

Gardner-Webb University

Digital Commons @ Gardner-Webb University

Education Dissertations and Projects

School of Education

2019

The Impact of Blended Professional Learning Focused on Total Physical Response Storytelling (TPRS®) on Teacher Perceptions and Practices

April Dawn DeBord

Follow this and additional works at: https://digitalcommons.gardner-webb.edu/education_etd



Part of the [Curriculum and Instruction Commons](#), and the [Teacher Education and Professional Development Commons](#)

THE IMPACT OF BLENDED PROFESSIONAL LEARNING FOCUSED ON TOTAL
PHYSICAL RESPONSE STORYTELLING (TPRS®) ON TEACHER PERCEPTIONS
AND PRACTICES

By
April DeBord

A Dissertation Submitted to the
Gardner-Webb University School of Education
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Education

Gardner-Webb University
2019

Approval Page

This dissertation was submitted by April DeBord under the direction of the persons listed below. It was submitted to the Gardner-Webb University School of Education and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Gardner-Webb University.

Sydney Brown, Ph.D.
Committee Chair

Date

Morgan Blanton, Ed.D.
Committee Member

Date

April Avery-Ferguson, Ed.D.
Committee Member

Date

Prince Bull, Ph.D.
Dean of the School of Education

Date

Acknowledgements

Faith is the substance of things hoped for, the evidence of things not seen. -- Hebrews 11:1

First, thank you Jesus for helping me each step of the way in this endeavor. I am so thankful that you led me to Gardner-Webb University, and I will forever be grateful to you for walking with me every day. Knowing you has been my greatest joy; thanks for being my best friend, and thanks for loving me first.

To my family, thanks for loving me and for being my biggest supporters, for praying for me, and for giving me strength and courage to continue. Dad and Mom (Mark and Angie), there are no greater parents a girl could have! To my sisters Naomi (Andy), Sara (Eric), and Hanna and my nieces and nephews, Ella, Kate, Julianne, Tim, and Scott, thank you for being a great source of love, joy, fun, and laughter to me. I love you all!

To my church family, thanks for always being there to support me and love me. To my best friends Ken and Dana, your heart for people is incredible and always gently shows me the Lord's heart. Thanks for showing me John 17:3 and always pointing me to the Lord.

To Rebecca and Megan, thank you for being the best friends ever and for always encouraging me—also thanks for all the snacks and encouraging words.

To my grammatically correct best friends Dana, Jenn, and Alicia, thank you for reading my “not so grammatical” papers and providing lovingly kind feedback and revisions.

To my school family, thanks for joining me on this awesome journey. I am so thankful for your support and love. Your participation in this project was phenomenal.

To my cohort, thanks for always keeping it in the cone, for trips to the Italian Garden, for chicken tenderloins, for awesome reflective classes, Cinderella moments, and amazing devotions; I love you guys, and I see Jesus in every one of you!

To Dr. April Avery-Ferguson, your joy is contagious and you always have a way of making my heart feel better, even when I am not feeling bad. Jesus shines through you, and your impact is true and wonderful in any environment that has the blessing to encounter you. Thank you for being my school best friend forever and for serving on my committee. I am so thankful for you and all you do for me!

To Dr. Putnam, Dr. Blanton (thanks for being on my committee), and Dr. Greer, I am forever grateful for your hearts to teach us and share with us from your amazing knowledge and experience.

Finally, to Dr. Brown, there are no words to say how truly awesome you are! Without you, I am positive this project would have never come to fruition. God knew what kind of friend and professor I needed for this journey. Thank you for the countless hours, abundant ideas, and super fun Zoom meetings where you shared your life, with not only me but countless others. I have no idea how you do all that you do, and I am forever grateful! Thank you for making a place for us in your life!

Abstract

THE IMPACT OF BLENDED PROFESSIONAL LEARNING FOCUSED ON TOTAL PHYSICAL RESPONSE STORYTELLING (TPRS®) ON TEACHER PERCEPTIONS AND PRACTICES. DeBord, April. 2019: Dissertation, Gardner-Webb University

Professional learning plays an integral role in every educator's career. Studies show that traditional workshop professional learning in a one-round session without follow-up training is not effective (Ball & Cohen, 1999), yet this type of professional learning still comprises the bulk of professional development offerings. This study sought to discover the impact of providing blended professional learning with coaching on teacher perception, teacher knowledge, classroom practice, and student learning. Participating instructors from various Grades 9-12 backgrounds received asynchronous virtual training in the TPRS® method and Marzano's (2004) vocabulary learning strategies. The training was delivered via the Canvas Learning Management System. The researcher then provided synchronous face-to-face coaching helping teachers plan lessons and assessments utilizing the new methods. The teacher measured student learning with pre and postassessments before and after the course. The researcher's findings indicated teacher perceptions of the blended learning design were overwhelmingly positive. Teacher knowledge of best practices in vocabulary instruction increased, and their students grew and became more engaged with the class content. Teachers described their classroom instruction of vocabulary transformed from boring and lifeless to connected, personalized, and exciting. As teachers grew so did their students' learning. The researcher utilized the paired samples *t* test to analyze 46 pairs of student growth scores from before teachers participated in the course and after teachers participated in the

course. The results indicate with a high level of confidence that student posttest results will improve after teachers participate in the Blended Learning with Coaching Course on TPRS®.

Keywords: total physical response storytelling, vocabulary, blended learning, blended professional learning, professional development, coaching, culturally responsive teaching

Table of Contents

	Page
Chapter 1: Introduction	1
Introduction	1
Research Questions	9
Context of the Study: Location and Participants	13
Definition of Key Terms	14
Limitations of the Study	15
Background and Role of the Researcher	16
Organization of the Dissertation	17
Chapter 2: Literature Review	19
Restatement of the Problem	19
Professional Learning	20
A Brief Overview of Vocabulary Instruction in the United States	23
HPL	25
Marzano’s Six Steps for Vocabulary Instruction	28
Krashen’s Affective Filter Hypothesis and Sweller’s Cognitive Load Theory	29
Krashen’s Input Hypothesis and $i + 1$ Hypothesis	32
Storytelling: Tale as Old as Time	36
A History of TPRS®	37
Synthesis and Critique of the Literature	43
Summary of Chapter 2	49
Chapter 3: Methodology	51
Problem Statement	51
General Methodology	51
Research Context	55
Instruments and Materials	56
Data Analysis	60
Summary of Chapter 3	61
Chapter 4: Findings and Results	62
Problem Statement	62
Organization of the Chapter	62
Confidence, Collaboration, Transferability, and Acquisition of Learning	76
Summary of the Impact on Teacher Knowledge	82
Intentionality and Integration	83
Connections, Engagement, Accessibility, and Growth	91
Quantitative Results Related to the Impact on Student Learning	97
Summary of Chapter 4	104
Chapter 5: Conclusions and Recommendations	106
Summary of Findings and Results	106
Limitations of Study	108
Implications of Findings	111
Recommendations	115
Recommendations for Professional Practice.	115
Recommendations for State, District, and School Leaders	118
Suggestions for Future Research	120

Summary of Chapter 5	122
References	124
Appendices	
A Preinterview and Postinterview Introductory Script.....	137
B Community of Inquiry Survey Instrument.....	141
C Research Matrix	144
D Opt Out Agreement for Student as a Parent/Guardian.....	150
E Screenshots of Raw Data from Interviews in Dedoose and Examples of Transcripts.....	154
F Example of Coded Interview from Dedoose	156
G Community of Inquiry Results.....	162
H Pretest and Posttest Data for Student Scores Pre and Post Sequence	172
Tables	
1 Participants in the Blended Learning Design Project	64
2 Item 16 of the CoI Framework.....	75
3 Tests of Normality	99
4 Paired Samples Statistics	100
5 Paired Samples <i>t</i> Test.....	100
Figures	
1 Marzano’s Six-Step Process for Teaching Vocabulary	6
2 The HPL Framework	8
3 Krashen’s Affective Filter Hypothesis.....	30
4 Input Hypothesis Model of L2 Learning and Production	33
5 Krashen’s <i>i</i> + 1 Hypothesis Model	34
6 Script Example from TPR® Lesson	38
7 Martina Bex PQA Example Using Circling.....	42
8 Empirical Studies Comparing TPRS® to Other Teaching Methods	46
9 Embedded Experimental Project Design	52
10 Box Plot to Determine Outliers on Score Differences.....	98
11 Related-Samples Wilcoxon Signed Rank Test	102
12 Results of the Related-Samples Sign Test	103
13 The DeBord-Brown Model of Professional Blended Learning and Coaching	113

Chapter 1: Introduction

Introduction

Teachers never stop learning. “Eighteen billion is spent annually on professional development, and a typical teacher spends 68 hours each year—more than a week—on professional learning activities typically directed by districts” (Boston Consulting Group, 2014, p. 3); however, the same Boston Consulting Group (2014) tasked with researching the effectiveness of professional development by the Bill & Melinda Gates Foundation surveyed 1,300 teachers, many of whom said, “professional development offerings are not relevant, not effective and most important of all, not connected to their core work of helping students” (p. 3).

To combat this dilemma, districts and states have tried to offer online professional learning to provide more and varied content to teachers who may not have access (Freeda, 2018); however, for many teachers, this one workshop method without follow-up is still not effective (Ball & Cohen, 1999). Enter Blended Online Professional Learning, which couples an online component with a face-to-face component for teachers; the flipped education method is being employed for adult learning as well as student learning. This study sought to discover the impact of offering professional blended learning with coaching on vocabulary instruction by examining teacher perceptions, teacher knowledge, classroom practice, and student learning. The researcher offered a cross-curricular course on vocabulary instruction using Total Physical Response Storytelling (TPRS®) and incorporating vocabulary best practices from across the curriculum and then provided follow-up coaching in an effort to see the impact on teachers, their knowledge and practice, and student learning.

Vocabulary words are the building blocks of effective communication and literacy (Payne, DeVol, & Smith, 2006). Stahl and Kapinus (2001) stated, “When children ‘know’ a word, they not only know the word’s definition and its logical relationship with other words, they also know how the word functions in different contexts” (p. 13). The National Reading Panel (National Institute of Child Health and Human Development, 2000) acknowledged vocabulary as one of five major mechanisms of reading. Its importance to overall school success is widely documented (Anderson & Nagy, 1991; Baker, Simmons, & Kame’enui, 1998).

TPRS®, a world language teaching method, allows for active engagement reaching beyond the basic knowledge of the definition of a word (Gaab, 2006). According to Gaab (2006), “once considered a highly effective, but unconventional methodology, Total Physical Response Storytelling is now regarded by many to be a mainstream, tremendously successful method which promotes unrivaled fluency, listening and reading comprehension skills, and writing fluency” (p. 1). Students are engaged in learning vocabulary in context through images, sound effects, and actions and in a variety of contexts and stories.

TPRS®, based on the input hypothesis, “assumes that we acquire language by understanding messages” (Krashen, 1989, p. 440). Students receive comprehensible input (Krashen, 1989) when they hear and understand messages. Familiar storylines or stories that are easily comprehended allow students to relax and enjoy new vocabulary and cognitive load decreases (Sweller, Ayres, & Kalyuga, 2011). This method is in use in many world language classrooms across the United States (Gaab, 2006).

The research problem and purpose of the study. Providing professional

development for teachers in order to enrich classroom practice and student success is integral (Yoon, Duncan, Lee, Scarloss, & Shapley, 2007); however, professional development offerings are what Wilson and Berne (1999) described as, “a patchwork of opportunities—formal and informal, mandatory and voluntary, serendipitous and planned” (p. 174). Workshops often lasting a few hours to 1 day are “intellectually superficial, disconnected from deep issues of curriculum and learning, fragmented, and noncumulative” (Ball & Cohen, 1999, pp. 3-4). Perhaps, 1-day workshops are the norm due to dwindling budgets (Leachman, Masterson, & Figueroa, 2018), time constraints, or a lack of understanding of what teachers need as adult learners (Demands of teaching taking its toll on public school teachers, 2016). These reasons lead to a desire for new, relevant, and varied approaches (Boston Consulting Group, 2014, p. 3) to offer authentic and quality professional development without sacrificing adult learning needs and valuing teacher time commitments.

Blended learning models such as the flipped classroom are not new to education; however, they have recently become popular in classrooms throughout the nation (Schoology, 2018). Students receive course content online or by video, and instructors use face-to-face class time for active learning of the material previously presented (Koo et al., 2016). Teachers are taking more online courses than ever before due to availability and the ability to access a variety of courses that are not offered in the school system where the teacher is employed (Freeda, 2018). Coupling the online course with coaching provides a way to keep teacher autonomy and freedom while also giving teachers a chance for follow-up and help in implementing the authentic and relevant strategy or ideas learned in the professional development.

For this study, the authentic and relevant strategy chosen by the researcher is impactful vocabulary instruction. Cardenas (2001) stated, “Helping students develop vocabulary competence is one of the main challenges English language teachers face” (p. 8). Teachers of many subjects face the same issues when searching for ways to effectively present vocabulary in the classroom for students to achieve competence. Student success is the number one goal of education. Therefore, this challenge is diverse and cross-curricular in nature. By beginning to search and share methods across the curriculum, educators can find more and varied solutions to reach the vocabulary needs of all students. Investigating the impact of Blended Learning with coaching allows administrators and school leaders to find more and varied solutions to reach the varied needs of their teachers.

Conceptual framework. Two conceptual frameworks became evident during the research for this study: Marzano’s (2004) Six-Step Process for Teaching Vocabulary and Bransford, Brown, and Cocking’s (2000) Theory of How People Learn (HPL). As a former Spanish teacher, ESL teacher, and now instructional coach, the researcher has worked inside a variety of classrooms. In the researcher’s school system, due to budget cuts, some teachers had district-wide training on vocabulary techniques, but that training took place more than 6 years ago. Professional development does occur in the school system for other topics; however, there is a distinct lack of follow-up training and coaching from the experience of the researcher.

As an instructional coach, the researcher has observed vocabulary lessons that would benefit from the TPRS® tools used in world language instruction. Vocabulary instruction observed by the researcher included some of Marzano’s (2004) six steps but

was often cursory. For example, in one lesson, students received direct instruction on Monday, completed a homework assignment (including a few of Marzano's (2004) strategies) on Wednesday, and the teacher tested the vocabulary on Friday with little to no interaction, direct instruction, or practice of words between. Ellis (2002) shared,

Ross Perot, with his unique use of the English language, said it best—"That dog don't hunt!" In other words, many of the traditional techniques teachers and students use to learn vocabulary does not work because most students, not just those with learning problems, rarely remember the meanings of new terms beyond the test. (para. 3)

Knowledge of vocabulary correlates strongly to reading comprehension (Johnson & Johnson, 2009). Students need to know a variety of meanings and contexts to navigate the ever-increasing growth of reading material being produced daily. Schilling (2013) wrote, "On average human knowledge is doubling every 13 months. According to IBM, the build out of the 'internet of things' will lead to doubling of knowledge every 12 hours" (para. 1). Information and access to information is growing at a staggering rate. Creating ways to help students learn, recognize, and know more gives them more skills to access this knowledge.

To be effective, according to Marzano's (2004) research, vocabulary instruction needs to follow all six steps (description, restate, show, discuss, refine, and reflect) and apply them in learning games. The six steps are summarized in Figure 1 and are broken into two sections. The first three steps allow the student to be introduced to the word. Description is first; the instructor provides an explanation that is understandable for students. Second is restate; students restate the explanation in their own words. Show is

the third step; students show a way to represent the word by finding a picture, symbol, or graphic representing the word. The second section allows the student to have multiple exposures to the word. Fourth is discuss; there is discussion both with the teacher and among students and their peers about a word's context and meaning. Refine and reflect are the next step; in this step, students are periodically asked about a word and its meaning to refresh their memory and help them reflect upon any new information they have. Finally, the instructor provides multiple exposures through learning games, allowing students to play with new words and practice them in different contexts.

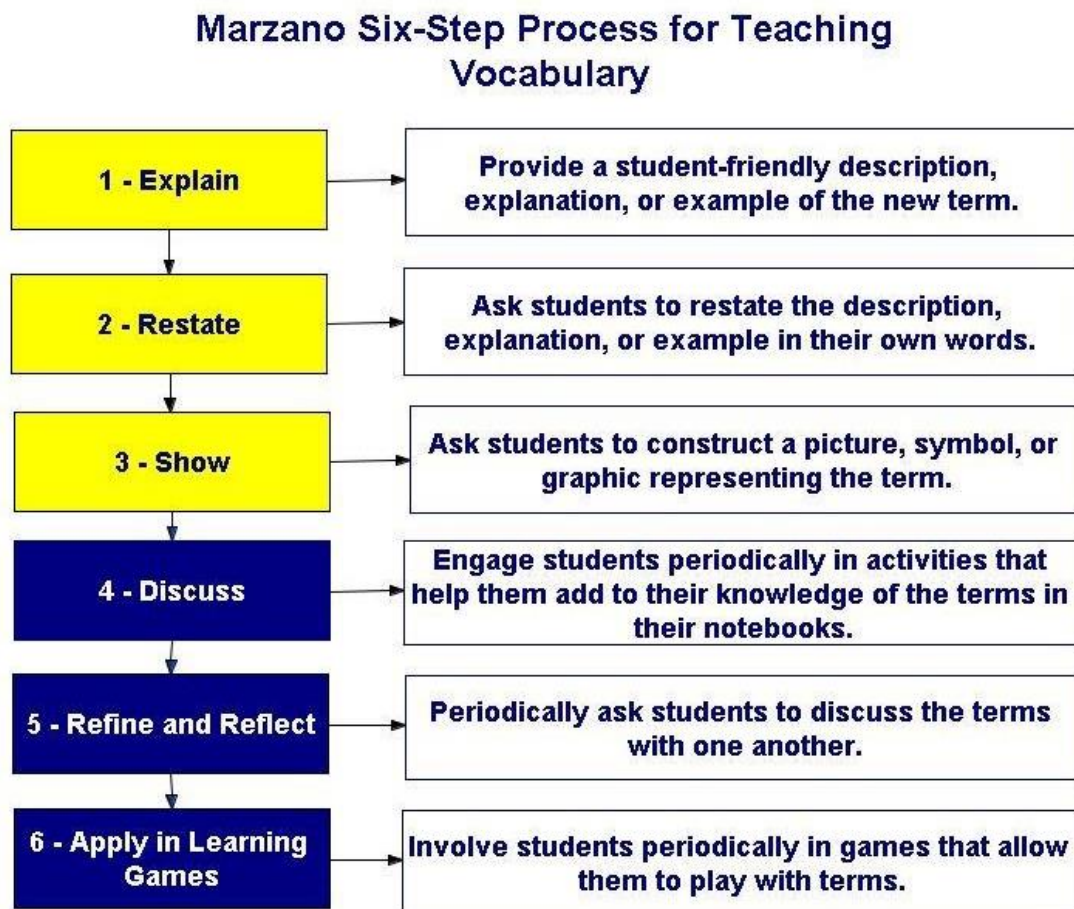


Figure 1. Marzano's Six-Step Process for Teaching Vocabulary (Hartman, 2011).

