

Pedagogical Considerations for Effectively Teaching Qualitative Research to Students in an Online Environment

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Abstract

Qualitative research aims to understand both individual meaning as well as complex systemic interactions as they apply to social problems or individual experiences. This method of research is both inductive and flexible, allowing for a holistic approach that facilitates a rich understanding of the content examined. Past research identifies a number of challenges associated with teaching qualitative methodology to undergraduate students, including: the research skills and values maintained by the instructor, the prestige associated with qualitative research in particular, as well as a number of other interpersonal and environmental factors. These challenges are further complicated, it seems, when extended into the online learning environment. This paper explores the factors related to the instruction of qualitative research in an online environment and provides recommendations for best practices in teaching.

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Within academia, numerical data and analysis are often valued over other forms of research; thus resulting in the marginalization of qualitative research efforts (Breuer & Schreier, 2007). Consequently, priority is often placed on teaching students how to interpret and conduct quantitative research over that which is qualitative. While quantitative research has value across disciplines, qualitative strategies are important as well. Qualitative research, whether it be conducted on an independent basis or combined with quantitative strategies via mixed methods designs, brings an added dimension to the research process by allowing researchers the means to explore the impact of context as it applies to a particular phenomenon. Whereas quantitative research provides insight into the types and strengths of relationships amongst variables, qualitative research may afford a better understanding regarding the nature of those relationships. Given the complex dynamics that exist within interpersonal relationships, relying solely on quantitative data may lead to an incomplete understanding of the human experience. Qualitative methods allow for the exploration of questions regarding experience and personal perspective, two factors that are often overlooked or too generalized in quantitative research. With this in mind, students seeking a well-rounded liberal arts education should be instructed regarding how to interpret, design, and conduct research utilizing both quantitative and qualitative approaches.

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The inductive nature of qualitative research is often a difficult concept for students to understand. They frequently struggle with the idea of serving as the primary instrument within the research process. Consequently, instructors teaching qualitative research are not only tasked with teaching students about basic methodologies, but must also introduce students to a revised philosophical paradigm pertaining to research as well. Often, such instructional objectives are achieved via class conversations, modeling, and interactive application activities. Given the lack of shared physical space that is common to online learning, instructors do not have access to the nonverbal cues that accompany traditional face-to-face learning. Consequently, online instructors teaching qualitative research may need to employ non-traditional teaching approaches and assessment strategies.

Online Learning

Over 5.8 million students accessed online courses in 2015. This number represents 28.4% of all college enrollments (Allen & Seaman, 2016). The numerous benefits of online distance learning are well-documented. Engaging in online courses allows for great flexibility in one's academic schedule, tends to be less costly, requires less travel and research time, is said to facilitate greater opportunities for group learning amongst highly-motivated students, and may allow students increased access to a more diverse pool of faculty (Bowen, Chingos, Lack, & Nygren, 2014; Crowell & McCarragher, 2007; Kim, 2008; Pape, 2010; Thomson, 2010). Participation in online communication may also aid in building students' interpersonal skills and decrease their anxiety as well, thus promoting a sense psychological safety, which encourages more creative thinking and mastery of course materials (Clingerman & Bernard, 2004; Kim, 2008; Rovai, 2002).

Despite its known benefits, online learning is also criticized due its inability to customize learning experiences to the needs of each student (Crowell & McCarragher, 2007). Some critics suggest that the lack of non-verbal communication that accompanies many online classes may also impact students' learning experiences as may the inability to stimulate hands-on or lab work that is found in a traditional classroom environment. Muilenburg and Berge (2005) further indicated that online learning may contribute to student isolation, which could have a negative effect on student success (Glazer & Wanstreet, 2011). Limitations aside, evidence suggests that online learning is here to stay. In fact, 70.8% of Chief Academic Officers acknowledge online education as being a key component to their long-term growth strategy (Allen & Seaman, 2016). With these circumstances in mind, it is incumbent upon instructors to determine how to best present their course materials via the online platform in a manner that facilitates authentic learning.

The Role and Key Characteristics of Qualitative Research

Qualitative methods allow researchers to provide rich multi-layered analyses and are particularly warranted when there is a problem or issue that needs to be explored on an in-depth level or when a complex explanation is needed. They may also be appropriate when the researcher wishes to empower individuals or write in a flexible style that conveys a story. Qualitative research is also merited when context needs to be explored,

when the researcher desires to follow-up on quantitative research in an effort to explain mechanisms, when the researcher wishes to develop comprehensive explanations when inadequate theories exist, or when quantitative methodology simply does not fit the problem being studied (Creswell, 2012).

