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## An Exemplar for Teaching and Learning Qualitative Research

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## An Exemplar for Teaching and Learning Qualitative Research

### Abstract

In this article, we outline a course wherein the instructors teach students how to conduct rigorous qualitative research. We discuss the four major distinct, but overlapping, phases of the course: conceptual/theoretical, technical, applied, and emergent scholar. Students write several qualitative reports, called qualitative notebooks, which involve data that they collect (via three different types of interviews), analyze (using nine qualitative analysis techniques via qualitative software), and interpret. Each notebook is edited by the instructors to help them improve the quality of subsequent notebook reports. Finally, we advocate asking students who have previously taken this course to team-teach future courses. We hope that our exemplar for teaching and learning qualitative research will be useful for teachers and students alike.

### Keywords

Teaching Qualitative Research, Qualitative Research Pedagogy, Qualitative Notebooks

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## **An Exemplar for Teaching and Learning Qualitative Research**

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*In this article, we outline a course wherein the instructors teach students how to conduct rigorous qualitative research. We discuss the four major distinct, but overlapping, phases of the course: conceptual/theoretical, technical, applied, and emergent scholar. Students write several qualitative reports, called qualitative notebooks, which involve data that they collect (via three different types of interviews), analyze (using nine qualitative analysis techniques via qualitative software), and interpret. Each notebook is edited by the instructors to help them improve the quality of subsequent notebook reports. Finally, we advocate asking students who have previously taken this course to team-teach future courses. We hope that our exemplar for teaching and learning qualitative research will be useful for teachers and students alike. Key Words: Teaching Qualitative Research, Qualitative Research Pedagogy, Qualitative Notebooks.*

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The majority of students enrolled in graduate programs representing schools and colleges of education are required to take one or more courses in qualitative research (Leech & Goodwin, 2008; see also Capraro & Thompson, 2008). Unfortunately, despite the prevalence of qualitative research courses, and although an abundance of information is present in the published literature on how to *conduct* qualitative research, with a few exceptions (cf. Chenail, 2007; Hurworth, 2008), little explicit guidance is present on how to *teach* qualitative research. For example, in the previous edition of the *Sage Handbook of Qualitative Research* (Denzin & Lincoln, 2005b), one of the leading textbooks used in qualitative research courses in the United States, none of the 44 chapters deal explicitly with teaching qualitative research. This lack of representation of teaching models in such a high-profile publication prevails despite the fact that the editors of the book declared the following:

We need *rigorous* work that pays systematic attention to the systematic relations among the interaction order, orders of talk, representational orders, and the organized properties of material culture. . . We need more principled and disciplined ways of accounting for the world and its organization. (Denzin & Lincoln, 2005b, pp. 646–647 [emphasis added])

Many other excellent leading qualitative research textbooks (e.g., Miles & Huberman, 1994) also have not provided explicit details about how to teach qualitative research. Thus, new teachers of qualitative research courses can glean little guidance from the literature.

With this lack of teaching guidance in mind, the goal of this article is to provide a meta-framework for teaching and learning qualitative research, which comprises several frameworks, models, and ideas that other teachers of qualitative research might consider using or adapting. Specifically, we outline a 17-week, 3-credit hour semester-long course in which the instructors teach students how to conduct rigorous qualitative research. Further, we illustrate how this course helps doctoral students successfully negotiate the path of emergent scholarship.

The students in the course comprised 11 doctoral students, 10 of whom represented a cohort of counseling education students taking their second semester of courses. The qualitative research course was one of two courses that same semester—with the other course being an introduction to statistics course that was team-taught by the same instructors. In teaching qualitative research, quantitative research (e.g., statistics, measurement), and mixed research courses, the instructors consider themselves to be what Johnson (2011) referred to as a *dialectical pluralist*, which refers to an epistemology wherein the researcher incorporates multiple epistemological perspectives. Being the second semester of their doctoral degree programs, the students in the qualitative class were in the beginning stages of identifying their research philosophies.

In particular, we discuss the four major phases of the course. These phases, although distinct, overlap. The first phase, the *Conceptual/Theoretical Phase*, involves an overview of the qualitative research process, using Leech and Onwuegbuzie's (2006) model. In the second phase, the *Technical Phase*, the instructors describe 18 qualitative analysis techniques from different traditions and different epistemologies (e.g., constant comparison analysis, discourse analysis), delineating when to use each type of analysis and how to conduct each of these analyses using Computer-Assisted Qualitative Data Analysis Software (CAQDAS; e.g., NVivo 9; QSR International Pty Ltd., 2011; QDA Miner 3.2; Provalis Research, 2009). For instance, we provide students with works that demonstrate how NVivo 9 (Leech & Onwuegbuzie, 2011), Excel (Combs & Onwuegbuzie, 2010; Meyer & Avery, 2009), and SPSS (Onwuegbuzie & Combs, 2011) can be used to conduct qualitative analyses.

The third phase, the *Applied Phase*, involves the instructors teaching students how to collect, to analyze, and to interpret qualitative data, and how to write up qualitative research. With respect to data collection, students practice collecting data via observations, interviews, and focus groups—as well as gathering field notes. With regard to data analysis and data interpretation, students write a series of what the instructors call *qualitative notebooks*, in which students use NVivo 9 or another CAQDAS to facilitate the analysis of data they had collected during the course using several qualitative analytic techniques. As surmised by Leech and Onwuegbuzie (2007), we make it clear to students from the onset that

CAQDAS programs can help researchers to analyze their data, but they cannot analyze the data for researchers. Further, in using CAQDAS programs, flexibility, creativity, insight, and intuition should never be

replaced by a systematic and mechanical analysis of qualitative data (Dey, 1993). The researcher is the main tool for analysis, regardless of whether a computer program is used to assist in the analysis. (Denzin & Lincoln, 2005b, p. 578)

Each of these analyses then is written up formally in separate reports (i.e., qualitative notebooks) over the last several weeks of the course using American Psychological Association's (APA, 2010) style guide. Students use the detailed feedback, checklists, and rubrics to help guide their subsequent write-ups. We also describe the journal-ready qualitative research report that cooperative learning groups produce at the end of the semester from the real data students collect during the course. Students present these research studies formally on the last day of the course. In the fourth phase, namely, the *Emergent Scholar Phase*, which occurs after the course ends, students are expected to present their qualitative inquiries at professional meetings and, hopefully, submit their manuscripts to journals to be reviewed for possible publication. Finally, we advocate asking students who have previously taken this course to team-teach future courses with their professors. Figure 1 illustrates the four phases of the course with respect to themes from the syllabus and pedagogical tools (e.g., frameworks, models). As seen in Figure 1, the phases are overlapping within the 17-week course.

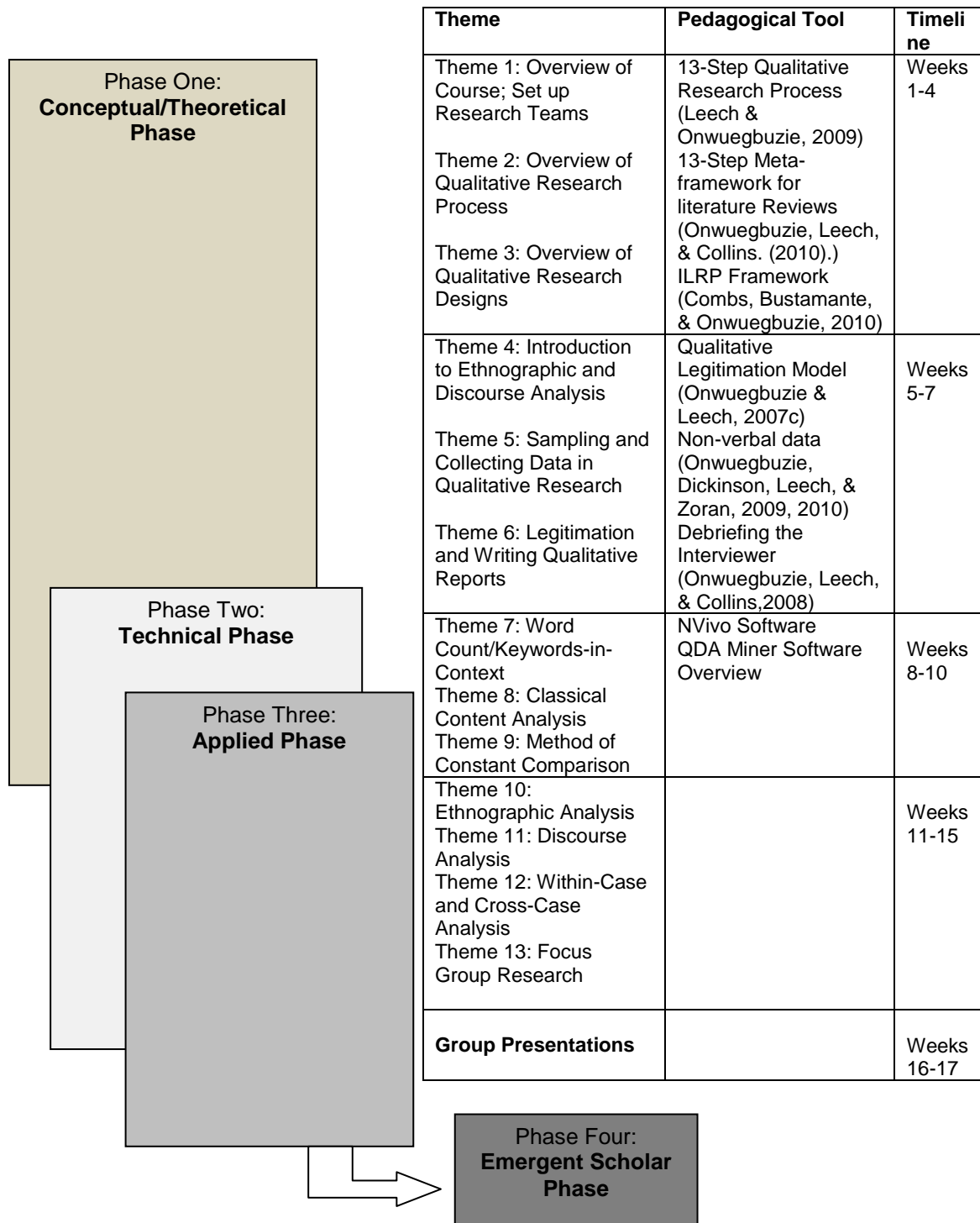
We realize that our framework for teaching and learning qualitative research might appear—at least initially—to a beginning instructor of qualitative research to be relatively complex. However, we would like to point out from the onset that we do not expect instructors to use all the ideas that we present, especially the ideas that do not fit within their philosophical assumptions and stances or that are not feasible to accomplish. We hope that our exemplar for teaching and learning qualitative research will be useful for teachers and students alike.

This article involved the collaboration of the following eight co-authors: Anthony J. Onwuegbuzie and John R. Slate are professors at Sam Houston State University who teach doctoral-level courses in qualitative research, quantitative research (i.e., statistics), mixed methods, and master's-level courses in research methods; Julie P. Combs is an assistant professor at Sam Houston State University who teaches courses in research methods, writing, and program evaluation in the doctoral program and various leadership courses in the principal certification program; Nancy L. Leech is an associate professor at the University of Colorado Denver who teaches doctoral-level courses in qualitative research, quantitative research (i.e., statistics, measurement), and mixed methods; Marcella Stark, Bipin Sharma, Rebecca Frels, and Kristin Harris were doctoral candidates pursuing a Ph.D. in Counselor Education at Sam Houston State University. Anthony J. Onwuegbuzie and John R. Slate co-taught the qualitative research course described below. Nancy L. Leech teaches a similar course at the University of Colorado Denver. Julie P. Combs observed the qualitative research course described below. Finally, Marcella Stark, Bipin Sharma, Rebecca Frels, and Kristin Harris took the course in the Spring 2007 semester.

All co-authors contributed significantly to every phase of the development of the article, with the students providing the qualitative notebooks that appear in Appendix B and Appendix C, with approval from the Institutional Review Board (IRB) at the institution where the course took place. During the development of the article, the co-

authors met face-to-face on two occasions, with Nancy L. Leech participating via telephone. A combination of telephone and email was used to communicate on the remaining occasions. The article underwent 20 drafts before it was submitted to *The Qualitative Report* for consideration. Just prior to submission, the article was presented at the Southwest Educational Research Association conference in 2009, with the student co-authors taking the lead role in presenting it. For these students, it was their first research presentation at a professional conference, representing an important landmark in their entry into the Emergent Scholar Phase (Onwuegbuzie, Leech, et al., 2009).

Figure 1. *The Four Phase Model Mapped with Syllabus Themes and Pedagogical Tools*



## Phase I: The Conceptual/Theoretical Phase

For the Conceptual/Theoretical Phase, we use Leech and Onwuegbuzie's (2009) conceptualization of the qualitative research process. According to these authors, the qualitative research process involves 13 distinct but iterative, interactive, and dynamic steps or components: (a) determining the goal of the study, (b) formulating the research objective(s), (c) determining the rationale(s), (d) determining the research purpose(s), (e) determining the research question(s), (f) selecting the sampling design, (g) selecting the research design, (h) collecting the data, (i) analyzing the data, (j) validating/legitimizing the data, (k) interpreting the data, (l) writing the final report, and (m) reformulating the research question(s). These 13 steps comprise the following three major stages: research formulation stage, research planning phase, and research implementation stage. This process is illustrated in Figure 2. In the Conceptual/Theoretical Phase, we provide detailed information about each of these steps. Most importantly, in presenting the first two steps, we introduce students to any array of philosophical belief systems and theories and their historical underpinnings, as well as the role that philosophical belief systems play in analytical decisions made in qualitative research. In particular, we use the works of Denzin and Lincoln (2005a), Heron and Reason (1997), Onwuegbuzie, Johnson, and Collins (2009) and Johnson and Onwuegbuzie (2004) to compare and to contrast the leading qualitative-based paradigms (e.g., constructivism, critical theory, participatory), quantitative-based paradigm (i.e., postpositivism), and mixed research-based paradigms (e.g., pragmatism, transformative-emancipatory) with respect to three axiomatic components (i.e., ontological, epistemological, and methodological foundations) and seven issues (i.e., nature of knowledge, knowledge accumulation, goodness or quality criteria, values, ethics, inquirer posture, and training). Also, we link each paradigm to data analysis strategies. In addition, we discuss the evolution of some of the leading qualitative analysis techniques, such as that associated with grounded theory—namely, the analytical techniques espoused by Glaser and Strauss (1967), Strauss and Corbin (1990, 1998), and Charmaz (Bryant & Charmaz, 2007; Charmaz, 2000, 2005, 2006; Charmaz & Bryant, 2008). Indeed, because of the vital role that philosophical assumptions and stances play in the research process, we discuss these throughout the course. Thus, students are required to discuss their philosophical assumptions and stances in all of their qualitative research reports (i.e., qualitative notebook assignments) that they submit to the instructors. Further, the detailed rubric used to grade these reports include items that assess the degree to which the student has delineated clearly the philosophical assumptions and stances that underlay their analysis strategies.

### Research Formulation Stage

The *qualitative research formulation stage* is represented by a journey through Steps 1-5. Step 1 involves determining the goal of the study, which entails making a decision about the overall, long-term aim of the qualitative study. Here, we recommend utilizing Newman, Ridenour, Newman, and DeMarco's (2003) framework. These authors have identified the following nine goals: (a) add to the knowledge base; (b) predict; (c) measure change; (d) have a personal, social, institutional, and/or organizational impact; (e) understand complex phenomena; (f) generate new ideas; (g) test new ideas; (h) inform

constituencies; and (i) examine the past. In qualitative research, some of these goals (e.g., understand complex phenomena, inform constituencies) are more viable than are others (e.g., predict). The research goal leads directly to the research objective (Step 2). For this step, we compare and contrast an array of paradigms/worldviews (e.g., constructivism, critical theory, participatory, see, for e.g., Guba & Lincoln, 2005) and philosophical assumptions and stances (e.g., hermeneutics, interpretivism, post-modernism, post-structuralism, feminism; see, for e.g., Schwandt, 2000) that are associated with qualitative research. We encourage students to identify their own worldviews and belief systems and to understand the role that they play in the research process.

