

# INTEGRATING QUALITATIVE RESEARCH IN A LITERACY EDUCATION COURSE

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## Abstract

*In this article, the authors presented the outcomes of a redesigned English language arts (ELA) pedagogical course to include a qualitative research project. From a phenomenological standpoint, the authors sought to answer the research question: How do the students enrolled in a teacher preparation course perceive their experience of learning qualitative research? Fifteen students, seeking elementary teaching certification, participated in this study. They conducted seven 50-minute observations of ELA instruction and wrote notes in their field journals. The instructor of the course, who was also the principal investigator, taught the following: characteristics of qualitative research, observation as a data collection method, conducting a literature search in an electronic database, and writing a qualitative research report. The preservice teachers produced a basic qualitative research paper as a major course requirement. The participants were interviewed to learn their perspectives on participating in the redesigned course. Qualitative data analysis revealed that the preservice teachers saw the value of observation as a qualitative research method but had difficulties finding related literature. The authors made recommendations on how to improve the implementation of a qualitative research project in a teacher education course.*

Keywords: undergraduate research, qualitative research in education

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## Introduction

Undergraduate research is an investigation done by an undergraduate student to make an original contribution to the discipline. It is transformative and high impact because of the opportunities for students to deepen understanding by connecting theory with practice (Gentry et al., 2016; Manak & Young, 2014). Conducting research teaches students to be analytical, original, and collaborative (Wuetherick, et al., 2018). It also has the potential to lay the foundation for pursuing a graduate degree (Groth et al., 2016). However, despite the documented benefits of engaging students in undergraduate research, it is not prevalent in teacher education programs and courses (Breidenstein et al, 2000). It was found that it is not yet standard practice for education majors to participate in research in teacher education programs (Manak & Young, 2014).

The International Literacy Association (2018), in a position paper, has called for the inclusion of research in literacy teacher preparation, stating that “preservice teachers need to engage in research as fundamental to their practice” (p. 7). This organization recommended that teacher educators not only conduct research about their practices but also prepare their students to conduct research in their classrooms. With this focus on research, teacher preparation holds the

potential to create among teacher candidates the “disposition to question, to grow practices using the tools of scientific inquiry, and to create powerful communities of practice that are dialogic and expansive” (p. 8). In a similar stance, the National Council on Undergraduate Research made a case that all undergraduate students, regardless of academic discipline should experience mentored research, both as a program outcome integrated with the curriculum as well as a pedagogy used in their courses (Wuetherick et al., 2018).

Research as pedagogy is aimed to facilitate and assess student learning. It is along with these constructs that the first author redesigned an English language arts (ELA) pedagogical course to include a strong research component. Her intent was to deepen the preservice teachers’ learning of content and give instruction on qualitative research as used in education.

This article is focused on the processes and outcomes of implementing an undergraduate qualitative research project for a group of senior-level university students pursuing elementary teaching certification. The students, while doing the required field experience component of the course, observed public elementary school teachers’ ELA instruction. Using field notes as raw data, the students sought to answer the research question: “How does English language arts instruction occur in the elementary classroom I am assigned to observe?” This study was conducted to learn the perspectives of the participants on the benefits and challenges of undergraduate research to improve its integration in teacher preparation.

### **Literature Review: Positioning Qualitative Research in Teacher Education**

Only a few examples of undergraduate research in education programs are documented in scholarly literature, but analysis of those examples suggested the potential for research experience to include inquiry-based learning, examining evidence-based practices, and reflecting on one’s teaching (DeVore & Munk, 2015). While a qualitative inquiry approach to learning how to teach is perceived to be more demanding and requires more scaffolding from teacher educators, it is an effective way to develop future teachers as practitioners who will form the habits of collecting and analyzing information to update, evaluate, and improve one’s teaching (Lassonde, 2008). In addition, qualitative research has been used to develop a reflective orientation towards teaching and learning in an educator preparation program (Breidenstein et al., 2001). In fact, doing systematic observations and interviewing teachers have been employed as data collection procedures preservice teachers engaged in to pursue answers to original research questions (Wuetherick et al., 2018).

