**ERMA 7220: Applied Qualitative Research[[1]](#footnote-1)**

**Auburn University - College of Education**

Department of Educational Foundations, Leadership, & Technology

Spring 2018

1. **Class Time:** Tuesdays 5:00-7:50pm

**Location:** Haley Center, Room 2442

**Instructor:** Hannah Baggett, PhD

**Contact information**:334.844.3024 [hcb0017@auburn.edu](mailto:hcb0017@auburn.edu)

**Office Hours**: Tuesdays and Thursdays, 4:00-5:00, and by appointment

**Credit Hours**: 3 semester hours

2. **Date Syllabus Prepared**: January 2018

1. **Special Accommodations**. Students who need accommodations are asked to electronically submit their approved accommodations through AU Access and to arrange a meeting during office hours the first week of classes, or as soon as possible if accommodations are needed immediately. If you have a conflict with my office hours, an alternate time can be arranged. If you have not established accommodations through the Office of Accessibility, but need accommodations, make an appointment with the Office of Accessibility, 1228 Haley Center, 844-2096 (V/TT).
2. **Course Description:** This course is based on the assumption that qualitative researchers learn their trade through both scholarship (i.e., deskwork) and firsthand experience (i.e., fieldwork). We take away lessons from doing our own research and from the research experiences of others. For this reason, the course has two aims. The first aim is to help you become familiar with the field's methodological literature, leading advocates, and ongoing debates. The second aim is to hone your skills conducting fieldwork, analyzing qualitative data, writing research reports, and reflecting meaningfully on these processes, including their theoretical, methodological, and ethical dimensions.

Course readings will serve as the basis for class discussions and requirements, so you are expected to complete the readings before the dates for which they are assigned.

1. **Student Learning Outcomes:** By the completion of this course, you will be able to: 1) conduct guided observations and interviews; 2) engage in data reduction and preliminary analysis of both field notes and interview transcripts; 3) write up these data, experimenting with various narrative strategies in this process, and, 4) identify and position yourself with regard to various issues in contemporary procedures and theories of interpretation.
2. **Required Texts**: : [1] Berg, B. L., & Lune, H. (2011). *Qualitative research methods for the social sciences (8th ed.)*. Boston: Allyn & Bacon. [2] Saldaña, J. (2016). *The coding manual for qualitative researchers*. Los Angeles: Sage. [3] Brinkmann, S., & Kvale, S. (2015). *Interviews: Learning the craft of qualitative research interviewing (3rd ed.)*. Los Angeles: Sage. [4] Van Maanen, J. (2011). *Tales of the field: On writing ethnography (2nd ed.)*. Chicago: The University of Chicago Press.
3. **Required Materials:**

* Time management skills. (This course is time-intensive. I encourage you to consider your schedule before deciding to commit to this class.).
* Web access. You must have access to a web browser, and you must check your email accounts (Tiger Mail and Canvas) several times a week.

1. **Course Format:** Scholars have long theorized that educational pedagogy and practice is rooted in a “banking” approach to teaching and learning (Freire, 1970; Giroux, 1997). In this banking model, students were (and in many cases still are) viewed as empty vessels to be filled by the teacher, who “deposits” knowledge and expertise. In this way, students are positioned as passive and powerless, and teaching is a purely teacher-directed act. Due to this positioning, students are often unfamiliar with being responsible for active participation in their own learning.Since all education is political (Freire, 1970) and teachers generally develop courses around their convictions, I try to be very transparent about my teaching philosophy: I approach teaching from a critical stance, which counters passive transference of knowledge. Instead of assuming the role of ‘director’ of learning and ‘keeper’ of authority in a classroom of adults, I participate in teaching as a guide, wherein students emerge as co-directors of the curriculum. This model of teaching expects that students will contribute their own experiences, knowledge, and expertise, and empowers students to be actively involved in their own development. This empowerment is particularly critical in working with adult students who each add a valuable and unique perspective that is essential to quality graduate level learning. Furthermore, an important aspect of this course will be ongoing collaborative interactions with your classmates. You will be working in a collaborative group for many of the class activities and projects. I hope you will learn a great deal from each other. I view myself as both a learner and a teacher in the class, and I expect each of you to also participate in both of these roles. This course utilizes a workshop format. Our course will include small group discussions and activities, whole-class discussions and activities, reflection, conferencing, fieldwork, and student-led discussions and presentations. It is important that students keep current with the assigned readings, attend class meetings, and participate in the discussions as informed members. Your participation will ensure that our time together will be productive and worthwhile.
2. **Course Requirements:** See class calendar for due dates.
3. Weekly Reader’s Reflections and Participation (70 points total):The reading for this class is not casual. To demonstrate that you have read, and engaged with the course readings, **a weekly reflection is due, based on the assigned readings, before the start of class each week by 12:00. You must attend class to earn credit for reflections.**