A guaranteed 10% of students' course grade is given to students for maintaining a reflexive journal—or what Maxwell (2005) calls a *researcher identity memo*—the purpose of which is to help researchers examine their “goals, experiences, assumptions, feelings, and values as they relate to [their] research, and to discover what resources and potential concerns [their] identity and experience may create” (p. 27). We also delineate how to construct a conceptual framework for a qualitative study, which, as Maxwell defined, is “the system of concepts, assumptions, expectations, beliefs, and theories that supports and informs...research” (p. 33). According to Maxwell, there are four main sources for constructing conceptual frameworks: (a) the researcher's own experiential knowledge (i.e., incorporation of the researcher's identity and experience; cf. Denzin & Lincoln, 2000); (b) existing theory and research (i.e., theories and empirical findings from the extant literature); (c) the researcher's own pilot and exploratory research; and (d) thought experiments (i.e., involving speculative models of behavior; cf. Lave & March, 1975).

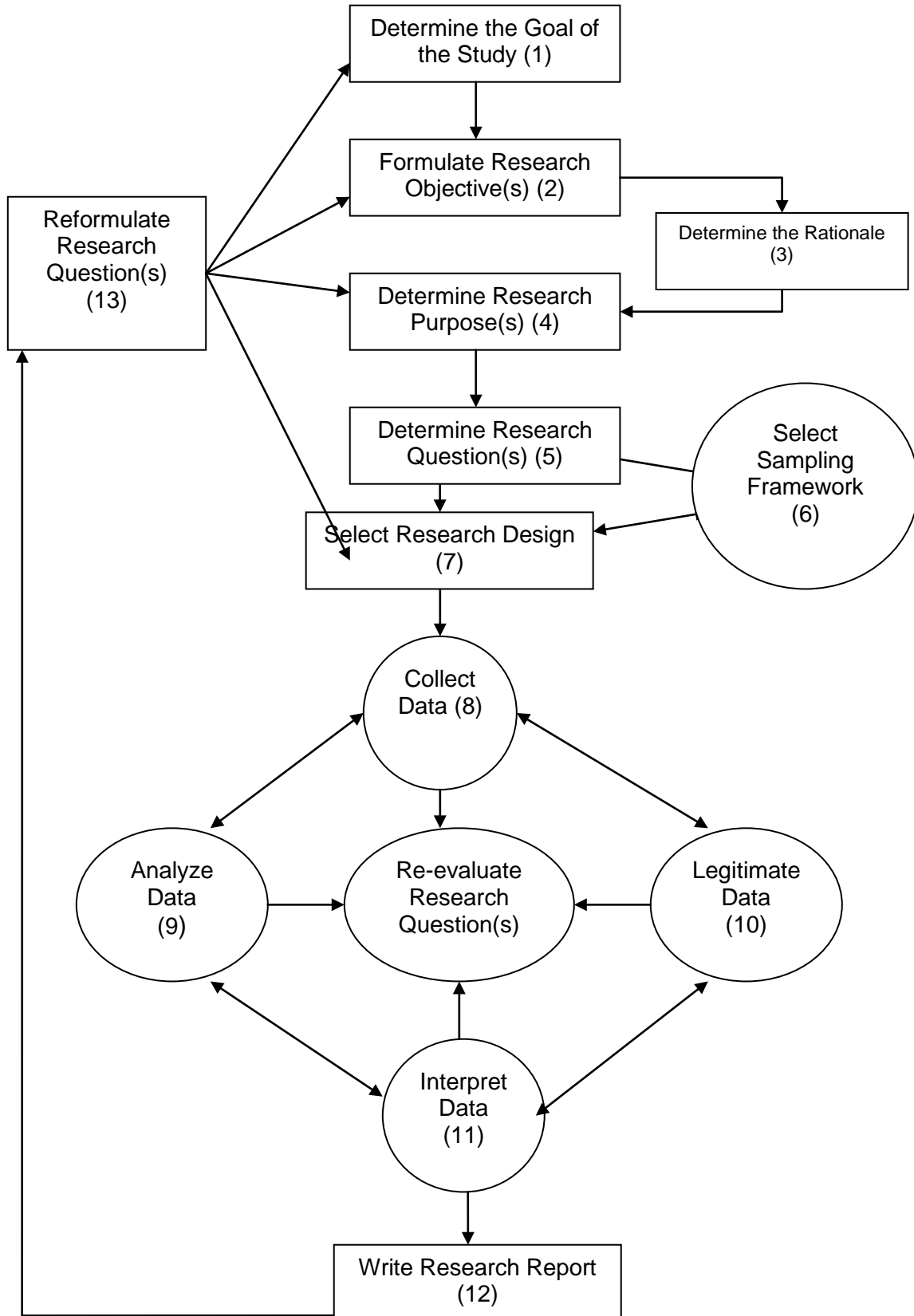
As part of determining the research goal and objective, we introduce various frameworks for conducting focused literature reviews. In particular, we outline Onwuegbuzie, Collins, Leech, Dellinger, and Jiao's (2010) meta-framework for conducting reviews of the literature. These authors contended that literature reviews should involve “an interpretation of a selection of documents available from various sources on a specific topic that optimally involves summarization, analysis, evaluation, and synthesis” (p. 2). Their framework involves a 13-step process for conducting literature reviews. We also utilize the interactive literature review process (ILRP) framework developed by Combs, Bustamante, and Onwuegbuzie (2010) that instructors, advisors, and mentors can use to teach students how to conduct effective literature reviews. The ILRP framework consists of nine stages in which the student completes a progression of activities: (a) Stage 1: Exploring belief systems; (b) Stage 2: Initiating the literature review process; (c) Stage 3: Selecting a topic; (d) Stage 4: Exploring the literature: Identifying themes; (e) Stage 5: Formulating a focus: Selecting/deselecting themes; (f) Stage 6: Analyzing/interpreting/integrating literature; (g) Stage 7: Closing the literature search: Reaching saturation; (h) Stage 8: Writing the review of literature; and (i) Stage 9: Evaluating the process and product (cf. Frels & Onwuegbuzie, 2010).

In introducing these frameworks, we make clear to students that an in-depth, comprehensive, and rigorous review of the extant literature is not necessary and might even be inappropriate for certain qualitative research designs, such as grounded theory research designs (i.e., designs using a rigorous set of procedures to produce substantive theory of social phenomena; Glaser & Strauss, 1967), wherein the researcher needs to set



aside all prejudgments and assumptions about social reality—a process known as bracketing or epochè (Schwandt, 2007).

Figure 2. *Qualitative Research Process*



Once the research goal, research objective(s), and relevant literature, have been identified, the next step in the qualitative process is to determine the research rationale (Step 3). This step not only involves determining the rationale of the study (i.e., why the study is needed) but also involves identifying the rationale for using qualitative approaches. Unfortunately, Onwuegbuzie and Daniel (2005) documented that a high proportion (i.e., 40%) of authors do not make clear the rationale of their studies. Thus, we emphasize to students the importance of identifying a clear rationale of the study. Alongside determining the research rationale, the researcher should identify the research purpose (Step 4) that reflects the research problem for which qualitative research techniques are needed.

Identifying the research rationale and purpose helps the researcher to develop appropriate research questions (Step 5). As can be seen from Figure 1, research questions that guide a study play a central role in the qualitative research process, a role that is interactive, fluid, emergent, evolving, and iterative. We emphasize that qualitative research questions are “open-ended, evolving, and non-directional” (Creswell, 1998, p. 99) and typically attempt to obtain insights into particular educational, familial, and social processes and experiences that exist within a specific location and context (Connolly, 1998; Onwuegbuzie & Leech, 2006). We also point out to students that in addition to the development of research questions occurring at the fifth step of the qualitative research process, these questions are re-evaluated during the data collection (i.e., Step 8), data analysis (i.e., Step 9), data legitimation (i.e., Step 10), and/or data interpretation (i.e., Step 11) phases. That is, any of these latter steps might lead to the research questions being modified, and/or to additional research questions being addressed (i.e., Step 13).

### **Research Planning Stage**

In Leech and Onwuegbuzie’s (2009) model that we use, the research planning stage involves selecting the sampling design (Step 6) and the research design (Step 7). These steps are interactive and iterative because choice of sampling design affects the selection of research design and vice versa. With respect to the qualitative sampling design, we introduce Onwuegbuzie and Leech’s (2007a, 2007b) frameworks. Building on the excellent typologies of Miles and Huberman (1994) and Patton (1990), Onwuegbuzie and Collins (2007) and Onwuegbuzie and Leech (2007a) identified 24 sampling schemes that they contend qualitative researchers have available for use. All of these sampling schemes fall into one of two classes: random sampling (i.e., probabilistic sampling) schemes or non-random sampling (i.e., purposive sampling) schemes. We point out to our students that in the vast majority of cases, qualitative research involves the use of one or more purposive sampling schemes. Further, we outline Onwuegbuzie and Leech’s (2007b) typology for classifying qualitative sampling designs. These authors conceptualized the following sampling strategies: (a) parallel sampling designs, which represent a body of sampling strategies that facilitate credible comparisons of two or more different subgroups that are extracted from the same levels of study; (b) nested sampling designs, which are sampling strategies that facilitate credible comparisons of two or more members of the same subgroup, wherein one or more members of the subgroup represent a sub-sample of the full sample; and (c) multilevel sampling designs,

which represent sampling strategies that facilitate credible comparisons of two or more subgroups that are extracted from different levels of study.

For the research design step (i.e., Step 7), we introduce students to an array of typologies. For example, we present Creswell's (2007) typology that comprises the following five qualitative approaches: narrative research, phenomenological research, grounded theory research, ethnographic research, and case study research. We also present Tesch's (1990) 28 approaches and Miller and Crabtree's (1992) 18 qualitative types. Other typologies and frameworks that we present include those of Wolcott (1992), Janesick (2000), Jacob (1987), Munhall and Oiler (1986), Lancy (1993), Strauss and Corbin (1990), Morse (1994), Moustakas (1994), Slife and Williams (1995), and Miles and Huberman (1994). Qualitative research designs to which students are exposed include the following: ethnography, life history, oral history, ethnomethodology, case study, field research or field study, naturalistic study, phenomenological research, ecological descriptive research, descriptive study, symbolic interactionist study, microethnography, interpretive research, action research, narrative research, historiography, literary criticism, and grounded theory research. In presenting these designs, we promote Janesick's (2000) assertion that "The essence of good qualitative research design turns on the use of a set of procedures that are simultaneously open-ended and *rigorous* and that do justice to the complexity of the social setting under study" (p. 379) [emphasis added].

### **Research Implementation Stage**

The research implementation stage comprises the following four steps: data collection, data analysis, data validation, and data interpretation. These four steps are extremely cyclical and interactive. For the data collection stage (Step 8), we discuss the following sources of data: interviews, focus groups, surveys, observations, personal journals, diaries/memos, permanent records, transcription of meetings, photographs, audiovisual material, pictures, paintings, and field notes.

The data collection step is followed by the data analysis step (Step 9). Here, we provide several definitions of qualitative data analysis. For example, Schwandt (2007) defined analyzing qualitative data as "the activity of making sense of, interpreting, or theorizing data. It is both art and science...If data speak for themselves, analysis would not be necessary" (p. 6). Spradley (1979) contended that "Analysis of any kind involves a way of thinking. It refers to the systematic examination of something to determine its parts, the relationship among parts, and their relationship to the whole" (p. 92).

Bogdan and Biklen (2003) asserted that "By *data analysis* we mean the process of systematically searching and arranging the interview transcripts, fieldnotes, and other materials that you accumulate to enable you to come up with findings" (p. 147). Further, Hatch (2002) declared the following:

Data analysis is a systematic search for meaning. It is a way to process qualitative data so that what has been learned can be communicated to others. Analysis means organizing and interrogating data in ways that allow researchers to see patterns, identify themes, discover relationships, develop explanations, make interpretations, mount critiques, or generate

theories. It often involves synthesis, evaluation, interpretation, categorization, hypothesizing, comparison, and pattern finding. It always involves what Wolcott calls ‘mindwork’...Researchers always engage their own intellectual capacities to make sense of qualitative data. (p. 148)

In addition, we outline Strauss and Corbin’s (1998) ten purposes of using analysis:

(1) steer a researcher’s thinking away from literature and personal experiences; (2) avoid standard ways of thinking; (3) stimulate the inductive process; (4) focus on what is in the data; (5) allow for clarification of assumptions; (6) listen to what people are saying and doing; (7) avoid rushing past ‘diamonds in the rough’; (8) force the asking of questions and giving of provisional answers; (9) allow labeling of concepts; and (10) discover properties and dimensions of categories. (p. 89)

The data analysis step is followed by legitimation of findings and interpretations (Step 10). When describing this step, we begin by delineating what Denzin and Lincoln (2005c) referred to as the triple crises of representation (i.e., difficulty of interpretive account of the researcher to capture lived experience), legitimation (i.e., issues that come to the fore from questioning the claim that the text is “an accurate, true, complete account of experience, meaning, a way of lie, and so forth” Schwandt, 2007, p. 46), and praxis (i.e., which leads to the question, “Is it possible to effect change in the world if society is only and always a text?”; Denzin & Lincoln, 2005c, p. 20). Further, we discuss Maxwell’s (1992) five legitimation types, namely: descriptive validity (i.e., factual accuracy of the account as documented by the researcher [e.g., accuracy of transcribed interviews]), interpretive validity (i.e., the extent to which the researcher’s interpretation of the account represents an understanding of the perspective of the underlying group and the meanings attached to the members’ words and actions), theoretical validity (i.e., the extent to which a theoretical explanation developed from research findings is consistent with the data), evaluative validity (i.e., the extent to which an evaluation framework can be applied to the objects of study, as opposed to a descriptive, interpretive, or explanatory one), and generalizability (i.e., the extent to which a researcher can generalize the account of a particular situation, context, or population to other individuals, times, settings, or context). With respect to the latter, we discuss the concept of generalizability in qualitative research, delineating the following five major types of generalization identified by Onwuegbuzie, Slate, Leech, and Collins (2009): (a) external statistical generalization (i.e., inferences or predictions made on data extracted from a representative statistical sample to the *population* from which the sample was drawn), (b) internal statistical generalization (i.e., inferences or predictions made on data extracted from one or more representative or elite participants [e.g., key informants] to the *sample* from which the participant(s) was selected), (c) analytic generalization (i.e., inferences or predictions made on a particular set of findings stemming from one or more cases to some broader theory; Yin, 2009), (d) case-to-case transfer (i.e., inferences or predictions made from one case to another [similar] case; Firestone, 1993; Kennedy, 1979), and (e) naturalistic generalization (i.e., inferences or predictions are made by readers of the

