

Learning to Appraise the Quality of Qualitative Research Articles: A Contextualized Learning Object for Constructing Knowledge

Ronald J. Chenail

Nova Southeastern University, Fort Lauderdale, Florida USA

Helping beginning qualitative researchers critically appraise qualitative research articles is a common learning objective for introductory methodology courses. To aid students in achieving competency in appraising the quality of qualitative research articles, a multi-part activity incorporating the Critical Appraisal Skills Programme's (CASP) Making Sense of Evidence Tool: 10 Questions to Help You Make Sense of Qualitative Research to evaluate the articles is shared. A Contextualized Learning Object for Constructing Knowledge or CLOCK approach is used to represent the appraising activity in terms of its context, content, evaluation components, exemplary outcomes, and options for customizing parts of the assignment. Key Words: Qualitative Research, Learning Objects, Contextualized Learning Object for Constructing Knowledge, CASP, and Appraising

Introduction and Rationale

Helping beginning qualitative researchers critically appraise qualitative research articles is a common learning objective for introductory methodology courses. The learning activity allows students to become acquainted with the form of qualitative research reports, to identify key parts of a qualitative research article, and to judge the quality of authors' representations of methods and findings. The developmental levels of beginners may also make the activity a challenge due to the students' lack of fundamental knowledge of what elements constitute a qualitative research article let alone what may define a "best practice" in qualitative research reports. In addition, the sheer variety of qualitative research methods and criteria for assessing quality of qualitative research result presentations (Cohen & Crabtree, 2008) can make acquisition of competencies in this area quite challenging.

To aid students in achieving competency I have designed and used an assignment called "Appraising the Quality of Qualitative Research Articles" to evaluate qualitative research reports. The assignment consists of multi-part task in which students locate three qualitative research articles, assess the retrieved articles using the Critical Appraisal Skills Programme's (CASP) *Making Sense of Evidence Tool: 10 Questions to Help You Make Sense of Qualitative Research* (http://www.phru.nhs.uk/Doc_Links/Qualitative%20Appraisal%20Tool.pdf), write of their assessment of each article, and compare and contrast the relative quality of the articles.

In this paper I will share this assignment as a reusable learning object--“self-describing, self-contained small chunks of learning that accomplish a specific learning objective (Oakes, 2002) or as Wiley (2002a, p. 6) describes them, “any digital resource that can be reused to support learning” (Chenail, 2004, p. 113). The style in which I will present this learning object is known as CLOCKS or “Contextualized Learning Objects for Constructing Knowledge.” In contrast to other ways of rendering learning objects, CLOCKS are described in terms of their contexts, evaluation components, exemplary outcomes, and options for customizing the parts of the CLOCK (Chenail, 2004).

Appraising Articles with the CASP Tool

I drew upon the Critical Appraisal Skills Programme’s (CASP) *Making Sense of Evidence Tool: 10 Questions to Help You Make Sense of Qualitative Research* to give the appraising assignment structure and to help students engage qualitative research articles efficiently. I have also found the use of the CASP tool provides students with the scaffolding they need to begin to make distinctions within qualitative research articles and to have a system within which they can compare and contrast articles’ relative quality. The CASP tool contains 10 questions designed to help readers appraise qualitative research reports broadly in terms of rigor, credibility, and relevance. The tool is not meant to be a definitive guide, but rather presents probes students can use to identify the salient features of a qualitative research article and to note what elements may be missing from a report.

The CASP tool’s ten questions help the students begin to identify the basic parts of a research article (e.g., sample, data collection, data analysis, and results) and to consider how well the author presented the steps taken in each of these areas during the study and the rationales for making each of these decisions. As the students query the article from the perspective of the CASP’s questions, they can begin to appreciate the quality of these texts and to see how the theoretical and conceptual material presented in an introductory qualitative research textbook is operationalized (e.g., Creswell, 2006) and practiced in actual qualitative research articles.

The use of the CASP tool also helps the assignment become a mini-data analysis activity as students must first conduct a within-case analysis of each individual article and then an across-case analysis in which they compare and contrast the three articles. In the within-case analysis the students use the ten CASP questions to analyze the contents of each article. For example, one CASP question asks the students to reflect upon the author’s attempt to present how ethical issues were managed in the research and another CASP question prompts the students to consider whether or not the author described a rigorous data analysis process. For each question the students render an evidence-based decision on the quality of the author’s presentation of the study.