Marzano's (2004) strategies are widely respected in educational circles. TPRS® provides tools for teachers to put all of those strategies into play in their classrooms in a fun, fresh, and memorable way (Gaab, 2006). Teachers can involve all six steps of the Marzano (2004) vocabulary teaching process, and the lesson takes shape in a story. Studies by Laufer, Hu, and Nation have shown the percentage of vocabulary a student needs to comprehend a written text is anywhere from "95% to 98%" (Schmitt, Jiang, & Grabe, 2011, p. 1). This strategy highlights the importance of framing new words in a familiar and memorable way for students to have the most effective chance of remembering and using the words within a variety of contexts.

From the beginning of time, stories have provided a way for people to remember. Cognitive scientist Willingham (2009) stated, "the human mind seems exquisitely tuned to understand and remember stories—so much so that psychologists sometimes refer to stories as psychologically privileged, meaning that they are treated differently in memory than other types of materials" (p. 66). Stories use all parts of the paradigm from Bransford et al. (2000). Stories are for an intended audience, making them culturally relevant. Stories convey knowledge and inform us about their authors. As stories flow from generation to generation, people remember them. This element allows for assessment by those who have heard the stories before, and creativity as the new storyteller can add to the story based on personal experience and prior knowledge. Finally, many stories are born out of experiences in community and culture.

According to the HPL framework in Figure 2 developed by Bransford et al. (2000), there are four concepts that should guide instructional design. Instruction should be student centered, knowledge centered, assessment centered, and community centered

(Bransford et al., 2000). TPRS® employs all parts of the framework from Bransford et al. along with harnessing the powerful cognitive benefits stories provide. TPRS® allows the instructor to make a story based on what students know already, utilizing elements from the students' culture. TPRS® provides formative assessment throughout by means of personal questioning, which makes the story personal to the students; and circling, which repeats words throughout the lesson to provide maximum opportunities for input. Other activities are also included to allow students to interact with new material. Community forms as the class acts out the stories and then adds to the story context from prior knowledge. TPRS® gives students an opportunity to extend their knowledge beyond the story by making connections and searching out new ways to keep the story going or to go deeper into the story frame.

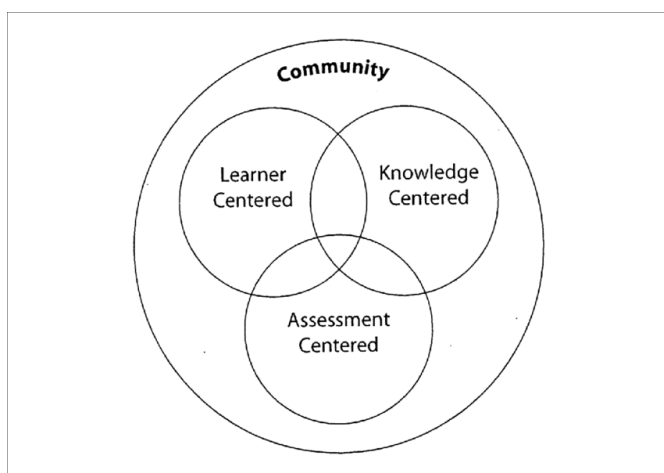


Figure 2. The HPL framework. Source. Reprinted from Darling- Hammond, Bransford, LePage, Hammerness, and Duffy (2005, p. 32) with permission.

Blended professional learning with coaching also utilizes these four frameworks. In the online course, a community is established when learners sign up, volunteer, or are assigned a course. The course is personalized as participants can choose when to work

on the course, how they complete assignments, and how long they spend with the material. The course disseminates knowledge through the provided modules and gives learners opportunities to self-assess. As learners progress through the discussion boards, they also have the opportunity to engage with their classmates and to see what other participants have shared. Feedback from the instructor provides encouragement and clarification when needed. After the course is complete, coaching sessions provide a chance for participants to apply and practice their new knowledge, circling back to the learner-centered and knowledge-centered environments. When the participant is ready, they present the lesson prepared in the coaching sessions to their classes, widening the community-centered environment to their students and allowing the instruction to impact student learner environments as well.

This study offered a glimpse into the impact of professional blended learning with coaching on teachers, classrooms, and students and a cross-curricular perspective on vocabulary instruction. It also provided training in a tool teachers can add to their vocabulary instructional strategies. Furthermore, the study enhanced the broad and rich body of research on blended learning with coaching and vocabulary learning and provided insight for future research.

Research Questions

The study addressed the following four research questions:

1. What were teacher perceptions of the blended professional learning design?
2. What was the impact of the professional blended learning coaching model on teacher knowledge of vocabulary instruction using TPRS®?
3. What was the impact of the professional blended learning coaching model on

classroom instruction and practice of vocabulary instruction using TPRS®?

4. What was the impact of the professional blended learning coaching model on student learning of vocabulary using TPRS®?

Professional significance of the problem. As the world moves toward integration, globalization, and cross-curricular thinking (Price, 2010). delving into the world of using methods in a cross-curricular way to impact student learning provides educators with yet another lens to view student learning. No matter the subject, theme, or topic of a class, language always plays a part. Learning and explaining, even at their lowest levels in any subject, must use some form of vocabulary. In the same way, offering the most impactful professional development to aid teachers in developing critical skills like these is integral to student success.

Finding more ways to reach, challenge, and grow our students' vocabulary proficiency and achievement should be at the forefront of all educators' minds. John Hattie's studies on effect sizes (Fisher, Frey, & Hattie, 2016) show that collective teacher efficacy (with an effect size of 1.57) is the second most effective element influencing student achievement. Goddard, Hoy, and Hoy (2000) defined collective teacher efficacy as, "the perception of teachers in a school that the efforts of the faculty as a whole will have a positive effect on students" (p. 503). The effect size demonstrates that teacher beliefs and perceptions are integral to student success. This study provides insight into how blended professional learning with coaching impacts teacher perceptions, teacher knowledge, classroom practice, and student learning. The professional development course could be used across the curriculum; however, it has the potential to spur even more research into best practices for how teachers learn, how they connect with teaching

students the vocabulary they need, and most importantly, how students learn best.

Overview of methodology. This study sought to describe how blended professional learning on vocabulary instruction using TPRS® with coaching impacts teacher perceptions, classroom planning and instruction, and student learning. To aid in answering the research questions, the researcher identified five to seven teachers who would be interested in learning a new technique for teaching vocabulary by sending out a survey to 55 high school teachers at a rural high school. The study follows a sequence created by the researcher and is a professional blended learning coaching model. The model sequence used for the project is included below.

The DeBord-Brown Model: A Professional Blended Learning Coaching Model

1. Participant agrees to be a part of the study.
2. Participant chooses material to teach, administers a pretest to students, and reports anonymous student grades to researcher.
3. Participant teaches self-created lessons.
4. Participant administers posttest to students and reports anonymous student grades to researcher.
5. Researcher conducts preimplementation interview on blended professional learning, coaching, and vocabulary instruction.
6. Participant completes virtual professional development course.
7. Participant completes the Community of Inquiry Survey (CoI; Arbaugh et al., 2008a).
8. Participant and coach create lessons and assessments based on virtual professional development.

9. Participant administers pretest created during coaching sessions to students and reports anonymous student grades to researcher.
10. Participant delivers instruction created during coaching sessions to students.
11. Participant administers posttest created during coaching sessions to students and reports anonymous student grades to researcher.
12. Researcher conducts postimplementation interview on blended professional learning, coaching, and vocabulary instruction.

After agreeing to participate, teachers gave students a pretest on the vocabulary they were beginning to study, presented a lesson or lessons to their students using their current method of vocabulary delivery, and then gave the students the same postassessment based on those lessons. Teachers then participated in an interview (Appendix A) with the researcher asking them to reflect upon their experience with professional development, blended learning, coaching, and current vocabulary instruction methodology. Next, the researcher provided training for teachers in the TPRS® method by presenting an asynchronous 3-module course in the learning management system Canvas. The participants then took the CoI (Appendix B). After completing the training, the researcher coached the participants individually and aided them in developing TPRS® lessons to identify or create a story to teach the vocabulary. The teacher then gave students a pretest and presented the lessons to students and students took the same postassessment based on the TPRS® lesson. Teachers participated in a final interview (Appendix A) after the conclusion of the course and lessons presented. The course, professional learning activities, teacher lessons and assessments, along with pre and postinterview results provided the researcher with insight into the research questions.

Context of the Study: Location and Participants

The researcher advertised the Canvas training course to 55 teachers in a small county in North Carolina as professional development for continuing education credits. The ideal group for training purposes was five to seven participants. After 1 week, five colleagues agreed to join the study. Their agreement to participate provided five sets of vocabulary assessment scores and pre and postinterventions from the classrooms. The small number was integral to provide time for follow-up coaching with each participant to create the lessons and assessments for implementation (Hattie, 2015). All classrooms were from the ninth- to 12th-grade levels. The number of participants was met in the first advertisement; therefore, the researcher did not have to advertise via professional networks for participants.

The targeted school system where the professional development was offered is located in a rural county located in the southwestern corner of North Carolina. The county shares borders with Georgia, Tennessee, and the Qualla Boundary (Home of the Eastern Band of Cherokee Indians). It is also home to a university.

Six years ago, district teachers received training in Thinking Maps and core teachers received training in using Marzano's (2004) vocabulary strategies; however, with the budget crises (Associated Press, 2017) that many North Carolina schools face due to lack of funding, professional development has been limited to school-based offerings for the past 5 years. Teachers may choose to go to professional development outside of their school, but they must provide their own funding. This vocabulary training was free to teachers and provided cross-curricular connections with colleagues from across the school. Participants earned 10 hours of credit or one CEU for

participating in the course.

Definition of Key Terms

Important terms are defined below to provide a common terminology for readers of this inquiry.

Circling. A TPRS® instructional strategy where teachers ask a set of prepared questions in the target language about a statement or part of a story (Bex, 2015).

Embedded reading. Three or more leveled passages to read creating a chance to expose students to the same outline with increasingly difficult versions to build and acquire more language (Bex, 2015).

Comprehension checks. A formative assessment tool allowing a teacher to know if a student understands the information being presented by using a series of yes/no, either/or, true/false, and fill-in-the-blank questions (Bex, 2015).

Culturally responsive teaching. A pedagogy emphasizing the importance of including a student's culture into how and why they learn (Ladson-Billings, 1994).

Personalized questions and answers (PQA). This strategy allows the teacher to include the student and their experience into the story during the TPRS® lesson. Students become the center of the content and delivery during this part of the lesson as teachers ask questions and form statements based on their knowledge of the students in the class (Bex, 2015).

Explicit instruction. Beginning with small steps, instructors perform understanding checks to obtain active participation by all students (Archer & Hughes, 2011).

Limitations of the Study

Limitations of the study included the relationship that the participants already had with the researcher. Research was conducted with teachers in the school where the researcher has worked for 17 years. Due to the nature of having to work closely with participants to develop lessons, this plan was the best choice for the synchronous coaching component; however, this choice could have limited the freedom participants feel about being honest with the researcher.

Second, the researcher is a world language teacher trained in world language methods who worked with a variety of teachers from differing backgrounds. For this reason, the researcher and participants worked together to avoid mistakes in understanding and depth of instruction.

The methodology for the study included a pre and postinterview (Appendix A) administered after the intervention. The researcher created the pre and postinterviews from research and examples found during the literature review. These could have been affected by researcher bias or prior knowledge of the participant; however, to protect against this issue, the researcher submitted questions to the dissertation committee for feedback and clarification.

The methodology also includes a description of the impact on student learning. As a single study, it would be impossible to link student achievement to professional development empirically; however, student vocabulary pre and postassessment from before the intervention and after the intervention could inform the research base and provide ideas for future study. This component had certain limitations, as the assessment measured different words. The pre and postassessment were implemented both times to

provide for prior student knowledge of words and their meanings. It was impossible for the two sets of assessments administered to be the same, as participant initial pre and postassessment and final pre and postassessment must measure different words within varied disciplines. This part of the study was limited by the fact that the participant administered the tests to the same group of students not providing a control group. When analyzing the data, this limitation was present.

Finally, due to time limitations, the number of participants had to remain low to allow for the researcher to meet with all participants to plan the lesson. This number of participants could have affected the transferability of the results, as the population studied was five teachers. The researcher also could not plan for specific participants or age groups the study would serve, as the workshop was offered on a volunteer basis. Time limits may have also affected the quality of the professional development. Yoon et al. (2007) found the most gains in student achievement when participants received approximately 49 hours of professional development. The scope and sequence of this project did not meet this standard due to time limitations.

Background and Role of the Researcher

The researcher is a language learner and teacher. While in undergraduate study, the researcher travelled to Mexico and began to learn the Spanish language. The researcher received a degree in Spanish Language Education, K-12 and taught for 10 years before returning to university to obtain a Master's in English for Speakers of Other Languages (ESOL) and an Educational Specialist degree in Foreign Language Education. After completing training in vocabulary teaching techniques, the researcher created training for ESOL majors and future teachers at a local university. This training caused

the researcher to question how the method could be transferred to other curriculums outside of world language instruction. During this time, the opportunity to teach and develop online courses with the state of North Carolina became a part of the researcher's experience. The researcher began classes for an Ed.D. in Curriculum and Instruction to further the researcher's knowledge base of how to best create curriculum and provide instruction. The researcher's experience provides part of the rationale for this professional study.

Organization of the Dissertation

The first chapter is an introduction to the dissertation. In this chapter, an overview is provided for the five chapters that are included in the study. The stage for the project was set by the presentation of the problem and the research question related to the impact of providing blended professional learning on teacher perceptions, teacher knowledge, classroom practice, and student learning while using the world language vocabulary method TPRS® to present and assess the vocabulary learning.

The second chapter is a review of past and current literature around the topic of professional development, blended learning, vocabulary instruction, world language methods, second language acquisition, and TPRS®. Synthesis of the literature is presented to the dissertation audience, and a synopsis is provided based on how it informs the study. This synthesis includes a background of the topic presenting both positive and differing views from the one presented by the candidate. A critique of the literature on the history of vocabulary instruction is also included.

The third chapter presents the methodology employed in the study. The chapter states how data were collected and analyzed within the study. Data were collected from

several sources. Participants were part of two interviews. The first interview created by the researcher was before the professional development was started. The second, the CoI (Appendix B), took place after the professional development. The teacher gathered student assessment data without identifying student information from their initial vocabulary lesson and reported it inside the Canvas course to the researcher and did the same after the second set of TPRS® assessments were complete. The researcher then compared the results for each numbered participant. The participants are identified in this section. An explanation of how the problem is aligned with the methodology speaking to the research design of the study follows.

The fourth chapter presents the findings of the study and the data analyses. The mixed-method results present the qualitative findings of the interviews and the CoI (Appendix B), along with the quantitative findings from the pre and postassessments given by the participants to their students.

Finally, Chapter 5 includes a discussion of the findings and results and their deeper significance, importance, and application to teaching and learning in the future. This discussion provides an opportunity to share the relevance of the research and to make conclusions and recommendations for further study.

Chapter 2: Literature Review

Restatement of the Problem

Professional development is a multi-billion dollar business with returns that are far less impactful for teachers than they should be. Marzano and Pickering (2005a) cited vocabulary instruction as one of the key indicators of student academic success. While observing multiple classes in which vocabulary instruction was cursory or passed over due to lack of time, the researcher identified an opportunity to train teachers in other disciplines to incorporate the world language method of Teaching Proficiency through Reading and Storytelling® or TPRS® (formerly known as Total Physical Response Storytelling) to enhance their vocabulary instruction. The researcher noticed a dearth in the body of research or literature that exists on how using cross-curricular world language learning methods outside of the world language classroom could inform and enhance vocabulary instruction in other subjects. Instead, the researcher examined reading and vocabulary instruction research, language acquisition research, and vocabulary teaching methodology and strategies to share in order to strengthen current practice. This study sought to add to the research on vocabulary instruction that already exists and to give insight to the growing research on using cross-curricular instructional methods and strategies to support all students.