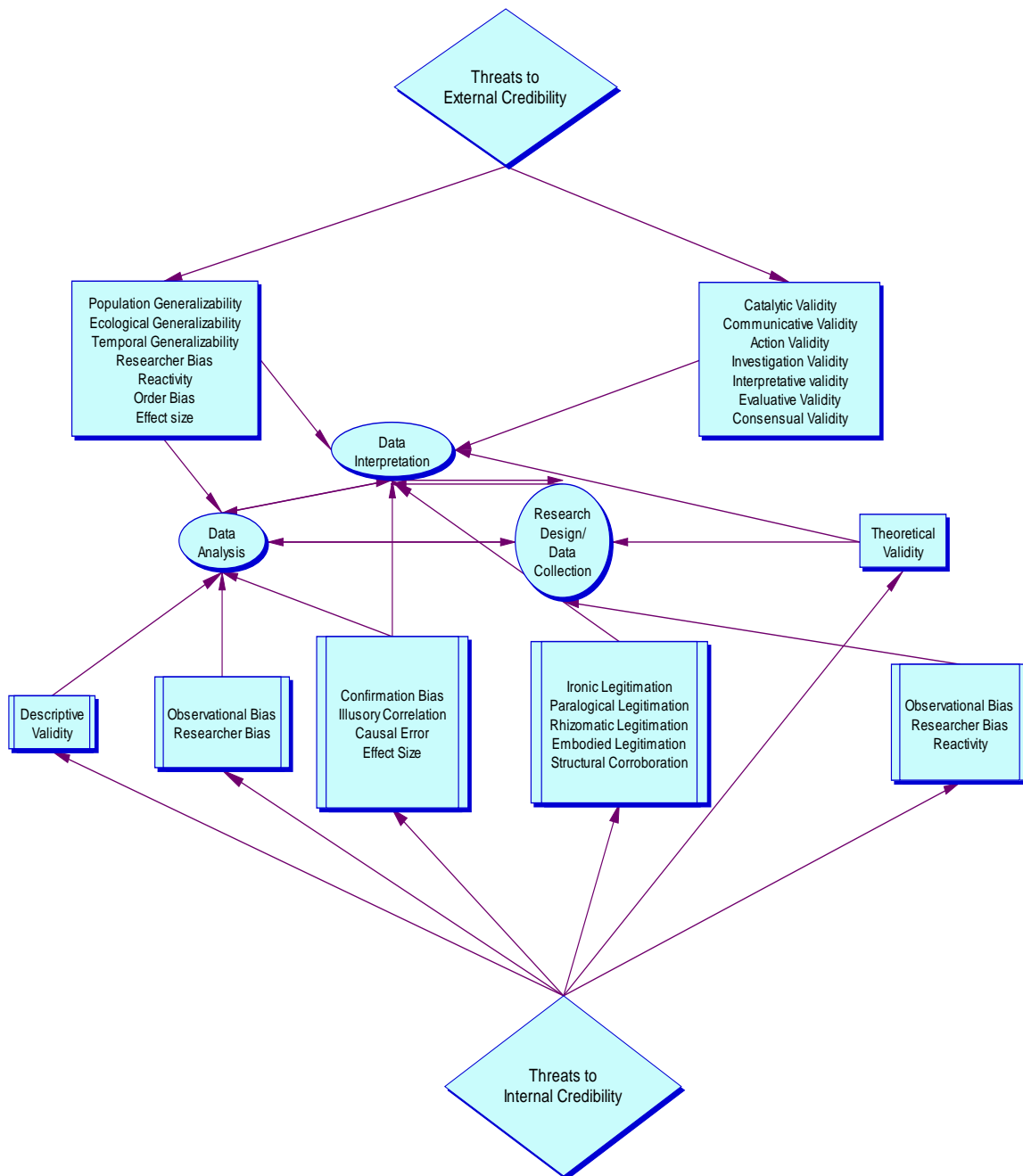
findings based, in part, upon their personal or vicarious experiences; Stake, 2005). Further, we discuss the appropriateness and inappropriateness of making generalizations in qualitative research using articles such as the following: Small (2009), Williams (2000), Payne and Williams (2005), and Onwuegbuzie and Leech (2010). Also, we present discussions of legitimation by the following authors: Creswell (2007), Glaser and Strauss (1967), Kvale (1995), Lather (1986, 1993), Lincoln and Guba (1985, 1990), Longino (1995), Maxwell (1992, 2005), Miles and Huberman (1994), Schwandt (2007), Strauss and Corbin (1998), and Wolcott (1990). In discussing legitimation, we outline the role that epistemology plays in the conceptualizations of these various standards and criteria.

In our course, the legitimation framework that we emphasize is Onwuegbuzie and Leech's (2007c) *Qualitative Legitimation Model*, which appears to represent the most comprehensive qualitative legitimation framework to date because it incorporates the legitimation types of many of the aforementioned authors. The Qualitative Legitimation Model contains 29 elements of legitimation for qualitative research at the following three recursive and interactive stages of the research process: research design/data collection, data analysis, and data interpretation. Onwuegbuzie and Leech classified each of the 29 threats either as a threat to internal credibility, i.e., "truth value, applicability, consistency, neutrality, dependability, and/or credibility of interpretations and conclusions within the underlying setting or group" (p. 234) or external credibility, i.e., "the degree that the findings of a study can be generalized across different populations of persons, settings, contexts, and times" (p. 235). This model is presented in Figure 3. As illustrated in Figure 3, the following threats to internal credibility are viewed as pertinent to qualitative research: ironic legitimation, paralogical legitimation, rhizomatic legitimation, voluptuous (i.e., embodied) legitimation, descriptive validity, structural corroboration, theoretical validity, observational bias, researcher bias, reactivity, confirmation bias, illusory correlation, causal error, and effect size. Also in this model, the following threats to external credibility were identified as being pertinent to qualitative research: catalytic validity, communicative validity, action validity, investigation validity, interpretive validity, evaluative validity, consensual validity, population generalizability, ecological generalizability, temporal generalizability, researcher bias, reactivity, order bias, and effect size. These threats to internal credibility and external credibility are positioned from their respective philosophical assumptions and stances.

Once validated/legitimated, these data then are interpreted (Step 11). Although conceptualized for mixed methods researchers, we present Tashakkori and Teddlie's (2006) integrative model of quality. This model comprises design quality (i.e., standards used for the evaluation of the methodological rigor of the study) and interpretive rigor (i.e., standards for evaluating the validity of conclusions). According to these authors, design quality contains the following four elements: (a) within-design consistency (i.e., "consistency of the procedures/design of study and from which the inference emerged"; p. 40); (b) design suitability (i.e., whether the methods used in the investigation are adequate for addressing the research question(s) and the design is consistent with the research question[s]); (c) design fidelity (i.e., whether the procedures employed are implemented with quality and rigor; the methods enhance the capture of meaning, associations, or effects; and the elements of the design, such as sampling and data

collection procedures, are implemented appropriately); and (d) analytic adequacy (i.e., whether the data analysis techniques are appropriate for addressing the research question[s]). The following four of Tashakkori and Teddlie’s five elements of interpretive rigor are relevant to qualitative research: (a) interpretive agreement (i.e., “consistency of interpretations across people”; p. 40); (b) interpretive distinctiveness (i.e., the “degree to which the inferences are distinctively different from other possible interpretations of the results and rival explanations are ruled out”; p. 40); (c) interpretive consistency (i.e., whether the inferences adequately stem from the results in terms of type, intensity, and scope; and the multiple inferences made on the basis of the findings are consistent with each other); and (d) theoretical consistency (i.e., whether the inferences are consistent with the extant theory and the state of knowledge in the field).

Figure 3. *Qualitative Legitimation Model*



Writing the research report (Step 12) is the last step in the research process of a *single* qualitative research study. Several classic works exist wherein writing qualitative research reports is viewed as a method of inquiry, which we use in our course (e.g., Richardson, 1990; Richardson & St. Pierre, 2005). We indicate to students that whereas research questions tend to be developed a priori in quantitative research studies, it is not unusual for research questions to be developed either a posteriori or iteratively in qualitative research studies. Thus, once the (initial) research report has been written (i.e., Step 12), the research question(s) continues to play an important role. Indeed, Step 12 leads to the research question(s) being reformulated (Step 13), which, in turn, might lead to a reformulation of the research goal (i.e., Step 1), research objective (i.e., Step 2), research rationale (i.e., Step 3), and/or research purpose (i.e., Step 4) in the current study or in subsequent studies. Alternatively, the research goal, research objective, and research purpose may stay intact, in which case, the reformulation of the research question directly leads to a reformulation of the sampling design (i.e., Step 6) and research design (i.e., Step 7). Thus, in the current inquiry or in subsequent studies, Steps 6-11 are repeated until all research goals, objectives, purposes, and questions are adequately addressed and the phenomenon of interest is understood. Discussion of Step 13 marks the end of the Conceptual/Theoretical Phase of the course.

### **Assessing Student Understanding of the Conceptual/Theoretical Phase**

To promote active learning, we ask our students to divide themselves into cooperative learning groups. For most weeks during the Conceptual/Theoretical Phase, at least one group is expected to present formally a selected part of the readings using PowerPoint slides to the remaining students in the class and the instructors. Our goal is for students to demonstrate the extent to which they have understood each week's readings. Following the student presentations, we provide feedback on the material presented by the students, clarify any misunderstandings that arise, and address any perceived gaps in their knowledge base relating to the Conceptual/Theoretical Phase.

### **Phase II: The Technical Phase**

In the Technical Phase, building on the frameworks of Leech and Onwuegbuzie (2008) and Onwuegbuzie, Leech, and Collins (2011), we describe the following 29 qualitative analysis techniques: constant comparison analysis, keywords-in-context, word count, classical content analysis, domain analysis, taxonomic analysis, componential analysis, conversation analysis, discourse analysis, critical discourse analysis, discursive psychology, historical discourse analysis, Foucauldian discourse analysis, secondary analysis, membership categorization analysis, narrative analysis, narrative genre analysis, qualitative comparative analysis, semiotics, manifest content analysis, latent content analysis, text mining, micro-interlocutor analysis, framework analysis, grounded visualization, interpretive phenomenological analysis, schema analysis, ethnographic decision models, and summative analysis. Moreover, we expand on Leech and Onwuegbuzie's framework for organizing these analysis techniques via four major sources of qualitative data collected: talk, observations, drawings/photographs/videos,

and documents. This conceptualization is presented in Table 1. A brief definition of each analysis type is provided in Table 2.

Table 1. *Relationship between Type of Qualitative Data Analysis Technique and Source of Qualitative Data*

Source of Data	Type of Qualitative Technique
Talk	Conversation Analysis Discourse Analysis Narrative Analysis Semiotics Qualitative Comparative Analysis Constant Comparison Analysis Keywords-in-Context Word Count Membership Categorization Analysis Domain Analysis Taxonomic Analysis Componential Analysis Classical Content Analysis Micro-interlocutor Analysis
Observations	Qualitative Comparative Analysis Constant Comparison Analysis Keywords-in-Context Word Count Domain Analysis Componential Analysis Taxonomic Analysis Manifest Content Analysis Latent Content Analysis
Drawings/Photographs/Video	Qualitative Comparative Analysis Constant Comparison Analysis Word Count Manifest Content Analysis Latent Content Analysis Secondary Data Analysis
Documents	Semiotics Qualitative Comparative Analysis Constant Comparison Analysis Keywords-in-Context Word Count Secondary Data Analysis Classical Content Analysis Text Mining

Source: This table was adapted from Leech and Onwuegbuzie (2008).



Table 2. *Most Common Qualitative Analyses*

Type of Analysis	Short Description of Analysis
Constant comparison analysis	Reducing data to codes systematically, then developing themes from the codes.
Classical content analysis	Counting the number of codes.
Word count	Counting the total number of words used or the number of times a particular word is used.
Keywords-in-context	Identifying keywords and utilizing the surrounding words to understand the underlying meaning of the keyword.
Domain analysis	Utilizing the relationships between symbols and referents to identify domains.
Taxonomic analysis	Creating a system of classification that inventories the domains into a flowchart or diagram to help the researcher understand the relationships among the domains.
Componential analysis	Using matrices and/or tables to discover the differences among the subcomponents of domains.
Conversation analysis	Studying naturally occurring talk by examining the structure and sequential patterns of (social) interaction.
Discourse analysis	Selecting one approach from a group of related approaches for studying language use and its role in social life, stemming from a variety of social science disciplines, including linguistics, philosophy, sociology, anthropology, education, social work, cognitive psychology, social psychology, international relations, human geography, each of which is subject to its own philosophical assumptions and stances, methodologies, and analytical approaches.
Critical discourse analysis	Studying theoretically the role of language as a form of social practice and focusing on the ways political and social domination are reproduced by talk and text.
Discursive psychology	Focusing, via a discourse analysis approach (based more on records of interaction than on interviews or texts), on how psychological issues become live in human practices, rendering practices—as opposed to individual cognition—at the center of the analysis.
Historical discourse analysis	Exposing history as a genre via a poststructuralist approach by viewing history as being discursively produced and as power-laden, subjective accounts.
Foucauldian discourse analysis	Focusing on issues of social critique, typically based on interviews data rather than text.
Secondary data analysis	Analyzing non-naturalistic data or artifacts that were derived from previous studies.
Membership categorization analysis/membership categorization device analysis	Describing the processes involved in a way that members of society use categories to organize and to understand the social world, attributing social identities to obtain social order, and utilizing the role that interpretations play in making descriptions and the consequences of selecting a particular category (e.g., baby, sister, brother, mother, father = family).
Semiotics	Using talk and text as systems of signs under the assumption that no meaning can be attached to a single term.
Manifest content analysis	Describing observed (i.e., manifest) aspects of communication via objective, systematic, and empirical means.
Latent content analysis	Uncovering underlying meaning of text.
Qualitative comparative	Analyzing systematically similarities and differences across cases,

analysis	typically being used as a theory-building approach, allowing the analyst to make connections among previously built categories, as well as to test and to develop the categories further.
Narrative analysis	Interpreting different kinds of texts (i.e., oral, written, visual) in storied form, using one of a family of analytic approaches that are case-centered, with cases being represented by individuals, selected groups, organizations, institutions, communities, nations, or the like.
Narrative genre analysis	Exploring narrative genre as social practices (i.e., natural and sociocultural ways of acting that produce and connect with social life); involving a coherent telling that comprises a beginning, middle, and end regarding a series of sequential events that build up to a complex action; and using linguistic and other semiotic techniques to illustrate the meaningfulness of these events and the impact they had on the teller (i.e., analyst).
Text mining	Analyzing naturally occurring <i>text</i> in order to discover and capture semantic information.
Micro-interlocutor analysis	Analyzing information stemming from one or more focus groups about which participant(s) responds to each question, the order that each participant responds, the characteristics of the response, the nonverbal communication used, and the like.
Framework analysis	Analyzing inductively to provide systematic and visible stages to the analysis process, allowing for the inclusion of a priori as well as a posteriori concepts, and <b>comprising</b> the following five key stages: (a) <b>familiarizing</b> , (b) identifying a thematic framework, (c) indexing, (d) charting, and (e) mapping and <b>interpreting</b> .
Grounded visualization	Examining spatially a combination of referenced data and ethnographic data, in close relationship to each other, and integrating geographic information systems-based cartographic representations with qualitative forms of analysis and evidence, thereby yielding an inductive and critically reflexive scale-sensitive analysis that combines grounded theory and visualization.
Interpretative phenomenological analysis	Analyzing in detail how one or more persons, in a given context, make sense of a given phenomenon—often representing experiences of personal significance (e.g., major life event).
Schema analysis	Searching for cultural schemata (i.e., scripts) in texts, which include identifying semantic relationships between elements of component schemas.
Ethnographic decision models	Building a model of the decision process for a behavior of interest, resulting in a display of data, via decision trees, decision tables, or sets of rules that take the form of <i>if-then</i> statements.
Summative analysis	Using a collaborative analytic technique that wherein a wide variety of analysts come together via group analysis sessions to explore the details of textual data, focusing on consensus-building activities to reveal major issues inherent in the data in an attempt to obtain an essentialized understanding of text.

Source: This table was adapted from Leech and Onwuegbuzie (2008).

In particular, we go into depth in describing the following nine qualitative analysis tools: constant comparison analysis, keywords-in-context, word count, classical content analysis, domain analysis, taxonomic analysis, componential analysis, discourse analysis, and cross-case analysis, as outlined by Leech and Onwuegbuzie (2007). As can be seen from the syllabus (cf. Appendix A), these nine qualitative analysis techniques are

taught over the course of several weeks. We delineate when to use each type of analysis. Using Leech and Onwuegbuzie's (2010) step-by-step guide, we demonstrate how to conduct each of these analyses using CAQDAS, namely, NVivo 9 (QSR International Pty Ltd., 2011) and QDA Miner 3.2 (Provalis Research, 2009). In-depth delineation of the selected nine qualitative data analysis techniques marks the end of the Technical Phase of the course.

