Using Assignments Linked with Assessments to Teach Qualitative Research in Education

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Abstract
Educational researchers make use of highly diverse qualitative methods but teaching these methods to students involves considerable challenges. This paper describes master's level qualitative research assignments that employ student-centered and masterly learning approaches. The paper addresses the increasingly important issues of how best to create course assignments of qualitative inquiry; and how to assess learning outcomes. The assignments described here focus on three interconnected challenges: (i) doing interviews and observations; (ii) writing fieldwork reports; and (iii) presenting orally qualitative data. The paper systematically explains how these sequencing assessments will promote students' practical understanding of qualitative data collection for a mini-ethnographic case study. The approach to designing the assignments proposed in this study can be applied to both traditional and online courses.

Keywords: Qualitative Research, Triangulation, College Teaching, Learning by Doing

Introduction

Qualitative research places emphasis on exploring and understanding with a focus on drawing meaning from the experiences and opinions of participants (Almalki, 2016). Qualitative research is "usually described as inductive, with the underlying assumptions being that reality is a social construct, that variables are difficult to measure, complex, and interwoven, that there is a primary of subject matter, and that the data collected will consist of an insider's viewpoint" (Rovai et al., cited in Almalki, 2016, p. 291). Furthermore, "rather than speak of 'generalizability' (where data or interpretations are understood to be directly transferable to other places or situations), qualitative researchers more often engage social theory as a means to speak beyond the nuances of their empirical studies" (Delyser, 2008, p. 234). In essence, according to Malterud (2001):

Qualitative research methods are founded on an understanding of research as a systematic and reflective process for development of knowledge that can somehow be contested and shared, implying ambitions of transferability beyond the study setting. Drawing on these assumptions, the researcher must be prepared to use strategies for: questioning findings and interpretations, instead of taking them for granted; assessing their internal and external validity, instead of judging them obvious or universal; thinking about the effect of context and bias, without believing that knowledge is untouched by the human mind; and displaying and discussing the processes of analysis, instead of believing that manuals grant trustworthiness. (p. 483)

"Increasingly, there has been a focus on developing research methodologies that promote social justice, inclusion, and empowerment of people" (McNicoll, cited in O'Connor & O'Neill, 2004, p. 20); and qualitative methods "tend to move beyond a positivist frame of reference which advocates that there is only one 'true' reality" (p. 20). Qualitative research data therefore "should be collected in the form that will increase understanding of human experience in the real life. However, qualitative researchers often do not know at the beginning of a study where they will find their most rusted information" (Dabić & Stojanov, 2014, p. 362). Hernández-Hernándeza and Sancho-Gilb (2015) noted that data collection methods in qualitative research "came to understand micro- ethnography as a powerful method for studying practices in dynamic social systems" (p. 657). The qualitative research methods "do not form a 'how to do' set of skills that can be applied in the textbook fashion of quantitative methodologies and statistical analyses" (Mason, 2002, p. 69).

"Whereas quantitative research provides insight into the types and the strengths of relationships amongst variables, qualitative research may afford a better understanding regarding the nature of those relationships" (Bender & Hill, 2016, p. 93). The following are commonly used data-collection approaches in qualitative research: ethnography phenomenology; historical; grounded theory; case study; narrative inquiry; and exploratory-descriptive (Astroth & Chung, 2018). Breslin and Buchanan (2007) discuss a case study approach as follows:

The application of case study methodology in the social sciences has correlations with the emerging field of design research, but the connection runs deeper than that. Formal case study structure requires researchers to determine a problem, make initial

hypothesis, conduct research in gathering information and making observations, revise hypotheses and theory, and tell a story. These all are acts that strikingly similar to the work of a designer. The result is that the act of researching and writing a case study easily am an application of the design processes. (p. 38)

In qualitative research and case studies, data collection instruments "such as observation, open-ended question, in-depth interview (audio or video), and field notes are used to collect data from participants in their natural settings. The methods employed in data collection give a full description of the research with respect to the participants involved" (Daniel, 2016, p. 92); and qualitative research "views human thought and behavior in a social context and covers a wide range of phenomena in order to understand and appreciate them thoroughly" (p. 93). As noted by Daniel, two of the major disadvantages of qualitative research are: (i) findings may be limited to the particular groups of people or individuals studied; and (ii) sampling procedures that may produce source material no more accurate than the products of biased samples.

