important to practice “open coding” and let patterns emerge before examining relationships between patterns and concepts (p. 129). Once initial categories were established, a more “focused coding” revealed core issues of writing for students that were pervasive throughout the sample of faculty assessments. In order to accomplish this, common themes were analyzed throughout all of the faculty reviews, to better determine the categories of issues that defined student writing, by revisiting and analyzing faculty assessments several times. The representative sample allowed for an even more systematic process, quantifying the writing issues among sociology students. When over 25% of the papers made a similar comment about student writing, both positively and negatively, that was coded as a common issue for student

writing. There is no definitive percentage to be used to identify an accepted pattern, but instead, researchers should rely on the data to inform them of an acceptable percentage to determine patterns. It is up to the researcher to set the standard, as grounded theory is about understanding and then responding, and not about having an explicit criteria met.

Refining the Understanding

To further develop these common codes, memos—thematic ideas or phrases—were established to make the common issues more coherent. “Memos are the theorizing write-up of ideas about substantive codes and their theoretically coded relationships as they emerge during coding, collecting and analyzing data, and during memoing” (Glaser, 1998, p. 54). Simply put, memos are more explicit descriptions of the codes that have been identified through the early part of the analysis. In the sociology writing assessment, memos helped to clarify and articulate the positive and negative writing issues identified through the coding. In this analysis, using the memos helped to clearly identify student development of a thesis. While it appeared that many of the papers did not have a thesis, faculty identified that often students introduced a thesis toward the end of the paper, which gave the appearance of no thesis. This negatively impacted the paper throughout. The memo that derived from the codes was “Struggle to clearly identify thesis at beginning of paper.” Furthermore, the memos helped to clarify that “A strong thesis at the beginning would help with other organization and writing issues throughout, including for stronger papers.” These same memos helped in the design of a sociology-specific rubric.

Developing the rubric was not just about creating categories of analysis, but, considering the concept of “workability,” also led to more explicit development of rankings within the categories. Drawing on the data (comments by faculty) within the “evidence” section of the rubric, what became apparent is that what was missing in the original rubric was the appropriate use of sources and correct ASA citation of the sources throughout a paper. The data not only identified a focus within a rubric, but displayed appropriate language to be used at the different levels of the “Evidence” category. For example, the data revealed that for a paper to have good, albeit not great, evidence (a score 3 out of 4 on “evidence” in the rubric), the paper contained “correct use and ASA citation of sources throughout, but heavy reliance on one source to support major points in the paper.” Using grounded theory methods, the data was able to inform the explicit needs and eventual rubric of the department, as opposed to relying on a preconceived deduced framework (Strauss & Glaser, 1967).

Another example of how the data informed us about department understanding of student writing, as well as impacted the structure of the rubric, concerned critical thinking

skills. Students displayed an ability to analyze ideas beyond basic description, often engaging in abstract discussions, but only when they applied concepts to their own lives. However, when attempting to apply the concepts to less personal experiences, students struggled to go beyond description. This applied well to a key concept in sociology, the “sociological imagination,” which was also assessed. In the assessment, it was determined that students were able to apply social concepts to the “personal,” but not the “social” (Mills, 1959). Or, in another context, students were able to recognize their place in the social world (micro applications) but struggled to understand the larger social context or macro applications. After noting this pattern throughout the faculty assessments, it was identified that a part of the rubric needed to address student application of both macro ideas and micro applications.

The assessment of critical thinking and the sociological imagination also revealed that faculty considered these two ideas along a similar vein. The majority of faculty, in their assessments of papers, utilized similar comments and evaluations of student papers when commenting about both critical thinking and the sociological imagination. Often, faculty stated plainly “see above in critical thinking” when referencing the sociological imagination. Relying on grounded theory of the assessment of papers revealed not only important information about student critical thinking but also revealed a common perspective from faculty about critical thinking. As a result, the two (critical thinking and sociological imagination) were combined into one component in the sociology writing rubric.