### **Phase III: The Applied Phase**

In the third phase, the Applied Phase, students *apply* what they have learned in the previous two phases. Specifically, students apply what they have learned regarding the following four techniques: (a) how to collect data, (b) how to analyze data, (c) how to interpret data, and (d) how to write up qualitative research. These steps are sequential and are considered by many students as the most difficult phase of the research process.

#### **Data Collection**

##### **Observations**

With respect to data collection, students independently practice collecting observational data in the same naturalistic setting at the same moment in time. Specifically, on the first day of class, students are assigned to groups of four to six students either at random or purposively (e.g., maximum variation sampling). Each group then is asked to go to a social location of their choice (e.g., restaurant) and each member of the group is asked to observe independently the same setting for the same 30-minute block of time. As soon as possible afterwards—and before the next class meeting—each student is required to transcribe her or his field notes, as well as to conduct a thematic analysis of her or his transcribed data and, in turn, write a report. Students submit their transcriptions and thematic analyses to the instructors (e.g., via email, Blackboard Discussion Boards), who, in turn, distribute them to the other group members. During the next class session, students read the transcriptions and thematic analyses of all members of their group and then compare and contrast them. Group members are required to undertake a cross-case analysis of the individual transcripts and emergent themes within each group to arrive at emergent meta-themes and/or conduct a reciprocal translation (as opposed to arrive at generalizations) of the transcriptions—in the spirit of meta-ethnographies that “protect the particular, respect holism, and enable comparison” (Noblit & Hare, 1988, p. 28)—into a shared social understanding of what all the group members observed. During the subsequent class, a representative of each group, in turn, shares with all class members her or his group's interpretive synthesis of the transcriptions. This sharing always promotes great discussion in class. With this assignment, students are given a unique opportunity to compare and to contrast to see how their observations in the same time and space compare to the observations of the other students, as well as to compare and to contrast various ways that students document their observations, including the differing levels of attention to detail. We find this class activity to be an invaluable experience for students.

## Interviews

We help students experience how to conduct various types of interviews, including structured interviews, semi-structured interviews, and unstructured interviews. Also, we outline the concept of postmodern interviews wherein the interviewer and interviewee co-construct knowledge—more specifically, the interviewer and interviewee co-construct the meaning of experiences that the interviewee reveals (Fontana & Frey, 2005; Onwuegbuzie, Leech, & Collins, 2008). In particular, we discuss how to construct appropriate questions for each of these three interview formats (e.g., avoiding interview questions that begin with *why* because they might imply judgment on the part of the interviewer and thus have the potential to place the interviewee on the defensive; cf. Dana, Kelsay, Thomas, & Tippins, 1992), as well as how to determine an appropriate number of interview questions to ask in the time allotted for the interview. In addition, we illustrate to students how to conduct member checking interviews (cf. Lincoln & Guba, 1985). Also, we discuss issues involved in transcribing data and outline how to transcribe data using transcription conventions (cf. Schegloff, n.d.). Further, we provide students with an opportunity to engage in *mock* interviews, wherein students undertake interviews in class and these interviews are critiqued by their peers and the instructors. As noted by Onwuegbuzie, Leech, and Collins (2010),

...few qualitative researchers appear to incorporate substantive information about proxemic, kinesic, chronemic, and/or paralinguistic nonverbal communication into their qualitative reports (Onwuegbuzie, Collins, & Leech, 2008a). Perhaps, this common omission might stem from the fact that discussion of nonverbal communication occupies a very minimal role in standard qualitative research text books. For example, in the seminal latest edition of the *Handbook of Qualitative Research* (Denzin & Lincoln, 2005b), one of the leading textbooks used in qualitative research courses in the United States, of the 44 chapters contained that span 1,126 pages, only two short paragraphs of one page (i.e., p. 713) of one chapter (i.e., Chapter 27) deal explicitly with nonverbal communication. As another example, in Creswell's (2007) 393-page qualitative text book—another popular book—no explicit information is provided about non-verbal information. Moreover, even among textbooks that provide discussion on nonverbal communication, no explicit guidance is provided as to how to collect these data. Although the study of nonverbal communication has been taking place for several decades in fields such as linguistics and communication research, clearly there is a large void in qualitative research representing fields such as education. (p. 700)

As such, we provide students with a template for collecting nonverbal data during interviews, as conceptualized by Onwuegbuzie et al. (2008) and Onwuegbuzie et al. (2010). Also, we demonstrate how to discuss strategies for writing an IRB proposal for qualitative studies that involve interviewing. Students then form pairs and, in a private location within the building where the class is held, interview one another during class

time for 30 minutes, each using questions that they had previously co-constructed in class. After the interview, each student is required to transcribe verbatim the interview schedule of her or his dyad member before the next class meeting. The following week, after the interview data have been transcribed, students conduct member checks with their dyad members.

Further, students are introduced to the concept of debriefing the interviewer, wherein the interviewer is interviewed by another member of the class as a means of collecting debriefing data and leaving an audit trail (Onwuegbuzie et al., 2008). One or two weeks after conducting and transcribing the member checking interview responses, students form different (i.e., new) pairs and collect debriefing data from one another regarding their previous dyad-based interview experiences and reflections. One set of possible questions constructed by Onwuegbuzie et al. (2008) that the debriefer might ask the interviewer include those questions that tap the interviewer's background/experience; perceptions of the participant(s); perceptions of non-verbal communication; interpretations of interview findings; perceptions of how the study might have impacted the researcher; perceptions of how the researcher may have impacted the participant(s); awareness of ethical or political issues that might have arisen before, during, or after the interview(s); and identification of unexpected issues or dilemmas that emerged during the interview(s) (cf. Frels & Onwuegbuzie, in press).

Onwuegbuzie et al. (2008) also developed questions based on Guba and Lincoln's (1989) five authenticity criteria that stem directly from naturalistic/constructivist assumptions: fairness (i.e., relates to the thoughts, perceptions, feelings, concerns, assertions, concerns, and experiences of all stakeholders being represented in the text), ontological authenticity (i.e., the extent to which the constructions of the research participants have evolved in a meaningful way as a result of participation in the study), educative authenticity (i.e., the extent to which the individual research participants' "understanding of and appreciation for [but not necessarily agreement of] the constructions of *others* outside their stakeholding group are enhanced"; Guba & Lincoln, 1989, p. 248, italics in original), catalytic authenticity (i.e., the extent to which the new constructions and appreciations of the position of others that have evolved during the course of the study lead to some action(s) taken or decision(s) made by the participants), and tactical authenticity (i.e., the extent to which participants and stakeholders are empowered to act on the increased understanding that emerged as a result of the study).

Students decide beforehand how many and which questions to ask during the debriefing interview. All debriefers then ask the same set of questions. The debriefing data are transcribed and added to the interview data and member checking data for subsequent combined analysis. We believe that the debriefing interview has logical appeal because it promotes a reflexive approach to interviewing. Further, we believe that interviewing (i.e., debriefing) the interviewer (i.e., researcher) has great potential for transforming the interview process in qualitative research studies into what Holstein and Gubrium's (1995) call active interviews, whereby interviews represent active meaning-making endeavors.

## Focus Group Interviews

Additionally, we teach students how to conduct focus group interviews. Using the frameworks of Onwuegbuzie, Dickinson, Leech, and Zoran (2009, 2010), we provide templates for collecting information about which participant responds to each question, the order that each participant responds, the characteristics of the response, the nonverbal communication used, the interaction patterns (e.g., argumentative interactions), the degree of consensus and dissent, and the characteristics of dissenters.

With respect to non-verbal data, we show students how the moderator and/or assistant moderator can collect non-verbal data that include proxemic, chronemic, kinesic, and paralinguistic information using transcription conventions. Also, as outlined by Onwuegbuzie, Dickinson, et al. (2009, 2010), we provide students with an array of ideas for monitoring and reporting the response patterns of sub-groups of interest (e.g., gender, age, ethnicity) across each of the focus group questions or across multiple questions. We give students the opportunity to apply what they learn by breaking into groups of six to nine (Krueger, 2000) or six to ten participants (Langford, Schoenfeld, & Izzo, 2002; Morgan, 1997)—depending on the size of the class—and conducting a series of focus group interviews, with one student serving as moderator and one student serving as assistant moderator in each focus group. Members of each focus group respond to the same set of co-constructed questions, observed by the other students in the class, who then discuss and critique each others' focus group.

## Data Analysis and Data Interpretation

### Qualitative Notebook

With respect to data analysis and data interpretation, students are assigned a series of what the instructors call *qualitative notebooks*, in which students use NVivo 9, QDA Miner 3.2, or another CAQDAS to analyze the interview, member checking, and debriefing data using nine qualitative analytic techniques that are combined within the same analytic framework to yield six write-ups or qualitative notebooks: (a) word count/keywords-in-context; (b) classical content analysis; (c) method of constant comparison; (d) ethnographic analysis (i.e., domain analysis, taxonomic analysis, componential analysis); (e) discourse analysis; and (f) cross-case displays: exploring and describing/ordering and explaining. (The ordering here represents the order that these qualitative notebook assignments are given. However, a different ordering can be used.) Each of these analyses is written up formally in separate reports (i.e., *qualitative notebooks*) over the last several weeks of the course using APA's (2010) style guide. Specifically, each qualitative notebook write-up contains the Method, Results, Discussion, and References sections of a research report, as well as tables, figures, and appendices (e.g., transcripts of the interviews and debriefing interviews, CAQDAS reports).

A rubric, developed by Onwuegbuzie (2009), is used to score each qualitative notebook assignment. This rubric contains two parts. The first part consists of a 5-point Likert-format scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree) that was designed to provide a score for the content of the qualitative

notebook. This rubric contains 158 items that evaluate all components of the qualitative notebook (i.e., method, results, discussion, reference list, appendices) such that scores range from 158 to 790. Samples items are presented in Table 3.

Table 3. *Sample Items from Content Section of Scoring Checklist for Qualitative Data Analysis Notebook*

Sample Item	Item #	Section (Subsection)
“The sample size is consistent with the type of generalization suggested by the title, purpose statement, and research question”	14	Method (Participants)
“The relationship of the researcher to the participants (e.g., participant observer, non-participant observer, collaborator) are fully described”	17	Method (Participants)
“Type of interview is specified (e.g., unstructured, partially structured, semi-structured, totally structured)”	34	Method (Instruments)
“The type of observation is specified using Fontana and Frey’s (2005) categorization (i.e., kinesic, proxemic, chronemic, paralinguistic)”	44	Method (Instruments)
“The philosophical correlates of the research paradigm are specified clearly (e.g., hermeneutics, post-positivist, post-structuralist, post-modernist, constructivist, feminist, idealist)”	55	Method (Procedure)
“If a case study design is used, the type of case study (i.e., instrumental, intrinsic, collective/multiple; Stake, 2005; Yin, 2003) is identified and described clearly”	59	Method (Procedure)
“The discussion of threats to verification/trustworthiness/legitimation/authenticity/credibility/transferability/dependability/confirmability of data is adequately undertaken using a framework (e.g., Creswell, 2007; Guba & Lincoln, 1989; Kvale, 1995; Lather, 1986, 1993; Lincoln, 1995; Lincoln & Guba, 1985; Maxwell, 1992, 2005; Miles & Huberman, 1994)”	78	Method (Legitimation)
“It is specified where the responsibility or authority for the creation of categories resided—that is the loci of origination is described adequately (i.e., participants, programs, investigative, literature, or interpretive; Constat, 1992)”	87	Method (Analysis)
“All qualitative software are specified (e.g., NVivo, QDA Miner, Atlas ti)”	94	Method (Analysis)
“Appropriate evidence is used (e.g., quotations) to represent each theme”	101	Results
“Where appropriate, themes are connected and interrelated”	104	Results
“Personal reflections of the researcher about the meaning of the data are delineated clearly”	129	Discussion
“Theoretical and practical implications of the findings are discussed adequately”	133	Discussion
“All citations provided in the text are contained in the reference list”	143	References
“The names of all authors provided in the text are consistent with the names presented in the reference list”	145	References

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“The appendix section contains samples of any researcher-made instruments”	151	Appendix
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The second part of the rubric, also comprising a 5-point Likert-format scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree), assesses the extent to which the qualitative notebook does not contain grammatical and typographical errors and follows the guidelines of the *Publication Manual* of the APA (2010). This rubric contains 70 items, and the total scores range from 70 to 350. Samples items are presented in Table 4. Scores from both rubrics are converted into percentages. From these percentages, a final score is derived using the following weighting scheme: 60% for the content rubric and 40% for the writing style rubric. Thus, each qualitative notebook receives a score on a 100-point scale. The tracking feature of the Word processing software program also is used to edit the student’s qualitative notebook word by word and line by line. Also, we use the Comment feature of the Word processing software program to provide detailed feedback. Scoring each qualitative notebook assignment via these rubrics takes between two and three hours per qualitative research report. However, instructors who are unable to devote this amount of time on grading qualitative research reports can use an abbreviated form of this rubric. For the full rubric, see Frels, Sharma, Onwuegbuzie, Leech, & Stark, 2011).

Table 4: *Sample Items from Quality of Writing and Adherence to APA Style Section of Scoring Checklist for Qualitative Data Analysis Notebook*

Sample Item	Item #	Section (Subsection)
“This section of the report contains all the salient information”	1	Results
“No inappropriate information is presented in this section of the proposal (including repetitive information)”	2	Results
“This section of the proposal is informative”	3	Results
“This section of the report is entirely accurate”	4	Results
“This section of the report does not contain any contradictions”	5	Results
“This section of the report is comprehensive”	6	Results
“This section of the proposal is written in strict adherence to APA guidelines (including margins)”	7	Results
“This section of the report is clearly written throughout”	8	Results
“The writing in this section of the report is of high quality (e.g., grammar, punctuation)”	9	Results

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Students use the rubric and the accompanying detailed feedback to help guide their subsequent write-ups. Indeed, we have documented that for virtually all students, the quality of the write-ups increases as students write more qualitative notebook reports,



until they reach maximum quality. Whereas most students can reach maximum quality by the second or third notebook report, some students take longer. Examples of these notebooks are presented in Appendices B and C.

## **Qualitative Study**

In addition to writing a series of qualitative notebook reports, we require that students form cooperative learning groups comprising four to six members, and, at the end of the course, each group submits a complete journal-ready qualitative research report using real data collected by the students during the course. We require that students obtain IRB approval to conduct their studies. Our goal is to allow students to practice conducting reviews of the literature; designing qualitative studies; seeking IRB approval; and collecting, analyzing, and interpreting real data using qualitative data-analytic techniques. Indeed, the ensuing research report should contain all the major elements of a research study. We expect students to use one or more of the qualitative data analysis techniques learned in the class to analyze the data, using NVivo 9, QDA Miner 3.2, or another CAQDAS to facilitate the analyses. Also, we require that representatives from each group present their research studies formally to the whole class on the last day of the course (i.e., oral presentation and poster presentation). In many instances, faculty members are invited to attend these presentations. Submission of the qualitative research papers and the oral and poster presentations of these studies marks the end of the Applied Phase of the course.

## **Reflexivity**

We encourage students to reflect on all aspects of the qualitative research course, including the biases they bring to the course, their personal investment in and commitment to the course, and so forth. To promote such reflexivity, as noted previously, we require that each student maintain a reflexive journal (Cunliffe, 2004). We ask students to update their journals on at least a weekly basis. Although we expect to give all students the maximum number of points given for this assignment, we make it clear to students that their reflexive journal must demonstrate depth of thoroughness of experiences, thoughts, reflections, and introspections, as well as personal and professional growth and application. Students submit their reflexive journals on the last day of the course.