Qualitative research makes use of many sources of data, including: interviews, videos, direct observation, and various forms of records, amongst others. Of these, the most valuable source of information may be the personal interview (Barbour, 2014). Perhaps the most significant step toward ensuring the accuracy of one's data is to conduct thorough, quality interviews that accurately encapsulate participants' experiences. As the primary instrument in qualitative efforts, the researcher is tasked with cultivating a relationship with the participant that elicits information representative of that individual's experience. Due to the complex interactions that take place within the context of an interview, as well as the vulnerability often experienced by the participant, qualitative interviewing must be completed with great care and intention. The researcher must demonstrate effective interpersonal skills in which he or she successfully builds rapport, gains the participant's trust, provides the participant with the space to describe his or her experience, and then co-constructs the data in a manner that is meaningful and reflective of the participant's perspective (Brinkman, & Kvale, 2015; Creswell, 2012; Whiting, 2008).

Qualitative researchers must also be aware of their own responses to participants' expressed experiences and understand how such reactions may influence the dynamics within the interview, the participants' reactions to such responses, as well as all subsequent analysis efforts. Such reflexivity allows the qualitative researcher the ability to determine how his or her personal perspective influences the data and to evaluate the research process (Corbin & Strauss, 2014). By becoming aware of one's personal biases and how they may influence the data, the qualitative researcher is empowered to reconsider the obtained data in a manner that is better reflective of participants' experiences.

A Qualitative Curriculum

Rather than pursue a narrow research question that seeks a conclusive answer regarding the accuracy of a pre-determined hypothesis, qualitative researchers instead take an exploratory approach geared towards understanding the whole picture. To facilitate the shift in rationale, the student must be immersed in a curriculum that includes instruction regarding qualitative design and methods while simultaneously facilitating opportunities for self-reflection and cultivating passion. This remains true whether the student studies qualitative research in-person or online.

Corbin and Strauss (2014) emphasize that the qualitative researcher must engage in much training and practice to develop effective interviewing and observational skills. Typically, students have the opportunity to sit in the classroom and witness several interviews take place and then engage in mock interviews of their own in which they may practice active listening, open body language, and reflective language. By participating in and recording live mock interviews, students are able to capture participant interviewees' responses to their questions. From those recordings, students may transcribe the data for

subsequent analysis. Taking notes regarding their experiences within their interviews also allows students the opportunity to engage in the process of reflexivity as they consider their own interpretations of participants' responses as they relate to the greater context. After transcribing their transcripts, students may engage in the process of memorizing and building themes based on the data before them (McAllister & Rowe, 2003).

Another core skill associated with qualitative research is the ability to write well. Qualitative researchers must provide their readers with in-depth descriptions of various phenomena and experiences that convey not only the participants' experiences, but also the context in which those experiences occur. As such, students should receive opportunities to draft their own descriptions of various phenomena whether these reflect their own research obtained via observations and interviews or from other sources (Brinkman, & Kvale, 2015; McAllister & Rowe, 2003).

While cultural competence and ethical adherence should be evident in all research efforts, such conduct is particularly critical in qualitative research. Given the intimate relationship that forms via the interviewing process coupled with the natural power differential that emerges, participants are put in a vulnerable position as they explain their own experiences to shed light on a larger phenomenon. Within this context, qualitative researchers must not only adhere to the ethical standards dictated by federal and state laws, professional expectations, and institutional practices, but must also take great care to understand the participant's perspective as it fits into the larger context of the phenomenon studied. Cultural and ethical competence is typically taught via lecture, reviews of past cases, class discussions, and in-depth introductions of professional and institutional codes of ethics (Lewis, 2015).

Challenges Teaching Qualitative Methodology Online

Due to the fact that most online courses are asynchronous in nature, students and faculty are rarely online simultaneously. With limited synchronous time, if any, it is often difficult for faculty to model appropriate research practices and techniques. It may also be challenging to assess students' mastery of concepts and skills as well. Typically, faculty and student must rely on video to demonstrate skills and techniques. While this method provides access to one another's work, it does not allow for the provision of live feedback as would occur in a more traditional learning environment. Further, the lack of access to nonverbal communication within the online setting seems contrary to the typical qualitative mindset, which emphasizes the proximity characteristic rather than support via a distance. Finally, the online medium provides limited ability to facilitate other experiential learning opportunities.