**Reflection Rubric**

1. Unpacks at least 2 specific concepts or points from the readings (with in-text citations). (1 pt)

2. Relation of new information to old information learned in the course to date. (1 pt)

3. Relation of information in article or reading to personal experience. (1 pt)

4. Discussion at a critical level, not just recitation and summary, **from *all* of the readings**. (1 pt)

5. Length of reflection: approx 1 page. (1 pt)

Note: Critical evaluation means writing about the concepts and ideas raised by the readings. You should synthesize the main ideas or themes across the readings, rather than respond to each reading in a laundry list. What are the cohesive ideas/patterns that manifest across the readings? Or, where do the readings seem to disagree? What questions do you have, after unpacking the readings? A critical discussion would not include your feelings about the author's writing style (e.g. “I like this chapter” or "This article is boring"), but aim for an intellectual/academic treatment of the ideas. Do not just tell me what the article or reading states...I already know this.

1. Facilitating Discussion (20 points): Each week, students will serve as discussion leaders. Discussion leaders are required to develop at least 5 thought-provoking questions that will be used to stimulate class discussion on Tuesday nights. Each student will have two opportunities to develop questions for their topic of choice (sign up in Canvas). Questions should be circulated to the class no later than Tuesday at 9 AM.

In order to assist question development, consider the following: (a) What are the strengths and weaknesses of the author’s work (e.g., consider its theoretical or empirical contribution, the credibility/tenability of the assumptions) (b) What questions provoked by the authors’ work merit study? (c) What is the most critical evidence presented by the author in support of these points? Use the writing you have done about the readings to guide your question development.

1. A Collection of Notes on the Normal Environment of Waiting (10 points possible): All qualitative research is ethnographic in the sense that is seeks to understand other peoples’ lived worlds. For the people with whom you do research, those worlds are ordinary, as ordinary as waiting. Your task is to collect notes / observations on the ways in which people (you?) behave while waiting over the next week. Collect sufficiently many so that you have two or three nice ones. (Think thick description as described by Clifford Geertz.). Turn in not more than three pages of field notes. Further details will be given in class.
2. Qualitative Research Methods Portfolio in Three Parts (100 points total):This class offers an opportunity to do fieldwork on a relatively small scale. Ideally, this will be a pilot or prior study for your dissertation, but at the least, the course should allow you to ‘practice’ the major qualitative methods for generating, analyzing, and writing up data. Your work for this portfolio will be individually completed and submitted. *NOTE: Each student will collect data as part of this class; however, the data collected is for educational purposes only and NOT for thesis, dissertation, or any additional projects or publications.*

Part I: Data Generation (30 points possible)

* 1. Research Purpose (10 points) —A statement regarding your research interest(s) or question(s), including a synthesis of relevant literature, and a frame for your study.
  2. Open Observation (5 points)—Notes from at least one hour of open observation. You may visit the site(s) more than once to have a total of 60 minutes of observation time. An open observation is conducted without a predetermined focus. Go into the field and see what there is to see. The relevance to your research purpose should be based on location.
  3. Structured or Guided Observation (5 points)—Notes from at least one hour of observation structured or guided by a theoretical perspective where you attempt to go beyond description. You may visit the site(s) more than once to have a total of 60 minutes of observation time. Now the relevance is based both on location and the particulars to which you attend.
  4. Interview (5 points)—A minimum of one, 30 minute interview evidenced by verbatim transcription. Your transcript(s) should be typed and formatted consistently.
  5. Reflective Journal (2.5 points) – Reflective journaling totaling at least three typed pages that documents your experiences and learning collecting data (see Appendix for guidelines and advice).
  6. Data Collection Audit Trail (2.5 points) – the who, what, when, where, of the data collection process etc. (see Appendix for guidelines and advice)