"The art of being a qualitative researcher frequently is overshadowed by a concern for teaching the technical aspects of research" (Start & Watson, cited in McAllister & Rowe, 2003, p. 296)—and so, "Although students may acquire the characteristics of qualitative researchers by observing role models, there is much the educational process and skilled teachers can do to emphasize and develop students' passion for being qualitative researchers" (p. 296).

This paper describes the master's level assignments promoting students' passion for qualitative research. The assignments facilitate a mastery of skills by providing maximum opportunities for students to practice and apply what they learn. Addressing the increasingly important issues of how best to create or design course assignments in qualitative research courses, and how to assess learning outcomes, the paper focuses on three interconnected challenges: (i) conducting effective interviews and careful observations while taking field notes; (ii) writing organized fieldwork reports; and (iii) presenting orally qualitative data informatively. The paper explains how these interconnected assessments will promote students' practical understanding of qualitative inquiry when a mini ethnographic case study is used. The approach to designing the assignments proposed in the current paper can be applied to both traditional and online courses.

THE STUDY——Assignments Linked with Assessments

Methodological training is essential in research courses at the graduate level (Wells et al., 2015), because "qualitive research poses many challenges for educators. The named approaches to qualitative research are numerus and diverse; it is not a single unified tradition, as is probabilistic qualitative research. Difference in epistemologies, research purposes, methods, and reporting styles make simple generalization about qualitative research difficult" (Drisko, 2008, p. 85).

Most important is that in qualitative research where the *researcher* is considered as a research instrument. "Since qualitative research is very much about *doing*….Some qualitative and ethnographic research courses include what could be called a 'mini-ethnography' component, where students practice ethnographic techniques such as

participant observation and interviewing at a local site of their choosing" (Este et al., cited in Delyser, 2008, p. 239). "In ethnographic research, the investigator is often involved in group activities, spends extended time in the field, and interviews participants" (Eller, 2019, p. 38).

The assignments described in this paper are designed based on a mini ethnographic case study approach. Although a mini ethnographic case study design uses data collection methods blending a mini ethnography and a case study, this type of design "allows researchers to explore causality links, which is not typical for ethnographies…the use of a mini-ethnographic case study design enables researchers to generate as well as study theory in real world applications" (Fusch, Fusch, & Ness, 2017, p. 926).

Targeting master's level students (in-service teachers mostly) in a qualitive research methods course, the above-mentioned interconnected assignments provide ample opportunity for hands-on experience to develop and enhance students' both theoretical knowledge and practical skills in conducting a small-scale qualitative research. As illustrated in Chart 1, students will be assigned to a research project in which they will interview and observe potential individuals in schools or other educational settings, collecting data in the form of field notes, summarizing and analyzing the fieldwork data in the form of written reports on their interviews and observations, and presenting these reports orally and formally in class.

The course syllabus will provide the details of learning objectives and activities. The assessments are aligned with Bloom's (revised) taxonomy that is a classification of different objectives and skills for learning, teaching, and assessing. The taxonomy consists of the following six levels within cognitive domain of learning: Level 1 (memorizing); Level 2 (understanding); Level 3 (applying); Level 4 (analyzing); Level 5 (evaluating); and Level 6 (creating). In the revised version, the lowest level of the original version of "knowledge" was renamed as "remembering." Chart 1 illustrates the entire picture of the course assignments described in this paper.

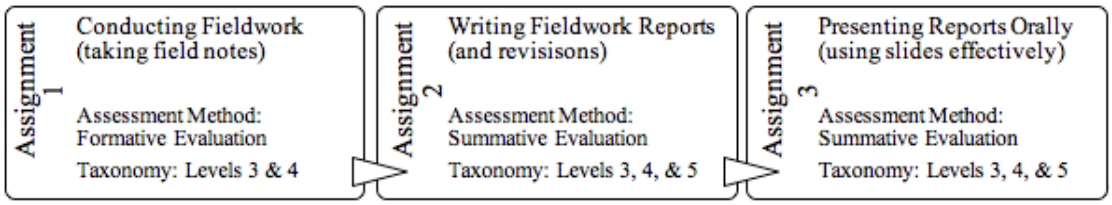

Chart 1. Three Interconnected Assignments (the first slide of the PPT file)

A case study—typically qualitative in nature—is a research method generally used in social sciences, resulting in a narrative description of behavior or experience. "The case study approach is familiar to social scientists because of its popularity in psychology (Freud), medicine (case analysis of a problem), law (case law), and political science (case reports). Case study research has a long, distinguished history across many disciplines" (Creswell, 2006, p. 73). Qualitative case study design actually "evolved out of ethnographic design" (Fusch et al., 2017, p. 926)—and so, "Contemporary case study design is much like historical case study design—both have specific boundaries, but within those boundaries there is a great deal of room for personal design: interviews, direct observation, document review, focus group sessions, journaling, participant observation, and more (Amerson, cited in Fusch et al., 2017, p. 967).