Organization of the literature review. To address the issue of vocabulary instruction, the researcher examined literature around the topic and divided it into four sections.

The first section reviews the literature on effective professional learning and the ways it relates to the study. Professional development is a part of every teacher's

experience. This section reviews best practices and methodologies for implementation of professional learning and coaching.

The second section of the review centers on vocabulary instruction and includes the following subsections: (a) a brief history of vocabulary instruction and (b) a review of the conceptual framework using Bransford et al.'s (2000) Theory of HPL. This discussion provides a basis to invest further in the study of direct vocabulary instruction. Reading and vocabulary instruction have often been viewed as synonymous; however, they are different, and the researcher hopes to show the differences in this section.

The third section includes a discussion of strategies and theories related to vocabulary instruction inside and outside of world languages and is divided into three subsections: (a) Marzano's (2004) six steps, (b) the affective filter hypothesis and Sweller et al.'s (2011) cognitive load theory, and (c) Krashen's (1982) input hypothesis. The ebb and flow of these theories and hypotheses paint a picture of how TPRS® can be an effective tool to teach vocabulary, using research from inside world languages, and how it can help with vocabulary acquisition. The researcher introduces TPRS® here along with a history and explanation of the methods used in the world language classroom and applications that reach beyond into other curriculums.

The fourth section is a synthesis and critique of the literature including the support and criticism of TPRS®. TPRS® is not without its critics; and in this section, the researcher reviews the literature, both for and against TPRS®, as an effective way to teach vocabulary.

Professional Learning

Professional learning is a part of every teacher's experience. When professional

learning is tailored to the teacher's experience, treats teachers as professionals, is interactive, and is sustained over time, teachers "value its potential as a tool to help them plan instruction" (Boston Consulting Group, 2014, p. 4).

According to Knowles (1984), there are six principles to keep in mind when developing instruction for adult learners. Adults prefer to direct themselves and make choices about their education. Instruction should provide a goal-oriented process (Knowles, 1984) with chance for self-direction and pacing in professional learning. Adults utilize prior knowledge and life experiences (Knowles, 1984) to guide their learning. Online, they should have a place to share their learning by way of discussion boards and group activities to connect and network with others. Adults desire relevant learning (Boston Consulting Group, 2014; Knowles, 1984). Finally, professional development needs to be practical and collaborative (Knowles, 1984). As adult learning is problem centered, providing participants with a way to experience the learning and then a way to apply it becomes tantamount to the success of the professional development. Prather (2015) shared, "adults prefer to process information by doing something with it" (para. 8).

Hattie (2015) used effect sizes to rank the influences of different educational strategies and interventions in relation to student achievement. Hattie identified 0.42 as an average effect size. He listed professional development at 0.41 when it relates to student achievement; however, collective teacher efficacy, where teachers believe their collective work is making a positive impact on student learning (Goddard et al., 2000), is listed at having an effect size of 1.57. According to a study by Joyce and Showers (2002), professional development for teachers carried an effect size of 0.00; however,

professional development along with coaching had an effect size of 1.42.

Coaching is a one-on-one exchange,
 focused on the enhancement of learning and development through increasing self-awareness and a sense of personal responsibility where the coach facilitates the self-directed learning of the coachee through questioning, active listening and appropriate challenge in a supportive and encouraging climate. (van Nieuwerburgh, 2012, p. 17).

The researcher flipped the instruction to teach participants about TPRS® in the Canvas course and then provide coaching for teachers. This flipped instruction allowed the researcher to interview participants about the impact of the blended professional learning with coaching model.

Online courses designed with the principles of andragogy follow similar guidelines to Knowles's (1984) six principles. According to the Northwest Center for Public Health Practice (Effective Adult Learning, a Toolkit for Teaching Adults, 2012), the course needs to be useful, relevant, welcoming, engaging, and respectful; allowing learners the chance to share about themselves and their experiences. The researcher utilized Universal Design for Learning Guidelines (About Universal Design for Learning, 2015) to aid in course development. Engagement, representation, along with action and expression are the three areas that indicate the why, what, and how of learning (About Universal Design for Learning, 2015).

For course content and guidance, the researcher utilized Ray and Seely's (2008) Fluency Through TPR Storytelling as a guide along with Marzano's (2004) Six Steps for Vocabulary Instruction and Bransford et al.'s (2000) Theory of HPL. The researcher also

utilized materials from the professional presentation created by the researcher to introduce the TPRS® method to new learners. The learning management system Canvas is the platform for the professional development, and there was no cost associated with the course for participants.

A Brief Overview of Vocabulary Instruction in the United States

Vocabulary instruction and reading instruction go hand in hand. Often, one cannot be differentiated from the other in history. A brief history of vocabulary instruction follows. This topic could span an entire book; however, for the purposes of this study, the researcher has chosen the following moments in history.

From 1880 to 1910 in the United States, there was a dearth of vocabulary instruction. Normal schools and teacher preparation programs were beginning, and teachers focused on giving students a broad knowledge of literature (Smith, 2002). In 1925, the beginnings of direct vocabulary instruction can be seen in “phonics based readers of the time” (Flesch, 1955, p. 49). From 1925 to 1935, the Thorndike Reader provided instruction on how to view words and how to use them in context, and “the beginning of the reading specialist profession was born during this era” (Smith, 2002, p. 186). The 1930s heralded the return of the basal reader in books like *Dick and Jane* and the look-say method, which closely resembles whole language and sight reading methods of today.

In the 1950s, the standardized testing movement gave the false picture to society that a standard reading vocabulary existed for the entire country, which was far from the truth (Traxler, 1958). Traxler (1958) ascertained that testing companies created standardized reading vocabulary that was often culturally and socioeconomically biased.

The 1960s brought new instruction in the way of reading research; however, there was still a lack of direct vocabulary instruction. In the 1970s, a focus on phonics returned. Whole language methods of instruction were reinstated in 1972 and were pervasive throughout the 1980s. The textbook and workbook were the main methods of delivery for vocabulary instruction; however, material that was more authentic in nature became a part of the basal readers of the time. Vocabulary instruction was again a part of the background and “continued to be a mystery” (Sears, 2007, p. 32) as students continued copying definitions from a glossary or dictionary. It was not until 1985 when Nagy and Herman (1985) related that “multiple exposure to the word, exposure to the word in meaningful contexts, rich or varied information about each word, ties between instructed words and students’ own experiences and prior knowledge, and an active role in the word-learning process” (p. 193) are ways in which vocabulary instruction can be effective. Ideas about vocabulary instruction began to change.

The 1990s brought even more emphasis on whole language. The government began the No Child Left Behind Legislation. Teachers used textbooks and more multiple-choice assessments to guide and provide instruction, as the government began to ask questions about educator effectiveness. More testing and accountability measures were added, shifting the focus from vocabulary instruction; however, researchers like Marzano (2004) and Nilsen and Nilsen (2003) were beginning to share their research on vocabulary instruction.

Much like the anecdote from the researcher’s school system in the introduction where a teacher gave students a list of 20 words on Monday, a homework assignment on Wednesday, and then an assessment on Friday, the following anecdote illustrates that this

type of vocabulary teaching, not tied to context, happens in other classrooms. Nilsen and Nilsen (2003) related the story of a teacher who handed out an alphabetized list of words for students to research definitions for on Monday, and on Friday students would take a quiz on the words. The teacher reported her students to the principal for punishment when she found they were collaborating by divvying up the list to research the meaning of the words and sharing them online. Nilsen and Nilsen said of the situation, “it received little support from administration” (p. 31) once they found out that they had only collaborated on the meanings of the words and not on the actual quiz. This situation, according to Nilsen and Nilsen, is directly related to the focus on standardized testing. Nilsen and Nilsen stated, “With no training in how to teach vocabulary skills, many teachers transfer to their classrooms the same techniques that they see test makers using” (p. 31). They also pointed out that in 2003, there were “few references to teaching vocabulary in the professional books that teachers read, nor do many preservice programs offer actual practice or advice on how to incorporate” (Nilsen & Nilsen, 2003, p. 31). In comparing Nilsen and Nilsen’s story with the story from the researcher’s district in 2017, one can see, much like in 2003, educators still need to understand how best to teach vocabulary.

HPL

In late 1999, the National Academy of Science championed the HPL learning theory (Bransford et al., 2000). HPL was based on their research from the 1980s and 1990s. Citing new data from new technologies, the authors proposed four environments in which they believe people learn. The four areas of focus are learner centered, knowledge centered, assessment centered, and community centered.

Learner-centered environments “pay careful attention to the knowledge, skills, attitudes, and beliefs that learners bring to the educational setting” (Bransford et al., 2000, p. 133). The authors shared that this environment is in line with Ladson-Billings’s (1994) research on “culturally responsive and culturally relevant” teaching that focuses on what the learner brings to the lesson. The researcher was surprised to read the terms, “culturally responsive” and “culturally relevant” in a document from 1995 as the words are very much in vogue in today’s educational arenas. Learner-centered environments do not include spectator lessons or traditional passive learning sessions. They provide opportunities for learners to engage, interact, and synthesize to construct their own learning.

Knowledge-centered environments “take seriously the need to help students become knowledgeable by learning in ways that lead to understanding and subsequent transfer” (Bransford et al., 2000, p. 136). Learners are not empty vessels; however, they need to be in an environment that is ready to fill in the gaps in their learning and challenge them to reach new heights, depths, and breadths in the learning process. Such an environment allows students to make connections to other curriculums and transfer learning from one area to another (Bransford et al., 2000).

Assessment-centered environments provide opportunities “for feedback and revision and that what is assessed must be congruent with one’s learning goals” (Bransford, 2000, p. 140). Assessments should be both formative and summative to give students and their instructors a valid and reliable picture of learning. In using assessment for learning, Black, Harrison, Lee, Marshall, and Wiliam (2003) stated, “for assessment to function formatively, the results have to be used to adjust teaching and learning” (p. 5).

Because of the political and divisive uses, standardized testing assessment has received a lot of negative attention; however, there is no way to know if true learning has taken place without an assessment of some sort, whether it be project-based learning, a short quiz, or a college placement exam.

Finally, community-centered environments are presented by HPL theorists. Bransford et al. (2000) referred to this environment as the classroom, the school, and “the degree to which students, teachers, and administrators feel connected to the larger community of homes, businesses, states, the nation, and even the world” (p. 145). A community is a part of the student’s culture and directly affects how they learn, when they learn, and what they learn.

This theory has direct bearing upon vocabulary instruction as the community, culture, knowledge, and types of assessment are related to the vocabulary that learners are exposed to in any given situation. Providing context is integral to student success with vocabulary. For example, Marzano and Pickering (2005b) related the following passage: “Carving is appropriate for most green and blue slopes and even some black slopes. However, if you try to carve through moguls, especially in packed powder or corn snow, you're going to face-plant” (para. 8). Unless a person knows something about skiing or they are getting instruction from a ski instructor on a mountain, a little context is important for the learner to understand.

Marzano and Pickering (2005a) also conducted an experiment where there was no vocabulary instruction for an activity given to students versus direct vocabulary instruction on words related to content. They found that 50% of students succeeded without the vocabulary instruction; however, the number rose to 83% when the direct

instruction provided students an opportunity to see words in context. The experiment's effect size was equal to .97.

Marzano's Six Steps for Vocabulary Instruction

Marzano's (2004) research on vocabulary instruction is revered and shared in the global arena. Having received training on vocabulary in instruction based on Marzano's (2004) six steps, the researcher began to delve deeper into how these steps could inform the study. Marzano's (2018) research and opinion on direct vocabulary instruction is clear on his research website, which stated,

The importance of direct vocabulary instruction cannot be overstated.

Vocabulary provides essential background knowledge and is linked to academic achievement. Effective teachers select terms for direct instruction, use a research-based process to teach those terms, and assess and track students' progress with new terms. (para. 1)

The research-based process from Marzano (2004) includes six steps. These are divided into two sections. The first section allows the instructor to provide first a description or anecdote to give meaning to the words. Students then perform two tasks: first, they create their own example based on experiences from their own lives; and second, they draw an image or a symbol that represents the words.

In the instructional sequence, the next section of the steps ideally happens a few days later. In step four, students interact with the word through various activities like comparing with another word they may have studied. In step five, they may discuss the word in context with a partner. Finally, in step six, the instructor provides a game with the words so students are able to formatively practice and play with the words in the

lesson.

Some of Marzano's (2004) strategies are used in the researcher's school system, where training took place around 7 years ago. Various parts of the strategies are being implemented to varying degrees in veteran teacher classrooms; but to be effective, all six steps must be implemented (Marzano, 2009).

Marzano's (2004) six steps provide a framework outside of world languages that closely relates to the strategies identified in comprehensible input and TPRS®. When creating the professional development for teachers, it is important to the researcher to find ways to connect the ideas of comprehensible input to contemporary examples in the body of studies available.

Krashen's Affective Filter Hypothesis and Sweller's Cognitive Load Theory

When teaching a world language, one is exposed to ideas from language acquisition experts and cognitive researchers who teach HPL languages. Due to professional development in schools, teachers also receive professional development from experts outside the world language realm. Experience for the researcher has shown that the opposite rarely happens. Findings and training from world language experts are not often shared outside of world language environments even though their research on language acquisition may be applicable to vocabulary acquisition. This study hopes to add to the cross-curricular pollination of the two areas.

In the process of researching the world language hypothesis on the affective filter process, the researcher's chair noted that further study of Sweller et al.'s (2011) cognitive load may be fruitful. The interplay of the hypothesis and theory has helped to shape the further study on how to present TPRS® outside of the world language classroom.

Stephen Krashen is well known in the arena of world language teaching.

Krashen's (1982) affective filter hypothesis looked at the variables that affect how people acquire language. He used the concept of affective filter proposed by Dulay and Burt (1977) related to affective variables. The three variables are listed here:

1. Motivation: "performers with high motivation generally do better in second language acquisition"(Krashen, 1982, p. 31).
2. Self-confidence: "performers with self-confidence and good self-image tend to do better in second language acquisition" (Krashen, 1982, p. 31).
3. Anxiety: "low anxiety appears to be conducive to second language acquisition, whether measured as personal or classroom anxiety" (Krashen, 1982, p. 31).

Figure 3 provides a picture of Krashen's (1982) hypothesis. Students first receive input that must go through a filter based on the three variables above; this input then passes through a language acquisition device, which in turn becomes acquired competence in a language.

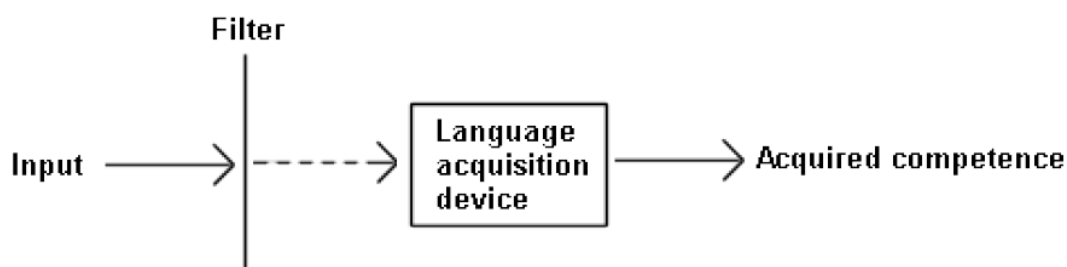


Figure 3. Krashen's (1982) Affective Filter Hypothesis (p. 32).

Each student is different and brings with them a variety and degree of filters; however, finding ways in which educators can reduce and diffuse the filters students

bring into the classroom is integral to how students acquire competence. Cognitive load theory is not identical to but rather adjacent to Krashen's (1982) hypothesis. Cognitive load theory provides a way to teach while considering human cognitive architecture.

Using research from George Miller, Sweller knew that short-term memory was limited in how much it could encompass simultaneously. Sweller defined cognitive load as, "The amount of information a human is trying to process in working memory at any one time" (Sharma, 2014, para. 9).

To show an example of cognitive limit, this exercise is helpful (Mbucy21, 2009). A group of letters is provided to participants and they are asked to memorize them in 3 seconds and then write them down as they appeared. The letters are WO, UIB, MES, LUS, and A. Next, participants see the same letters; however, this time they are arranged differently. The new set of letters is WOU, IBM, ESL, and USA. The researcher then asks participants which was easier to remember. The second is usually easier as it provided chunks, which makes the letters easier to remember because they were culturally recognizable (Mbucy21, 2009).

George Miller's research as reported by McLeod (2009) stated, "7 +/- 2 is around the number of things most people can keep in short term memory" (para. 4). The first set of letters is 12 pieces of information one has to remember, while the second is really only four bits of information because they can be grouped together (McLeod, 2009). Learners form cognitive schemas (Sweller et al., 2011) or scaffolding to help organize information.

Sweller et al. (2011) has identified three types of cognitive load. The first is extraneous cognitive load, which relates to the material taught, where it is taught, and the way in which it is presented. This theory relates directly to Krashen's (1982) affective

filter hypothesis. Awareness of how the information is presented to make it applicable, palatable, and understandable to those to whom you are presenting can reduce this load. Second, there is intrinsic cognitive load, which relates to how complex the material is that is being presented. Breaking the material down into chunks and using information the learner knew prior to the lesson can reduce intrinsic cognitive load. Finally, there is the germane cognitive load, which gives learners a chance to build new schema. By reducing extraneous and intrinsic cognitive load, learners have more room to form and automate new schema (Sweller et al., 2011).

This theory directly relates to the tenets of input hypothesis and TPRS®. TPRS® breaks information down into chunks for students and provides a schema of a story for students to construct their own knowledge (Ray & Seely, 2008). Some schema are automated when stories are familiar to students from their childhood or previous experience. This schema allows extraneous and intrinsic loads to be reduced, so students can learn the new vocabulary presented by the teacher.