As they are rendering their findings, the students have to consider the overall quality across the ten CASP questions. This new focus helps them to shift their analysis from the ten questions which serve as categories to a more thematic analysis driven by the question of quality. The CASP tool suggests the students consider three overall quality measures to make this determination: rigor, credibility, and relevance. For rigor the CASP tool asks the students to consider the thoroughness of the author’s accounts. For credibility, the students are asked to contemplate if the author presented the findings

in a meaningful fashion. For relevance, the students are encouraged to consider how the author established the usefulness of the results. These three factors can be used by the students as sub-themes of the overall determination of an article's quality.

The students' findings regarding the ten CASP categories and the three sub-themes for each article give the students points of relationship along which they can then judge the three articles collectively. They can compare and contrast the articles not only in terms of authors' discussions of ethical concerns and data analysis rigor, but also along the lines of credibility and relevance. The rigor of the CASP-driven analysis helps the students to go beyond the simple repeating of the content of the articles and presenting an overall impression; and instead, deliver a data-driven account based upon a rigorous analytical process.

Assignment Presentation

In the qualitative research courses I teach I organize the syllabus around the program's overall learning goals and objectives. I do this because I want to help the students to stay focused on the big picture in their degree or certificate program and to see how mastering the learning outcomes in this particular course will help them take the next step towards their overall goals (Chenail, in press). For example, we use the *Appraising the Quality of Qualitative Research Articles* in the Nova Southeastern University's Graduate Certificate in Qualitative Research. The Certificate's three goals for its students are to (a) gain insight into the philosophical and theoretical foundations of qualitative research; (b) distinguish and critique qualitative research approaches and products; and (c) apply best practices in qualitative research to design, propose, conduct, and compose qualitative research of their own. After reminding the student of the programmatic goals, I then connect these global goals with the course's learning objectives. In this case, I show the students by accomplishing the learning objectives for the appraising assignment successfully they will be making progress towards the program goal of distinguishing and critiquing qualitative research approaches and products. I make this connection overt by using the following table in the syllabus to present the relevant Certificate goal, the appraising assignment's learning outcomes, and the process by which the students' competencies will be measures during the activity.

| Certificate Goal: Distinguish and Critique Qualitative Research Approaches and Products | | |
|---|---|---|
| Assignment: Appraising the Quality of Qualitative Research Articles | | |
| Learning Outcomes | Direct Assessment Activity | Assessment Method |
| Locate and retrieve qualitative research articles. | Students will select three qualitative research papers which present results from qualitative data analysis, analyze the three papers using the CASP tool, and compare and contrast the quality of the three papers based upon the results of their CASP tool analysis in a | A criterion-based rubric is used to assess students' abilities to compose a 12 to 15 page paper in compliance with APA guidelines in which they will articulate their methodology for finding candidate |
| Compare and contrast defining attributes of selected qualitative research and evaluation methodologies. | | |
| Describe methodology-specific techniques for sampling, data | | |

| | | |
|--|-----------------------------|--|
| <p>generation, collection, and preparation, data analysis, and interpretation and representation.</p> <p>Conduct within-case and across case document analyses to determine relative quality of qualitative research articles.</p> <p>Report the findings of their analysis.</p> | <p>12 to 15 page paper.</p> | <p>papers, their rationale for selecting their papers, the quality of their analysis, the quality of their comparative analysis, and the coherence of their discussion about the findings of their analysis.</p> |
|--|-----------------------------|--|

After situating the assignment within the Certificate and Course learning outcomes, I then present the activity as follows:

Appraising the Quality of Qualitative Research Articles – xx points

As a qualitative researcher, it will be critical for you to collect, read, and assess published reports including ones employing qualitative research methodologies. Finding such papers can help you (a) identify relevant evidence for your research studies, (b) appreciate the utility of qualitative research methodology when it comes to studying various education topics, and (c) select an appropriate methodology to address your own research questions.