Interestingly, as has been the case for researchers (see, for e.g., Onwuegbuzie, 1997), we have noted that the use of reflexive journals in our qualitative research courses provides us with rich sources of data that not only help us understand the perceptions and experiences of students at different points in the course, but also help us to make meaningful and evidence-based adjustments to our subsequent qualitative research courses.

### **Phase IV: Emergent Scholar Phase**

After the course ends, we encourage students to present their qualitative inquiries at a professional meeting and, hopefully, submit their manuscripts to a journal to be reviewed for possible publication. To facilitate this process, we make ourselves available to students to provide advice, guidance, mentorship, and even co-authorship. Indeed, the present article, which we have co-authored with some of our students who recently took our class, provides compelling evidence of our commitment to helping students successfully negotiate the path to becoming emergent scholars. To date, many of our students have presented their qualitative research at state, regional, and national conferences (e.g., American Educational Research Association [AERA]) (see, for e.g., Ban et al., 2005).

As part of helping students along the path of being emergent scholars, we invite students who have taken our qualitative research course to team-teach this course with us in subsequent semesters. Over the years, several students have accepted this offer. Interviews conducted with these students have revealed that although they were initially very nervous about teaching students—some of whom were only a few months behind them in their doctoral programs—every one of them found it to be an extremely worthwhile experience. In fact, we have observed tremendous growth in our student team-teachers with respect to their levels of confidence as qualitative researchers. We have also observed that all of these students subsequently have produced dissertations of the highest quality, with many of them ending up being nominated for dissertation awards. As qualitative research instructors, we believe that *we* have grown by asking students to team-teach this course with us.

### **Summary of Assessment Techniques**

As can be seen, in our course, we use multiple forms of assessment. These assessment methods can be classified as representing two innovative methods of assessments, namely: performance assessment and authentic assessment. Performance assessment involves providing students with tasks, projects, assignments, or investigations, and then formally evaluating the products that emerge in order to determine what students have learned and the extent to which they can apply this knowledge (Hutchinson, 1995; Onwuegbuzie & Leech, 2003; Stenmark, 1991). More specifically, performance assessment tasks should involve important, meaningful, interesting, and stimulating performances that are linked to desired real-life student outcomes (Fuchs, 1995; Wiggins, 1989; Worthen, 1993). As noted by Baron (1990), performance assessment involves merging content with process and major concepts with specific problems. According to Elliot (1995), when performance assessments are used, instructors can improve students' levels of performance by undertaking the following: (a) selecting assessment tasks that are explicitly aligned with and connected to the material being taught; (b) delineating clearly the scoring criteria for the assessment task to students prior to their attempting the task; (c) providing students with explicit statements of standards and/or various exemplars of acceptable performance prior to students attempt a task; (d) encouraging students to undertake self-assessments of their performances; and (e) interpreting students' performances by comparing them to the

performances of other students, as well as to standards that are developmentally appropriate.

In contrast, authentic assessments represent a method of collecting information regarding students' learning and understanding in contexts that reflect real-life, everyday situations, and that challenge students to apply what they have learned in their courses in authentic settings (Archbald & Newmann, 1988). Most importantly, this form of assessment provides students with information about where they are in relation to where they need to be (Lankard, 1996). More specifically, according to Wiggins (1990), authentic assessments help students to be effective performers with acquired knowledge.

Authentic assessments and performance assessments provide a basis for instructors to evaluate both the effectiveness of the process (i.e., the procedure used) and the product resulting from the performance of a task (e.g., a completed report). As noted by Onwuegbuzie and Leech (2003), "Whereas in-class examinations typically measure factual knowledge, in performance and authentic assessments, there is often no single correct or even best solution. Rather, there may be several viable performances and solutions" (p. 122). In our course, the lectures conducted by the students provided a forum for performance assessment, whereas the qualitative notebook, qualitative research articles, oral presentation, and poster presentation provided an avenue for authentic assessment.

## Conclusion

In this article, we have outlined an exemplar for teaching and learning qualitative research. We believe that our qualitative course has logical appeal because students who take it are introduced to some of the latest thinking regarding conceptual, theoretical, technical, and applied aspects of qualitative research. Also, in this class, we provide students with a framework of how to conduct rigorous qualitative research. Further, the writing of reflexive journals promotes a reflexive approach to conducting qualitative research.

Our rationale for developing the four-phase course described in this article is based upon our belief that teaching students how to write-up their qualitative methodology, findings, and interpretations has significant potential for helping students become lifelong qualitative researchers. Moreover, we believe that our emphasis on developing students' abilities to write-up qualitative research will help students see that writing represents a method of inquiry (Richardson & St. Pierre, 2005)—going far beyond being a passive or reactive process—that is, writing represents an active meaning-making endeavor. As stated by Elizabeth Adams St. Pierre, "writing is thinking, writing is analysis, writing is indeed a seductive and tangled *method* of discovery" ([emphasis in original]; Richardson & St. Pierre, 2005, p. 967). Simply put, writing is an interactive, iterative, and dynamic method of data collection, data analysis, and data interpretation.

Our concept of allowing students to take an active part in the course by providing lecture of the readings, deciding where to conduct formal observations, developing the interview and focus-group questions, and designing their own qualitative research studies promotes the idea that learning not only is co-constructed and negotiated by the teacher and student, but also reflects a collaboration between both parties. Moreover, we believe

that our approach can help the student complete the hermeneutic circle of understanding. Our framework thus transforms the instruction of qualitative research into what we call a *methodology of learning-sharing*.

In advancing our framework for teaching and learning how to conduct qualitative research, we are providing an alternative epistemological exemplar for the teaching and learning qualitative research that attempts to demystify the qualitative research process and yield qualitative reports that are both warranted and transparent—the two overarching principles of the Standards for Reporting on Empirical Social Science Research in AERA Publications (AERA, 2006), developed by the Task Force on Reporting of Research Methods in AERA Publications and adopted by the AERA Council in 2006.

We recognize that our framework for teaching and learning qualitative research might appear daunting to a beginning instructor of qualitative research. Yet, we believe that this concern is offset by the fact that our framework encourages students to take the path to becoming lifelong qualitative researchers. We are aware that our framework brings to the fore its own set of methodological and analytical guidelines, principles, and stances. Notwithstanding, at the very least, we hope that the exemplar presented heretofore provides some ideas for qualitative research instructors—both beginning and experienced alike. If a reader finds only one idea that we presented useful for his/her qualitative research class, then we will have fulfilled at least part of our goal in writing this article.

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## Appendix A

### Qualitative Course Schedule

Class	Topics	Assignments
<b>Theme 1: Overview of Course; Set up Research Teams</b>		
	1. Class Interview Activity: organize into pairs, draft interview questions 2. Group into research teams 3. In-Class Exercise: Group Observations 4. Lecture: Discuss Qualitative Research Questions	1. Write classroom observations 2. Read
<b>Theme 2: Overview of Qualitative Research Process</b>		
	1. In-Class Exercise: Qualitative analysis of observations of all group members 2. Develop research question(s) for each research team & begin planning research design for each research team 3. Lecture: Qualitative Research Process	1. Develop a qualitative-based research question(s) for groups 2. Write qualitative analysis of group observations
<b>Theme 3: Overview of Qualitative Research Designs</b>		
	1. Lecture: Qualitative Research Designs (Case Study, Grounded Theory, Critical Ethnography)  2. Small groups research planning	1. Begin to prepare application to Institutional Review Board (IRB) 2. Read Text 1 (Gee, 2005): Chapters (Ch) 1, 2, 4 Text 2 (Miles & Huberman): Ch 1, 2; Text 3 (Spradley): Ch 1, 2, 3, 4 Kilbourn, B. (2006). The qualitative doctoral dissertation proposal. <i>Teachers College Record</i> , 108, 529-576. 3. Bring Audio-tape recorders, next class
<b>Theme 4: Introduction to Ethnographic and Discourse Analysis</b>		
	1. Lecture: Interviewing 2. Discuss Kilbourn's (2006) article on Qualitative Dissertation Proposals 3. Class Activity: Pairwise 30-minute Interviews (need audio-recorders) 4. Small group lectures: Text 1: Ch 1, 2, 4; Text 2: Ch 1, 2; Text 3: Ch 1, 2, 3, 4	1. Read Text 2: Ch 3, 4; Text 3: Ch 5, 7, 9 2. Prepare application to Institutional Review Board (IRB) 3. Transcribe 30-minute Interviews
<b>Theme 5: Sampling and Collecting Data in Qualitative Research</b>		
	1. Lectures: Sampling, Collecting Data, Interviewing the Interviewer, Analyzing Interview Data 2. In-Class Exercise: Collecting non-verbal data during interviews 3. Class Activity: 10-minute pairwise member checking of interview transcripts 4. Class Activity: 20-minute pairwise interviewing the interviewer	1. Read Text 2: Ch 10, 12; Text 3: Ch 12
<b>Theme 6: Legitimation and Writing Qualitative Reports</b>		
	1. Lecture: Writing up Results, Legitimation	1. Read Text 2: Ch 10, 11
<b>Theme 7: Word Count/Keywords-in-Context</b>		
	1. Lecture: Text 2 Ch 10, 11 2. NVivo 8 Software Overview 3. Lecture: Qualitative Data Analysis	1. Qualitative Notebook 1: Word Count/Keywords-in-Context
<b>Theme 8: Classical Content Analysis</b>		
	1. Discuss: Carley, K. (1993). Coding choices for textual analysis: A comparison of content analysis and map analysis. In P. Marsden (Ed.), <i>Sociological methodology</i> (pp. 75-126). Oxford: Blackwell.	1. Qualitative Notebook 2: Classical Content Analysis

	2. Lecture: Qualitative Data Analysis	
<b>Theme 9: Method of Constant Comparison</b>		
	1. Lecture, Strauss, A., & Corbin, J. (1998). <i>Basics of qualitative research: Techniques and procedures for developing grounded theory</i> . Thousand Oaks, CA: Sage. Analytic Tools, Open Coding, Axial Coding, Selective Coding 2. Lecture: Qualitative Data Analysis	1. Qualitative Notebook 3: Method of Constant Comparison 2. Read Text 3: Ch 6, 8, 10
<b>Theme 10: Ethnographic Analysis</b>		
	1. Lecture: Domain Analysis, Taxonomic Analysis, Componential Analysis	1. Read Text 1, Ch 6-11 2. Qualitative Notebook 4: Ethnographic Analysis (i.e., Domain Analysis, Taxonomic Analysis, Componential Analysis)
<b>Theme 11: Discourse Analysis</b>		
	1. Lecture Discourse Analysis, Text 1, Ch 6-11	1. Read Text 2: Ch 5, 6, 7, 8, 9 2. Qualitative Notebook 5: Discourse Analysis
<b>Theme 12: Within-Case and Cross-Case Analysis</b>		
	1. Lecture Within-Case and Cross-Case displays, Text 2	1. Prepare Group Research Article 2. Read Onwuegbuzie, A. J., Dickinson, W. B., & Leech, N. L. (2007, February). <i>Toward more rigor in focus group research: A new framework for collecting and analyzing focus group data</i> . Paper presented at the annual meeting of the Southwest Educational Research Association, San Antonio, TX.
<b>Theme 13: Focus Group Research</b>		
	1. Lecture: Focus Group Research 2. In-Class Exercise: Focus Group 3. Group Work: Prepare Group Research Article	1. Qualitative Notebook 6: Cross-Case Displays: Exploring and Describing/Ordering and Explaining 2. Complete Group Research Article 3. Prepare Cooperative Learning Oral Presentation 4. Prepare Cooperative Learning Poster Presentation
<b>Theme 14: Final Presentations</b>		
	Last Class Presentations Cooperative Learning Oral Presentation Cooperative Learning Poster Presentation	1. Qualitative Notebook 6: Cross-Case Displays: Exploring and Describing/Ordering and Explaining 2. Group Research Article 3. Group Poster 4. Reflexive Journal

## EVALUATION GUIDELINES

The final course total comprises six components. Each is described below.

1. Each student will maintain a qualitative notebook that will be handed on a weekly basis. In total, the following six qualitative notebooks will be assigned: (1) Word Count/Keywords-in-Context; (2) Classical Content Analysis; (3) Method of Constant Comparison; (4) Ethnographic Analysis (i.e., Domain Analysis, Taxonomic Analysis, Componential Analysis); (5) Discourse Analysis; and (6) Cross-Case Displays: Exploring and Describing/Ordering and Explaining. Each qualitative notebook, which must be of the highest quality, also should contain a cover page and running head. Please note that your writing style (e.g., grammar, punctuation, clarity, and application of APA criteria) also will be assessed. **Please note that one point will be deducted for every missing, incomplete, or inconsistent reference. A missing assignment will not only be assigned a value of 0, but an additional 5 points will be deducted from the total value of the qualitative notebook.** Each qualitative notebook assignment is worth 25 points. For every qualitative notebook report, evidence must be provided (i.e., NVivo 8 printout in the appendix) that a qualitative computer software program was used to help analyze the data.

You are expected to complete 100% of your assignments by yourself. Do NOT copy the works of other students in the course. You are also expected to modify the wording provided to you in any sample write-ups. Students are reminded that plagiarism (**including copying work from another student, present or former, or copying any sample write-ups**) is strictly prohibited. Students against whom evidence of plagiarism is found automatically will fail the course and may have further action taken against them. **THERE WILL BE NO EXCEPTION TO THIS RULE.**

2. Each student will be assigned to a cooperative learning group comprising 4-6 students. Onwuegbuzie, Collins, and Elbedour (2003) found that groups containing six students, on average, produced the best group products in research methods courses and thus attained the highest scores—scoring between 8 and 12 points higher than did groups containing two, three, four, or five students [cf. Onwuegbuzie et al. (2003). Aptitude by treatment interactions and Matthew effects in graduate-level cooperative learning groups. *The Journal of Educational Research*, 96, 217-230.] Each group will submit a complete qualitative research report using real data collected by the students during the course. Each research report is worth 100 points. The goal is to allow students to practice conducting reviews of the literature, and collecting, analyzing, and interpreting real data using qualitative data-analytic techniques. That is, the research report should contain all the major elements of a research study. Each group is expected to use NVivo 8 or another computer-assisted qualitative data analysis software to analyze the data. The research article, which must be of the highest quality, also should contain a cover page and running head. Please note that your writing style (e.g., grammar, punctuation, clarity, and application of APA criteria) also will be assessed. The research report should contain at least *20 complete and consistent references*. **The main body (i.e., including the cover/title page, but not including reference pages, tables, figures, and appendices)**

**must not exceed 25 pages using 12-point font, 1-inch margins all around, and double spaces throughout. That is, the reference list page should not begin any later than on page 26. Please note that one point will be deducted for every missing, incomplete, or inconsistent reference.** It is expected that, upon completion of the research report, students will be familiar with EVERY aspect of the qualitative research process. As such, the research project will play a major role in *demystifying the research process*. A scoring rubric will be used. For each individual, his/her group score will be weighted by the participation score, such that if he/she receives 100% of the participation points available, his/her individual score will be exactly equivalent to the group score. If the student receives 90% of the participation points available, his/her individual score will be worth 90% of the group score, and so on. *This journal-ready research report should be completely written in APA style and ready to be submitted to a refereed journal.* Thus, you should check, if you are not certain, to verify all the parts that must be included in a journal-ready research report. Your submission must include all of these parts. *Missing parts and APA errors will result in substantial reductions in the grade you receive.*

3. Each group will conduct a 15-minute professional presentation of its qualitative research report. The goal is to give students an opportunity cooperatively to present their qualitative research studies in a formal setting. The presentation is worth 50 points. Detailed feedback will be given, utilizing a scoring rubric. For each individual, his/her group score will be weighted by the participation score, such that if he/she receives 100% of the participation points available, his/her individual score will be exactly equivalent to the group score. If the student receives 90% of the participation points available, his/her individual score will be worth 90% of the group score, and so on. The presentation must be scholarly and professional in nature. Points will be deducted from the presentation and course grade of every individual contained in a group that provides a presentation that represents a sufficiently lower quality than expected.