Krashen's Input Hypothesis and $i + 1$ Hypothesis

Sweller et al.'s (2011) cognitive load theory provides a bridge into Krashen's (1982) input hypothesis. Krashen's (1982) input hypothesis stated that "optimal input is comprehensible, when the acquirer does not understand the message, there will be no acquisition" (p. 63). Krashen (1982) often referred to this phenomenon as "noise" (p. 63). Krashen's (1982) use of "noise" sounds much like the extraneous load from Sweller et al. (2011).

Krashen (1982) believed there are two ways teachers can provide input to their students, linguistically and nonlinguistically. Figure 4 provides is a picture of the input

hypothesis as described by Krashen (1982). Input, which is comprehensible in nature to language acquirers, passes through the affective filter into the brain. There, it is processed and becomes the language that a student is able to understand and use.

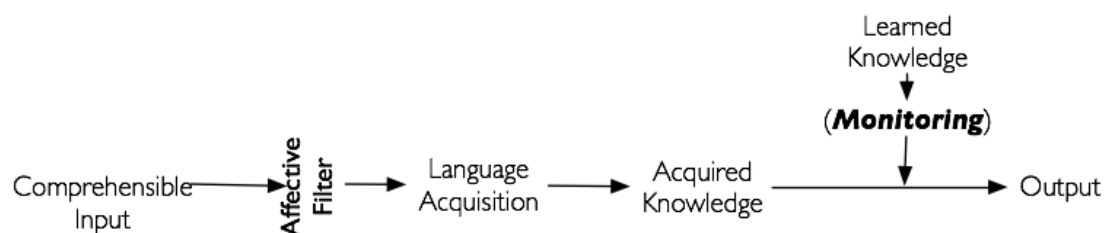


Figure 4. Input Hypothesis Model of L2 Learning and Production (Cook, 1993, p. 53).

World language teachers need to provide input that is comprehensible if the students are expected to acquire the language and not just treat it as noise (Krashen, 1982). Krashen (1982) took his theory one step further with the $i + 1$ hypothesis in Figure 5. Krashen (1982) stated in *Principles and Practice*:

In order to acquire, two conditions are necessary. The first is comprehensible (or even better, comprehended) input containing $i + 1$, structures a bit beyond the acquirer's current level, and second, a low or weak affective filter to allow the input “in.” (p. 33)

Good input, in Krashen’s (1982) opinion, always provides comprehensible input, which he defined as (i) plus (+) material that is a “bit beyond” the level of the student to drive instruction, equaling 1 in the equation.

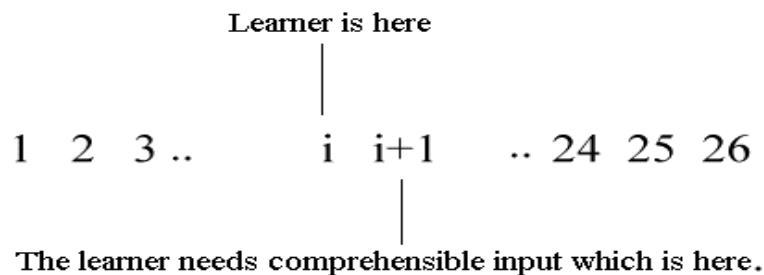


Figure 5. Krashen's $i+1$ Hypothesis Model (Shoebottom, 1996).

Outside of world language acquisition, Krashen's (1982) theory also shares similarities to Vygotsky's (1987) Zone of Proximal Development (ZPD). Vygotsky defined ZPD as, "The distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peer" (p. 86).

In world language instruction, vocabulary is at times reduced to a list of words students must remember for the test. Context is just a heading for each vocabulary section, and if students are lucky, they may use online flashcards to study for the assessment; however, language is richer and more varied than this reduction. Teachers can use Krashen's (1982) theory to show students how to see patterns, enjoy context, and use their prior knowledge. The result is the teachers being able to show students they can acquire vocabulary and language.

In the researcher's own English vocabulary learning in the 1990s, students were given a workbook of vocabulary that was presented as definitions with a variety of activities aiming to give small chunks of context in sentence form. Many of the words did not relate to each other, and there was no concept of culturally relevant teaching at

the time. The researcher and classmates merely memorized words for the assessment and then forgot them. The teacher did not use comprehensible input as a teaching tool; vocabulary was simply memorized for the test, and most of it was forgotten after the test.

Every teacher is a teacher of vocabulary no matter the subject. Teachers all have a set of vocabulary and specific contexts that come with each area of expertise. Some may teach the language of math, others the language of second grade, another the language of nuclear physics, or perhaps the language of a hard-knock life; no matter the language, the more effectively one can explain, teach, and impart that vocabulary, the better our instruction will be. An *envelope* in engineering is not the same as an *envelope* used in letter writing, nor are the ways that smell of your grandmother's coconut pie *envelopes* your senses and takes you back nostalgically. This situation is why cross-curricular instruction and methods are so powerful. Students are going to be tasked with problems that require synthesis of learning from all of the areas from which they have knowledge, talent, and expertise. If educators can teach them how to make those connections, new worlds of possibilities are at their fingertips.

Language is living and active; it slows down for no person and can jump continents in a matter of seconds in our digital global age. For example, in September of 2017, Kim Jong-un used the word "dotard" (Ventura, 2017). In a matter of days, the word had a large following as it added fuel to the already raging media frenzy against President Donald Trump. *USA Today* reported that internet searches for the word dotard surged (Fifield, 2017).

Saying a word as simple as "dog" can make each person who hears it feel or see something different. If one says, "Describe what happens when you hear the word 'dog'"

to a room of 20 people, of course the answers will be similar; however, each one's prior experience will be attached to a moment, a story, a smell, a feeling, or a picture of what each has in his or her mind. If you were to ask the participants in the room, one person may say they have warm feelings of a ball of fur with a wet nose cuddled up with her on the couch, while another person may fear the word because of a traumatic experience when they were younger. Prior experience plays a significant role in how one sees or consequently how one does not see a word (Marzano, 2004).

As teachers search for ways to be better at the craft of teaching, they delve more deeply into the methods around them to find the best way for students to learn and use the vocabulary that surrounds their lives.

Storytelling: Tale as Old as Time

Stories and the oral tradition predate written stories, and stories are at least as old as human language. Even though it is difficult to pinpoint, some studies say language could be 300,000 years old (Konner, 2010). Psychologists give stories a special category of "psychologically privileged" (Willingham, 2009, p. 66). This privilege means "the memory treats them differently than other pieces of information" (Willingham, 2009, p. 66). Story structure lends itself well to remembering. The five elements of a story are plot, character, conflict, theme, and setting. These provide context, place, and a reason for telling the story. Willingham (2009) contended that "organizing a lesson plan like a story is an effective way to help students comprehend and remember" (p. 66).

This piece connects to Sweller et al.'s (2011) cognitive load theory, which concludes that one needs to create schema to house new memories; stories are a container of sorts for the new information received. Stories help organize and file information in a

tidy manner that is accessible to one's memories in ways that other information is not readily available. Frank (2010) said the following about the use of stories:

Stories may not actually breathe, but they can animate. The breath imputed by this book's title is the breath of a god in creation stories, as that god gives life to the lump that will become human. Stories animate human life; that is their work.
(p. 1)

The schema created by learning a new story exposes a learner to new vocabulary using elements like, but not limited to, imagery, character, detail, description, plot, and intrigue. The learner then has a context to remind him or her of new vocabulary; and the more they hear that story, the more their new vocabulary is reinforced. Studies have shown one of the main ways vocabulary can be improved is through reading. TPRS® makes use of stories employing language that is easily comprehensible in order to build context for new words in the story students are learning. The next section discusses the history of TPRS®.

A History of TPRS®

TPRS®, now known as Teaching Proficiency through Reading and Storytelling®, is a world language method developed by Blaine Ray (Ray & Seely, 2008). The method stemmed from the method Total Physical Response, the precursor to TPRS®. TPR was created in the late 1960s by James Asher. Asher's (1969) method used scripts to teach students vocabulary commands in a world language. For example, teachers asked students to stand up, sit down, stand up again, jump, dance, put a pencil on top of their head, and do a variety of actions while learning these scripts in the new language. Along with the commands came actions for the vocabulary words students were learning and

circling activities, which exposed students to the words multiple times during the lesson for students to be able to practice the new words and their forms. An example of a script like ones used by James Asher is included in Figure 6. In Figure 6, one can see all of the verbs are in the command form, and the nouns are concrete and tangible. This format allowed students to use kinesthetic actions in the classroom, which was one of the main cruxes of Asher's method (p. 17). Asher believed students needed to be more active in their world language classroom and that word actions would allow them to connect to meaning more in their learning.

SCRIPT 1: The Room and Numbers 1-10

VERBS	NOUNS		
Stand up			
Sit down			
Point to the	door	ceiling	telephone
Touch the	wall	blackboard	clock
Look at the	window	light switch	table
Walk to the	chair	wall plug	(floor)
	one	two	three
Jump	four	five	six
Clap	seven	eight	nine
	times		
Open the	door	cabinet	book
Close the			
Shut the			

Figure 6. Script Example from TPR® Lesson, Spring Institute (Silver, Adelman, & Price, 2003, p. 10).

Blaine Ray (Ray & Seely, 2008) used TPR® in his classroom in the 1980s and 1990s in Bakersfield, California, and he and his students saw success; however, he also began to research how TPR® could be used outside the world of commands in more

descriptive ways that helped narrate stories (Ray & Seely, 2008). Using the interests of his students and kinesthetic actions to aid students in connecting and remembering stories, Ray created and began training others in using TPRS® for Total Proficiency through Reading and Storytelling. With TPRS® in the classroom, teachers assigned actions to the story frame and represented concrete as well as abstract concepts.

While Ray (Ray & Seely, 2008) incorporated some ideas from Asher's (1969) TPR®, the idea for TPRS® was born from other ideas using the Natural Approach. The Natural Approach other theories resulted from the work of Stephen Krashen and the late Tracy Terrell (1983). TPRS® would not be the same without the Natural Approach and, more specifically, Comprehensible Input. Krashen and Terrell presented the Natural Approach in 1983. Still debated today, Krashen and Terrell's (1983) approach and subsequent theories are still somewhat controversial among language teachers (Liu, 2015).

Krashen and Terrell's (1983) Natural Approach views language instruction from the perspective of a child acquiring his or her first language contrasted with more traditional ways of teaching a world language (i.e., translation, drills, grammar, conjugation, etc.). According to Krashen (1982), there are two systems for language: the acquired, which centers on how children acquire their first language from family and peers; and the learned, which zeroes in on how children are taught a language by teachers and schools. Krashen's (1982) main tenet is that acquisition is more important than learning. Krashen (1982) offered almost 40 juxtapositions of acquisition versus learning phrases to illustrate his point. Some of these included

Subconscious 'picking up' of language vs. conscious study of language, Focus on

input vs. focus on output, Contextualized Language Use vs. Context Free

Examples, Feels Easy vs. Feels Difficult, Attention is on the message vs. attention is on the structure. (Hedstrom, 2012, p. 2)

Ray defined the three steps of TPRS® as “establish meaning, ask the story, and read” (Ray & Seely, 2008, p. 35). Much like Marzano’s (2004) first step of explaining, *establishing meaning* allows the student to see what the new word is, how it is used in the world language and in their current language, to discuss the context of the word, and to see the word in action in a story. In the world language classroom, the word is first translated with students into their native language (Ray & Seely, 2008). Marzano (2009) used anecdotes much in the same way to “translate” words so that students can understand them using prior knowledge. Using tenets from affective filter hypothesis (Krashen, 1982) and cognitive load theory (Sweller et al., 2011), step one takes place in a relaxed space where students feel comfortable. The translation of the word is also on the board or wall so students have access to it when they need it (Ray & Seely, 2008). Teachers can now take the opportunity to repeat the words, ask personal questions with the words, and talk about how the words have different contexts in different situations. The amount of words one wants the students to learn depends upon the amount the teacher believes the students can grasp in the duration of the lesson. The vocabulary is incorporated by being broken into three to four mini-stories (Ray & Seely, 2008) relating to the main story presenting approximately 3-5 new words each. Each mini-story uses similar characters and settings. The story is short but complete, incorporating the four Cs of storytelling: causality, conflict, complication, and character (Willingham, 2009).

The second step is to *ask the story*. As the teachers retell and ask the story, they

use comprehension checks, yes/no questions, either/or questions, true/false questions, and fill in the blank to formatively assess what students know. When teaching a world language, it is important to stay “in bounds” (Hedstrom, 2012, p. 13) with words and phrases students know. This time is not a part of the lesson where teachers should present the other 20 vocabulary words waiting in the wings. During the second step, there are three things to keep in mind: “the teacher retell, the student retell and a point of view/perspective change” (Beal, 2011, p. 15). PQAs gave Ray a chance to get his students involved in the story and allowed them to personalize it (Gross, 2005). Ray used humor in his stories by having three ridiculous words to throw in at a moment’s notice for his students while retelling the story (Gross, 2005). Gross (2005) stated that Ray’s words were “Julia Roberts, Toad Suck, and ‘pato’ (duck)” (p. 2).

The PQA example below is from Martina Bex (2015) and her site, *The Comprehensible Classroom*. The words that are underlined are words that can be replaced in the story to allow students creativity. The words in bold represent terms the teacher is presenting for students to learn, and are therefore *circled*, by using them multiple times throughout the script to provide for high frequency input and exposure. One can see how replacing the word mom with the word duck would open up interesting new realms of possibility, creativity, and fun for the story.

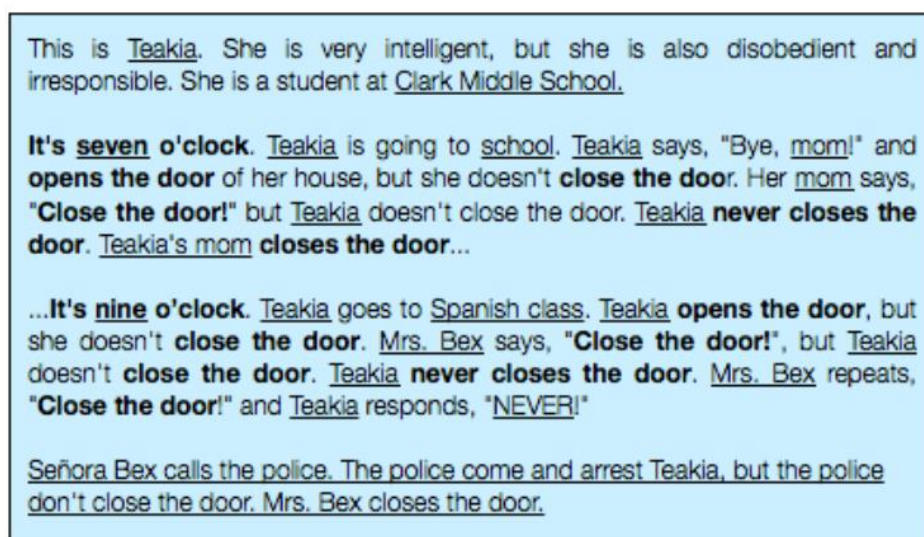


Figure 7. Martina Bex PQA Example Using Circling (Bex, 2015). Used with permission <https://martinabex.files.wordpress.com/2012/09/screen-shot-2014-11-24-at-9-37-10-pm.png>

In the last step, students read a new story similar in theme, character, and setting to get a chance to see the new words in action in a different context. For example, in a TPRS® lesson by Gaab (2006), the preliminary four mini-stories present a wolf, a boy, a dad, and some sheep as characters. The settings are home and the mountains.

In the first story, a wolf is part of a strange family with a dad and a boy. The wolf eats too much, the dad gets angry, and the wolf cries.

The second story follows with the boy who takes care of sheep, the sheep are disobedient and run away, the boy yells for them to come back, and they do.

The third mini-story has the wolf as the main character and he is looking for a friend. He is lonely and sees a boy walking by with a radio. They dance and become friends.

The final story is of a boy who tells the same joke for 4 days. At first, his friend

laughs; and at the end, his friend tells him his joke is not funny anymore.

One can see the simple nature of the stories; however, students are compiling new words and cognates in the Spanish language as they practice these stories. In the end, they are able to do step three, which is to read the story of “The Boy Who Cried Wolf” by themselves in a second language using the new constructions.

By transferring this method outside of the world languages arena, teachers can already overcome one obstacle that world language teachers face. Students already speak the language, and the extraneous load (Sweller et al., 2011) of the new language they are learning does not complicate the new words they are attending to in the lesson.

Synthesis and Critique of the Literature

The literature has examined TPRS® by researching the following: an overall history of vocabulary instruction, the theory of HPL, Marzano’s (2004) six strategies for vocabulary instruction, Krashen’s (1982) affective filter hypothesis, cognitive load, Krashen’s (1982) input hypothesis, storytelling, and the history of TPRS®.

During the research process, these elements came to the foreground of the research as salient portions of the study. The overarching conceptual framework of HPL in four environments (student centered, knowledge centered, assessment centered, and community centered) serves as scaffolding for the research project. HPL gives the researcher an exemplar of how to guide the planning, creation, and implementation of instruction for teachers in the professional development course. It acts as a guide to make sure the research and the subsequent project are on the best course. By looking at the history of vocabulary instruction, the researcher could see how there was much room to grow in how educators can best teach and present vocabulary in a way that is meaningful

to students in all areas of the curriculum. Marzano's (2004) six steps for vocabulary instruction provide a research-based method outside of world language on which to anchor the steps for TPRS® instruction. Krashen's (1982) hypothesis of affective filter and Sweller et al.'s (2011) theory of cognitive load gave insight into what teachers can do to make learning accessible to all students. Storytelling provides a method that is "psychologically privileged" (Willingham, 2009, p. 66) to organize instruction. Finally, after incorporating this research-based design with the features of TPRS®, the project provides a cross-curricular, research-based method for teachers that is accessible to all curriculums.