When you locate pertinent research papers, it is critical that you can assess the quality of these published accounts and synthesize your understandings of these sources. This objective can be even more challenging in qualitative research given the variety of methodologies, styles, and philosophical approaches, as well as the uneven nature of the quality of some published results (Barroso, Gollop, Sandelowski, Meynell, Pearce, & Collins, 2003; Flemming & Briggs, 2007; McKibbin, Wilczynski, & Haynes, 2006). To help you to develop a critical eye for evaluating qualitative research you will be asked to appraise the individual and comparative quality of three qualitative research papers you have collected. To help you in discerning the quality of your chosen papers, you will use the Critical Appraisal Skills Programme’s (CASP) *Making Sense of Evidence Tool: 10 Questions to Help You Make Sense of Qualitative Research* (http://www.phru.nhs.uk/Doc_Links/Qualitative%20Appraisal%20Tool.pdf) to evaluate the articles.

The assignment also serves as an introduction to the conduct of within-case and across case qualitative data analysis of documents and the reporting of your resultant findings. In the case of this assignment, your CASP within-in case analysis of each qualitative research paper will help you to open up the article, separate its content into meaningful categories, render your findings for each of these categories, and then declare your pronouncement of the article’s quality by identifying patterns across the CASP-determined categories. Finally, after you have offered your findings for each article, you will then conduct an across-case analysis of the three articles and discuss the comparative quality of your three qualitative research articles.

To successfully complete this assignment you must

1. Select three qualitative research papers which present results from qualitative research methodology relevant to nursing education.
2. Analyze the papers using the CASP tool.
3. Discuss the papers' within-case and across case quality based upon the results of your CASP tool analysis in a 15 page paper.
4. Compose your paper in compliance with the American Psychological Association (2001) *Publication Manual of the American Psychological Association* (5th ed.).

Your 15 page paper must include the following elements:

1. Title Page
2. Abstract
3. Introduction to the three articles
4. Search plan for locating and rationale for selecting your papers
5. Methodology for conducting the within-case and across case analysis including your quality control procedures
6. Results of the CASP analysis of your three papers
7. Findings and discussion of your three papers' comparative quality
8. References
9. Appendix
 - a. Completed CASP Tool analysis of your papers
 - b. Copy of your papers

The 15 pages do not include your title page, abstract, references, or appendix.

Your work on the Critique and Comparison Paper assignment will be graded on

1. Title page – x points
2. Abstract – x points
3. Introduction – x points
4. Search plan for finding and rationale for selecting your papers – x points
5. Methodology for conducting your analyses – x points
6. The quality of your within-case CASP analysis (including the Appendix) – x points
7. The quality and coherence of your across-case comparative quality discussion – x points
8. The compliance of your references with APA conventions – x points

The following rubric will be used to assess your progress on this assignment:

| Appraising the Quality of Qualitative Research Articles Total: xx out of xx Points | | | |
|---|-----------|---------|--------|
| Section Goals | Strengths | Changes | Points |
| <p>Title Page (x points): Clearly identify the subject of your paper (e.g., Appraising Assignment). You can also add information describing the content of the three papers being compared (e.g., Comparing the Methodological Quality of Three Qualitative Research Domestic Violence Studies). Complies with the directions outlined in the <i>Publication Manual of the American Psychological Association</i> (APA, 2001) Sections 1.06 (pp. 10-12), 5.03 (p. 286), 5.04 (pp. 286-287), 5.06 (p. 288), and 5.15 (pp. 296-298) (i.e., includes a header with page number, a running head, the title of the paper, the author's name, and the author's affiliation).</p> | | | |
| <p>Abstract (x points): In 120 words or less present the key points you will make in the major sections of the paper; therefore you can write one sentence each summarizing the main points of the Introduction, the Rationale, the Comparative Analysis, and the Discussion. Complies with the directions outlined in the <i>Publication Manual of the American Psychological Association</i> (APA, 2001) Sections 1.07 (pp. 12-15) and 5.16 (p. 298).</p> | | | |
| <p>Introduction (x points): Introduce the reader to the assignment and the three papers selected and tell the readers what you plan to tell them in the rest of the paper.</p> | | | |