### **Context of the Study**

The study took place in the spring semester of 2019 at a university center in lower South Texas, an off-campus location for the educator preparation program in which the participants were enrolled. The Institutional Review Board (IRB) approved the study on January 9, 2019, for one year. The first author was the instructor of the course, and the second author was an undergraduate student who took the course and participated in the research project. The third author, who is a senior faculty member, served as a peer debriefer in the study. After the interviews of all the participants were conducted, the first author invited the second author to be a co-investigator of the study because of her strong interest in research. Upon completion of the required researcher training, an amendment to the protocol was submitted to and approved by the IRB to include her in the study.

The first author redesigned a senior level, field-based pedagogy course, Teaching Language Arts in the Elementary School, required for undergraduate students seeking elementary teaching certification. This reading education course was the last in the sequence of courses teacher candidates take before student teaching. It dealt with the application of linguistics and theories of language development to ELA learning. Moreover, there was an emphasis on the interrelationships between oral and written language occurring in the classroom and best practices for teaching ELA. Aside from the face-to-face class sessions students attended, they also completed 80 hours of classroom observation as

required and coordinated by the university's educator preparation program with elementary schools in lower South Texas.

The figure below lists observation points the first author gave the participants to guide them in doing field observations. She cautioned and instructed the preservice teachers to take a neutral stance in doing the observations to avoid making judgments on their mentor teacher's teaching performance

### Figure 1

#### *Observation Guide*

1. Which pattern of practice does the teacher use for teaching English language arts--literature focus units, literature circles, reading and writing workshop, or thematic units?
2. How does the teacher implement a read aloud?
3. What reading materials are used in the classroom (basal readers, trade books, ebooks, fiction/nonfiction books)? How do the students use such materials?
4. How does the teacher encourage the students to write?
5. How does the teacher group students for reading instruction?
6. How do the students interact with each other? Do they work in partners, triads, or small groups?
7. How are the students made to reflect on what they are learning?
8. How does the teacher engage students with higher-level thinking skills (synthesizing, analyzing, comparing and contrasting, evaluating/making judgments)?
9. How are the English language arts lesson objectives or standards displayed and communicated to students?
10. How does the teacher differentiate instruction in teaching English language arts?
11. What do you notice about the kinds of questions (literal, inferential, or evaluative) the teacher asks students?
12. Is technology incorporated in the English language arts lessons? If yes, how?

In addition to the traditional and existing Student Learning Outcomes (SLOs) for this course pertaining to ELA instruction, the instructor added the following SLOs relevant to undergraduate research: (a) gain an understanding of the characteristics and uses of qualitative research in educational settings, assessed through written assignments and discussions, (b) develop skills in observing teaching and learning processes in a public elementary classroom, assessed through the application of field notes rubrics and (c) apply APA conventions such as the use of in-text citations, references, and formatting, assessed through the production of a qualitative research paper.

The instructor included a unit on qualitative research that focused on the following topics: characteristics of qualitative research, relevant applications of qualitative research on classroom settings, observation as a data collection method data, inductive analysis of observational data, using an electronic database to search for academic literature and the use of APA conventions in writing a basic research paper. These topics were taught within four weeks.

The research activities and project collectively comprised 35% of the final course grade. As formative and summative assessment tools, the instructor examined the students' field journals and the research paper using a rubric. She also assessed the students' learning of qualitative research concepts by way of class discussions and the submission of a reflective paper at the end of the course. To add, students were required to meet with the course instructor during office hours to monitor progress and give feedback. Figure 2 presents the instructor-designed rubric for the field observation log.

**Figure 2***Field Log Assessment Rubric*

| The student's field log shows...  | No Evidence (0) | Needs Improvement (1) | Basic (2) | Proficient (3) | Exemplary (4) | Comments |
|---|-----------------|-----------------------|-----------|----------------|---------------|----------|
| careful recording of the actions and processes observed in the classroom                    |                 |                       |           |                |               |          |
| data collected is relevant and adequate to contextualize language arts instruction observed |                 |                       |           |                |               |          |
| the amount of data collected is sufficient to support the final summary                     |                 |                       |           |                |               |          |
| the time, date and location of the observation  |                 |                       |           |                |               |          |

**Methodology**

The focus of this study was the participants' viewpoints on the shared phenomenon of learning how to conduct basic qualitative research in a pedagogical course. Thus, this study followed phenomenological traditions. As a qualitative research methodology, the focus of phenomenology is to describe an event or a phenomenon using the words of individuals who experienced it (Patton, 2002). In addition, using phenomenology as a method can help educators learn from the experiences of others (Neubauer et al., 2019).