Vocabulary instruction research shows room for expansion and growth. The history on reading research is wide and deep (Sears, 2007), but the history of vocabulary instruction has always seemed to be in the background until recent years (Sears, 2007).

When one examines vocabulary instruction under the lens of HPL, the need arises for instruction to be more student centered, culturally relevant, and related to the community in which the student lives and breathes. There are also areas of assessment and knowledge where teachers can grow. While standardized testing has been implemented since the 1950s, educators are just beginning to grasp the need to use assessments formatively *as* and *for* learning (Black et al., 2003; Earl, 2013).

Theories like cognitive load from Sweller et al. (2011) lead us to help students by breaking things down or delivering them in meaningful chunks to allow for maximum student achievement. Due to new technology, research on how the brain functions and how memory works have been found. With this research comes new areas of research to maximize full potential and learning. Along with Sweller et al. (2011), Krashen's (1982)

hypotheses give us even more reasons to make students feel comfortable during lessons and to make instruction accessible to all students.

From the research, stories play an integral role in education. “Since storytelling is oral, even illiterate people can participate” (Buxbaum, 2000, p. 18). This reason makes stories even more applicable as teachers have students in classes from other cultures who speak other languages. All students have heard stories for their entire lives. Stories have good and bad, binary opposites according to Egan (1986). Stories are familiar and predictable. They set the stage; provide meaningful characters, a plot, and action; and have a resolution. Stories are filled with elements of fun, details, tragedy, heartbreak, silliness, or intrigue to reach students. TPRS® is a method that can help educators deliver stories to serve students and meet them where they are.

Support for TPRS®. While TPRS® is not the only method for teaching a world language, it has garnered more support in recent years due to a grassroots effort by teachers (Lichtman, 2012). Lichtman (2015) went on to say, “In the last five years, there has been an explosion of research on Teaching Proficiency through Reading and Storytelling (TPRS®), as a generation of teachers interested in using TPRS® pursues master’s and doctoral degrees” (p. 1).

Blaine Ray has spent his life teaching a world language, not researching a world language. TPRS® research has been slow to come to fruition due to this fact (Lichtman, 2015). Several new studies have shown that students from TPRS® have scores that are on par with other more traditional world language methods in listening and reading; however, students who were taught using TPRS® are performing better than their counterparts in speaking and writing (Lichtman, 2015). The researcher was unsure of the

transferability this study would have to the user of TPRS® outside of world language classes; however, the presentation skills of writing and speaking have documented importance and usefulness inside of a student's first language.

Figure 8 is reproduction of a summary of research provided by Lichtman (2015). Of 16 empirical studies she analyzed, only five studies outperformed TPRS®, 11 studies featured a traditional method that had a learning domain (reading, writing, listening or speaking) even with the TPRS® method, and 15 had at least one domain that was higher with TPRS® (Lichtman, 2015). The table is reprinted here as Figure 8 with permission from Dr. Lichtman and represents work she has presented nationally and internationally of the usefulness of TPRS® as a world language method.

	TPRS® outperforms another teaching method	TPRS® equals another teaching method	Another teaching method outperforms TPRS®
Garczynski (2003)	✓	✓	
Perna (2007)	✓	✓	✓
Jennings (2009)	✓	✓	✓
Spangler (2009)	✓	✓	
Varguez (2009)	✓	✓	
Watson (2009)	✓		
Castro (2010)	✓	✓	
Nijhuis & Vermaning (2010)	✓		
Beal (2011)	✓	✓	✓
Foster (2011)	✓	✓	✓
Oliver (2012)	✓		
Dziedzic (2012)	✓	✓	
Holleny (2012)		✓	
De Vlaming (2013)	✓		
Murray (2014)	✓	✓	✓
Roberts & Thomas (2014)	✓	✓	

Figure 8. Empirical studies comparing TPRS® to other teaching methods. Reprinted with permission from Dr. Karen Lichtman.

While the researcher was unable to locate a study or literature where TPRS® was employed outside of the world language classroom, Marzano's research on vocabulary and the literature on storytelling proved a promising beginning to the inquiry. Much like this quote from HPL, TPRS® also allows for culturally relevant instruction to happen through, PQA:

Learner-centered instruction also includes a sensitivity to the cultural practices of students and the effect of those practices on classroom learning. In a study of the Kamehameha School in Hawaii, teachers were deliberate in learning about students' home and community cultural practices and language use and incorporated them in classroom literacy instruction (Au and Jordan, 1981). After using the native Hawaiian "talk-story" (jointly produced student narratives), shifting the focus of instruction from decoding to comprehending, and including students' home experiences as a part of the discussion of reading materials, students demonstrated significant improvement in standardized test performance in reading. (Bransford et al., 2000, p. 135)

This research allowed the researcher to see how professional learning on vocabulary instruction using TPRS® can affect teacher perceptions and understandings, classroom planning and instruction, and student vocabulary learning.

Criticism of TPRS®. TPRS® is not without its fair share of critics. As Blaine Ray (Ray & Seely, 2008) was not a researcher but a teacher, it took many years before the grassroots method was studied academically. The lack of explicit grammar instruction (a hallmark of more traditional methods) and the bizarre stories were not popular with teachers who were uncomfortable giving up verb charts and grammar-based

instruction for more communicative instruction. The foundation of TPRS® is communicative instruction and theories by Krashen and Terrell (1983). TPRS® was also frowned upon by teachers who followed more traditional models. The following section discusses the main tenets for criticism against TPRS®.

Grammar instruction is one of the largest criticisms. In TPRS®, grammar is not explicitly focused upon as in traditional teaching methods; however, teachers look at the constructions used in the story and offer a “pop up” instruction when a grammar point is salient in the current story (Ray & Seely, 2008). On a blog post from 2018, Pat Barrett reposted a teacher’s take on some serious issues she had with TPRS®. The poster disagreed with the instruction of grammar in TPRS® saying that pop up instruction of grammar is not an effective methodology in which grammar is addressed. Some world language teachers think that translation of the terms is not something one should do as a part of world language teaching. This reason has little bearing on the use of TPRS® outside of world languages; however, the first step of the process is establishing meaning.

The foundations upon which TPRS® is built has critics as well. For example, Second Language Acquisition researchers have questioned Krashen’s (1982) five hypotheses. Perhaps his largest critic, Gregg (1984) said that Krashen’s hypotheses have “serious flaws” (p. 94). Gregg’s main arguments are that Krashen lacks content that is empirical in nature, making his claims false; that Krashen has not defined or has poorly defined terms; and that his constructs are ambiguous (p. 94).

Other critics like White (1987) also said that Krashen’s (1982) take on input hypothesis is erroneous and he lacks sufficient evidence to prove his claims; however, one can see in Liu’s (2015) research the following quote from Wright: “However, despite

his theoretical deficiencies, even his harshest critics cannot deny that some of his assumptions are correct, as White (1987, p. 96) is quoted as saying, ‘there is something essentially correct about the input hypothesis’” (p. 145). It is this essential correctness that provides context for further research and discovery.

One strategy of TPRS® attacked most often is the use of silly or weird words as ways to provide humor and connect with students (Ray & Seely, 2008). Some teachers feel the words are too crude for language teaching (Barrett, 2018). Another argument is that TPRS® is tedious as it uses the same strategies to teach repeatedly (Brune, 2004). Binary arguments exist that TPRS® is too prescriptive and leaves little room for creativity (Cottrell, 2014), while critics also say TPRS® teachers spend little time preparing their lessons (Barrett, 2018) and do not teach because they never use a verb chart (Hayles, 2012).

As with most teaching methods, there are proponents and critics. The overwhelming experience and success in the world language classroom of the researcher, along with cross-curricular connections from Marzano (2004) and storytelling experts and research from this dissertation process have reignited a desire to find out how training teachers outside of world languages in TPRS® can affect the vocabulary learning landscape despite the criticism of the method.

Summary of Chapter 2

TPRS® is one strategy for teaching vocabulary. In fact, research into vocabulary instruction has shown there are many ways to teach vocabulary; however, the current state of vocabulary instruction cries out for new, varied, and creative solutions to meet student needs. The explosion of information available to students makes it necessary that

they become aware of cross-curricular words that have different meanings in different situations. The researcher hopes that offering this professional development to teachers brought them one-step closer to finding workable solutions to better student achievement and teacher efficacy in the classroom.

Chapter 3: Methodology

Problem Statement

Teachers need professional development that is more impactful (Boston Consulting Group, 2014). This study sought to discover the impact of blended professional learning design with the added component of coaching on teacher perception, teacher knowledge, classroom practice, and student learning. While vocabulary is as old as time itself, vocabulary instruction is another topic altogether. A lack of focus on vocabulary instruction in recent years in the researcher's school system, coupled with the trend in other parts of the United States, prompted the study of the impact of using blended professional development with coaching in cross-curricular methods to search for answers to the following questions:

1. What were teacher perceptions of the blended professional learning design?
2. What was the impact of the professional blended learning coaching model on teacher knowledge of vocabulary instruction using TPRS®?
3. What was the impact of the professional blended learning coaching model on classroom instruction and practice of vocabulary instruction using TPRS®?
4. What was the impact of the professional blended learning coaching model on student learning of vocabulary using TPRS®?

In this chapter, the researcher explains the methodology of the study and how it informed the research questions.

General Methodology

The researcher employed a mixed-methods study, gathering both qualitative and quantitative data to inform the research in an embedded quasi-experimental design with

two phases (Creswell & Plano-Clark, 2011, p. 68). Figure 9 relates the multiphase design, and the research matrix is located in Appendix C. The embedded experimental method used a *qual* intervention first. This step was followed by a *QUAN* premeasure, then the intervention. Next in the model came a *qual* mid-intervention and a *QUAN* post measure. After the quantitative measure, a *qual* measure follows. The interpretation is then based on the *QUAN (qual)* results (Creswell & Plano-Clark, 2011, p. 68).

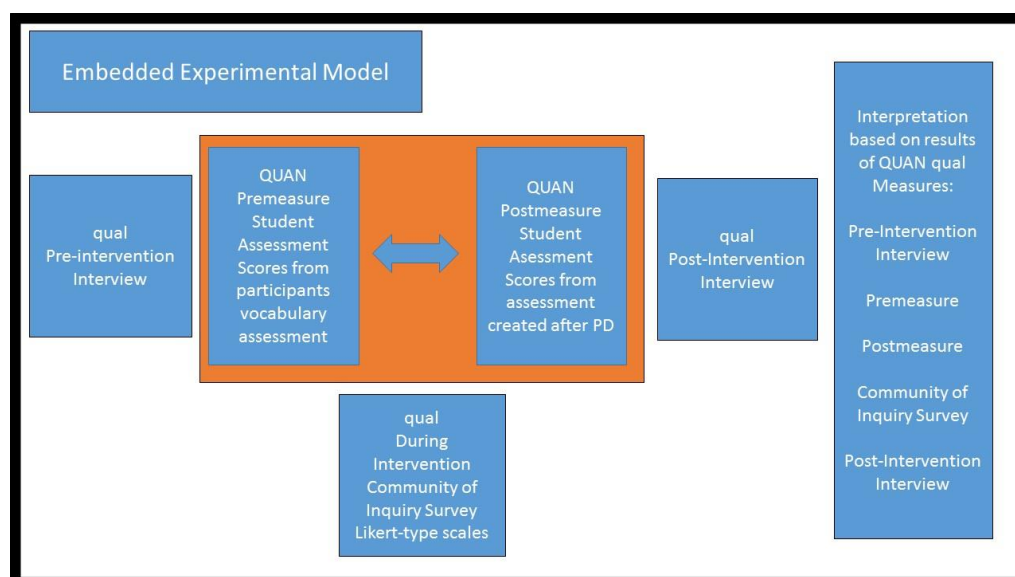


Figure 9. Embedded Experimental Project Design (Creswell & Plano-Clark, 2011, p. 68).

The researcher began by identifying five to seven teachers who were interested in learning a new technique for teaching vocabulary. Teachers were asked to present a lesson or lessons to their students using their own method of vocabulary delivery, and students took a pre and postassessment based on those lessons. This data set provided a baseline of student grades on vocabulary assessment to inform the impact of the professional blended learning on student learning of vocabulary.

Second, the participants completed an interview (Appendix A). This interview

asked participants about their current vocabulary instruction and the influences the vocabulary instruction has had on their teaching. Participant responses to interview items informed research questions pertaining to teacher perceptions, the impact on teacher knowledge, and the impact on classroom instructions and practice of vocabulary.

The study addressed the following four research questions:

1. What were teacher perceptions of the blended professional learning design?
2. What was the impact of the professional blended learning coaching model on teacher knowledge of vocabulary instruction using TPRS®?
3. What was the impact of the professional blended learning coaching model on classroom instruction and practice of vocabulary instruction using TPRS®?
4. What was the impact of the professional blended learning coaching model on student learning of vocabulary using TPRS®?

Next, the researcher provided training for teachers in the TPRS® method by presenting an asynchronous 3-module course in Canvas, a learning management system. Participants completed modules by engaging with materials, discussion boards, and activities. After completion of the course, participants then took the CoI (Appendix B), which informs the impact on teacher perception after the professional blended learning course. After completing the training, the researcher coached the participants for two sessions to develop TPRS® lessons and assessments by identifying or creating a story to teach the vocabulary the participant had chosen. The participant then administered the pretest and presented the lessons to students. After the lessons, students took an assessment based on the TPRS® lesson. The researcher compared student assessment data to the previously collected pre and posttest data at the beginning of the study to

inform the impact on student learning.

Teachers participated in a final interview after the conclusion of the professional learning sequence to gauge how the provided professional development informed their instruction. The researcher used the responses from these interview items to inform all of the research questions as the items encompassed changes in teacher perceptions, teacher knowledge, classroom practice, and student learning from the perspective of the teacher. The item results contributed insight into teacher perspectives and experiences, providing answers to research questions and giving the researcher topics for further study.

The preimplementation interview items included qualitative questions about participant experience with blended professional learning, coaching, and vocabulary teaching methods. The interview items also asked about training the participants had received and the ways they instructed students using vocabulary. The second component was a quantitative study of student achievement on teacher-prepared lessons and vocabulary assessments versus student performance on lessons and assessments prepared using the TPRS® method. Next, participants took the CoI (Appendix B), a quantitative survey using Likert-type scales. Finally, a postimplementation interview with qualitative items asked teachers to share their experience with training and implementation. By using a mixed-method approach, the study sought to explore and more fully understand how to describe blended professional learning on vocabulary instruction and the impact on teacher perception, teacher knowledge, classroom practice, and student learning.

Analysis of these instruments allowed the researcher to describe how blended professional learning on vocabulary instruction using TPRS® impacted teacher perceptions and understandings, classroom planning and instruction, and student

vocabulary learning.

Research Context

The researcher advertised the Canvas training course to 55 high school teachers in a small county in North Carolina as professional development for continuing education credits. The link to the public training course can be found here:

<https://canvas.instructure.com/courses/1252399/>. An ideal group for training purposes was five to seven participants. Having a smaller group size allowed the candidate sufficient time to provide follow-up coaching with each participant. Follow-up coaching focused on creating the lesson and assessment for implementation (Hattie, 2015). The desired number of participants was met in the first advertisement with five participants; the researcher did not have to advertise via professional networks for participants. This amount of participants provided five sets of vocabulary assessment scores pre and postinterventions from the classrooms.

The researcher offered professional development in a school system located in a rural county in the southwestern corner of North Carolina. The county shares borders with Georgia, Tennessee, and the Qualla Boundary (Home of the Eastern Band of Cherokee Indians). It is also home to a university.

Six years ago, district teachers received training in Thinking Maps, and core teachers received training in using Marzano's (2004) Vocabulary Strategies; however, with the budget crises (Associated Press, 2017) many North Carolina schools face due to lack of funding, professional development has been limited to school-based offerings for the past 5 years. Teachers may still choose to go to professional learning opportunities outside of their school; however, they must provide their own funding. This vocabulary

training was free to teachers and provided cross-curricular connections with colleagues from across the school. Participants earned 10 hours of credit or one CEU for participating in the course. The researcher received permission from the superintendent, the researcher's principal, and the professional development coordinator at the county office to conduct the training, gather data, and provide the CEU credit. The assistant superintendent requested that the researcher notify parents with a letter being sent home stating that the study was being conducted. This letter is included in Appendix D.

As the researcher was providing cross-curricular professional learning, the most important aspect was that participants in the study needed to be a K-12 classroom teacher currently teaching vocabulary to their students. The researcher's experience working at the secondary level provided a large pool of participants. The researcher planned initial dates and adjusted the dates as needed during the study's progression.

Instruments and Materials

The researcher used two interviews, created with the researcher's dissertation committee, as pre and postqualitative measures. Individual interviews are a form of narrative investigation and a way to collect important data simply (Butin, 2010). These interviews kept the four research questions in the forefront and sought to find data that impacted teacher perception, teacher knowledge, classroom practice, and student learning when teachers receive professional blended learning with coaching. The prequalitative measure was modeled after the research questions and was created by the researcher with further additions and clarifications by the dissertation committee. The result of this work is in Appendix C. The researcher codified the data by analyzing the interviews for themes based on the research questions. The questions were broken down into units of

analysis based on the overarching ideas represented by the interviewee. Screenshots and an example of how the work was codified is provided in Appendix E and Appendix F.