| | | | |
|---|--|--|--|
| <p>Methodology for locating relevant qualitative research papers (x points): Explain the procedures you followed that allowed you to locate these papers (e.g., describe your search terms, databases accessed, or other search strategies employed to narrow or re-focus your search).</p> | | | |
| <p>Rationale for selecting the three qualitative research papers (x points): Explain why you selected the papers you did (e.g., describe your inclusion criteria and explain how these papers met them).</p> | | | |
| <p>Comparative analysis of the three qualitative research papers (x points): Using the results of the CASP analysis of the three papers you selected, compare and contrast the quality of the three papers from a methodological perspective. Support your findings by using quotations and page citations from the papers and the CASP tool and any other relevant resources.</p> | | | |
| <p>Discussion of the comparative quality of the three qualitative research or program evaluation papers (x points): Tell the readers what you have told them and come to a conclusion as to the comparative methodological quality of the three papers: Was one paper better methodologically than the others, were all papers of equal methodological quality, or were all papers of poor methodological quality? Also explain what you learned about quality in qualitative research</p> | | | |

| | | | |
|--|--|--|--|
| <p>papers from reading and appraising these papers including any limitations to your analysis and what questions still remain concerning appraising qualitative research articles.</p> | | | |
| <p>References (x points): Include all references cited in the paper including the appendices. This means a citation for the CASP should also appear in your Reference section. Complies with the directions outlined in the <i>Publication Manual of the American Psychological Association</i> (APA, 2001) Sections 1.13 (p. 28) and 5.18 (p. 299) and Chapter Four (pp. 215-281).</p> | | | |
| <p>Appendices (x points): Include a copy of all three papers and their individual CASP analyses. In your CASP analyses, support your findings by using quotations and page citations. Complies with the directions outlined in the <i>Publication Manual of the American Psychological Association</i> (APA, 2001) Sections 1.14 (pp. 28-29) and 5.19 (pp. 299-300).</p> | | | |

Assessment

In presenting this assignment I think it is important to share the criterion-based rubric with the students so they can see how their work will be assessed. Students can also be encouraged to use the rubric as a self-assessment tool for them as they write and revise their work.

I use a simple rating form rubric (Middle States Commission on Higher Education, 2007) because it allows me to provide specific feedback to the students. I try to note strengths for each section and identify ways in which the element can also be improved. The specificity of the prescriptions I share in the “Changes” column helps the students focus on problems in their papers and provides guidance for the students to revise their submissions. I also assign a point total for each section and an overall point total for the activity. The mixture of the strength and changes comments with the point total helps to give students both a qualitative and a quantitative assessment of their work.

When a student turns in their assignment electronically I review the paper using various Microsoft® Office editing tools such as “track changes,” “insert comments,” and “highlight text” to embed my comments and suggestions in the text as well as in the rubric. Students receive a summary of their performances, suggested changes, and a quantitative score. In the cover email the students are given the option to revise and resubmit their assignments until they can clearly demonstrate that they had mastered the competencies and had earned the points they wanted to accrue for that part of the assignment.

In assessing each component of the assignment I look for the prescribed elements as expressed in the directions and reinforced in the rubric. Maximum points are awarded when students (a) address all required elements; (b) support their assertions with excerpts from the articles and/or their analyses; (c) provide citations from third-party sources (e.g., course textbook) to support their observations; (d) write clear and coherent sentences, paragraphs, and sections; and (e) compose their work in compliance to the APA style manual.

When reviewing the students’ CASP analysis for each article I pay close attention to how the students answer each CASP question to observe if the student renders a clear finding and supports this pronouncement with evidence from the article itself. Students can demonstrate evidence of this competency by showing marked up articles with the material addressing each CASP noted and CASP worksheets where they record their determinations to each question with supporting quotes and page numbers from the articles. I try not to be overly prescriptive in guiding the students when they conduct their analyses in order to learn how they go about carrying out their coding and analysis. In doing so, each time I use this exercise I usually learn some novel way of analyzing textual data due to the students’ creativity.

I use the same openness to execution when it comes to how the students render their appraisal of the three papers’ relative quality. I only ask that the students make a pronouncement of quality and provide evidence to support their findings. Some students have employed a mixed-method approach by assigning a numeric score for each CASP tool question and ranking the quality of the papers quantitatively and articulating the rationale for the scores qualitatively by sharing exemplars from the articles and commenting on their qualitative differences. Other students have used more global assessments of the articles’ quality by providing narratives of the articles’ strength and weaknesses along with supporting quotes. In both examples, the students successfully applied criteria to transform the articles’ content into categories, themes, and/or composite scores allowing them to compare and contrast the material and ultimately appraise the articles’ quality.