4. Each group will submit a poster presentation of its qualitative research report. The goal is to give students an opportunity cooperatively to present their qualitative research studies using a visual format. The presentation is worth 50 points. Detailed feedback will be given, utilizing a scoring rubric. For each individual, his/her group score will be weighted by the participation score, such that if he/she receives 100% of the participation points available, his/her individual score will be exactly equivalent to the group score. If the student receives 90% of the participation points available, his/her individual score will be worth 90% of the group score, and so on. The presentation must be scholarly and professional in nature. Points will be deducted from the presentation and course grade of every individual contained in a group that provides a presentation that represents a sufficiently lower quality than expected.

5. The students will divide themselves into three cooperative learning groups. For most weeks, at least one group will present formally a selected part of the readings using PowerPoint slides to the remaining students in the class and instructors. The group presentations are worth a total of 100 points. The goal is for students to demonstrate the

extent to which they have understood each week's readings. Following the student presentations, the instructors will provide feedback on the material presented by the presenting students. For each individual, his/her group score will be weighted by the participation score, such that if he/she receives 100% of the participation points available, his/her individual score will be exactly equivalent to the group score. If the student receives 90% of the participation points available, his/her individual score will be worth 90% of the group score, and so on.

6. Each student will maintain a reflexive journal. This journal labeled, "Qualitative Research Reflections," should be updated on at least a weekly basis. This journal must demonstrate depth of thoroughness of experiences, thoughts, reflections, and introspections, as well as personal and professional growth and application. These journals, which must be typed (e.g., Word document), are worth 50 points and must be typed in an APA-compliant manner. *The evaluation of your journal will be based upon the quality and quantity of your reflections.* As you are doctoral students, expectations for this reflexive journal are high. All information will be kept confidential.



## **Appendix B**

### **Sample Qualitative Notebook Report 1**

The Wellness of a Doctoral Student: A Case Study

## The Wellness of a Doctoral Student: A Case Study

Students in doctoral programs encounter challenges that include the rigor of studies and the uncertainty of coursework as they follow the path to completing a dissertation (Witte & James, 1998). Students may leave a doctoral program because of difficult educational and personal challenges (Jeavons, 1993). This particular study outlined how wellness helps one doctoral student manage the personal challenges that accompany the journey.

### Method

#### Participant

This study utilized information gathered from a single participant. The use of a single participant was sufficient for addressing the research questions: (a) What are some activities that contribute to wellness for one student in the course of a doctoral program? and (b) How does one doctoral student care for himself or herself while undertaking doctoral studies? A single participant also allowed the researcher to use a key informant to gather responses (Onwuegbuzie & Leech, 2007b). Further, the participant was a doctoral student in the counseling education department at a Tier-III university in southeast Texas (*U. S. News and World Report*, 2008). Moreover, the university population consisted of 15,000 undergraduate and graduate students (*U. S. News and World Report*). The counseling education doctoral program is in the process of seeking accreditation from the Council for Accreditation of Counseling and Related Educational Programs (CACREP).

A convenience sampling scheme was utilized (Onwuegbuzie & Collins, 2007), and each student enrolled in the course selected one individual from the class to interview based upon personal preference or proximity in class. A single interview was conducted between the participant and the primary researcher at a high school in southeast Texas, and the interview took place in the teachers' lounge at the high school at 8:00 PM on February 14th, 2008. The setting of the interview was informal and lasted approximately 25 minutes. As the participant was asked a question, the participant was given time to respond, and then was presented with another question until all the questions were answered. Characteristics of the sample included the criteria that each participant was a member of the doctoral cohort, or a participant in the class, and was willing to share his or her ideas pertaining to the research questions regarding doctoral wellness. Because each student was conversely a researcher, a naturalistic approach, as defined by Angrosino (2005), recognized that no pure, objective, or detached observation was possible and the researcher presence could not be erased.

The participant in this particular study was a first- year, single, White male, doctoral student in his late twenties. For the purpose of this study, the participant will be referenced as the alias Tom. The relationship was informal between Tom and the researcher due to the close nature of the cohort. As a member of the class and the study, the role of the researcher was somewhat collaborative in nature because many of the experiences and attitudes shared by Tom had been discussed with the researcher prior to this study. Ethical considerations were observed during the study and the content from the interview remained confidential, outside the boundaries of the two supervising professors. This limitation of confidentiality was made known to Tom prior to the interview.

#### Instruments

A single, one-time interview was selected as the means to acquire the unique perspective of the participant in this case study. Creswell (2005) defined a qualitative interview as an exchange between a researcher and one or more participants, whereas the researcher asks general and open-ended questions and transcribes the data for analysis. The interview in this study was conducted one-on-one, and was partially structured, whereas probing questions and side conversations flowed in and out of the interview. As the research took place through the exchange of language, the relationship between the participant and the researcher was the foremost instrument for collecting information, eliciting purpose, and directing discovery (Spradley, 1979). The researcher utilized the role of observer-researcher-interviewer, as experience with interviewing and interpreting non-verbal behavior was extensive and an integral part of the researcher's identity as a counselor.

Spradley (1979) suggested that language, specifically different languages, can create and express different realities. The instrument of interview questions was co-constructed two weeks in advance of the interview by the participants in the class for the purposes of collecting the data in this study. The questions were basic descriptive questions, described by Spradley as questions that facilitate the acquisition of an informant's language and embrace a unique reality. Furthermore, the questions were purposefully created by the participants-observers in the class to gain insight into the ways doctoral students care for themselves. An *a priori* technique of writing the questions provided the participant time to prepare thoughtful answers and provided focus for the interview. The concept of truth-space (Onwuegbuzie, 2003a) was utilized whereas the sample of words collected through the interview remained true and directly related to the intent and focus of the research questions. The setting for the interview was a private corridor outside the regular classroom, and the interview was recorded by an Optimus hand-held recorder and lasted approximately 20 minutes. Because the intent of the research was to determine wellness for a doctoral student, interview questions were presented as follows: The following six questions in the instrument were designed to relay the experience of the participant: (a) Aside from pursuing a doctorate what are some of your life goals? (b) How do your professional skills help you in your personal life? (c) What does your life look like when things are going well? (d) What does your life look like when things are not going well? (e) When things are not going well, how do you pick yourself up? and (f) How do you take care of yourself?

Probing questions were used, and in keeping with the core of qualitative research, maintained the simultaneous creativity and "dance" to accommodate the unpredictability of human nature (Janesick 1994). During the informally structured interview, particular probing questions were utilized such as "tell me more about how you nurture that balance?" An observation protocol was included and notations were recorded in a notebook throughout the interview and reflected the interviewer's interpretations of non-verbal information such as scratching of the head, moving forward in body motion, tone, pitch, and the pace of exchange. The exchange of verbal and non-verbal nuances, as outlined by Fontana and Frey (2005) was categorized into four basic modes: (a) proxemic, the use of interpersonal space to communicate ideas, (b) chronemic, the way speech and silence is conveyed through conversation, (c) kinesic, the body movements or postures, and (d) paralinguistic, the variations in volume, pitch, and quality of voice. Each of these modes contributed to the overall tone of the interview. As addressed by Adler and Adler (1987), the researcher-observer model in this study was an *active member*, wherein the researcher was a member of the group participating in the study. The researcher as an active member-observer, did not participate in constructing the values or goals of the participant.

At the conclusion of the interview, the tape and the field notes of the interview were transported from the location to be transcribed and were later presented back to the participant for two member-checks. The process of member-checking, as explained by Creswell (2005), involved the active process of asking Tom if the description of the interview was complete and realistic and if the themes were accurate and the interpretations were fair.

## Procedure

The objective of this study was to co-create and co-participate in a qualitative research experience that focused on the wellness of selected doctoral students. Qualitative research has been described as rich in multiple meanings (Onwuegbuzie & Leech, 2007a), and this research maintained a communitarian view of power, as described by Christians (2005), as being intimate and reciprocal. Institutional Review Board approval was not obtained or necessary because the study stayed within the confines of the class, the professors, and other educational purposes. Nevertheless, the research maintained privacy and confidentiality. At the time of the interview, the purpose of the study was explained to the participant by the researcher. Further, the interview was conducted during the allotted time of 30 minutes so that all the research questions were answered thoroughly. The researcher as an interviewer was trained and experienced in both academic and professional interviewing. Ethical considerations were taken into account as this study did not employ the use of deception. Further, initiatives were taken to ensure that the participant remained anonymous through the alias Tom, as a code, and no names were mentioned (Creswell, 2007; Lipson, 1994).

At the commencement of the interview, Tom gave permission to be audio-taped. As a data collector, the researcher's training as an interviewer was limited to interview skills and background as a counselor. Due to the ethical nature of research and the focus of the study, the interviewer did not deviate from the research questions. A social-constructivist research paradigm was used with regards to a single, intrinsic case study,

which allows a choreographed report from the social experience of a single case to provide insight into an issue or generalization (Stake, 2005). Assumptions for this model followed the idea that social phenomena develop in particular social contexts; thus, the research design, followed an intrinsic case study, because of its uniqueness (Creswell, 1998). The framework for the study, via interview, was guided by the four criteria suggested by Shank and Villella (2004) for understanding qualitative research: (a) the willingness to go beyond the surface through the use of probing questions, (b) interpreting the data adequately, (c) using the results to inform and (d) recognizing myself, the researcher, as a participant in the study. Through this framework, the study was allowed to evolve as the process of analyzing data unfolded so that, as described by Shank and Villella, light could shine like a lantern that illuminates obscure ideas.

Following the interview, the audio tape was transcribed in a verbatim transcription and presented back to the participant for accuracy of content through member checking. During this exchange, explanation of the transcription and notes of field observations of behaviors were presented back to Tom and permission was obtained from Tom before beginning the analysis.

### **Legitimation**

A qualitative legitimation model, as proposed by Onwuegbuzie and Collins (2007), was used to attend to internal credibility. Internal credibility is defined as truth value, applicability, consistency, and neutrality as it is transferred into conclusions (Onwuegbuzie & Leech, 2007a). Internal credibility includes descriptive validity (the factual accuracy of the account), researcher bias (assumptions by the researcher that are unrecognized), and reactivity (reactions by the participant due to being cognizant of the study (Onwuegbuzie & Collins). Also addressing external credibility, or the conformability and transferability of the findings, the legitimation model outlined the circular process of researcher bias and reactivity through data collection, analysis, and interpretation.

External credibility includes catalytic reliability (the degree of which the research empowers), communicative validity (the validity of knowledge claims), investigative validity (the researcher's methods and personality), interpretative validity (the understanding of the group studied), and evaluative validity (evaluation as more than a description) (Onwuegbuzie & Collins, 2007). Threats to verification, trustworthiness, internal credibility, and authenticity were addressed through an examination of some of the relevant queries as outlined by Miles and Huberman (1994): (a) How context-rich, meaningful, and thick are descriptions from text? and (b) Are the presented data linked to the emerging theory? In addressing credibility, transferability, dependability, and conformability of data, a pre-analysis decision model (Leech & Onwuegbuzie, 2007) was utilized to explore biases, assumptions in data analysis, and intra-coder agreement through member-checking for informant feedback.

As also addressed by Leech and Onwuegbuzie (2007), descriptive validity, or the factual accuracy of an account as documented by the researcher (Maxwell, 1992), and researcher bias, *a priori* assumptions that are not dismissed (Onwuegbuzie, 2003b), were both addressed through a debriefing interview. Questions for the interview were designed by the participants-researchers to bring initial hunches to the foreground before conducting the analysis. The debriefing interview was conducted by a third-party classmate who was a peer researcher in the same doctoral cohort. The peer debriefing allowed the researcher to assess his personal bias towards the participants, and also to understand the effect the participant had on the researcher (Leech, Onwuegbuzie, & Collins, 2008). By conducting the peer interview, the researcher was able to discuss openly his expectations of the interview process, and also the feeling that he had during the process (Leech et al.). In effect, the peer debriefing was a cathartic release for the researcher (Leech et al.). The debriefing interview allowed the researcher to identify that the gender differences may have influenced some of the constructed themes in the analysis. Thus, the interviewing of the researcher addressed and promoted reflexivity by addressing these thoughts, perceptions, feelings, and experiences relating to the research (Leech et al., 2008).

Interpretive validity, or the extent to which the interpretation of the analysis represented an understanding of the phenomenon (Maxwell, 1992), was addressed in the interview through the use of original language for each theme and category. Coding, for identifying themes, was utilized as the foundation in analyzing and interpreting the data until saturation occurred. Saturation was evident when themes began overlapping with one and other and repeated familiar concepts. However, saturation was limited due to the one-time interview.

Edmonson and Irby (2008) described steps for legitimation and validity that included checking for factual accuracy, supporting documentation, recognizing theory, justifying relationships, and ascertaining

credibility relating to the appropriateness of the participant. Construct-related credibility was addressed through systematized reflexivity (Lather, 1991), because the researcher sought to challenge and illuminate preconceived ideas regarding wellness. In respect to addressing external credibility, transferability, and fittingness of the content, a special effort was made for careful interpretation regarding the generalization outside the setting of this study. A naturalistic generalization will be left solely to the reader, which, according to Maxwell (1992), may be extended as connection-making either to unstudied parts of an original case or to other similar cases.

Other potential threats to validity included theoretical validity, the degree to which the theory of wellness fit the data collected (Maxwell, 1992), and reactivity, the chance that the participant may have been cognizant of participation (Onwuegbuzie, 2003b). These were addressed through a second member-check as the participant and researcher met at a mutual location and discussed the results of the analysis. In the meeting, the researcher presented the participant with the analysis, the list of themes, and provided an explanation of the themes and sub-themes. Once the participant approved of the themes and sub-themes, the researcher and participant discussed the significance of each theme and sub-theme as it pertained to the participant. This procedure of member checking increased the interpretive validity by validating the interpretations made by the researcher in regard to the participant in the study (Sharma, 2008). To ensure that the external credibility threat of reactivity was not influencing the participant's responses the researcher conducted a member checking to increase legitimation which was not recorded. Finally, order bias was addressed as a threat to external credibility: the order of the questions was considered to ensure that the order in which the questions were asked did not influence confirmability of the findings (Onwuegbuzie & Leech). The researchers who created the questions reduced order bias by discussing the format and order of the questions asked (Sharma).

## Analysis

Qualitative research emphasizes an experience that is transformed into words (Miles & Huberman, 1994). After the interview was member-checked with Tom, an emic perspective (Creswell, 1998) was utilized whereas the view of Tom was the primary consideration in analysis. The process of nomination (Constas, 1992), or naming a code so that a name was more than a neutral description, was used throughout the analysis and were based upon Gee's seven building tasks (i.e., significance, activities, identities, relationships, politics, connections, and sign systems) associated with his discourse questions. Codes were developed by the researcher *a priori* (Constas, 1992) and the sources for the codes were the transcript, field notes of non-verbal behaviors, and the recollections of mood and interactions throughout the interview process as translated by the researcher. Thus, a case-oriented analysis, with the focus on the high frequency themes as the means for analysis, was utilized.

In addition, the analysis originated from a focus on discourse analysis, which acknowledged a particular focus on language as an action that is politically affiliated (Gee, 1999). Gee explained that whenever a person is speaking or writing, the person simultaneously constructs seven areas of reality, or building tasks of language. Thus, seven codes were produced deductively and as outlined by Gee highlighted: (a) significance, giving meaning or value, (b) activities, engaging in something, (c) identity, taking on a certain role, (d) relationships, speaking or acting in a particular role, (e) politics, the individual perspective of social goods, (f) connections, the way certain thoughts are relevant to other thoughts, and (g) sign systems, communication systems other than language. Careful consideration was given to context in referencing this and other discourse codes. Due to the limitations of a one-time interview with Tom, the process of associating the codes, through the categories, and referring back to addressing the research question through discourse analysis was limited.