As with the previous mention of lack of literature on vocabulary instruction, the lack of instruments and tools to measure perceptions and teacher beliefs about vocabulary instruction is also lacking; therefore, the researcher chose to create an interview based on the research questions.

The CoI (Appendix B) measures perceptions of teachers who have taken an online course (Arbaugh et al., 2008b). There are three main components of the survey: teaching, social, and cognitive.

The results of the study suggest that the instrument is a valid, reliable, and efficient measure of the dimensions of social presence and cognitive presence, thereby providing additional support for the validity of the CoI as a framework for constructing effective online learning environments. (Arbaugh et al., 2008b, para 6).

The researcher administered the survey to participants directly after they completed the online course. To analyze this survey, the CoI suggests the Principal Components Analysis (PCA). The PCA allows one to look at the principal components to have differing responses so the researcher is able to see the data with the most differences; however, the researcher had to use descriptive statistical analysis, as the PCA test did not function. The researcher used descriptive analysis due to the smaller number of participants and the fact that participants provided very similar answers. The researcher had a sufficient amount of responses ($n=5$); however, due to the similarity in answers, the PCA could not be employed. This result was unforeseen and was the result of receiving a

negative Eigen value when the researcher received and researched the results from SPSS; therefore, using descriptive analysis was necessary to analyze the results.

The participants in the study created four vocabulary assessments. The participants created two by themselves before participating in the course, and the participant and the researcher created the other pre and posttest together during the coaching session. First, using prior knowledge and experience, participants created a pre and postassessment for students based on participant knowledge of vocabulary instruction. Participants reported their students' final scores randomly for both the pre and postassessment. There were 47 student scores reported. To describe the impact on student learning, the researcher compared these raw scores with the raw scores that students received on the pre and postassessment created with the researcher after completing the online course. The researcher used the pretest/posttest assessments to address threats of student prior knowledge of vocabulary. Ascertaining whether students knew the word before the postassessment was integral in proving internal validity (Trochim, 2006). These four assessments allowed the researcher to see student results from pre and postassessments before and after the intervention. This critical piece was important, as the assessments measured different sets of words. While the testing threat (Trochim, 2006) may make students more aware of the type of question they may have encountered on the postassessment, the pre/postassessment model gives a data point of comparison to rule out prior knowledge and the fact that the test is not testing the same material. During the coaching session, the researcher also asked participants to include test items in the higher levels of Bloom's Taxonomy when creating assessments for their students. As a result, the type of questions became more open ended than on previous

assessments, which had contained matching or fill in the blank vocabulary items.

There are inherent challenges in demonstrating that professional development could translate into gains in student achievement (Yoon et al., 2007, p. 3). Yoon et al. (2007) cited that studies should “ideally establish two points. One, that there are links among professional development, teacher learning and practice, and student learning. The other is that the empirical evidence is of high quality—that the study proves what it claims to prove” (p. 3). This study was limited in both scope and sequence; therefore, it would be impossible to link empirically the effects of the professional learning to student achievement. Instead, the study focused on describing how professional learning impacted teacher knowledge, teacher instruction, and student learning. The pre and postassessments delivered before the professional learning and after the professional learning aided in eliminating the bias from student prior knowledge of the words. This study has provided a springboard for further research like that of Yoon et al. Their report (Yoon et al., 2007) found that in nine high-quality studies where participants received 49 average hours of professional learning, student achievement rose by approximately 21%.

The researcher used data from the three module professional development and subsequent follow-up training with each participant to inform the study as well. Activities built into the professional development and notes from time spent planning with teachers allowed another qualitative data point for the study.

After the course, the participants completed the final interview (Appendix B) seeking the impact on their perceptions, their knowledge, classroom practice, and student learning. The final interview allowed the researcher a glimpse into how participation in the professional learning influenced participant ideas for classroom planning and

instruction in the future.

Data Analysis

The researcher gathered both quantitative and qualitative data from a variety of sources. The researcher employed a dependent or paired sample t test, the Wilcoxon Signed Rank Test, and the Sign Test to analyze quantitative data from before and after the intervention assessments. The study examined student pre and posttest scores on a vocabulary assessment at two different points, before the teacher implemented the intervention and after. The independent variable was the intervention that the researcher provided to teachers to see the impact on instruction and student learning. This intervention allowed the researcher to see the statistical differences in scores from before and after, giving insight into how student learning grew with the intervention.

As suggested by the creators of the CoI (Arbaugh et al., 2008b), the PCA was used to score the 34 items on the survey in the three subscales that are presented. The CoI was implemented using the online program Survey Monkey. This platform allowed for easy initial analysis of the qualitative data using the provided tools in the Survey Monkey suite. The results that emerged from the qualitative data are shared in Chapter 4. The researcher hypothesized the themes and patterns would provide ways for the researcher to express how the virtual professional learning alone impacted participants; however, the results were more complex than originally expected. These findings are discussed in Chapter 4 using descriptive analysis.

Appendix C contains an item-by-item correlation of each component and interview item to the appropriate research question. This research matrix guided the researcher in analyzing the data and helped in making the decision for the statistical test

or qualitative tool to measure the results.

Summary of Chapter 3

The methodology set forth in this section provided insight into how the researcher examined blended professional learning with coaching for TPRS® to measure impact on teacher perspective, teacher knowledge, classroom instruction, and student vocabulary learning. The tools to gather data, subsequent statistical and qualitative analyses, and research from the study provided implications for further study and gave a snapshot of data to add to the larger cross-curricular library on blended learning with coaching and vocabulary instruction.

Chapter 4: Findings and Results

Problem Statement

The field of education is always evolving. Finding quality and more efficient methods of providing professional development is of interest to administrators, district personnel, and most of all to teachers who feel the impact greatest. This study sought to discover the impact of providing blended learning with coaching for teachers, the classroom, and students to inform and add to the growing body of literature about blended professional learning with coaching on vocabulary instruction.

Organization of the Chapter

In this chapter, the researcher discusses the findings and results of each of the research questions in relation to the instruments used for the study:

1. What were teacher perceptions of the blended professional learning design?
2. What was the impact of the professional blended learning coaching model on teacher knowledge of vocabulary instruction using TPRS®?
3. What was the impact of the professional blended learning coaching model on classroom instruction and practice of vocabulary instruction using TPRS®?
4. What was the impact of the professional blended learning coaching model on student learning of vocabulary using TPRS®?

After the organizational information, the researcher begins with an overview of methodology employed in the study. The chapter includes a review of the setting and participants, the method used for gathering data, and a description of the system for coding the data. Next, the discussion of the research questions begins as the researcher shares findings and themes related to each question.

First, three themes emerged from teacher perceptions of the blended professional learning design from before and after the course: authenticity, personalization, and relationships. Next, the researcher discusses the themes of confidence, collaboration, transferability, and acquisition of learning related to the impact of the professional blended learning with coaching model on teacher knowledge. This section is followed by a discussion of intentionality and integration, the themes related to the impact of the professional blended learning on instruction and practice. The chapter ends with a discussion of connection, engagement, accessibility, and growth – the four themes associated with the impact the professional blended learning had on student learning before and after the course. The researcher concludes with a summary of the findings and results chapter.

Overview of methodology. The researcher employed the Embedded Experimental Model Design by Creswell and Plano-Clark (2011) to guide the research steps. After an initial pre and postassessment for participating teacher classrooms, the researcher conducted an interview with participating teachers to determine participant understanding and practices with regard to vocabulary instruction. After this initial interview, participants completed an asynchronous 2½ week virtual professional learning course focusing on utilizing TPRS® in vocabulary instruction. After the course, participants completed a CoI to help illustrate the impact of the course on teacher perception. Next, participants attended two coaching sessions with the researcher in which the participant and coach brainstormed and created pre and postassessments and lesson plans aligned to new learning on vocabulary instruction. Afterward, participants administered a pretest to their students, presented lessons, and administered a posttest.

Finally, participants met for a postinterview with the researcher.

Setting and participants. Five full-time members of the faculty at a small rural high school volunteered and completed the blended professional learning with coaching study and interviews in the spring semester of 2018 beginning on March 12. The study concluded with the last interview on June 14. The school is set in rural North Carolina with a student body of 910 students. The details of participant levels of experience are listed in Table 1 with pseudonyms to protect participant identities.

Table 1

Participants in the Blended Learning Design Project

Participant	Subject Taught	Number of Years Teaching
Mrs. D.	Speech and Debate	20 +
Mrs. H.	History	3
Mrs. E.	English I	17
Mrs. V.	Adobe Video Design	20 +
Mrs. F.	Family and Child Development	10

The first member, Mrs. V., teaches Adobe Video Design and is part of the Career and Technical Education Department at the school. She has been in education over 25 years; however, she is always looking for ways to improve her teaching. As a teacher who incorporates a lot of technology into her courses, she has a desire to stay current in her knowledge of technology. She is currently taking an Adobe Video workshop class online.

The second member, Mrs. H., teaches history in the Exceptional Students Department. She is a third-year teacher. She was looking for ways to get her students engaged and to help them retain vocabulary. Mrs. H. teaches both history and math in the Occupational Course of Study and manages a caseload of approximately 15 students.

The third member, Mrs. E., has been teaching English at the school for 17 years. She is a self-professed nontechnical person who has a desire to learn and has been rethinking the way her department presents vocabulary to ninth-grade students. She has great rapport with students and teaches as part of the freshman academy.

The fourth member, Mrs. D., has been teaching English and speech and debate for 23 years. She is always looking to learn more and is currently pursuing her administrator's license. She chose her speech and debate class because she has vocabulary to teach them but is looking for new and varied approaches at delivery, as it is not her normal literature-based course. Mrs. D. loves to travel and share her varied experiences with her class.

The fifth member, Mrs. F., has been teaching Child and Family Development for 6 years in the Career and Technical Education Department. She was previously the director of a daycare facility and loves connecting with daycares in the county, as a liaison for her students to do internships. She entered as a lateral entry teacher and reported how she has not received any professional development on vocabulary instruction. Her hands-on approach gets students involved in caring for children and themselves during her program.

Gathering data. The study employed a mixed-methods approach to research. Qualitative data consisted of audio interviews and transcripts from participants in the study and the data collected from the CoI. Quantitative data included four sets of testing data, two from before the intervention and two from after the sequence.

To gather the qualitative interview data, the researcher recorded participants during the interview sessions. The researcher used a microphone and a computer to

capture the sound, then an online service transcribed the sessions and the recordings. The researcher kept the recordings and transcriptions in an encrypted password protected online filing system for safety. In order to gather data anonymously for the CoI, participants took the survey through a Survey Monkey link as their last activity in the course. This platform kept the data anonymous and gave participants an opportunity to reflect without pressure on their experience with the virtual professional development piece of the study.

The researcher collected quantitative data via the Canvas course. Participants removed all student names and substituted with a random numbering sequence which they used pre and post for each exam so the researcher could easily compare the same student without having access to identifying information. This process for collection of data was discussed when the participant signed the Informed Consent Agreement after the researcher received permission from the Institutional Review Board at Gardner-Webb in March of 2018. The district also requested that students be notified of the study by sending a letter home (Appendix D). The researcher wrote the letter and had it approved by the principal of the school, and teachers sent the letter home with students. This letter can be found in Appendix D.

System for coding qualitative interview data. To code the qualitative data received from participant responses to interview items, the researcher utilized the website Dedoose to search for patterns, stories, and themes. Dedoose is a cross-platform application for analyzing qualitative and mixed-methods research with text, photos, audio, videos, spreadsheet data, and more. Dedoose is a secure platform that allowed the researcher to upload transcripts of interviews, create codes, extract excerpts, and analyze

for codes using word clouds and a hierarchical coding system. This software platform created a system for analysis of the raw interview data.

Authenticity, Personalization, and Relationships

Teacher perceptions of the blended professional learning with coaching design are presented in this section. This first research question included items to elicit responses from teachers about their experiences and thoughts about blended professional learning with coaching. The section includes three overarching themes: authenticity, personalization, and relationships.

Eight interview items and the CoI supported the researcher in finding information about teacher perceptions of the blended professional learning design. Four interview items came before the blended professional development with coaching, and four were after the blended professional development with coaching. Participants completed the CoI after they participated in the professional development course. The research matrix (Appendix C) explains how the research question relates to tools and instruments used, data collected, and methods of analysis.

Authenticity. Teachers expressed how professional development must be relevant to them as well as their experience, and that authenticity matters. Adult learners value credible and relatable experiences (Knowles, 1984). Participants utilized the words “real,” “practical,” and “hands-on” to describe their best experiences with professional learning before the course. The experiences teachers had were authentic, indicated by the excerpts: “they used actual scenarios,” “it’s a lot of practical current information,” “research-based,” and “you have folks who researched, but they are here to present.” All participants shared that the opportunities to learn were relevant to the learner. A

participant shared, “What made it [valuable] is, it was so real. They gave you actual scenarios.” The interviews indicated that participants found the best professional learning enjoyable while also being grounded in research. Mrs. H. noted that during her most impactful professional development, “We had time to brainstorm; we could see how it was going to work for us.” Participants easily recalled their best experiences and spoke joyfully and thoughtfully of how the professional learning influenced their practice.

Participants shared about how professional development experiences were relatable, authentic, and increased their own knowledge: “it’s a lot of practical, current information.” Teachers learned about everything from classroom management and student engagement to best practices in their subject based on research shared by experts in the field. Their experience was memorable because it was something that would increase their knowledge and add to what they shared with their students.

In the postinterview, teachers shared their experience participating in the course with blended learning with coaching. Mrs. H. believes the course is relevant: “It would be something any teacher from any content could benefit in.” She related a story about a math class where they used hand motions for their quadratic unit and parabolas and believed the things she learned in the course have relevance to her math classroom. Mrs. E. prompted the researcher to “keep doing it.” Her experience with the new technologies in the course prompted her to encourage the researcher to keep offering professional development related to the tools she learned. Mrs. D. said it was in the 9 out of 10 category for her. She encouraged the researcher to publish the completed work and to reach out and share with professionals in the field of reading and vocabulary instruction. She mentioned researchers like Janet Allen and Robert Marzano to share findings and

feedback, as she follows their research. Participants viewed the course as authentic and relevant as they shared their desire to incorporate the course topics and strategies into their own teaching. This segues into the next theme of personalization and application.

Personalization. Personalization emerged as an important component of professional learning for teachers. They shared their thoughts on how professional learning was personalized before and after the course. Teachers related what they learned from the course to make it applicable to their own learning and the learning of their students.

Participants spoke to the personalization of the blended learning design. Before the intervention, three teachers had not taken many virtual professional development opportunities. Two teachers had varied experiences with online courses. Afterward, each teacher had familiarity with blended learning design, and each articulated success with the experience. Mrs. D. expressed how she would use the flipped course design with her students as she saw the merits of experiencing it as a learner.

Adult learners often prefer flexible timing for courses to fit their busy schedules (Knowles, 1984). Before the course, participants expected the course to allow more time to spend with the material as individually required. When talking about the face-to-face component, two participants noted it would allow them to ask questions and clarify things with the instructor. Mrs. D. and Mrs. H. shared the same sentiment about being able to manage their time when taking a course virtually.

After the professional blended learning with coaching sequence, Mrs. D. and Mrs. F. described how they liked the self-paced nature of the course, and Mrs. F. liked the flexibility and opportunity to go back and look at course materials again to familiarize

herself even more. These match participant expectations from before the blended learning design experience. Despite the fact that Mrs. E. had a busy semester, she did not feel pressured by time because there was an established timeline for the study. Examples, like the ones provided, show how both before and after the course, participants valued the chance to personalize their experience with time when taking a professional development course.

The most salient change came afterward when Mrs. E. described the virtual course as, “much more hands on.” She previously used the term hands on in the precourse interview to describe only face-to-face classes as hands on, in juxtaposition with virtual classes. She stated, “It was fun to watch the kids interact with it and then look at each other's pictures and say, ‘Oh, that's a good picture. What does that mean?’” The blended learning experience challenged Mrs. E.’s expectation that the course would not be hands on since the course format was online. She and Mrs. H. shared how they were able to have both a personalized experience and apply the learning to their teaching.

Participant descriptions of the blended learning process changed and deepened. Mrs. V. shared about her experiences before in relation to how the courses she had taken were convenient for her because they were self-paced and she could spend more time on the things she needed; however, after the blended learning with coaching experience, Mrs. V. related how the courses affected her perception of her classroom practice. For example, she said, “I will think about vocabulary instruction differently after the course and take a pause to see if students understand the vocabulary because students need to understand the goals of my class.” With the previous experiences, the responses were generic and not specifically related to what she had learned. She saw how her learning

directly related to her students and how their understanding of vocabulary influenced their understanding of her class goals. Mrs. H. had little to no experience with blended learning before the course and related the specific ways in which she would change her practice. She went from a theoretical understanding of how blended learning could affect her practice to a tangible and concrete knowledge of how it did affect her practice. In the following section, the researcher presents the theme of connections and relationship.

Relationship. Relationship was a theme interwoven throughout the process. Interviewees described the importance of connection and the ways in which these relationships enhanced their experiences. From networking, collaboration, and coaching, teachers want to connect with others to gain from their experience and learn and share ideas. This in turn allows teachers to build relationships with their students.