In the Discussion section I ask the students explore the limitations of their findings and share what questions about the process still remain for them. This practice helps to prepare them for future qualitative research studies wherein they will have to address these two areas again.

Pedagogical Suggestions

Each time I assign this exercise I learn some new ways to help make the activities work better for the students and myself. Here are some of the pedagogical steps I have used to improve the assignment and to address some difficulties students and I have had.

1. Students lacking database searching experience may need to be shown how to access and utilize basic search functions. I have used Google Scholar (<http://scholar.google.com>) in class to show students the basics of searching and retrieving articles online.

2. Students can be asked to collect articles with no specific inclusion criteria other than the paper reports findings produced via the application of a qualitative research methodology. They can also be asked to collect articles in which the researchers used similar methodologies or studied similar phenomenon.

3. Because the CASP tool is contained in a Adobe Acrobat “PDF” file, students may need to create a Microsoft Word version of the CASP tool if they wish to type in their findings; otherwise, they can print off the CASP tool and write in their results.

4. When assessing the individual articles, students with a “full version” of Adobe Acrobat can use Acrobat’s editing features to insert their notes into the files themselves.

5. The structure of assignment lends itself to a multiple submission/feedback process so students can turn in parts throughout the length of the course. The following is one suggested way of dividing up the assignment: (a) Student turns in candidate articles along with draft APA formatted references; (b) Student turns in one CASP analysis at a time to show the analysis and the draft write up of the results; and (c) Student turns in draft of the comparative article analysis. For each submission, the rubric can be used to present preliminary assessments of the work. As students revise and resubmit their parts, the “track changes” feature of Microsoft Word can be used to create an audit trail for the assignment.

6. As an optional component students can keep a journal in which they describe the procedural steps they took to complete the assignment along with personal reflections they had on conducting the project.

7. The assignment pairs well with a good introduction to qualitative research text which can provide students with background information on basic qualitative research methods and procedures. The introductory material can also include writings on how to read a qualitative research article (e.g., Greenhalgh & Taylor, 1997) and a “read-along” in which the students and professor read through an article together and make note of the main features of the paper and offer assessments of the articles strengths and weaknesses. Students can cite these foundational sources to support their findings of quality in the articles. For example, the second question in the CASP tool directs the student to examine how the author described the appropriateness of the qualitative methodology used in the study. Once this information is located the student can compare the rationale given in the article with rationales shared in a basic qualitative research textbook (e.g., Creswell, 2006). When writing up the assessment of the article, the student can present the basic prescription the book’s author shared when to use a qualitative research methodology, describe the article’s author depiction of the rationale, share a quote from the article evidencing this description, and share a pronouncement of the author’s performance within the context of the CASP tool and the reference book.

Discussion

I have used variations of this assignment over the past four years with master's and doctoral students during their first qualitative research courses. In earlier iterations I had students retrieve and analyze five articles, but I have now found three articles suffice in giving students enough detailed exposure to qualitative research reporting variety and enough candidates to assess and compare for them to demonstrate competencies for these learning objectives. In some introductory courses the students also had to conceive and compose a qualitative research proposal. In those courses I have suggested students use papers they have collected for their proposals' literature reviews in the appraisal assignment too.

Students who struggle with this assignment can be divided into two general groups. Some students seem to have difficulties using different technological means to accomplish different parts of the exercise. For example some students appear to have little experience searching for materials in databases, or downloading papers from an electronic library, or using electronic means to analyze or edit documents. For this group, extra coaching provided by me or our technology and library help desk staffs along with supplemental guiding materials can assist in mastering these supporting competencies.

The other group consists of students who struggle with reading critically and writing clearly. I group these two challenges together because it usually seems to hold that students who have trouble reading others' work with a critical eye appear to lack that same skill when it comes to reading and writing their own texts. In the case of this second group I find breaking down the assignment into smaller pieces works well. For example, I will ask the student just to read the article to locate material that appears to respond to the first CASP tool question and to render an opinion to the article's performance in this one category. The student would then turn in their analysis and finding for this question so I can provide feedback and guidance one area at a time until they can show they can complete the rest of the activity with less oversight. For the writing portion, I encourage the students to submit paragraphs, sections, and other smaller portions of the complete paper so adjustments can be made earlier than later.