1. Part II: Data Analysis (30 points possible)
   1. Derived notes (5 points) -- Writing while exploring the data (ie. during your ‘open read’). Write your thinking…what you choose to submit to me should be indicative of the thinking you’ve been able to capture. These notes are as long as they are. Writing your thinking may serve to be a foundation for the full reports you craft later.
   2. Coded Data (5 points)—Individual initial coding of data corpus applying both inductive and deductive analysis (looking for emergent themes and patterns and applying a priori codes from a theoretical or conceptual framework, or from prior literature). Submit a “meaty” section of coded data. Choose a segment that is representative of the work you have done to analyze your data. Be sure the segment you choose is also representative of your codes. That is, make sure it’s aligned with your codebook.
   3. Codebook (5 points)—Submit a complete codebook; a codebook is a list of codes, identifications of kind of code (e.g., a priori or emergent) and source (e.g., data or citation from the literature), operational definitions or inclusion/exclusion criteria, and data exemplar (e.g., a quote or observation to which you would uniquely attach that code).
   4. Warrant and Assertion (10 points)—Code and categorize your own data and then warrant an assertion. This entails constructing evidentiary warrants for a claim you want to make (i.e., asserting a pattern or theme and warranting it with examples from your data).

More precisely, code and categorize your data and identify a recurring pattern. State the pattern and illustrate it with 3-5 quotes from your data, using exact quotes from your observation notes, interview transcript, document, or even grounded survey responses. Do not paraphrase or “clean up” the data. If tone of voice or pacing is important, try to show this by the way you display the quote. Follow the warrants with at least two paragraphs of interpretive commentary. Explain to the reader what you think the data mean, and add whatever contextual information you need to from your field notes or reflective journal that adds meaning to the data or clarifies their significance. These paragraphs should make the relationship between your assertion and your warrants absolutely clear. Include at least one instance of disconfirming data—data that contradicts or does not perfectly align with your assertion. I will be looking for evidence that you made a good faith effort to look for disconfirming evidence. If you find it, share what it is and provide an explanatory paragraph. If you looked for it and didn’t find it, say so and describe how you conducted the search.

* 1. Reflective Journal (2.5 points) – Reflective journaling totaling at least three typed pages that documents your experiences and learning analyzing data (see Appendix for guidelines and advice).
  2. Data Analysis Audit Trail (2.5 points) - the who, what, when, where, of the data analysis process etc. (see Appendix for guidelines and advice)

1. Part III: Writing Up Data[[2]](#footnote-2) (40 points possible)

NOTE: Each student is required to submit an inductive report. Beyond that, you may choose 20 points worth of ‘tales’ to write. You may repeat a ‘tale’ as long as the total points attempted is at least 20. You may use the assertion from Part II or some other assertion. You may also use different assertions for any or all of the ‘tales.’ You must base Part III on the data you analyzed for Part II.