Practical Solutions

Despite some of the challenges the online environment may pose, it is possible to teach students about qualitative methodology effectively via this environment. Instructors, of course, must be aware of differences that exist between the traditional and online classroom settings and then accommodate their course design and delivery to overcome these

variations. Specifically, the online instructor must work to: reduce the effects of distance, make assignments meaningful, and minimize student anxiety.

Reduce the effects of distance. Given the personal nature of qualitative research, it is especially important that students feel engaged and supported. Perhaps the most effective way to minimize the impact of a lack of a shared physical environment is to increase the instructor's telepresence; allowing students the sense that they are interacting with a real person rather than participating in a course that is preloaded into a learning management system. The online instructor may increase his or her telepresence by actively engaging in discussion board conversations, via the posting of frequent announcements or updates within the course, thru answering questions promptly, and by actively taking an interest in students' comments throughout the course. Additionally, the inclusion of a profile picture and biographical information within the course further strengthens students' ability to gain a better understanding of the instructor as a whole person, as does access to the instructor's personal webpage, social media streams, etc. By providing students' with insight into the instructor's personality, these efforts may also help to facilitate more comprehensive interpersonal interactions between a faculty member and his or her pupils, which should contribute to more authentic learning experiences (Bender & Dickenson, 2016; Cleaveland-Innes & Campbell, 2012; Kozan & Richardson, 2014). Faculty may use social media management programs such as Buffer, Hootsuite, and Edgar to manage several social media streams/platforms simultaneously thus saving them time and effort. Via these programs, faculty may pre-schedule course announcements, bookmark relevant resources on the Internet, etc. to be disseminated to students when it aligns with the course schedule. Further, faculty is also able to monitor and respond to student comments via a singular portal via such a program rather than maintaining several different forums thus increasing faculty engagement without any additional work.

The literature reveals that one common grievance amongst online students is a static learning environment (Carr-Chellman & Duchastel, 2000). In an effort to provide students with the most robust learning experience possible, online instructors should create a blended learning environment that addresses multiple learning styles; thus engaging students into a dynamic learning process. Faculty teaching online qualitative research courses should consider providing students with opportunities to engage in live interactions with others within the course whenever possible, including informal synchronous meetings in which students may ask questions to clarify concepts and seek additional instruction and support. On a more formal level, faculty may use such meetings to model how to engage in the process of active inquiry via live demonstrations of interviewing techniques and similar activities. Of course, not all students may have the ability to join such meetings or benefit from conversational tasks. With that, faculty should present course information via other modalities as well. For example, the use of narrated slide lectures may emulate a typical course lecture allowing students who prefer traditional learning methods or identify as visual or audio learners access to the materials. Another way to provide students with visible examples of concepts reviewed in the course is to embed multimedia resources throughout the course, including video clips, links to external audio lectures, etc. The use of collaborative learning tools outside of the learning management system is another strategy likely to enhance the teaching of qualitative

methods within online courses. Web-based applications (such as Google docs) that allow students to generate content and share it with their peers may be used, for example, to allow students to collaborate in the creation of a research proposal. In a similar vein, students may also share transcripts of interviews via this method, allowing co-researchers/peers the ability to code data using the same documents (Bender & Dickenson, 2016).

The inclusion of other social media may also be of benefit in teaching qualitative methods online. Faculty may use Facebook, for example, to create a class 'page' to supplement the course. Here, students and faculty could engage in informal discussion of class concepts and students may ask questions, seek support from one another, etc. (Green & Bailey, 2010; Wang, Woo, Quek, Yang, & Liu, 2012). Similarly, faculty may choose to leverage a site such as Pinterest to provide students with access to other supplemental materials. For example, the instructor may consider creating boards dedicated to specific concepts unique to qualitative research, including: interviewing techniques, coding, theme development, etc. Also, boards dedicated to each major qualitative method may also be created. By actively engaging in the course and providing students the opportunity to engage with course materials in a variety of ways, instructors may reduce the effects of the physical separation between the student and the institution thus minimizing the effects of the learning environment and highlighting the course content (Bender & Dickenson, 2016).