To describe their best professional development ever, one participant mentioned networking, along with how professional development provides a way for her to connect with people, make friends, and relax. A participant said they were able to “work out real scenarios with people.” Another mentioned being able to hear from researchers in the field. One teacher shared about classroom motivation and student engagement speaking to the need for classroom community. These examples show how participants enjoy collaborating and networking with colleagues and find them an invaluable part of their experiences.

Coaching also provided these types of connections for participants. Before the course, Mrs. V. stated,

Well, I think with that (*coaching*), it would just enhance the learning, because you would be able to see face-to-face, to ask those questions, and get ... the verbal

cues. The nonverbal cues, I should say, of what you wouldn't be able to see online.

Afterward, Mrs. V. related how it was refreshing that the researcher would come spend time getting to know her students to help make those personal connections. Mrs. V.'s students had an eclectic collection of likes and passions including a student who had a love of gas masks, a few Star Wars fans, a Rock Band enthusiast, and some hunters. The researcher was able to help her include these themes in the story that Mrs. V. used to review vocabulary. This strategy became not only very personal for the students but also very personal for Mrs. V. and her class as they laughed together and made memories while learning vocabulary.

While relationship and connection were desires expressed by teachers, a few also shared their reluctance to experience coaching before the course. Some responses that participants shared before the course captured the vulnerability that could be part of the coaching experience. Mrs. E. shared that a coach needs patience:

Patience, I guess for me because I have to take baby steps with technology because I'm afraid I'm going to mess something up, or I'm afraid I'm going to look ... what word am I looking for? I'm afraid I'll look uneducated in front of my class or kids.

Mrs. V. shared a similar sentiment: "I think it's just having someone who has more experience and knowledge, to guide you ... not necessarily tell you're doing stuff wrong, but to help you talk through stuff." Other participants were not sure about all that educational coaching entailed. Mrs. F. expressed unfamiliarity with what educational coaching was, quipping that educational coaching meant, "Trouble." As a lateral entry

teacher, she expressed that she was not sure of the meaning of some educational jargon. According to all participants, coaching needed to come from a place of guiding and asking the right questions; however, after the course, reluctance to experience relationships within educational coaching shifted.

Participants shared about this shift in thinking in the postcourse interviews. Mrs. E. spoke to the type of coach she thought someone should be:

If it's someone like you, I would do it (*again*). Someone who you don't feel, what word am I looking for? You don't feel like they are looking down on you because you don't know something. You're so approachable, and so easy to work with.

She went on to share that some do not possess the patience to make that work; and if it is not the right fit, “it can be horrible.” Comfort level and trust are integral in the coaching relationship according to participants. After the course, Mrs. D. shared that “Coaching is wonderful because ... modeling is the easiest way to teach something,” and it can “give you the most results from your efforts.” Afterward, Mrs. H. said the following: “I think the follow-up and just having that coaching from you really was what made the difference for me.” In these responses, teachers moved from being reluctant or unsure about the coaching process to how it could be a valuable relationship to bolster their own professional learning. Mrs. F. expressed, “You came in and sat down with me and helped me implement. It's one thing to just be given the information, but you came and sat with me and said, ‘Okay, this is how we do this.’” Teachers expressed how they liked learning a concept and then having someone come alongside them to explain and walk them through the process related to their own experience. Mrs. V. stated, “I like doing a blended, because I can see what I’m supposed to do and kind of work through it, and then

when I get with the coach, I can ask those questions.” This response corroborates the coaching research completed by Joyce and Showers (2002).

Mrs. H. took the concept a step further to say,

I think that's where a lot of professional developments are missing, is we learn all this great information but it's like the follow-up or the conversation about it, I feel like that's not always there. I feel like in that particular situation we had that, and that was really helpful for me.

She also shared a desire to use the researcher as a resource in the coming year for more professional learning. This desire shows a way in which coaching relationships can build and grow, becoming organic within the school community.

To allow the researcher to garner knowledge of teacher perceptions related to the online course, the researcher utilized the CoI. The researcher gathered anonymous surveys from each participant in Survey Monkey. The CoI was developed and validated by a collaborative research team. The members of the team, in alphabetical order, are Ben Arbaugh, Marti Cleveland-Innes, Sebastian Diaz, D. Randy Garrison, Phil Ice, Jennifer Richardson, Peter Shea, and Karen Swan. A study conducted by the team of researchers “suggests that the instrument is a valid, reliable, and efficient measure of the dimensions of social presence and cognitive presence, thereby providing additional support for the validity of the CoI as a framework for constructing effective online learning environments” (Arbaugh et al., 2008b, p. 2).

The researcher used SPSS to analyze the results using the recommended PCA. Due to the small number of responses (5) and a negative Eigen value, upon further research, the analysis was invalid. When the number of respondents is too low and like

responses are too close together, SPSS does not print KMO or Bartlett test because some of the numbers are negative, causing nonpositive definite matrices. IBM Support (2016) stated, “the presence of an NPD correlation matrix may lead you to rethink the choice of variables or attempt to acquire data on a larger sample to achieve more reliable results” (para. 7). The results of limiting the data to a smaller number of variables where the variation existed resulted in the same nonpositive definite matrix; therefore, the conclusion was that to achieve positive definite matrices, the researchers should acquire data on a larger sample for more reliable results (IBM Support, 2016).

The results of the 34-question survey are presented in Appendix G. The survey is based on a Likert-type scale with five steps (1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree). The only question scoring less than a 4 on the Likert-type scale was question 16, found in Table 2.

Table 2

Item 16 of the CoI Framework

Q16. Online or web-based communication is an excellent medium for social interaction.		
Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	20.00%	1
4	20.00%	1
5	60.00%	3
	Answered	5
	Skipped	0

Each of the other 33 questions scored received either strongly agree or agree. Of the 33, nine of them were agree and 24 were strongly agree. Due to the inability to validate the survey, these numbers and results are presented here and were not be

considered as part of the study except as a limitation in the appropriate analysis section of the study.

The result of this question speaks to how relationship played an integral part in how participants viewed social interaction. At this point, the participants had not experienced the coaching component, and they saw a need for more interaction to make web-based communication an excellent medium for social interaction.

Summary of teacher perceptions of blended professional learning. The researcher presented findings related to teacher perceptions of best professional development experiences, virtual learning experience, blended learning perceptions before and after the course, and educational coaching perceptions before and after the course; and finished with a discussion of teacher perceptions of the strengths and weaknesses of the course. This discussion of impact on teachers leads into the next research question regarding the impact of the professional blended learning coaching model on teacher knowledge.

Confidence, Collaboration, Transferability, and Acquisition of Learning

The second research question asked about the impact the course had on teacher knowledge, and the researcher discusses the findings in this section. Four main themes surfaced in this section: confidence, collaboration, transferability, and acquisition of course concepts.

Two items from the interview are included here. The two questions ask about teacher knowledge of best practices in vocabulary instruction, both before the course and after the course. The researcher also asked teachers to share what new knowledge they gained as a result of the professional development. The results from these items are

shared below in four parts.

Confidence. Teachers expressed more confidence with vocabulary best practices along with more confidence when explaining their own practices after the course. All participants showed knowledge of vocabulary best practices mentioning the first parts of Marzano's (2004) strategies of explain, restate, and show before the course. None of the participants mentioned the importance of vocabulary instruction that provided the last three components of Marzano's (2004) strategies to discuss, to refine and reflect, and to provide learning games.

Before the study, teachers mentioned underlying theoretical principles of vocabulary instruction such as "without a foundation of vocabulary, reading and comprehension are challenging for students," and "being able to teach vocabulary explicitly is extremely important." They shared how reviewing words was important; how using visuals enhanced instruction; and that the more students read, the stronger their vocabulary will be. Teachers also recognized reinforcing and repeating vocabulary as well as presenting and showing as important. The two career and technical education teachers highlighted that demonstrating vocabulary with hands-on components is integral in their classes. Teachers discussed how vocabulary instruction must be consistent. Mrs. D. could see the impact of her instruction in the use of terminology that students used in her classroom discussions and the fact that students have a well of knowledge to pull from as they perform. Before the blended professional learning course, all teachers used assessment items in the lower levels of Bloom's Taxonomy. Teachers also shared components they were thinking about changing or strategies they wanted to be able to add to their tool belts. They wanted variety. Mrs. F. shared that she wants some new

ways to teach vocabulary that are “a non-boring and effective way for kids to really grasp their vocabulary.” She could not recall the last vocabulary training she had. She mentioned thinking maps, which she then labeled as critical thinking training from 2006-2007. This training took place over 10 years ago and was not specifically about vocabulary. Mrs. E. noted that she had been thinking about how she could change things and how she knew there were improvements to how she did things. She has been thinking about how vocabulary is “necessary in all levels and I think across curricular vocabulary.” These examples show how teachers knew vocabulary was an integral part of their instruction; however, their professional learning did not include the training to implement the vocabulary strategies to take them to the higher levels of Marzano’s strategies.

After the training, teachers were more specific and confident in sharing about personal vocabulary instruction experiences and the ways in which their vocabulary instruction had an impact on students. Teachers named specific TPRS® and technology strategies they used for student engagement. Mrs. F. mentioned the TPRS® strategy of personalized questions several times during her postinterview as one of the techniques she enjoyed using most, and she learned “a lot of techniques she didn’t know about.” Mrs. E. related how students need lots of review and repetition, “and you can’t just give it to them one time ... they need to use it in context.” She will take time to add more pictures and sounds to her instruction, also inviting students to do the same so they can “gain from that.” Mrs. H. enjoyed integrating vocabulary instruction together with the other parts of her lessons. She had recently felt that she was “not doing a good job,” and this course helped her to “get excited for what she was teaching.” Mrs. V. liked how the

course made her take a step back and look at how she was teaching vocabulary and what students knew. She also said, “we forget how simple something might seem to us, but to these kids it’s not.” Mrs. H. and Mrs. V. both mentioned how the professional learning helped them get out of a space they had been stuck in for a while. Mrs. F. noted that she thinks the course was one of her favorites and that she “learned more from this.”

Teachers reported deeper learning of vocabulary instruction. Mrs. H. spoke to a renewed sense of excitement and shared,

It really changed my idea of vocabulary instruction. It combined some things I already knew, and some things that I knew I liked ... kind of all that put together and made sense with some research to back it up. So, that was helpful for me.

Mrs. E. stated, “They need lots of review and lots of repetition and you can't really just give it to them one time and say, you know, here, have it, try to remember, do you not remember that was a vocab word?” She will now take time to find pictures and sound effects for her vocabulary and give students the opportunity to do the same, so “others will gain from it.” As teachers described changes in their instruction, they also described shifts in student learning. Next, the researcher presents how teachers grew in confidence to incorporate more technology into their instruction after the course.

After the course, teachers made plans to use more technology in their courses.

Mrs. V. indicated that she hoped to incorporate more technology into her Adobe video classroom. After years of teaching the same subject with similar tools, the course helped her see how using different tools allowed her to reach students differently. Mrs. E. shared that the course was “very helpful,” despite her fear of technology; she received help from her students to make technology tools work in class. She made plans to use

Padlet and Flipgrid with her students next year as she saw the connections students made with vocabulary and each other. During a coaching session, Mrs. E. related how a student who was shy in class made Flipgrid videos that helped her see his personality and connect with him on a deeper level. She also recommended that the researcher rename the course to reach more people in the future from the vocabulary topic to a technology one. She thought the course would be better marketed as a Padlet or Flipgrid technology tools course to pull more people in, as vocabulary instruction in her opinion did not sound like a glamorous professional learning opportunity.

Teachers also confidently described changes in student learning. Mrs. D. expressed that she would implement the strategies from the course because she saw student scores from before and after. She shared how the interactions with kinesthetic learning versus activities like writing and reading were tremendous for her students. She also shared, “Even the students who struggle the most for whatever reason, for ability or effort reasons, were able to score in the above average range just through the interaction.” One student, who generally struggles due to having a learning disability, thrived; and Mrs. D. pointed out this experience to the researcher. Mrs. F. will be changing her assessments in the future. In the past, Mrs. F. may have used something like a crossword to assess student vocabulary knowledge; however, as a team, the teacher and researcher worked on a plan to raise the Bloom’s Taxonomy level of the questions on the exam and make them open ended so she could see what students truly learned. When asked if she could tell a positive difference in her pretest to posttest versus the pretest and posttest created after the course, she stated, “Oh, yes, definitely.” She related how many students were unable to complete the open-ended pretest before instruction and how she could tell

they had definitely grown after the posttest. Identifying shifts in both practice and student learning gave teachers confidence in their own teaching. They also reflected on how their blended professional learning with coaching experience showed them the value in the course and the coaching relationship and its impact on their professional growth, leading to the next theme of collaboration.

Collaboration. Teachers shared the value of collaborating with colleagues and their view of the collaborative coaching experience. Mrs. F. mentioned collaboration through the discussion board with colleagues in other departments as something that impacted her. She wanted to see how others were incorporating the ideas in their classes. Mrs. H. liked how the course helped her see what others were doing in their own courses and practice and helped her feel as if she were not alone. In school schedule planning, finding time for teachers to connect and collaborate with each other is difficult due to the parameters schools must meet when designing their schedules; however, blended courses could provide a chance for teachers to hear what others are thinking, respond, share best practices, commiserate, and find solutions to problems teachers face.

Teachers valued the coaching relationship and its impact on their professional growth. Mrs. H. enjoyed the coaching aspect, and the fact that she did not have to go back and implement the plan on her own was something “that really helped me.” The strongest imprint and learning from the course for Mrs. H. came from her experience with coaching. She related how she often has professional development where she has to go back and “figure it out on my own”; however, having the researcher as a coach to collaborate and work through ideas with gave her confidence to implement the strategies in her course. Mrs. E. saw how educational coaching influenced her own classroom; and

she would do it again, given that the coach was understanding and approachable. Mrs. E. evoked the importance of trust and that coaches should not be judgmental or make the participant feel as if they do not know anything. Mrs. V. valued the coaching relationship as it meant the researcher spent time getting to know her students in order to personalize their learning. All teachers mentioned how they valued the time the coach spent with them to prepare the course, their lessons, and assessments for students. Next, the researcher shares how teachers value the transferability of the strategies from the course to their classrooms.

Transferability. Teachers valued the transferability of the strategies from the course to their classroom. For example, Mrs. H. ranks the experience high because the day after the course, she was able to implement the strategies into her class. Mrs. E. shared how she loved that the class was hands on and she was able to use the strategies with her students. Overall, the researcher sought to design the course in such a way that it provided a tool belt of strategies to engage students and provide teachers with plug and play solutions for their classes. When teachers return to their classes and immediately use or try a strategy they have learned, this is the ultimate compliment to any professional development course. Next, the researcher relates how teachers reported deeper learning of how vocabulary instruction works.

Summary of the impact on teacher knowledge. To summarize, the feedback from interviews show the impact of the instruction and coaching on teacher perception. After the experience of the blended professional learning course with coaching, participants spoke more confidently about vocabulary best practices and plans to incorporate more technology usage in their classroom. Teachers valued the

transferability of the professional learning to their practice, they saw how it impacted their vocabulary instruction, they saw how it affected student learning, and they shared how coaching impacted them. This discussion of the study's impact on teacher knowledge leads to the discussion of the findings related to the impact on classroom instruction and practice.

Intentionality and Integration

This section discusses the third research question related to the impact that blended learning had on classroom practice and instruction. Two themes of intentionality and integration emerged from this research question. In each theme, we look at how teachers planned vocabulary instruction, how teachers presented vocabulary instruction, and how teachers assessed vocabulary instruction. Participant responses to four items asking about the impact of classroom practice and instruction from before and after the course were analyzed and are presented here.

Intentionality. The researcher noticed a shift in how teachers wanted to plan vocabulary instruction from before and after the course.

Before the course, to plan vocabulary instruction, every teacher described looking ahead in their next unit or story. Teachers would pull out terms they thought students would need to know. One teacher mentioned using a list that she and her department collaborated on for shared common vocabulary. She noted how she liked the fact that they had the list; however, there was an issue in that the lists of 10 words grouped alphabetically rather than thematically, making it difficult for her students at times, and she was thinking about changing that for the future. One teacher had an informal conversation with her students to see if they knew the words they were about to learn;

however, there were no pretests mentioned by participants.

To present vocabulary before the course, teachers used a variety of methods; however, it seemed as though vocabulary instruction happened in isolation from the rest of the unit activities. For example, Mrs. D. provided one word a day for her speech class. She and the students would go over the definition and part of speech and talk about the word in context. Mrs. F. provided unpacked content, a document from Career and Technical Education designed to help students understand the topics, main themes, and vocabulary for each lesson. Her students then copied down the vocabulary word and definition. Sometimes, she had students illustrate words, but not for every unit. Mrs. E.'s vocabulary instruction followed the same format each week. On Mondays, Mrs. E. had students complete vocabulary squares and asked students to provide the definition and synonym of each word. Students then could choose between drawing a picture or writing a sentence. In the postinterview, Mrs. E. related that most people chose writing the sentence, as they did not want to spend time drawing or they did not see themselves as great artists. On Tuesday, she graded their work and they reviewed the definitions to make sure everyone had the same or similar definition. Mrs. H. identified words that her students would most likely not be familiar with and then asked them questions informally to gauge what they knew about the words. Throughout the unit, she returned to review the words and played dice and Quizlet games to help them practice the words. Mrs. V. taught technology vocabulary; therefore, she pulled out essential words and gave students the definitions or showed them the hands-on tool to use. As she taught her lessons, she took time to go over the vocabulary as they arose in the lesson, pointing things out or demonstrating to her students. Several presentation examples were isolated to vocabulary

instruction only and not embedded in the entire student instructional class experience.