"Case studies may be *exploratory*, *explanatory*, or *descriptive* and may involve one organization and location or multiple organizations and locations for a comparative case study design" (Yin, cited in Fusch et al., 2017, p. 926). These characteristics of case studies are particularly appropriate for the assignments designed in this study. Charts 2, 3, and 4 illustrate the step-by-step processes of the assignments for students: indicating how the assignments are conducted and assessed. Chart 5 illustrates the use of triangulation in the assignments. Each Chart is illustrated in PowerPoint (PPT) slides (one chart per one slide in the file) created by the instructor: the five slides, which explain specifically the assignment steps and rubric links, are posted on the course page. Students can click to see the assessment rubric at any time to work on each step of work.

Assignment 1

Both summative and formative assessments are needed for effective teaching and learning. For assessing students' field notes, it is important for the instructor (the author of this paper) to provide students with *actionable* feedback in a timely manner to promote student learning. As Wiliam (2013) argued, "The term formative should apply not to the assessment but to the function that the evidence generated by the assessment actually serves" (p. 15)—for this to happen, the instructor must know the process in learning: specifically, where the student is right now; where the student needs to be; and how to get there.

For Assignment 1, students will develop observational guidelines and interview questions: select study participants for their research; conduct a 40-minute observation for two participants and a 40-minute interview for two participants; and transcribe their semi structured interviews with supplementary notes. Submitted assignments will include descriptive and reflective notes, and sketches describing important features of the individual or the setting. Students' field notes and interview transcripts will be assessed using formative assessments. These assessments will be kept simple, to make checking the list straightforward. The list includes three categories: (i) observation guidelines and interview questions are developed in an orderly manner; (ii) observation notes are detailed and fact-based; and (iii) the interview transcripts are based on the established interview questions. And then, students will write their fieldwork (Chart 2) assignment reports (Assignment 2) based on the instructor's assessment-based feedback.

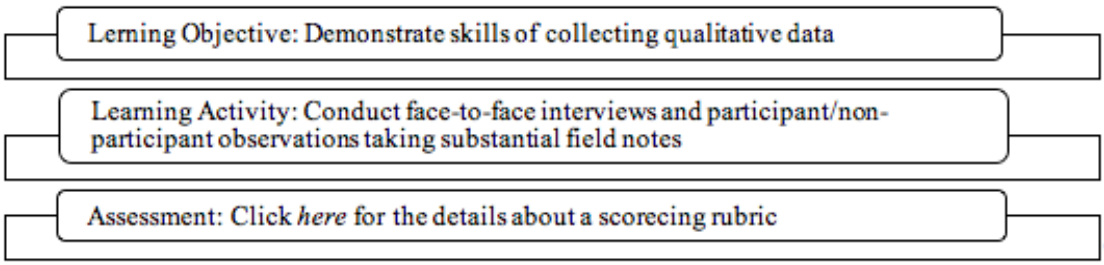

Chart 2. Assignment 1: Collecting Qualitative Data (the second slide of the PPT file)

Assignment 2

Online learning communities can be best described as a group of people that share a common purpose or interest. As an example, "By requiring students to choose an argument and support the view-point with a rationale, students were better able to

construct knowledge as related to course content" (Howell, LaCour, & McGlawn, 2017, p. 487).

At this stage of the assignment 2, students share portions of their fieldwork reports by posting to the discussion forum. The instructor must encourage students providing timely feedback, which is *specific* and *descriptive*, not general or vague. Such feedback certainly helps students to revise their fieldwork reports. The rubrics for assessing Assignment 2 cover the following five categories of evaluation: (i) the *content* rubric evaluates the degree to which the report is a fully developed description: demonstrating the student's abilities to interview and to observe carefully, and to generate coherent records of interviews and observations; (ii) the *organization* rubric addresses the degree to which the report has an engaging introduction and is logical and well organized, as well as the adequacy of the student's conclusions; (iii) the *disposition* rubric quantifies the degree to which the student's interpretation of field relations provides a basis for continued inquiry; and the relevance of the information included; (iv) the *length* rubric rates the degree to which the number of pages the report contains is appropriate for this assignment; and (v) the *writing and style* rubric addresses the degree to which the report is stylistically strong, demonstrating that the student can revise successfully.