Relying on pre-established rubrics might force the assessment of areas not relevant to a department. Such rubrics allow for comparison across multiple groups, but do not express key components of writing that are major specific, or even department specific. In the analysis of sociological writing, data helped to refine a general rubric created for the College of Social Sciences and Interdisciplinary Studies, which was part of a university assessment project. By using the findings from grounded theory, we were able to redesign the rubric to be specific to sociology, and this sociology department explicitly. Now, even when using the rubric, we are able to assess writing that is relevant to sociology. For example, within the general rubric, audience is a key component of many departments’ writing assessment, so it is a category on many standardized writing rubrics. Within this sociology department, “audience,” while an important issue, is not relevant enough to be considered its own category in a rubric. In assessing papers, faculty did not offer any commentary about audience, positively or negatively, even though consideration of audience was included in the clarification notes given to faculty, which are mentioned in the section below (Interactive Analysis section). This was done to allow faculty to consider

audience throughout all seven sections, as it can impact numerous aspects of a paper, and is not limited to a specific assessment area. Sociology faculty, when asked, claimed that the majority of papers written in sociology are for an academic audience, thus making the audience category unnecessary.

Interactive Analysis

While systematic coding helps in the determination of patterns, a key component of grounded theory is for the data collection to occur simultaneously with the analysis so that each informs the other (Glaser & Strauss, 1967). This interactive analysis ensures that the assessment of the writing is as accurate about “what is going on” as possible. The key is to consistently evaluate the data while gathering it to determine if new information is necessary. For example, in developing the sociology assessment, following the first set of evaluations (10 papers), the data collection was refined based on comments and questions from faculty. The intention was to offer faculty more explicit information to direct them in their assessment of the papers. These clarification notes, as mentioned in the above section, presented ideas or topic issues to consider when reviewing the papers, such as audience or feasibility of any claims made in a paper. The additional information also focused faculty in their analysis of the papers. Faculty were informed in the additional notes that while they could use more quantifiable labels about student competence in each area, such as *excellent*, *passing*, or *weak*, they needed to describe in greater detail why they used the term. This cued faculty to relay the more in-depth qualitative data needed to conduct the grounded theory. Refining the analysis also occurred in the preliminary analysis discussed above in the methods section when it was determined that the analysis would be organized around seven general topic areas, as opposed to leaving it open-ended. Essentially, refining the analysis throughout the process is an important aspect of grounded theory, as it allows for a better and more truthful finding from the data. All additional directions were to focus the data so that a more accurate understanding of issues in student writing could be reached during the analysis. Focusing data collection “serves to strengthen both the quality of the data and the ideas developed from it” (Charmaz, 1983, p. 110).

Comparative Sampling

Another key aspect of grounded theory is the idea of comparative sampling, which means making sure that data is consistent across different groups. This will allow an accurate claim regarding what is being assessed. If, for example, the findings from this sociology department assessment do not accurately apply to findings in other sociology departments

at other universities, then we can only claim to have assessed student writing in this department. Similarly, if assessing general education writing by reviewing student writing in a writing intensive course, one might then compare the findings to student writing in courses from other general education areas. If the findings in the initial assessment do not apply to the comparative assessment, then one cannot claim true assessment of student general education writing, as the findings do not apply. The issue might be that students focus more on writing in writing intensive classes or that they are given more direction in those classes, but they do not apply this knowledge to their other classes. Truly, the reason for the difference would need to be studied in greater depth to determine why they are not comparable.