* 1. **Required:** Inductive Report (10 points)—Consider the ways in which your data suggest an emerging understanding or theory; that is, the report is of your data-driven findings. Your report should include at least two assertions. You can expand first assertion you warranted in Part II and/or you can construct a report of new assertions. (2-4 pages each assertion, including tables and figures). Consider looking at the ‘Findings’ sections of empirical articles for models. This will maximize the likelihood of your ‘seeing’ things you hadn’t noticed, or had taken for granted, in your data.
  2. Realist Tale (5 points)—Expand an assertion and its warrants into 1-2 pages that could be included in an empirical article. Remember, realist tales present data and findings *as if* what you found is absolutely real. That is, they don’t position the author within the text, and they don’t critique the context or the societal structures at work (see Van Maanen). They are written as if the data are generalizable.
  3. Impressionist/Literary Tale (5 points)—Expand an assertion and its warrant into a 2-3 page vignette. More precisely, present a few sentences to identify the context of the event and then be as concrete, vivid, and precise as you can in describing the sequence of events in the incident. Present specific details of non-verbal behavior, direct quotes of speech, and describe the physical setting. Make clear to your reader that this is an instance of the assertion. At the end of the vignette, reiterate your assertion and follow it with a few sentences of interpretive commentary, telling the reader the point of the vignette (see Van Maanen).
  4. Frequency Tale (2.5 points)— “The issue is not whether or not to count, but how to decide what to count” (Erickson, 1977). Search your data corpus for frequency data and construct a frequency figure. This entails assembling evidence for an assertion about typicality or a-typicality in your data. Pay particular attention to the title of the figure; your assertion should be clear in the title. Try to show patterns in your data. Make an assertion based on the pattern you are claiming. Illustrate your assertion with a bar graph, contingency table, or other simple frequency figure. Present this with at least one paragraph of explanatory discussion, which tells the reader what to pay special attention to in the figure (e.g., “Notice that over the last three days I observed, only one-third as many irrelevant comments by students appeared in my field notes. This suggests that…”). See examples in Canvas.
  5. Synoptic Tale (2.5 points)—Search your data for an emerging theory and construct a synoptic chart. This entails assembling evidence for relationships between or among patterns or themes in your data. Pay particular attention to the title of the chart; your assertion should be clear in the title. The synoptic chart should illustrate patterns or assertions in your data of a more analytic/conceptual type. That is, they should assert a relationship among themes or patterns (selective coding, in grounded theory terms). Present this with an accompanying discussion of at least one paragraph. See examples in Canvas.
  6. Deductive Formal/Theoretical/Structural Tale (7.5 points)—Consider the ways in which an existing theory sheds light on your data. This entails adding theoretical framings to your findings in order to play with different analytic perspectives. This will maximize the likelihood of your discovering things you hadn’t noticed before, or had taken for granted, in your data. Use an a priori theory. That is, use an existing theory to shed light on what is going on in your data. When you use an a priori theory as an analytic lens, what do you see in your data? Include an annotated bibliography, in APA format, of 2-4 scholarly sources that you drew on for your a priori theoretical framing of the data. The annotation should include 2-3 sentences summarizing the main point of the reading and its relevance to your project (see Jackson & Mazzei and/or Alvermann, or special issue of ).
  7. Alterna-Tale (5 points)—It is increasingly common in qualitative research for data stories to be told in ‘non-traditional’ formats. These include collage, drawing, painting, satire, poetry, film, drama, and other kinds of performances. Your task is to present your findings in one of these, or some other not-yet-thought-of, formats. Have fun with this one. That is, the alterna-tale is a representation of your data and findings that does not fit into one of the other categories. It’s something else.
  8. Writing Up Data Audit Trail (2.5 points)
  9. Reflective Journal (2.5 points) – Reflective journaling totaling at least three typed pages that documents your experiences and learning writing up your data (see above description and Appendix).
  10. Synthesizing Reflective Journal (5 points)— Reflective journaling totaling at least two typed pages that synthesizes your experience conducting research and creating your portfolio.

1. **Grading Scale for the Final Grade:**

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| --- | --- |
| Points | Letter Grade |
| 180 to 200 points | A |
| 160 to 179.99 points | B |
| 140 to 159.99 points | C |
| 120 to 139.99 points | D |
| Below 120 points | F |

1. **Course Policies:**
2. Professionals show up on time and prepared every day for work. Your attendance is expected at all class meetings. We are all working adults. Your presence in class demonstrates that you prioritize your graduate work.
3. Professionals complete assignments on time. Assignments are due in Canvas as indicated in the syllabus and the course calendar. Assignments handed in after this time will be considered late. Late assignments will be penalized by 10% per day.
4. Professionals use appropriate means for discussing disagreements. Please respect our class time together and my own time as a teacher and researcher by planning to discuss grades or other points of contention during office hours or by appointment, **not via email**.
5. Professionals take responsibility for their own learning. That said, my purpose is to help class members become the very best they can possibly become at this point in their professional development. Please allow me to assist in any way possible including, but certainly not limited to: listening, providing feedback, answering questions, sharing and addressing concerns, brainstorming, clarifying course content or expectations, and mediating or facilitating work with collaborating peers. Always feel free to contact me by phone or by email. While I do check my e-mail regularly, **I do not check e-mail after 9 pm. Please allow me 24 hours to respond to email.**
6. Professionals give credit where credit is due. Even though I will encourage you to work in groups and learn from each other, each individual is held responsible for his/her own behavior and learning. I expect students to submit their own work for all assignments. The University Academic Honesty Code and the Tiger Cub Rules and Regulations pertaining to Cheating will apply to this class. See also Student Policy eHandbook ([www.auburn.edu/studentpolicies](http://www.auburn.edu/studentpolicies)) for rules on academic honesty. If and when resources are found (even those online!), proper citation must be used. Details regarding APA formatting and citations will be available on Canvas. Specifically, written assignments that include material that is similar to that from course reading materials or other sources should include a citation including source, author, and page number. Quotation marks should be used if the material is copied directly from the readings and text citations should be used (Author, year, page). If the material is paraphrased, (Author, year) should appear immediately following the paraphrased material. Failing to do so constitutes violation of the Auburn University Academic Honesty Code. In addition, written assignments that are similar or identical to those of other students in the class (past or present) is also a violation of the Code. Violations of the Auburn University Academic Honesty Code will be treated according to university policy. Rewriting and resubmission is not an option. **Finally, you may not submit the work of someone else, or work that you have submitted for another class to satisfy a requirement of ERMA 7220, nor can you use work from ERMA 7220 as part of your formal dissertation study.**
7. Professionals make others aware of what they need to be successful. Please inform me within the first week of class if you require adaptations/modifications to any assignment because of special needs (disabilities, religious observances, and so on).
8. Professionals are flexible and developmental in their approach. What follows is a tentative course schedule. The instructor reserves the right to modify this schedule as needed throughout the semester.