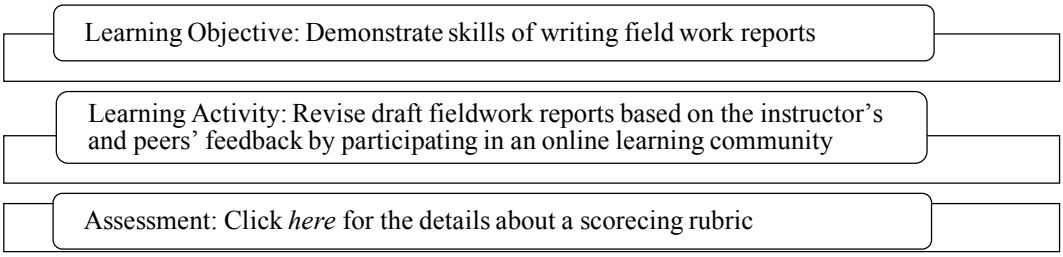

Chart 3. Assignment 2: Analyzing Qualitative Data (the third slide of the PPT file)

Assignment 3

Virtually everyone agrees that oral presentations—which are commonly assigned in college courses—provide positive learning experiences. An in-class presentation is a "chance for students to gain insight into knowledge and skills that make a good lecturer, which often turns to become their vocation… sharing their knowledge in a constructive way both for their audience and themselves with structured planning and organization" (Živković, 2014, p. 469). Rubrics are often used to assess student oral presentations and written reports. In terms of using rubrics for course assignments, Rippé's (n. d.) describes as follows:

There is no room for bias or subjective prejudice in rubric utilization because a rubric is impartial. A student either meets that defined objectives or does not. This helps promote fairness and increases satisfaction, since there is no preferential treatment when everyone is measured using the same benchmarks. (pp. 12–13)

Student presentations in Assignment 3 are assessed using a rubric, focusing on the four categories of evaluation: (i) the *organization* rubric addresses the degree to which the student presents information adequately in logical and interesting sequence which audience can follow; (ii) the *topic knowledge* rubric evaluates the degree to which the

student demonstrates knowledge by answering questions with explanation and elaboration; (iii) the *graphics and tables* rubric assesses the degree to which the student's graphics fully explain and reinforce screen text and presentation; and (iv) the *delivery* rubric rates the degree to which the student delivers the message in a confident, poised, and enthusiastic fashion.

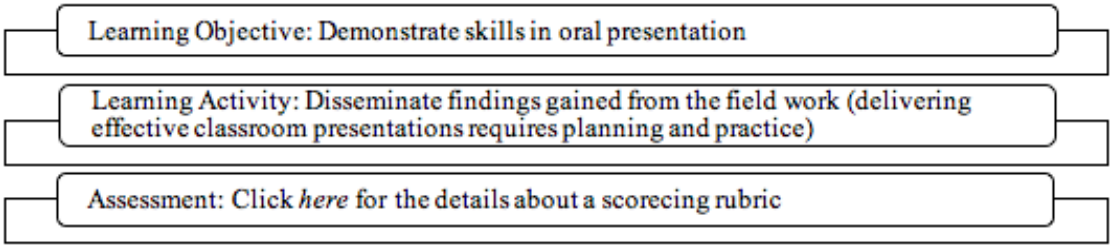

Chart 4. Assignment 3: Reporting Qualitative Data (the fourth slide of the PPT file)

Triangulation is "somewhat like looking through a crystal to perceive all the facets/viewpoints of the data. Moreover, he posited that triangulation should be reframed as *crystal refraction* (many points of light) to extrapolate the meaning inherent in the data and thereby mitigating one's bias" (Denzin, cited in Fusch et al., 2017, p. 927). Triangulation requires using more than one approach to investigate the same research question. In most cases, researchers involve five types of triangulation for establishing the validity of research: (i) data triangulation (using different sources of information); (ii) investigator triangulation (using several investigators in data analysis); (iii) theory triangulation (using multiple perspectives in data interpretation); (iv) methodological triangulation (using multiple methods to study the person or event); and (v) environmental triangulation (using different locations or settings related to the environment).