The key is to constantly evaluate the data and the analysis of the data (Glaser, 1998). This can be accomplished in a number of ways, such as comparing transfer students to native students, different grade levels, or even students with different abilities, demographics, or double majors. For the sociology analysis, comparative sampling was established by analyzing papers from different core classes to determine if different course topics or faculty would impact student writing, which would limit our ability to accurately assess sociology student writing. If student issues and/or abilities in writing differed across courses and/or faculty, then our analysis would be limited to courses or faculty. Upon comparison, we concluded that there were no differences in the themes that were identified across classes, thus allowing us to claim assessment of sociology student writing in general. We also compared assessments of the same papers across faculty members, which allowed for inter-rater reliability and established more systematic claims from the grounded theory process. Such systematic sampling is useful in grounded theory as it can help to make claims about the findings that apply to a larger population.

Using Grounded Theory

Although grounded theory is familiar to most sociologists, compositionists may not be as familiar with the research methods and processes we described in this essay. In order to review the most important aspects of grounded theory for writing specialists and faculty members in the disciplines conducting writing assessment, we end this essay with some practical advice about deploying grounded theory. When utilizing a grounded theory methodology when assessing writing, here are some considerations that will assist in obtaining the most accurate data:

1. *Sample*: Design a systematic sampling procedure that will allow the faculty to generalize findings to all of their students.
2. *Be interactive*: Try to avoid being stagnant throughout the process, as it is important

to allow the data to inform which direction to focus assessments. This is especially important early on, as it can help to direct the data gathering and the assessment process. While it can be useful to ask faculty in a department what are important areas in writing that they use to evaluate their students, oftentimes it is easier for faculty to identify these in the process of assessing papers. Obviously it can be difficult to get faculty to commit to a completely open-ended assessment process, as there are workload considerations. This is one more reason why it is important to refine the process throughout, to aid faculty, while not quantifying it.

3. *Code*: Systematically code the assessments, each time further fine-tuning the concepts that are being identified about student writing.
4. *Memo*: Using the codes, describe the concepts that have been consistently noted by faculty. This is the identification of positive and negative writing issues. Don't just identify the issue, but the range of competence concerning the issue. Rely on words and phrases shared by faculty, as it can help to create a more explicit rubric that is department or even discipline-specific.
5. *Design*: With the findings, develop not just a plan for responding to student writing but also a rubric that measures student writing in the department. This means plan for future assessment. This might include creating a baseline about student writing before implementing any changes that will address student writing. Since the rubric derives from the findings of this assessment, and the changes to the curriculum are also predicated on this idea, they should be closely associated when assessing changes to student writing.
6. *Reevaluate*: Regularly evaluate student writing (as with the rubric) and also the assessment process. In other words, be prepared to conduct another assessment using grounded theory to identify changes that have occurred with student writing or adjustments to the rubric.
7. *Be flexible*: While grounded theory is based on the idea of being systematic, one aspect that is important is to constantly be open to altering the process, tools, analysis, data, etc. Make it work to fit the needs of your department.

Based on the conclusions drawn from the grounded theory assessment, several suggestions were brought to the sociology department to address the specific student writing concerns. One such suggestion is to extend the use of the rubric beyond the department writing assessments. Faculty will discuss adjusting the rubric to fit all papers that are assigned in sociology classes to establish consistency across student writing. Furthermore, considerations of how to utilize the rubric to assist with student writing will be discussed, including using the rubric for peer writing assessments. In an attempt

to address citation concerns, the department will consider the requirement in all core sociology courses, or potentially all sociology classes of several specific links that identify how to cite using ASA citation format as well as why students would cite references. The biggest consideration will be educating students on paper editing and thesis construction. One proposal will involve the potential development of a one-unit writing adjunct to be taken in conjunction with a core sociology course, and possibly required during the junior year by each sociology major. The writing adjunct may be facilitated by a faculty member or potentially a sociology graduate tutor. At this time, these are the general suggestions presented to the department; other suggestions may be offered as the department develops responses. All suggestions will be evaluated and discussed by the department to determine the best course for responding to the identified struggles. Ultimately, what can be determined is that any responses that address any of the findings will be dealing with the explicit issues that sociology students struggle with in their writing, as determined through the grounded theory assessment.

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