| **Class** | **Readings** | **Assignments**  **Bold** indicates hard deadlines; *italics* indicates work-in-progress that should be brought to class. |
| --- | --- | --- |
| **1**  **1/16**  Introduction – What is Qualitative Research?, revisited; Paradigms and Philosophical Underpinnings | *Erickson (2011)*  *Guba & Lincoln (1994)*  *Kincheloe (2001)*  *McCloud (2015)* |  |
| **2**  **1/23**  Research Ethics;  Ethnographic Research / What is culture anyway? And, how do we observe it? | B&L Ch 3  B&K Ch 4  VM Prologue-Ch 2  *Ponterotto (2006)* | *Bring to class: possible research topics* |
| **3**  **1/30**  Identifying an area of interest, Subjectivity, Reflexivity, and ‘doing’ Qual | *Frankel & Devers (2000)*  *Rocco & Palkhotnik (2009)*  *Peshkin (1988)*  *Creswell (2016)*  *Agee (2009)* | *Bring to class: (tentative) Research Question(s)* |
| **4**  **2/6**  Doing Fieldwork: the Art of Observation | B&L Ch 6  Shankman et al (1984)  Fieldnotes Guide (in Canvas)  Taking Good Notes in the Field (in Canvas) | *Identify gatekeepers for observational data collection site; Start participant recruitment for interviewing*: N**otes on waiting due Sunday, 2/11** |
| **5**  **2/13**  Conducting Interviews (More than a conversation) | B&K Chs 6-9, 17  B&L Ch 4 | *Bring to class: draft of interview protocol* |
| **6**  **2/20**  Objectivity(?) and Validity / The Beauty of Documents | B&K Chs 15 & 10  B&L Ch 8  *Eisner (1988)*  *Whittemore, Chase, & Mandle (2001*) | *Bring to class: archival data (documents, etc.);*  *Ongoing: observation and interview data collection* |
| 7  **2/27**  **No Class** | Time to focus on data generation (observational and interview), field notes, and transcription | *Ongoing: observation and interview data collection*  **Portfolio Part I due Sunday, 3/4 at midnight** |
| **8**  **3/6**  Now what? | B&L Ch 11  B&K Ch 11  Saldaña, pp. 1-29, Saldaña, pp. 43-82 | *Bring to class: all observation field notes, interview transcripts, and any archival data (hard copies of all)* |
| **9**  **3/13**  **No class** | **Spring Break** | *Ongoing: data ‘immersion’ and sense-making (ie. coding, categorizing, writing memos)* |
| **10**  **3/20**  Coding, Categorizing, and Writing Memos | B & K Chs. 12-14 | *Ongoing: data ‘immersion’ and sense-making (ie. coding, categorizing, writing memos)* |
| **11**  **3/27**  Coding, Categorizing, and Writing Memos, cont. | Saldaña, pp. 82-198 (choose at least three types of coding methods to read about and apply to data, post portion of coded data to Canvas.)  Saldaña, pp. 218-260 | *Ongoing: data ‘immersion’ and sense-making*  **Portfolio Part II due Sunday, 4/1 at midnight** |
| **12**  **4/3**  Warranting Assertions; Representation | B&L Ch 12  *Freeman et al (2007)*  *Nolen & Talbert (2011)* | *Bring to class: draft of inductive report* |
| **13**  **4/10**  Constructing ‘tales’ | B&K Ch 16  VM Chs 3-5 | *Bring to class: draft of one ‘tale’ for writing workshop* |
| **14**  **4/17**  *(Possible virtual meeting)*  Constructing ‘tales’ | VM Chs 6 & Epilogue | *Bring to class: draft of another ‘tale’ for writing workshop* |
| **15**  4/24  Thinking with theory; Post-qualitative inquiry? | *Alvermann (2000)*  *Jackson & Mazzei (2012)*  *Brinkmann (2014)* | **Portfolio Part III due**  **Sunday, 4/29 at midnight** |