The assignments described here basically apply methodological triangulation. As illustrated in Chart 5, through their hands-on experience, students may realize that ethnographic interviews and observations are valuable tools for case studies to collect meaningful data about people (study participants) interacting in a natural setting. Students may also realize that one key to getting meaningful data from interviewing is to ask well-thought-out questions. These types of real-life experiences *are* truly the best teachers for students who are taking a qualitative research methods course. In qualitative research, the researcher participates actively both in data collection, and in transforming the data into important findings.

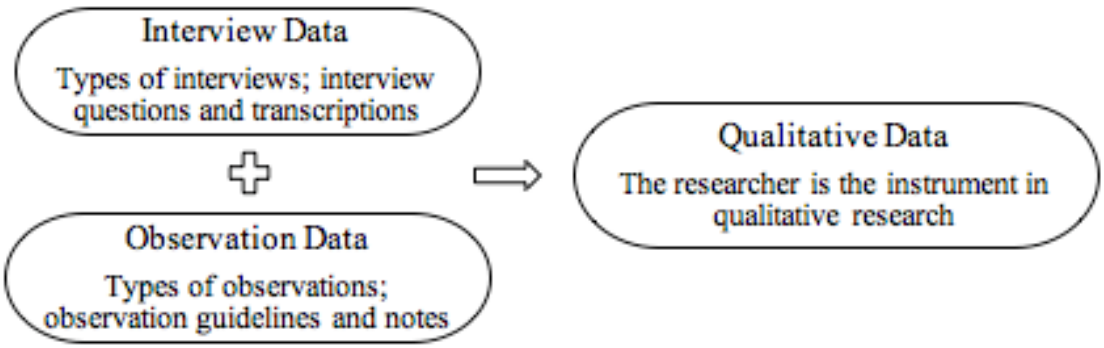

Chart 5. Triangulation of Data for a Mini Ethnographic Case Study (the fifth slide of the PPT file)

Conclusion

Goussinsky, Reshef, Yanay-Ventura, and Yassour-Borochowitz (2011) explained a three-phase model in qualitative research: "While in the first phase students are exposed to the qualitative thinking and writing, they are required in the second phase to take a qualitative research methods course that includes practice. The third and final phases include conducting a qualitative research seminar" (p. 126). An instructor can facilitate student learning, but students must accept some responsibility for their own learning (Centra & Gaubatz, 2005). As a proverb goes, "You can lead a horse to water, but you cannot make it drink."

As noted by Goussinsky et al., much learning among master's level students occurs through practice, and by making *connections* between classroom experiences and the outside world. Such meaningful learning occurs when students take responsibility for their own learning. This is particularly true in qualitative research courses. What the instructor can do is to stimulate such learning through *assignments* and *assessments* by providing—effectively and efficiently—formative assessments with feedback and encouraging work that develops students' competencies in a small-scale qualitative research project.

It should be emphasized that learning by doing is a central concept in qualitative research courses, given that "qualitative research is very much about *doing*…" (Este et al., cited in Delyser, 2008, p. 239). Confucius' saying can be also applied to teaching qualitative research: "I hear and I forget. I see and I remember. I do and I understand." Once students are equipped with substantial knowledge of philosophical assumptions and theoretical perspectives of qualitative research, it is time for them to develop hands-on understanding of techniques used in qualitative research, applying Goussinsky et al.' (2011) three-phase model discussed here.

Highlighting the importance of integrating methodologies and paradigmatic elements when teaching qualitative methods, Terkildsen and Petersen (2015) recommend focusing on teaching epistemology, instead of teaching methods for methods' sake. This paper described how to teach qualitative research systematically, integrating students' real-life experience. The author strongly believe that individual students do not really learn qualitative research until they start collecting and analyzing data from their own research. Assigning a mini ethnographic case study described herein will be implemented in the next academic year, with learning outcome-based assessments of each of the interconnected assignments.

Finally, the concepts of practice, coaching, and teamwork are as important in qualitative research as in team sports. Just as athletes improve their skills with practice, researchers improve their skills through practice. In student centered learning, the instructor acts as a coach or a guide. To benefit from their practice, students will need support and feedback as they encounter predictable challenges in reviewing the literature, clarifying researchable questions, and collecting and analyzing their data. In a master's level research course, the goal should be cooperation, not competition: encouraging students to become resources for one another. As a result of practice, feedback, and collaboration, students will come to see how qualitative methods can provide uniquely useful answers to important questions in education.

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