By keeping an open mind and setting aside the researchers' preconceived notions of the phenomenon under study, the participants' understandings of a phenomenon were brought to the forefront of this study. The goal of this study was to construct an understanding of preservice teachers' experiences of doing field observations in elementary classrooms and how they used these observations as data in writing a basic qualitative research report. The main research question was: How do the students enrolled in a teacher preparation course perceive their experience of learning qualitative research? The product of this study was the description of the participants' experiences in doing field observations and writing a qualitative research report for an undergraduate teacher preparation course.

**Research Sample**

Eighteen preservice teachers completed the redesigned course, but only fifteen students gave consent to participate in this study. Of the 15 participants, 14 sought early childhood to 6<sup>th</sup> grade generalist teaching certification and one sought bilingual elementary teaching certification. All participants completed the course. There were two male participants and 13 females whose ages ranged from 21 to 43 years.

**Data Collection**

The first author interviewed 15 participants in the 2019 spring semester at the University Center after the course was completed and final grades were given in the fall semester of 2018. Interviews were done during dates and times

convenient for the participants. The purpose of interviews was to develop a deep understanding of the participants' perspectives on qualitative research. Their responses were audio-recorded and manually transcribed by the researchers. The audio recordings and participants were numbered one to 15, based on the chronological sequence the interviews were done. For each interview session, the first author used an interview guide. Prompt questions or probes were asked as necessary. The interview guide is presented in Figure 3.

### Figure 3

#### *Interview Guide*

1. Have you ever done research in or for a college level course before? If yes, could you describe what you did?
2. Have you ever heard of or learned about qualitative research before taking this class? If yes, what did you know about doing qualitative research before taking this class?
3. What were your first thoughts or impressions when you learned that you will be learning about and doing qualitative research in this course?
4. In which campus were you placed to do field observations?
5. What grade level(s) and subject(s) did you observe?
6. Could you describe to me the process you did in writing your observation notes? For example, when did you usually write your field observation notes/log? How many minutes did it take you to write them? How did you feel about writing your observations?
7. What did you learn about writing your observations? Are there any insights that you gained? Was there anything that surprised you in the process of doing your classroom observations?
8. Did you find it easy or difficult to learn how to do qualitative research? Please explain.
9. Do you think that you learned how to do basic qualitative research in your college course? Why? Why not?

### Analysis

Two hours and eight minutes of individual interviews were recorded. Forty-nine pages of interview transcripts were analyzed using inductive content analysis (Patton, 2015). This process was initiated by repeated readings of the transcripts followed by open coding. Statements relevant to the research question were reread, highlighted, and labeled to examine the emergence of patterns in the data. Interview transcripts were annotated with words or phrases to identify themes, using the same words that participants had used in the text. Then, summaries were written to generate themes. A list of main themes and subthemes was constructed, which allowed for detailed checking of each transcript and a comparison of themes to be made across participants. The researchers supported the themes by including interview excerpts.

### Credibility of Findings

To ensure the trustworthiness of the results of this study, the researchers used member checking. The data and results were returned to the participants to check for accuracy and resonance with their perspectives. None of the participants disagreed with the findings presented in this study.

### Findings

As required by the instructor of the course, all participants completed seven observations that lasted 50 to 55 minutes. Their observations were recorded in notebooks that were submitted to the instructor. Six participants observed third grade classrooms; four observed fourth grade; two were assigned in first grade, and three observed kinder classes. All participants, except for one who was assigned in a Spanish-English bilingual classroom, observed reading classes taught in English. They wrote observations in their field journals while in these classrooms. These notes were written quickly, and a few were in the form of bulleted lists. Some participants added notes later in the day to fill in the information they had quickly written. One participant drew sketches of the physical arrangement and positions of students in the elementary classroom. Below is a sample description of a participant's data collection:

Really awesome cool things happened, and I didn't want to forget, so I stopped and wrote it right there (in the classroom). But also, I didn't want to miss any of the lesson, so I had to write after the lesson. It would always be the day of, so I wouldn't forget anything. I had a format that I would always follow: What were the objectives? What were the TEKS? What were the standards? What were the methods used? What were the student responses? What was the outcome? And how I felt the students felt.