**Appendix A**: Hallmarks of High Quality Reflective Journals

ERMA 7220: Applied Qualitative Research

Reflective Journal:This semester, you will be asked to keep a reflective journal. The reflective journal will be a place for you to document your emerging subjectivity (i.e., those particular things about you that help and/or hinder your research), methodological learning (i.e., what you have come to understand about research practice and yourself as a researcher), and your experiences conducting fieldwork. You are required to make reflective notes here about your experiences before, during, and after each phase of the research process. You should integrate responses to class sessions and readings as seems appropriate. Your final journal entry should synthesize and summarize your growth as a researcher over the course of the semester. Feel free to use a personal tone; after all, this is about you.

Entries in your reflective journal should document your substantive thinking about some of the following questions:

* What have I learned about qualitative methodology?
* Who am I becoming as a researcher? Who do I want to be as a researcher?
* What is the nature of “my particular pair of spectacles”? How do I see the world in unique ways? How do my views, my lenses, my biases, and my assumptions shape what I can, and cannot, see in my data? How do they shape the data I collect, the analyses I conduct, the conclusions I reach, and the ways I disseminate my work?
* What sense am I making of the class readings? … the field experiences? … the class experiences?
* How are my readings, fieldwork, and class experiences related?
* In what ways am I building skills as a qualitative researcher? What has gone well? What mistakes have I made in my fieldwork? What will I do differently next time? Why?
* How is my sense of my class project evolving? How are my ideas for my dissertation evolving? How are my ideas for my professional program of research evolving?
* How am I working to align my research topic, research questions, research design (data collection and analysis plans), and writing for my class project? … for my dissertation? … for my professional program of research?

There are also five criteria that can be used to assess the degree to which reflective practice is productive.[[3]](#footnote-3)• I will assess your journals based on the degree to which your writing meets these criteria. They are:

1. **Specificity and Clarity:** Does the reflective writing draw on specific language and terminology rather than broad, vague terms? Does it clearly communicate a message, epiphany, discovery, concern, or question?
2. **Accuracy:** Does the reflective writing refer to concepts in qualitative research in ways that demonstrate accurate, or evolving, understanding? Does the reflective writing include appropriate, formal citations where the thoughts, ideas, and words of others have been used? That is, this document will be most useful for you if you use it as a place to record ideas that you may cite in future work (conference presentations, journal articles, chapter 3 of a dissertation, etc.).
3. **Synthesis:** Does the reflective writing provide evidence that you have drawn on more than one source of information (reading, field experience, class experience, etc.) to reveal deep thinking about qualitative methodology? It will be particularly important to incorporate ideas from the readings. Including citational support for your ideas is a good scholarly habit.
4. **Self-Focus:** Does the reflective writing include substantive statements about your learning and experiences? After all, reflection is ultimately about *you*.
5. **Future-Focus:** Does the reflective writing include specific statements about your future practice as a (qualitative) researcher?

Audit Trail: Your audit trail, on the other hand, will be less personal as it is a place to document what you have done—the specifics of what you did, from/with whom, when, where, how long did it take, etc? Be as detailed as you can so that the information you document can easily become a methods section or chapter. This is also a place to keep track of how your research design is evolving. Use an organizational convention that works for you and that you think you can maintain (calendar, bulleted list, paragraphs, tweets, wiki, blog, etc.). Integrate citations for methodological literature where appropriate.

1. This syllabus is based on syllabi by Drs. Patti Lather, Daniel Henry, Antoinette Errante, and Aaron Kuntz, Carey Andrzejewski, Julia Storberg-Walker, and Bonnie Fusarelli. [↑](#footnote-ref-1)
2. These, as well as the assertion and warrant assignment, were adapted from assignments designed by Fred Erickson, Patti Lather, and Carey Andrzejewski. [↑](#footnote-ref-2)
3. Davis, E. A. (2006). Characterizing productive reflection among preservice elementary teachers:

   Seeing what matters. *Teaching and Teacher Education, 22*(3), 281-301.

   Based on guidelines developed by Drs. Carey Andrzejewski and Heather A. Davis [↑](#footnote-ref-3)