This procedure, again, relied heavily on the discretion of the researcher, as a participative element of the process (Constas, 1992), yet included the additional step of confirming emerging ideas with the participant Tom. Instrumental in refining and categorizing the data through clusters as a technique of memoing (Miles & Huberman, 1994) was utilized. The qualitative software NVivo 8 (QSR International Pty Ltd., 2008) was utilized for analysis and organization of data. After the steps of coding, categorizing, and sorting, the themes were grouped into concepts and related directly back to the research questions. From the resulting themes, conclusions were drawn and outlined to frame the report.

## Results

### Overall Impressions

Incorporating the overall tone of the interview and taking in account the times of laughter, pensiveness and other non-verbal behaviors, the themes revealed that wellness resulted from a way of thinking that promoted experiences and reflexivity. Immediately after the interview, the researcher took note of particular impressions, based upon researcher-constructs, during analysis to note a peaceful and pensive attitude toward wellness. These constructs were interrelated to the seven learning, or building tasks of discourse analysis, as outlined by Gee (1999). The themes that emerged through the analysis highlighted a unique journey for Tom through his personal story and constructs. Major themes outlined were: (a) laughter as a means of significance with self-understanding, (b) the defining role of a doctoral student (identity), (c) relationships with self, others, and God, (d) the political environment of a university setting, (e) connections to physical care and care for others, and (f) sign systems and knowledge of the world as a unique story.

### Significance

The 1,400-word transcript yielded symbols through verbal expressions in addition to language. The significance of the other verbal sounds added to ideas conveyed and, as outlined by Gee (1999), was one of the seven areas of reality to invoke questions about the language in use. For Tom, the symbol of thoughtful reflection was the noise of tapping when spending time to answer as he stated, “I think, it probably looks like I’m, [tapping sound with mouth] well, I guess since I’m in a school setting, it’s just that, you know, I’m in class and doing well in class...”

Also, the significance of laughing was discussed with Tom during the member-check and was clarified as relaxed, comfortable, and assuring. Tom suggested during the member-check, that laughter could be interpreted in the analysis to mean that a person should laugh at oneself, at times. An example of laughter in response to discussing personal ideas was observed:

It’s been good because I’ve been able to share some expertise that nobody else has, and so, you know, I can actually do something about it, and things, rather than just watching them happen [hearty laughter as if at oneself]. So, that’s more empowering.

Significance, for Tom’s life, related small gestures such as laughter and tapping to be symbols of “being okay” with what he valued in life, such as being relaxed in most situations. As can be seen in Table 1, other examples of verbal and non-verbal language outline significance, one of the seven building tasks as outlined by Gee (1999). This table illustrates how discourse combines actions, interactions, and ways of thinking, believing, and valuing, as experienced by Tom.

Table 1. Examples of Language that Outline Significance

Behavior or Word Phrase	Significance
Experiencing different food, and places, and scenery, and exploring. I think that’s part of it, cause I just like learning	Success may be undefined and allusive
It’s just that I’m so laid back. I don’t have to have everything figured out right now	Being laid back is a strength characteristic
I’ve been doing a lot of diagnosing [smiling and laughing]	Laughter occurs as a means to discuss the possible discomfort of talking about oneself

## Activities

*Activities*, as explained by Gee (1999), is the use of language to recognize the exact purpose of engaging in the here-and-now. Tom spoke of the activity of traveling, yet defined it with values typical of a doctoral student by relating the activity to learning:

Um, because I do like getting out and seeing different cultures, and experiencing different food, and places, and scenery, and exploring. I think that's part of it, cause I just like learning. So, that could be also a goal, uh, to just keep learning, no matter what I do.

In addition, Tom appeared to distinguish the activity of having relationships with friends, socially, as a different social engagement from having relationships in school, by outlining that, "I'm out, you know, doing stuff, meeting up with friends, going to sporting events. Just, having fun. But I'm not in school. [laughing] But I'm having friends when I'm in school too, but, for different reasons." Table 2 outlines the building task of activities, and the language used by Tom that he used to convey his behaviors through actions.

Table 2. Examples of Language that Outline Activities

Behavior or Word Phrase	Activity
Um, as a goal, I'd like to teach [thumbs moving] do some more research, and do some writing. I guess those are, because [speeding up] of a doctorate, you know, the doctorate will allow me to do those other things, and that's why I'm doing that.	Teaching is more than classroom work
Um, because I do like getting out and seeing different cultures, and experiencing different food, and places, and scenery, and exploring. I think that's part of it, cause I just like learning.	Traveling includes the activity of learning
I'm out, you know, doing stuff, meeting up with friends, going to sporting events. Just, having fun. But I'm not in school. [laughing] But I'm having friends when I'm in school too, but, for different reasons.	Sporting events are expressions of relationship with friends and school is an activity with different expressions of relationship

The theme of *identity* related to Tom's identity as a first-year doctoral student. Many descriptors that are unique to his language identified wellness through a university culture. For example, when asked the question: what does your life look like when things are going well, Tom responded that,

I think, it probably looks like I'm, well, I guess since I'm in a school setting, it's just that, you know, I'm in class and doing well in class, keeping up, you know, getting things published or whatever, or, doing some good research, working for some professors.

In addition, Tom used language to underscore his abilities to use the language of a counselor, even unto himself. He explained that "circumstances are going to be good or bad. And, it's that I think things can go well in bad circumstances and things can go badly in good circumstances. It's kind of how you respond to them." Tom included the language of a committed person of faith in a spiritual sense when he outlined his relationships with others: "Um, I think when, my relationships, both horizontal and vertical, are, more attuned, uh, then that helps to turn around situations, or how I'm feeling at least." Table 3 further illustrates the language that accompanied the building task of identity, and outlined how Tom's identity and various roles impacted wellness.

Table 3. Examples of Language that Outline Identity

Behavior or Word Phrase	Identity
I don't know...be, be successful. I don't know if I have a definition for that, but I would know it when I saw it [laughing].	As a doctoral student, learning underscores other tasks in life
If I see something going on with myself, I know, kind of, where the cause is and what to do about it... I can actually do something about it, and things, rather than just watching them happen.	The identity of a counselor and promotes a need to self-correct
I think I'm well attuned to my relationships, um, then I think I [talking faster] respond better to circumstances.	Identity as a friend is proactive and brings energy for wellness [talking faster]

### Relationships

The theme of *relationships* defined Tom's personal theory of wellness. This building task addressed how Tom used relationships in connecting to wellness as an essential element for daily endeavors, as illustrated by the following responses: "I think it comes down to, the work connection. Um, being connected to different people" and "Also, I think, uh, make sure I'm connecting with family and support systems. Um, because, I know, as busy as I am, it can be easy to lose those connections, and support systems." Other responses referring to relationships aligned closely to the concept of wellness. For example, participant described life going well as:

And so, things look good with everything. So, um, things are going well; I'm out, you know, doing stuff, meeting up with friends, going to sporting events. Just, having fun. But I'm not in school. [laughing] But I'm having friends when I'm in school too, but, for different reasons.

When referring to a relationship with God, the participant described that,

Being connected to different people, with different communities, with God. Um, and working on those connections. Um, I think when, my relationships, both horizontal and vertical, are, more attuned, uh, then that helps to turn around situations, or how I'm feeling at least.

Table 4 illustrates how Tom's language described the building task of Relationships, within three subthemes: relationship with others, relationship with events, and relationship with oneself.



Table 4. Examples of Language that Outline Relationships

Behavior or Word Phrase	Relationship
I think when, my relationships, both horizontal and vertical, are, more attuned, uh, then that helps to turn around situations, or how I'm feeling at least.	Relationship with others and with a higher power
Because things aren't always going to go well, and things don't always go badly, and the circumstance that I don't know necessarily should, you know, control how you feel.	Relationship with events
I think, when things are going well, I'm sleeping well, eating well, just taking care of myself...if you're taking care of yourself, things are gonna, go better.	Relationship with oneself

**Politics**

*Politics* was a theme that described a feeling of wellness through the political environment of doctoral studies. Gee (1999) explained that the building task of politics outlines implications for the distribution of social goods, or the implications that a person's actions have for being a reputable, responsible person. In the case of Tom, he seemed to value his own responsibility for maintaining relationships as he explained "make sure I'm connecting with friends and support systems. Um, because, I know, as busy as I am, it can be easy to lose those connections, and support systems." In the area of success, Tom explained that success could not be measured, but he outlined specifically the political and cultural indicators associated with success in a university environment:

Um, as a goal, I'd like to teach [thumbs moving] do some more research, and do some writing. I guess those are, because [speeding up] of a doctorate, you know, the doctorate will allow me to do those other things, and that's why I'm doing that. And then, let's see, I don't know... be, be successful. I don't know if I have a definition for that.

In addition, Tom appeared to embrace fully the politics of being a student, and the endeavors that accompany doctoral work as he explained,

Um, as a goal, I'd like to teach [thumbs moving] do some more research, and do some writing. I guess those are, because [speeding up] of a doctorate, you know, the doctorate will allow me to do those other things, and that's why I'm doing that.

Table 5 outlines other aspects of Tom's language that accompanies the building task of politics.

Table 5. Examples of Language that Outline Politics

Behavior or Word Phrase	Politics
So, that could be also a goal, to keep on learning	Identity as a doctoral student influences idea of goals
Just, having fun. But I'm not in school. [laughing]. But I'm having friends when I'm in school too, but, for different reasons.	Friends are defined differently in school and out of school
I can actually do something about it, and things, rather than just watching them happen [hearty laughing]. So, that's more empowering.	Cultural identity of western work ethic combined with hearty laughter at discussing oneself

### Connections

The theme or building task of *connections* referred to the many ways Tom connected a task to wellness. Connections were made through the interview regarding the way wellness related to physical tasks. As Tom stated:

Probably, uh, sleeping well, eating well, getting exercise, um, going to church and not just, you know, going, but participating, and then, having it be meaningful and not going through the motions. Um, I think, those are the big ones really. If I could do all four of them then I'm in good shape.

He also related the building task of relationships to the task of connections:

And, uh uh let me add, [laughing] a big one. Also, I think, uh, make sure I'm connecting with friends and support systems....Um, because, I know, as busy as I am, it can be easy to lose those connections, and support systems.

Table 6 illustrates how Tom's language described the building task of connections, and how Tom used language to make one idea relevant or irrelevant to another.

Table 6. Examples of Language that Outline Connections

Behavior or Word Phrase	Connection
The doctorate will allow me to do those other things, and that's why I'm doing that.	Accomplishing a doctorate is relevant to "teaching, research, and writing"
If you take care of yourself, things are gonna, go better	Self-care is relevant for things to "look good"
When things aren't going well, or I'm just really stressed, I'm a lot more short and um, tired. I'm a lot more short an um, tired.	Stress is connected with interactions
Verses upbeat and energetic. I would like to think I have a sharp wit, as well [laughing].	Self-care promotes a better cognitive process
Things can go well in bad circumstances and things can go badly in good circumstances. It's kind of how you respond to them.	Circumstances are not relevant to wellness

### Sign Systems and Knowledge

Gee (1999) defined *Sign Systems and Knowledge* as specific language or a different way of knowing. Sign Systems and Knowledge were revealed throughout the interview. For example, Tom used the term, "doing stuff" to describe being active and well. He also described awareness of relationships as being both horizontal and vertical, in responding to his knowledge and belief in God, and appeared to draw strength from friendships and religion. Furthermore, a specific ability of knowing, or being "attuned" was a sign system for Tom as he described how staying in tune with his relationships directly impacts wellness and stated, "Um, because, I know, as busy as I am, it can be easy to lose those connections, and support systems. But, and so, at the same time, as hard as doctoral work is, you need a support system."

In keeping with Gee's (1999) description of building significance for sign systems and knowledge, Tom's value of wellness can be understood through the interrelated network of his unique language. The idea of wellness as a doctoral student is directly related to the defined tasks of a doctoral student. For example, Tom explained indicators of wellness as:

I think, it probably looks like I'm, well, I guess since I'm in a school setting, it's just that, you know, I'm in class and doing well in class, keeping up, you know, getting things published or whatever, or, doing some good research, working for some professors.

Tom also held a unique perspective of control over feelings as a quality that helped him to maintain wellness. Tom's language discourse brings about the question of the relevance of his sign-system of control. His perception that control over one's emotions as important to wellness was explained:

...things aren't always going to go well, and things don't always go badly, and the circumstances that I don't know necessarily should, you know, control how you feel. You know, um, they're just; they are what they are.

As seen in Table 7, Tom outlined other examples of Sign Systems and Knowledge to illustrate his concept of wellness as his unique story in life.

Table 7. Examples of Language that Outline Sign Systems and Knowledge

Behavior or Word Phrase	Knowledge
The circumstances that I don't know necessarily, should, you know, control how you feel	Counselor Knowledge
I don't know...be, be successful. I don't know if I have a definition for that. But I would know it when I saw it [laughing], it's one of those, there's not a clear definition.	Academia Knowledge (evolving in nature)
Going to church and not just, you know, going, but participating, and then, having it be meaningful and not going through the motions	Religious, or Spiritual Knowledge

### Discussion

By examining the seven building tasks outlined through discourse analysis, many ideas relating to wellness emerged for Tom. His journey in the role of understanding wellness illustrated particular themes that included success, the challenges of a political definition of success as a doctoral student, and meeting of physical and emotional needs. Additional concepts of wellness underscored Tom's belief that relationships helped him define himself as well, and that his unique ability to set aside outside circumstances helped him maintain control of a positive outlook. Themes that emerged for Tom related with current literature that focused on the challenges for doctoral students. Many emotional and academic challenges are addressed by university through a cohort model, or the model of one group moving through the course program together (Miller & Irby, 1999; Witte & James, 1998). *Control* was a theme that appeared to relate to self-care from the unique language that accompanied Tom's interpretation of controlling to physical needs such as sleep, and eating correctly. The theme of *support* emerged from the way Tom emphasized *connections to others*, and the theme of *self-awareness* underscored the political role of a doctoral counseling student. These themes also paralleled the literature that outlined drop-out rates for students due to stress or person life circumstances (Leshem, 2007). In general, Tom's themes for wellness are directly related to his ideas about and contributions to his doctoral studies.

A limitation of the study stemmed from the fact that the findings were bound through the researcher's limited ability as a novice researcher. Furthermore, the data were confined to a one-time interview with a follow-up member check, contributing significantly as a limitation of the study. Another limitation of the study was the timing of the interview itself. In addition, the tone of the interview may have been set before Tom's interview because Tom interviewed the researcher first; some of the themes may have depended on themes outlined in this first interview, as they were similar. For example, the participant replied to a question, "Well, I like one of the things you said, about traveling. I love traveling." Because the interview was dependent upon the one-time phenomenon and particular mood of the participant on a given day during a single class session, an uncertainty of data saturation was present. Contributing to the uncertainty of saturation, the interview questions standing alone as the only instrument for data may have precluded other justified areas and experiences of the participant relating to wellness and the identity of a doctoral student.

In addressing areas of support and wellness for doctoral students, many universities have utilized a mentoring role through professors in addition to a cohort model (Burnett, 1999; Silvera, Laeng, & Dahl, 2003). Future studies addressing the challenges of wellness that face doctoral students should address such support networks for students to become more self-aware and proactive in the area of personal care as it relates to educational performance. A future study might also involve multiple doctoral students and the presence, or lack, of ethical, moral, and spiritual foundations with respect to stress levels and wellness (Sharma, 2008). And finally, future research also may promote ideas for understanding the pressure and politics of a student life so that university programs can better support student wellness as a key component for student success.

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## **Appendix C**

### **Sample Qualitative Notebook Report 2**

The Life and Experiences of One Doctoral Student

## The Life and Experiences of One Doctoral Student

In this individual case study, the experience of one doctoral student will be presented. Six questions were posed to the interviewee with regard to her goals, personal life, and self-care. The participant's responses to these questions helped the researcher to gain insight into her experiences.