Participants reported that they have never learned about qualitative research before taking the course. In the beginning, the majority felt overwhelmed, intimidated, terrified, scared, confused, and thought that it would make the course difficult to complete. Only a few participants held positive perceptions initially and expressed that it would be beneficial to know how to do research. One participant was not worried about finding out about the research required but instead "took a deep breath, knew (she could) take it step by step" with the course instructor "walking (them) through it".

Results of the analysis indicated that conducting classroom observations, recording data in the form of field notes, and synthesizing results in the form of a qualitative research paper were generally perceived to be beneficial. Out of 15 participants, five clearly mentioned interest in pursuing graduate studies. These participants revealed that doing the research project might have given them an initial experience of what could be expected in graduate school. They reported that having completed a research paper gave them some level of confidence in doing future research if they decide to enroll in graduate school. Specifically, three core themes were identified that represented the participants' perceptions of doing undergraduate qualitative research. These themes are presented in the succeeding section, illuminated with relevant quotes.

### **Theme One: Learning from Observations**

The participants expressed varying insights in response to the question, "What did you learn from writing observations?" However, the common thread among these responses was that there is more than occurs in language arts teaching than they actually thought. Participants commented that they noticed the details of the actual workings of a teacher and realized that there are things that they had taken for granted. Participant 5 expressed that "there's more going on besides what we already see". In fact, insights were gained on how children learn. For example, Participant 6 described, "younger children like to move around; they play; rhythm, rhyme, and music help them remember". In addition, a participant noted that she learned how learning theories and teaching strategies are applied in the elementary classroom. The following interview excerpts further reinforce the idea that observations can lead to insights far beyond what can be learned from attending lectures and reading the course textbook.

Participant 8 said:

I didn't realize how much time and planning goes into what she (the teacher) is doing behind the scenes to get ready. It looks so simple teaching little kids to read and do these activities, but once I really started observing and seeing, there's a lot of stuff beneath the surface. There was a definite rhyme and reason to what she was doing, a definite pattern, and consistency in her instruction. If I had not done the qualitative research and made to keep the logs, and go back and highlight, and look at the patterns, I wouldn't have seen it.

Participant 12 noted:

When you are writing your observations, you really see it in a bigger perspective--how the children are learning because you write down all their responses--like if the child is getting it, or not. You get to see it first-hand and write it down. I think I just saw everything in a whole different light when you actually have it, when you read it on paper.

Participant 15 reported:

I feel like writing the observations just helps me realize patterns more, seeing how people act. You are actually paying attention to what they are doing in the class. You notice that they do the same things all the time. Some things don't really work, and some of the things really do work.

## Theme Two: Experiencing the Research Project

The preservice teachers' field observation experience was purposeful, with a tangible product which was the research paper produced by the end of the semester. However, this emerged as a challenging aspect of doing the research project for several reasons. First, the preservice teachers have never written a qualitative research paper following APA conventions. Second, they had to learn to use the university's electronic database to gather peer-reviewed articles to support their observations and findings. Third, the instructor could not present a sample student work because this was the first undergraduate research project implemented in her department. Instead, she showed and discussed with students her qualitative research manuscripts to illustrate the concepts and skills she taught. While a few participants noted that the instructor's own research examples were helpful, one participant stated that she was unsure of "what Dr. Modesto (the instructor) really was looking for", and the majority wanted to read student samples and direct guidance on the writing process.

The participants also reported that they felt rushed in completing the research requirements. Most of them expressed that they needed more time to observe. The statement of Participant 8 represented this view. She said, "I would have liked to have spent a little more time... (we) could have collected more data and seen more patterns" and recommended starting the observations much earlier in the semester. Participant 14 echoed the same opinion but also added that learning both ELA content and learning how to do research demanded more time and also caused unnecessary distractions. She said that "we learned a lot in class about how to do qualitative research but seeing how it was mixed in with the class (content), I feel like more time on qualitative research (should have been given) because it was kind of broken between half class (content), half qualitative research. I think more time on qualitative research would have helped--time in observations, time in learning, and actually doing and writing it." In addition, participants also felt challenged gathering journal articles to support their writings and were unsure if they were writing the paper correctly.