Make It Meaningful. The ability to fully understand qualitative research seems dependent on experiential learning opportunities (Kolb, 2015). One common criticism of many online courses is their propensity to feel more like one-way correspondence courses rather than dynamic learning experiences. Instructors must, therefore, design collaborative learning communities in which students are engaged, challenged, and able to explore course concepts while simultaneously practicing new skills.

One of the key characteristics of qualitative inquiry is its consideration of multiple perspectives. One strategy that provides online students with the ability to interact with their peers while being exposed to varying perceptions is the utilization of asynchronous online discussions. Qualitative research instructors may keep their courses vibrant by offering students current and relevant discussion prompts that include course concepts in action. For example, instructors may engage students in discussions regarding how qualitative research may be used to better-understand current real-world events. During election periods, for instance, a worthy exercise may be for online instructors to discuss with their students how they would go about understanding voters' decision-making processes when determining for whom to vote based on interviews provided by the media and similar sources. Similarly, after a notable event (natural disaster, an act of violence, etc.), students may benefit from a dialog regarding how qualitative inquiry may best be leveraged to understand people's psychological reaction to that phenomenon.

As with most assignments, the value of asynchronous discussion board exercises within an online research course is often dependent on the structure placed upon the activity. Instructors are therefore encouraged to actively engage students into meaningful discus-

sions rather than having the online classroom serve merely as an ‘answer board’. The most effective online classroom discussions are those in which the instructor remains highly participatory, modeling appropriate content, format, and synthesis while promoting additional critical thought via the use of open-ended questions (Comer & Leneghan, 2013). Instructors should aim their efforts within online forums to clarify concepts, probe students’ assumptions, and question their perspectives with the intention of promoting critical thinking and fostering reflexivity (Astleitner, 2002). The utilization of teaching assistants within discussion forums is also desirable as it serves as a form of telementoring, which engages students with additional opportunities for collaboration and facilitates the process of cognitive scaffolding (Kaczynski & Kelly, 2004). Online instructors may ensure more robust conversations by developing a rubric that not only requires students to consider course materials on a critical level, but also encourages substantive contributions by all class members throughout the duration of a lesson. For example, here is a sample rubric likely to keep students engaged in a class discussion throughout a lesson:

Table 1: Discussion Board Rubric.

Element	Points Possible
Student provides an initial post that serves as evidence of his or her mastery of course concepts as demonstrated via the synthesis of personal experience with course materials.	1 point
Student provides substantive feedback in response to at least two peers’ initial posts. Responses should be crafted in a manner that is likely to encourage additional critical thought and discussion.	2 points
Student provides substantive responses to at least two inquiries from other students and/or faculty made in response to his or her initial post.	2 points
Total	5 points

Note that students’ participation is dependent on their interactions with others in the class thus encouraging additional engagement.

Kaczynski and Kelly (2004) developed a specific discussion board assignment that further highlights the importance of navigating multiple perspectives and the influence of the same on qualitative research. They created the ‘*Multiple Meanings*’ exercise, in which the instructor posts a relatively ambiguous photograph and requests students to comment on what that photograph means to them. After all of the students comment on the picture, each student is tasked with reading everyone’s comments on the discussion board and coding the same. From that, students are encouraged to develop themes and compare those themes to their initial comments. Similarly, More and Janzen (2012) suggest an activity in which students track an issue in media and summarize the context regarding the same. Based on their notes, and those of their peers, students are then tasked with writing a story based upon those notes. Activities such as these not only lend stu-

dents insight into others' perspectives, but also highlight how others' interpretations may influence their own research process, despite any pre-existing thoughts they may have. Another interesting activity likely to increase online students' qualitative research skills is to have students find transcripts associated with famous case studies or well-known profiles. Students studying abnormal psychology, for example, may enjoy reviewing the transcripts of Ted Bundy's final interview. In this interview, Bundy hypothesized the likely contributing factors to his crime sprees. By reviewing, memoing, and coding these transcripts, students may gain practical experience regarding the interpretation of an interview while simultaneously gaining insight into the nature of psychopathy. This activity, of course, could be tailored to fit almost any field of study.