This assignment is still a work in progress for me. The CASP instrument makes for a fine training tool, but it can also skew students' perceptions of what stands for quality in qualitative research. I constantly remind students of this deficit and the CASP tool itself expresses this caveat, but the exercise can also leave students with an overly narrow view of what qualitative research is and is not. There is also the debate of whether or not students should be reading less than exemplary examples of qualitative research. Reading such articles can help students to learn the weaknesses as well as the strengths and hopefully, they will remember to embrace the strengths in their own work. But as one student taught me last summer, strengths and weaknesses can be relative.

In our PhD in nursing program one doctoral student selected three nursing education research papers that spanned a decade. She quickly noted in her report that the newer paper was in greater compliance with the CASP tool questions than its older counterparts. This observation helped her to organize how she presented the three articles in her paper and how she determined the relative quality of the three publications. By drawing this temporal distinction she was able to gain an historical perspective on the

development of qualitative research report writing practices as well as on the evolution of the criteria with which we use to evaluate these articles. In doing so, she was able to gain an appreciation for the earlier works by situating them in a particular time and place even though by contemporary prescriptions and practices they now seemed lacking in some fashion. In such a way she was able to gain an appreciation for what those authors did and did not do in their reports. Because of this thoughtful appraisal her findings helped to remind me of the importance of context in conducting qualitative data analysis and that quality is something about which we have to remember its meaning in context all of the time.

References

- American Psychological Association. (2001). *Publication manual of the American Psychological Association* (5th ed.). Washington, DC: Author.
- Barroso, J., Gollop, C. J., Sandelowski, M., Meynell, J., Pearce, P. F., & Collins, L. J. (2003). The challenges of searching for and retrieving qualitative studies. *Western Journal of Nursing Research*, 25(2), 153-178.
- Chenail, R. J. (2004). When Disney meets the research park: Metaphors and models for engineering an online learning community of tomorrow. *Internet and Higher Education*, 7(2), 107-121.
- Chenail, R. J. (in press). Learning marriage and family therapy in the time of competencies. *Journal of Systemic Therapies*.
- Cohen, D. J., & Crabtree, B. F. (2008). Evaluative criteria for qualitative research in health care: Controversies and recommendations. *Annals of Family Medicine*, 6(4), 331-339.
- Creswell, J. (2006). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage.
- Flemming, K., & Briggs, M. (2007). Electronic searching to locate qualitative research: Evaluation of three strategies. *Journal of Advanced Nursing*, 57(1), 95-100.
- Greenhalgh, T., & Taylor, R. (1997). How to read a paper: Papers that go beyond numbers (qualitative research). *British Medical Journal*, 315, 740-743. Retrieved November 28, 2008, from <http://bmj.bmjournals.com/cgi/content/full/315/7110/740>
- McKibbin, K. A., Wilczynski, N. L., & Haynes, R. B. (2006). Developing optimal search strategies for retrieving qualitative studies in PsycINFO. *Evaluation & the Health Professions*, 29(4), 440-454.
- Middle States Commission on Higher Education. (2007). *Student learning assessment: Options and resources* (2nd ed.). Philadelphia: Author. Retrieved from <http://www.msche.org/publications/SLABook07070925104757.pdf>

Author Note

Dr. Ronald J. Chenail is the Co-Editor of *The Qualitative Report* and *The Weekly Qualitative Report* at Nova Southeastern University (NSU). He also serves as the Vice President of Institutional Effectiveness and Director of NSU's Graduate Certificate in

Qualitative Research. He can be contacted at 3301 College Avenue, Fort Lauderdale, FL 33314-7796 USA; Telephone: 954.262.5389; Fax: 954.262.3970; E-mail: ron@nova.edu.

Copyright 2008: Ronald J. Chenail and Nova Southeastern University

Article Citation

Chenail, R. J. (2008). Learning to appraise the quality of qualitative research articles: A contextualized learning object for constructing knowledge. *The Weekly Qualitative Report*, 1(9), 49-61. Retrieved from <http://www.nova.edu/ssss/QR/WQR/appraising.pdf>