### Method

#### Participants

The participant was a White female, 50 years of age. To protect her anonymity in this research report, she was given the pseudonym of Tallulah. Tallulah was married and had four children. She was enrolled full-time in a doctor of philosophy degree program studying counselor education and supervision at a public university in southeast Texas with an undergraduate enrollment of approximately 14,000 students (U.S. News and World Report, 2008). This doctoral program was one of eight offered at the university, and was in the process of seeking accreditation through the Council for Accreditation of Counseling and Related Educational Programs (CACREP) at the time of the study. Tallulah was a member of the fifth cohort of doctoral students enrolled in the counselor education program. She was selected from a population of 12 members of the same qualitative methodology course, including 10 members of the cohort, one doctoral student from another program at the same university, and one faculty member from another program at the same university.

Convenience sampling, which "involves selecting individuals or groups that happen to be available and are willing to participate at the time" (Onwuegbuzie & Leech, 2007a, p. 114), was used for selection of the participant. Students enrolled in the course were instructed by the qualitative methodology course professors to select partners with whom to interview for a class assignment. Tallulah was selected because she sat in close proximity to and commuted to class with the researcher. Furthermore, this participant was selected because she represented a doctoral student who was a mother in a different life stage than that of the researcher. The purpose of the study was to gain insight into the experiences of a single doctoral student. Therefore, this type of purposive sampling and the sample size of one were appropriate.

The researcher in this study was a complete-member researcher because the researcher was a member of the same setting (the doctoral cohort) from which the participant was selected (Adler & Adler, 1987; Angrosino & Mays de Perez, 2003). Angrosino and Mays de Perez (2003) suggested that an interactive context is appropriate in contemporary social research. The researcher shared a friendship with and had a collaborative relationship with the participant. According to Miles and Huberman (1994), collaborative action research involves a joining together of the researcher and participant from the outset. This type of collaboration was used throughout the data collection process of interviewing and member-checking. Information obtained during the interview was kept confidential. One limitation to confidentiality was that the professors of the qualitative methodology course had access to the data and analysis for grading purposes. This limitation was made known to Tallulah before the interview.

#### Instruments

The instrument used in this study consisted of a semi-structured interview using a list of six open-ended questions. Interviewing allowed the researcher to discover how Tallulah makes meaning of his or her experiences (Seidman, 2006); interviewing also was chosen as the primary method of data collection to provide the researcher experience with this research technique. The researcher's attending skills and interviewing skills were developed through previous training in the counseling field as well as through life experience. Members of the previously mentioned qualitative analysis course co-constructed the interview questions two weeks prior to the interview. Each student was given the opportunity to propose questions, and consensus was reached when proposed questions were accepted omitted. Open-ended questions were selected to allow for richer responses, and the interview began with a broad question followed by more specific questions as suggested by Edmonson and Irby (2008). The questions were as follows: (a) Aside from pursuing a doctorate, what are some of your life goals?, (b) How do your professional skills help you in your personal life?, (c) What does your life look like when things are going well?, (d) What does your



life look like when things are not going well?, (e) When things are not going well, how do you pick yourself up?, and (f) How do you take care of yourself?

All of the questions were descriptive in nature and could be classified as example questions. According to Janesick (1991), example questions seek clarification. Though none of the six questions specifically asked for a clarification or example, the request for them is inferred. The second and third questions additionally asked for a comparison/contrast of things *going well* versus *not going well*. In addition to asking questions, the researcher interacted with Tallulah by clarifying statements made and offering tentative summarizations of her comments.

The researcher served as the interviewer in this study. The initial interview took place in the hallway outside of the classroom where the course was taught at 8:00pm on February 14, 2008. The interview lasted approximately 25 minutes. With Tallulah's permission, the interview was audio taped with a Sony IC recorder to facilitate the transcription of her responses. For purposes of member checking, Tallulah was e-mailed a copy of the transcript. A five-minute, follow-up interview was later conducted in person to clarify remaining questions. No changes were made as a result of the member-check. Tallulah agreed that the transcription served as an accurate reflection of the thoughts she wished to express.

A focused observation method was used to observe the participant's behavior during the interview in that certain observations, such as details of appearance and attire, were considered irrelevant to the study and therefore ignored (Werner & Schoepfle, 1987). A contributing factor to the decision to discount such observations was the researcher's familiarity with the participant and the setting. However, notations were made in the transcription to delineate nonverbal communication such as laughter, warmth in the eyes, silences, body posture, and interpersonal space. These observations were in keeping with the types of chronemic (the way speech and silence are conveyed through conversation, kinesic (body movements or postures), paralinguistic (variations in volume and pitch), and proxemic (use of interpersonal space) categorizations specified by Fontana and Frey (2005).

## Procedure

**Data collection.** Data were collected entirely through the interview process. Predetermined questions were asked by the researcher. Verbal, including probes, and non-verbal attending behaviors were used to encourage the participant to share rich information. Observations were recorded on paper in addition to the use of audiotape. The researcher's graduate-level training in the counseling field facilitated data collection because the counseling training included attending and interviewing skills. Data were collected with the consent of the participant, and the privacy of the participant was protected. No identified risks of harm were present for the participant.

**Research paradigm.** This study attempted to gain an in-depth understanding of the perspectives and experiences of one student. A social constructionist paradigm (Berger & Luckmann, 2007) was adopted by the researcher. Specifically, the researcher believed that each individual constructs his or her own reality based on their own social context. The researcher did not seek to generalize or explain causality because the data obtained were specific to the individual case.

**Research design.** According to Stake (2005), qualitative case studies focus on an object that represents a "specific, unique, bounded system" (p. 445). In this intrinsic case study, the case represents one student enrolled in a counselor education and supervision doctoral program. Stake suggested that the purpose of an intrinsic case study is not to generalize to other populations or to build a theory; rather, the purpose is to explore the experience of a unique case of interest.

**Verification.** The researcher used the validation method of member checking (Manning, 1997) to ensure that the words transcribed were reflective of what Tallulah intended to convey. Additionally, because the researcher also served in the role of interviewer, the threat of researcher bias was a plausible concern (Onwuegbuzie & Leech, 2007b). To control for this threat, both professors of the qualitative methodology course served as external auditors to obtain an outsider's perspective for the findings and conclusions obtained by the researcher.

## **Legitimation**

**Threats to external credibility.** External credibility refers to whether or not the findings of a study can be generalized to other individuals and settings (Onwuegbuzie & Leech, 2007b). The researcher does not seek to generalize this individual case study. Consistent with the constructionist perspective (Berger & Luckmann, 2007; Creswell, 2007), data obtained were specific to the individual who was studied.

**Threats to internal credibility.** Internal credibility can be defined as truthfulness or consistency of interpretations and conclusions within the group being studied (Onwuegbuzie & Leech, 2007b). One type of internal credibility, descriptive validity, refers to accuracy in what the interviewer heard and observed (Maxwell, 1992). To reduce threats to descriptive validity, the researcher took notes and recorded the interview via audiotape. The researcher then transcribed the interview and used member-checking to confirm Tallulah's intended communication.

Interpretive validity refers to the participant's perspective or the meaning that he or she gives to objects and experiences (Maxwell, 1992). According to Maxwell, "Unlike descriptive validity, however, for interpretive validity, there is no in-principle access to data that would unequivocally address threats to validity" (p. 49). However, the probing and requests for clarification by the interviewer reduced this threat to some degree. The counseling background of both the interviewer and Tallulah, perhaps, allowed for more awareness of meaning than might be the case with in studies involving non-counselor interviewers and participants. Tallulah's training in counseling also may have reduced the threat of reactivity. Reactivity refers to changes in participants' behaviors when they know that they are being studied or when a novel stimuli (such as an audio-recorder) is introduced (Onwuegbuzie & Leech, 2007b). As part of her training, Tallulah was required to counsel clients while being taped for the purpose of supervision. She may have a greater ability to ignore the audio recorder than does the average participant.

According to Glaser (2002), researcher bias is particularly common in constructivist research. As previously stated, research was reviewed by the professors of the qualitative methodology course. Feedback from experts in the field helped to reduce this bias. A peer debriefing session held between the researcher and a fellow interviewer served as an additional control for this threat. Potential biases, concerns regarding confidentiality, and the experience of the interview were discussed during the debriefing session. Peer debriefing helps the researcher to assume an objective stance in evaluating the research process (Leech, Onwuegbuzie, & Collins, 2008). The debriefing session encouraged further reflection on the part of the interviewer which increased awareness of potential interviewer bias. However, given the personal relationship between the interviewer and Tallulah, this bias could not be eliminated completely. In addition, the personal relationship caused some concern with regard to confidentiality due to difficulties in distinguishing between data obtained during the interview and prior knowledge about Tallulah through friendship.

Although the findings were similar to what the researcher had anticipated, the degree of parallels between this researcher and participant was unexpected. The researcher and participant shared the same gender, race, and roles as wife, mother, and student. These two individuals also appeared to share many of the same values. This researcher was struck that Tallulah shared the same feelings of guilt and the struggle to balance school and family despite the fact that her children were grown. The only obvious difference from the researcher's experience was that Tallulah is approximately 13 years older than the researcher. Because of these similarities, there were occasions when Tallulah responded like a mentor, passing on the wisdom of her years.

Paralogical and voluptuous validity were considered through the previous conduction of multiple analyses of the data including word count, key-words-in-context, and classical content analysis which produced similar themes including the importance of family, gratitude as a way of managing stress, and the awareness that comes with age. However, observational bias was a strong threat to this study because of the brief duration of the two interviews. Observational bias arises whenever the amount of data collected is insufficient to reach saturation (Onwuegbuzie & Leech, 2007b).

Although the order of the questions had been discussed by members of the qualitative course prior to the interview, it was not possible to eliminate completely the threat of order bias. For instance, as Tallulah considered her responses to the question about what her life was like when it was not going well, it was impossible for her to ignore her responses to the previous question about what her life was like when it

was going well. Theoretical validity was not applicable because the development of a theory was not an aim of this study.

### Analysis

Constant comparative analysis was used as the method of analysis in this study. According to Glaser and Strauss (1967), the constant comparing of different data allows the researcher to examine their similarities and differences. Through this process, the researcher creates categories or themes. To conduct a constant comparison analysis, the researcher first reads through the complete data set and breaks the data down into small sections (Leech & Onwuegbuzie, 2007). The next step involves labeling each section with a descriptive code and comparing each new section of data with previous codes. In this study, the qualitative software NVivo 8 (QSR International Pty Ltd., 2008) was used to import the transcription of the interview and to code each response. The researcher used an empirical approach to determine whether each group should be coded as a new code or connected to an existing code and to determine whether or not codes were grouped together into sets or themes. Themes were subjectively developed by the researcher *a posteriori* (i.e., after the data were collected). Therefore, the interpretive approach would serve as their point of origination (Constas, 1992). An interpretive approach was also used to label each theme.

### Results

The analysis yielded 14 free nodes or codes that were compiled into four themes or categories: (a) need for rejuvenation, (b) family, (c) goals, and (d) awareness. The *desire to be left alone* category contained two codes. One code in this category was labeled *need for rejuvenation* and contained phrases such as “the world will not leave me alone” and “Sometimes I just (laughs) want the world to go away.” The other code in this category was labeled *embracing the light* and referred to how Tallulah deals with this desire. Sections or “chunks” from this category are displayed in Table 1. The majority of these codes came from the following segment:

I see a little light on the horizon and I think “Okay. Thursday, you can . . . Thursday, you can get caught up on your sleep. And you can go shopping and make a good dinner. And so I try to just give myself a light at the end of the tunnel. And I look at that light, and then I indulge in that light when it does come. You know, I savor it. I say “I don’t have to get up in the morning.” I sleep ‘til 3:25 and go pick up my son at 3:30. And that’s what I’m gonna do – it’s like I give myself a present. I go “Okay, Tina . . .” I placate myself. I play a game with myself. “Okay, you can have this. Just hold on. Just hold on.” And so I did. I just play a game with myself.

Table 1. *Chunks for “Embracing the light” code*

Chunks
I see a little light on the horizon
Thursday, you can get caught up on your sleep
I try to just give myself a light at the end of the tunnel.
I look at that light
I indulge in that light when it does come.
I savor it.
Okay, you can have this. Just hold on. Just hold on.
It’s like I give myself a present.
I just play a game with myself

References to *family* comprised the second category with codes of *relationship with children* and *relationship with spouse*. Examples for these codes included responses such as “I want kids to be proud of me,” “I live for them,” and “my husband . . . he can become very resentful.” The category of *goals* was made up of *future goals*, such as writing a book and becoming a grief counselor, and *making a difference*. Upon review of the codes, it was noted that *making a difference* was a major part of her goals for the future. One response paired the two together --“I’d like to do more writing and make a difference that way.”

The final category of *awareness* was the most encompassing theme, including the following codes: *feeling of completeness*, *confidence*, *perspective*, *ownership of problems*, *finding balance*, and *gratitude*. Examples from each code are listed in Table 2. Each code represents a way that Tallulah steps outside of herself and shows an awareness of different aspects of her life, how they relate, and her role in her circumstances.

Table 2. Chunks for “Awareness” theme

Chunks	Codes
get to a point where I think “Okay. I’m done”	feeling of completeness
overall feeling that you’ve set out that you meant to do	feeling of completeness
gives me a certain perspective on things	perspective
neutral stance in my own life	perspective
gives me confidence in dealing with other people	confidence
to show a certain amount of truth in your life	perspective
I’m deliberately putting things in my life that sabotage my life	ownership of problems
I’m constantly faced with the conflict of prioritizing	finding balance
train myself to be aware of my age and my longevity	perspective
I try to make gratitude lists.	gratitude
write down everything that I have and am thankful for	gratitude

### Discussion

The first theme of need for rejuvenation was emphasized in Tallulah’s wanting “the world to go away.” She wants to accomplish much in her life, but the time and energy involved with each accomplishment is draining for her. Although she repeatedly expressed a desire to be left alone, she later admits that this is not what she truly wants. Rather, she wants to “put the world on pause” so that she can rest. Another aspect of these accomplishments is the time they take away from her family, the second theme found in this study. References to relationships with Tallulah’s children and spouse were made in response to all six questions.

This conflict between career and family is well-documented in the literature (Adams, King, & King, 1996; Frone, Russell, & Cooper, 1992). In their model of work-family conflict, Frone and his colleagues (1992) discussed how work interferes with family and family interferes with work. This reciprocal relationship between work and family was replicated by Adams and her associates (1996) who found that both conflict and support characterize the relationship between career and family. In Tallulah’s interview, the emphasis was on work (or school) interfering with family.

The third theme revolved around Tallulah’s goals, with the primary goal being to make a difference in the lives of others. This theme is the obstacle to her time for rejuvenation and for family; her goals sometimes get in the way of her needs to rest and spend time with her family. Finally, the awareness theme demonstrated that Tallulah is well aware of this conflict and her role in creating it. Awareness is of particular interest in this case. Tallulah has reached a stage in her life that she is able to look back on her life and assess what she has accomplished and what she still wants to achieve. She represents not only a mother who is a doctoral student but (also) that she demonstrates an awareness that appears to come with age.

This study was designed to gain insight into the experience and perceptions of one female doctoral student. Future research, particularly studies incorporating mixed methods, is needed to determine if Tallulah's experiences are typical of older, female graduate students. A mixed methods design would allow researchers to explore the experiences of students deeply as well as to determine if such experiences are statistically significant in the population. A limitation of this study is that only one complete interview was conducted with no follow-up questions outside of that needed for member-checking. Onwuegbuzie and Leech (2007b) suggested that multiple interviews are needed to achieve saturation for a case study. Future single case studies should be extended in length and number of interviews. Tallulah's experiences suggest that time away from family can cause inner conflict within graduate students. Counselor preparation and other related graduate programs would benefit by addressing address the topic of balancing school and family in their orientation courses.

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