The researchers also found that some participants developed dispositions and skills associated with doing research, such as being organized, inquisitive, analytical, and reflective. For example, Participant 14 "wrote notes on (her) notes, marking things that were similar or different, highlighted things that stood out and picking out things (she) had noticed." The words of Participant 11 also supported this theme:

As I was doing this research, I started seeing things, like maybe I could do research on this. I wanted to do my own research on certain things... I thought about the STAAR test. Maybe these teachers are focusing too much on the STAAR test. Maybe I should do research on that. I started to think about questions like that and everywhere I went. It's crazy, no lie.

Participant 1 also made this comment:

I believe it's important that every teacher should know how to conduct some sort of research. I'm student teaching right now, and I see these things and think: Wow, this could be a research topic! Why don't we know more about this information? I don't know about anyone else, but it (the research project) made me crave wanting to learn and wanting to research things a little bit more. Why don't we have more data? There's a learning experience in everything, so I really enjoyed this research project because it gave me something to learn about. It's only going to help me in my education because I do plan on getting my master's someday. This just helped propel me forward.

## Theme Three: Valuing the Experience

The participants described their experience of doing qualitative research as "helpful", "fun", "insightful", "informational", "reasonable" and "well worth it". One participant remarked that it provided "in-depth learning" as compared to other classes she has taken. Participant 13 saw the value of qualitative research comparing it with quantitative research:

I believe that there is value because, you know, aside from quantitative, that it is more surveys and numbers, which is important too, but qualitative (research) is about quality...you being there first hand, as opposed to just grabbing numbers and counting them...qualitative (research) is more valuable because you are there experiencing it first-hand.

While the majority of participants felt negatively at the beginning of the process, they reported that they “enjoyed” it and felt “grateful” and “learned so much”. Participant 10 stated, “after I was done writing my paper, I would compare it to the examples that we’ve gotten, and I felt this is good. I was really proud of myself...if a teacher tells me you have to do a qualitative research paper, I think, I would do a pretty good job at it.”

Participant 10 reported a sense of community that developed out of the process:

Our class was structured and the students, as a whole, wanted to be there and wanted to learn and were really helpful, myself included, with each other. Whenever we missed something, we would say, ‘Oh no no, this is what that means.’ So, we were all on the same page. We all wanted to succeed. We all wanted this project to succeed because we were very excited about it.

Overall, the outcomes of the course redesign were positive but with specific areas of improvement that need to be addressed. Participants were apprehensive at the beginning of the course but reported a deepened sense of appreciation for teachers’ work and the research process. Researchers noted that the execution of a research-integrated course can be improved by doing the following: (a) increase the number of observations to gather more data (b) early implementation of the actual research process to give ample time for students to fulfill requirements adequately, (c) providing student samples of the final product, and (c) giving more direct instruction on how to write a qualitative research paper, supported with progress monitoring.

### **Conclusion**

The findings from this study correlate with the current literature stating that preservice teachers benefit from engaging with undergraduate research. Specifically, the participants’ development of critical reflection skills intersects with the study conducted by Szecsi et al. (2019) who found that the systematic and gradual infusion of research skills in teacher education courses produce uneven but steady growth in students’ scholarship abilities. In addition, the participants’ perceptions that they felt rushed and needed more time to observe and write their research papers are supported by other researchers’ viewpoint that the lack of time and resources and the demands of education course content limit effective implementation of research for teacher candidates (Manak & Young, 2014). Finally, the participants’ assignment of positive values to their research experience and that they deepened appreciation for teacher work support a recent call by Baldwin and Darner (2021). They urged teacher educators to engage preservice teachers to become acculturated into a community of practice that facilitate deep understanding of the practices of their discipline, enabling them to integrate engagement in disciplinary practices into pedagogy.

### **Limitations of the Study**

The potential weaknesses of this study emanate from the characteristics of qualitative research: the results are not generalizable to the larger population and the researchers are the primary tool for data collection and analysis (Creswell, 2009). Participants in qualitative research projects are chosen based on their first-hand experience of a particular phenomenon under scrutiny (Rubin & Rubin, 2005). Thus, the results are not generalizable to the larger population of preservice teachers pursuing elementary teaching certification.

Because the authors brought personal opinions to the research process, human bias and shortcomings played a role in this study. To reduce human bias and shortcomings, they collected data thoroughly, followed the research protocols as approved by the IRB, documented the steps taken to transform raw data into findings, and employed member checking. The authors presented thematic descriptions, illuminated by participants’ words, to arrive at the essence of doing qualitative research in a pedagogical course.

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