Students must also learn to engage in reflexivity, as it is a cornerstone to qualitative inquiry. They should be taught to consider their understanding of truth and to question their 'conceptual baggage' (Kirby & McKenna, 1989), including their preconceptions regarding the phenomenon to be studied, the research process, and the emerging themes in a study. These considerations should provide student researchers with the ability to better understand their processes of meaning-making as well as to appreciate how the phenomenon studied fits into the larger context while simultaneously reducing the potential for excessive bias, poor-quality interviews, questionable data, and problematic conclusions. There are several strategies that may be implemented within an online environment to encourage students' reflexivity. First, instructors may require students to maintain an online journal or blog where they document their perceptions regarding the research process. Similarly, students may create an online portfolio in which they respond to specific case samples created by the instructor. A more immersive technique to teach this skill would be to have students fully design a qualitative study, memoing their thoughts throughout the process.

Other online activities that require less direct participation from the instructor may also be effective in teaching qualitative research concepts as well. For example, faculty may leverage social media to increase students' familiarity with class concepts. One example of such a strategy would be to have students maintain a class wiki regarding topics and resources related to psychological concepts and qualitative research. Similarly, social networking sites such as Pinterest would allow students to meet the same objective with students creating virtual bulletin boards of course-related materials. More formally, online tutorials and supplemental videos coupled with online quizzing may serve to confirm that students are aware of professional and institutional ethical standards. Also, independent assignments in which students must view a pre-designated stimulus (interview, video, etc.) and describe the same may provide the online student with additional practice in writing rich, think descriptions (Bender & Dickenson, 2016). More complex assignments may be used to promote student-to-student interactions within the online classroom to teach qualitative strategies as well. For example, instructors may pair students to interview each other regarding a particular experience common to all students within the course (majoring in, for example) and then have them analyze the data from that activity. Depending on the particular learning management system (LMS) used, instructors may be able to provide student pairs their own breakout room in which to conduct and record their interviews, and then meet for follow-up member check activities. A supplemental

assignment may be for students to review their own videos, or those of their peers, to critique interviewing techniques and to review study conclusions, as a form of peer review. *Adhere to student anxiety.* One factor that seems to greatly impact online students' satisfaction with online courses and mastery of course materials is their anxiety (Wang, Shannon & Ross, 2013). Given the great variability amongst students' familiarity with distance learning and technological skills, instructors of online courses should orient the student to the basic tenants associated with online learning, the intricacies of the specific learning management system utilized, as well as the expectations of the course in particular. This may be achieved by the presentation of an orientation module and/or video as well as a list of resources available to the student for additional support. The course syllabus should also explicitly address all policies associated with the online class. By providing students with clear expectations regarding online classroom behavior, including adherence to basic netiquette, the instructor communicates to the class that he or she is committed to the course and invested in its students. In view of the personal nature of the qualitative researcher serving as the primary research instrument and the responsibility this brings, instructors may want to address issues of confidence in providing the student with the skills and knowledge needed to effectively serve in this role in spite of the class modality. At the same time, faculty should directly address any resistance students may have to online learning and assure them that online learning may not only be comparable to face-to-face learning, but in some cases, actually far exceeds it (Allen & Seaman, 2016; Bowen, Chingos, Lack, & Hygren, 2012).

To further alleviate anxiety associated with taking a course in qualitative methods online, instructors should provide clear assignment instructions and rubrics to their class. Additionally, instructors may serve their students well by providing increased resources to their students via the provision of quality articles, assignment exemplars, recorded lectures, and any other resources one may provide in a traditional qualitative methods course. Scaffolding assignments upon one another allows students to master one concept and feel confident in their abilities before progressing to the next layer of the research process. As mentioned previously, the instructor's active participation within the course is likely to build classroom morale and contribute to students' mastery of course concepts as well.

Conclusion

Given the lack of proximity between students and their instructors within the online environment, courses pertaining to qualitative methodology may be particularly challenging to develop and teach. This is especially true at institutions in which instructors are held to pre-defined curriculum and assignments. Despite these circumstances, faculty are able to transcend the online environment to provide rich and meaningful learning experiences that allow students to master qualitative design while cultivating skills appropriate for this type of research. Faculty are encouraged to utilize a variety of tools to create robust materials to serve as the foundation of their courses, or to supplement those previously developed by their institution. Creating materials such as narrated slide shows to serve as lectures, or videos modeling interview techniques serve as formal efforts to deliver students with course materials whereas the maintenance of various social media platforms

may serve as less formal activities to keep students engaged and to create an environment of collaboration and providing a number of experiential opportunities.

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