During the coaching sessions, the blended learning model design allowed the participant and the coach to use backward design to plan for instruction. Providing students with a pretest to gauge prior knowledge of words and the same postassessment gave the participant and the coach instructional goals. It also helped teachers see student growth. Before, teachers were just guessing which words students might not know; however, afterward, they were sure students did not know the words. This preassessment gave them a starting place to plan instruction. The researcher was encouraged that participants wanted to try a variety of activities and methods from the blended learning course. They also wanted to utilize other Marzano strategies mentioned in the course to plan their activities. Participants saw the need to provide discussion and time for students to refine and reflect, and they sought out learning games to give students chances to spend time with the vocabulary.

During coaching sessions, the researcher and teacher also collaborated on content and the ways teachers felt most comfortable presenting it in class. The researcher was able to provide technology support during this time, as teachers wanted to implement tools like Flipgrid and Padlet into their lessons.

In the postinterviews, the researcher saw intentionality as participants described their plans for the future. Mrs. V. and Mrs. F. described how they plan to take a step back and make sure their students understand vocabulary. Mrs. V. used the word thoughtful when speaking of how she will plan for vocabulary practice. When answering a follow-up question from the researcher, she stated, “We forget how simple something may seem to us, but to these kids it's not.” She related the story of teaching the word

fish-eye lens in her class: “We did the fish-eye lens, then they went in and found the pictures of the fish-eye lens and we talked about what made it look different, and when would you use that fish-eye lens.” Where in the past she would, “jumble,” all of the words together, she saw the merits of planning to separate them out to talk about them in depth one at a time. Teachers also discussed a shift in how they plan to present vocabulary instruction.

Intentionality in how teachers planned to assess students also shifted. Before the course, four of five teachers mentioned giving a multiple choice or matching assessment as a posttest. Mrs. V. sometimes gave a multiple choice test; however, she also mentioned giving students an oral test where she asks students to show her how to use technology tools they learned in class. None of the assessments were open ended and most came from the lower levels of Bloom’s Taxonomy for recall and memorization.

After the course, teachers noticed the powerful benefits of providing an open-ended vocabulary test. Students were not able to guess a multiple choice or matching question with the open-ended design, making results even more valid. The tests teachers created after the course also helped students reach higher levels of learning as they completed tasks like analyzing, creating, and designing versus their previous test where their teachers asked them to recall definitions, match words, or write sentences.

Assessment was the main place where the training had an impact for Mrs. F. She shared, “The assessment was definitely more than what I would normally do, and I am going to strive to make my assessments more like your assessments.” During the coaching sessions with Mrs. F., we discussed moving toward more open-ended items to allow students to show what they learned, asking them to move to higher levels of Bloom’s

Taxonomy. The pre and posttest for after the intervention were in this format. Mrs. F. noticed the difference in how students performed and was excited about the gains she saw in student growth. Mrs. D. also saw large gains in student learning from before and after the course. Before, she offered a Quizlet multiple choice or matching test; however, with the open-ended assessment, she was able to gauge true learning in her students, which is why she made plans to implement strategies from the course into her classroom practice.

Integration. The following section shares the ways in which teachers integrated vocabulary instruction after the course. Teachers became more aware of how they integrated vocabulary instruction into their classes. Teachers planned to change the strategies they use to present vocabulary in the future. Teachers planned to use and integrate TPRS® strategies in their classroom and to incorporate more storytelling for vocabulary instruction into their courses.

After the course, teachers became more cognizant of the ways in which they presented vocabulary and integrated it into the whole unit. They asked students about prior knowledge and related their presentations to their knowledge of students through questioning, personalization, and stories related to vocabulary and their students. When teachers realized how they were personally presenting vocabulary, it opened the conversation to allow for modification and change of their plans based on research and their experiences in the course.

After the course, teachers planned to change how they integrate vocabulary instruction into their classes. Mrs. E. expressed new knowledge that giving words to students one time is not as effective as giving them multiple exposure to the words in context. Mrs. D. spoke about how the transference of interacting with the vocabulary

from hearing and writing to more kinesthetic type of interactions was “tremendous.”

Mrs. H. said,

It’s a combination of things. It can't just be ... I mean it can be, you can use one method, but it's really when you marry all those different things together, that's that sweet spot where students are able to access those vocabulary words and then be able to maintain that information in their personal vocabulary.

Teachers used language from the course about providing multiple avenues for comprehensible input. Before, as teachers were describing their method of presenting vocabulary, it was linear and unconnected to other parts of their instruction. Afterward, the approach became one of integration and had multifaceted components. Not all teachers used every tool from the course; however, they expressed plans to implement a multi-tool approach rather than a single way to teach a list of words with a single set of definitions, and they reflected upon how it would apply to their instruction as a whole to reach different students in their own situations. To help them make connections, the teachers planned to implement and learn how to use more technology tools in their courses.

After the course, teachers shared how they planned to use new technology tools in their courses and planned to explore incorporating the flipped learning model into their classes. Mrs. E. shared about her new knowledge of technology tools for vocabulary learning. Mrs. E.’s classroom practice was impacted the most by technology. Flipgrid and Padlet gave her new tools to reach students. She moved from being a teacher who was unsure about technology to a teacher who is now leading the way in using tools with her students that they have never seen before. Mrs. E. ventured to try new things in the

course and in her instruction; and because of that, her students benefitted as well. Mrs. D. took things a step further and related how the blended learning plus coaching flipped format of the professional development course is one that she planned to try with her students. The teachers also learned and practiced a lot of new TPRS® strategies in the course, and they shared how they planned to implement those along with the new technology.

Teachers shared how integrating TPRS® strategies impacted their classrooms. Personalization was mentioned by Mrs. V., Mrs. H., and Mrs. F. as something they plan to use in the future in their classroom. Content was personalized in the stories shared in all three classes. Mrs. V. shared an example of this personalization related to one of her students who particularly likes gas masks. The researcher included a gas mask in the class story planned with Mrs. V. after learning more about her students during the coaching sessions. After sharing the story lesson, she noted in the interview, “Then he started listening a little bit more, and I think including things in your story that they can relate to and that they like, that hooks them.” She also shared the impact on classroom practice that the coaching sessions had: “But then you took the time even though they weren't your kids to get to know my kids through me, like with (*student name omitted*) and what makes him tick.” Teachers will use questioning and circling as technique in the classrooms. Mrs. F. mentioned this TPRS® strategy and said she will definitely use the personalized questions in the future. Mrs. H. will also use questioning and circling with her students. She gained new strategies to help students by using questions to get a better understanding of the word. She expressed the following about student learning: “They're really not thinking about, ‘Oh, I'm learning this new vocabulary,’ but they're applying it

to that story.” She learned that integrating personalized questions help show her what students know about a word before they learn and as they learn.

Teachers plan to integrate more storytelling components in their classrooms. The impact on classroom practice moved from being a set of words pulled out from a list or story to vocabulary learning as an experience. Mrs. H. saw success with questioning, motions, and using stories with her vocabulary. During her coaching session, the researcher and Mrs. H. planned a story incorporating personalized things about the participant’s class, along with components from the lesson into the simple story. She shared, “My classroom was so diverse in ability and I was still able to, with that story, all of the kids were able to understand what those words meant.” According to her interview, students of all ability levels including nonreaders were able to connect with the story. Mrs. H. planned to tell a story with her words and use questions, motions, and sound effects, as she saw success with those tools. She planned to use the questions to learn what her students knew, and she believed that “some of them might even start to use that vocabulary in future classes.” Mrs. F. planned to implement the strategies of developing interest: “Even though it made me feel a little silly at first,” she saw the value in helping students come up with actions for the vocabulary they were learning. The kinesthetic component of storytelling was “tremendous” for Mrs. D.’s students. Instead of passively learning the words, she used the word interaction several times. Students were interacting with words and creating moments of learning. Mrs. V. and Mrs. H. saw the impact of stories firsthand as their students’ faces lit up when gas masks, ACDC, or hunting were mentioned, making learning personal to their students. Mrs. V. also found it encouraging that someone would take time during the coaching lesson to get to know

her students and create a personalized story. After presenting vocabulary differently, participants realized the need to assess differently. The next section discusses how assessment transformed from before and after the course.

Summary of impact on classroom instruction and practice. In this section, the researcher presented the findings related to the impact on classroom instruction and practice. The two themes woven throughout the section were intentionality and integration. Participants stated an intention to change the way they plan, present, and assess vocabulary in their classrooms because of the study. They planned to integrate more technology, change the way they present vocabulary, and change their assessments to be more open ended to better gauge learning. They also made plans to implement TPRS® strategies for vocabulary learning into their course. In the next section, the researcher discusses the final research question related to the impact that the professional blended learning design had on student learning.

Connections, Engagement, Accessibility, and Growth

Four themes emerged when analyzing the qualitative data on the impact the course had on student learning. The themes are connection, engagement, accessibility, and growth.

First, the researcher presents the four themes and their connection with student learning. The researcher qualitatively analyzed responses to two interview items from before the professional development and two from after the professional development sequence. After the discussion of the four themes, the researcher shares the results of the quantitative analysis with statistical results. The researcher used statistical tests to compare the growth scores from before the professional blended learning design to

growth scores after the professional blended learning course. This section presents how participants related their impact on student learning before the course related to the four themes of connection, engagement, accessibility, and growth.

Connections. Interview items related to this research question allowed the researcher a glimpse into how participants made connections from their teaching to student learning. Before the intervention, teachers described knowing that the vocabulary they taught made an impact and students made connections with words. Some participants taught life skills, so the implications for future impact were described as “huge”; however, participants also found it “frustrating” and a “struggle” when students could not remember the words they were teaching. Mrs. F. signed up for the training because she recognized her impact “could be better.” Overall, the results of the question were mixed. Participants related how some vocabulary instruction activities and methods have a larger impact than others. Mrs. D. described how she wanted to “give students a well from which to draw,” so students would be able to access the vocabulary they learned along with words and concepts related to those terms. Before the course, four of five mentioned vocabulary instruction moments like this one described by Mrs. H.: “when you ask for what a word means and you get a lot of blank stares.” Teachers chose to take the course so they would learn ways to mitigate those blank stares.

After the course, none of the teachers mentioned how things were a struggle or how they were frustrating. In fact, the opposite happened. Mrs. V. shared, “It’s made me think a lot more about my vocabulary ... I need to step back and make sure they understand the vocabulary so they can understand, get the objectives of what we’re doing, the goals.” Mrs. E. shared, “It was fun to watch the kids interact with it, and then look at

each other's pictures and say, 'Oh, that's a good picture. What does that mean?'" She was excited about how her students were interacting with the lessons that she and the researcher created. The teacher grew in her use of technology, as she expressed apprehension about using it before the intervention. Teachers made connections with students, and students made personal connections with vocabulary. This leads to the next theme of engagement.

Engagement. After the course, teachers related how students were "hooked." Mrs. D. said that her students were "excited about it, instead of just going through the motions of memorizing words." The fact that students who usually struggled, whether due to ability or effort, scored above average gave her confidence to implement the strategies in the future. Teachers reported that students loved the personalization, the learning games, and the goofy pictures and they thought it was fun and exciting; these reached many of the goals teachers related in the interview before they began the course.

Teachers shared about how using methods from the course allowed their students to be more engaged. Mrs. E. said, "Oh I think it's a whole lot better than anything I was ever doing." She shared that she was able to see students working and responding throughout the vocabulary learning process. Mrs. E. engaged students with strategies like sounds and images with the vocabulary words and stories with built-in vocabulary. One of the strategies she used before the course was vocabulary squares, and students often avoided drawing a picture; however, after the course, with the use of technology, she had students finding "goofy" but relevant pictures, sharing, and learning from them. When asked why the pictures were important, she explicated, "One of them put a picture and they were like, 'What's that picture mean?' 'It's the wrong picture.' And he said, 'Oh

man, I clicked the wrong one.’ They would see that.” The teacher did not have to correct the student, and their feedback from peers was gentle and well received. The student just switched the picture. Mrs. E. also engaged students by learning to use Padlet and Flipgrid with her lessons. Consequently, she also introduced them to many of her students who had not seen the tools used in other classes before. Mrs. F. mentioned how learning games (Marzano, 2004) like Quizlet Live made a difference. She saw student learning happen in her classroom by using games. Her students begged to play the collaborative vocabulary games during class. These strategies for engagement lead to the next theme of accessibility.

Accessibility. Teachers shared how the methods from the course gave their students access they did not have before. Mrs. H. shared that she thinks “This (*method*) is something that has access points for every single kind of kid and every kind of learner.” She liked how learners were “really not thinking about, ‘Oh, I’m learning new vocabulary,’ but they’re applying it to the story.” She already used motions and sound effects, but adding in the components of questioning and circling the words in different ways allowed her to see what her students knew and were learning about the vocabulary. She used questioning and circling to talk about vocabulary with her students. During the coaching session, Mrs. H. and the researcher wrote a simple story about blond- and brown-haired hunters in a kingdom called Brond using the names and details of students in the class. In the story (just like her class) everyone loved to hunt, but the blond king noticed that brown-haired people were taking all the best deer. The king made a decree that the only blond-haired people could hunt for deer. This situation caused segregation to happen at the local hunting club, a boycott of the club by brown-haired people, and

oppression of the brown-haired people by the blond-haired people. The blond king and his wife were having a baby; and when the baby was born, he had red hair. The king's heart was broken because his son would never be able to hunt with him. Fairy Godmother Mrs. H. (the teacher) showed up and saved the day giving wise counsel to the king, and the kingdom of Brond had a new ruling that anyone could hunt. Mrs. H. shared this example: "It was really helpful for them for us to talk about it (*in the story*), and then put it into context when we talked about the Civil Rights movement." Because of the story, she had already introduced the words to the students and then she was able to ask questions like, "What does boycott mean" and "Why would we want to integrate schools," drawing parallels between the Civil Rights Story and the Kingdom of Brond. She expressed that before the intervention, students would not have talked about things in this way. She did the actions and sound effects with her class for the vocabulary words; some were even able to take it to the next level by drawing a picture or writing a sentence. She said, "It was awesome. It is cool how you can make it fun for them and it doesn't have to be ..., 'All right. Copy this definition.'" As a teacher for exceptional children, Mrs. H. identified strongly with the need to provide access to students at all levels; however, all of the teachers expressed how their students grew through the process, which leads to the next theme of growth.

Growth. Teachers shared about how using methods from the course allowed them to see students grow. Mrs. V. shared that even though not everyone made a 100 on the assessment, they improved. She said they were able to "actually visualize the word." Some improved "tremendously," she indicated by sharing the growth from 21% to 89%. Mrs. V. also found merit in using the technology tool Padlet to strengthen learning. Mrs.

F. saw a huge difference in the student learning from the pretest to the posttest after the intervention. She noted that “even the way they answered the questions in the post was ... changed ... for the better.” She related how her student responses were either more detailed or blank as they were unable to guess pretest answers. She was then able to tailor her instruction to meet the needs of her students by using pretest results.

When Mrs. V. gave her open-ended assessment, she had similar results – students could not guess to get the right answer. They had to show what they knew. This experience gave students much lower pretest scores, as they had not yet received instruction; however, after instruction when students took the open-ended postassessment, she shared how they were able to answer the questions and she and the students could see how much they learned. Mrs. D. also saw a huge difference between before and after scores, which caused her to want to incorporate the strategies that she learned. Her students expressed excitement about learning, “instead of just going through the motions of memorizing the words.” She noticed that students who normally struggled “for ability or effort reasons” benefitted from the interaction and scored above average on the posttest. The next section is a summary of the qualitative findings of the course impact on student learning.

Summary of qualitative findings related to impact on student learning.

Students were connected and engaged, they had more access, and they grew. As teachers shared about the impact the course had on student learning, the researcher noted again that the theme moved from being a linear way of thinking about success to a multifaceted way of providing success for all learners. Providing multiple ways for students to learn not only made the teacher excited, but the students became excited as well. Teachers

used the words excitement and fun in conjunction with vocabulary learning, whereas before teachers were looking for ways not to bore students with their instruction. No one mentioned the words struggle or frustration in the postinterview when related to the vocabulary instruction and student learning; however, phrases like “It was awesome,” “it’s just cool,” “he was hooked,” “you can make it fun,” “that was like an aha moment,” “my students loved,” “which they all loved,” “engaged,” and “they were excited,” serve as evidence of student connection, engagement, accessibility, and growth. According to teachers, student learning had evolved from a source of boring, irrelevant instruction before the course to postcourse fun, excitement, and personalized relevance. Some of the same phrases teachers utilized for the best professional development they had ever attended became some of the same phrases they used to describe the impact the course had on students, themselves, and their practice. In the next section, the researcher provides the qualitative results related to the impact on student learning.

Quantitative Results Related to the Impact on Student Learning

To allow the researchers to see the impact of the professional blended learning coaching model on student learning of vocabulary using TPRS®, the participants gathered test scores from their students for the initial pre and postassessment and after the course and coaching from the pre and postassessment. These data are located in Appendix H for each teacher. There were 47 sets of student scores reported in five classes. The researcher did not report seven student scores, as those students were unable to take all of the assessments due to absences. The researcher refers to the scores as preintervention growth scores and postintervention growth scores. To arrive at these growth scores, the researcher subtracted the pre and posttest scores participants provided

to get the preintervention growth score, and the postintervention growth scores came from the subtraction of the pre and posttest scores participants gave students after completing the course with coaching.

Paired samples t test. The researcher utilized the paired samples t test to compare how much students grew from the first set of assessments they took to the last set of assessments they took. The researcher took the difference between the first pretest and posttest and compared it to the last pretest and posttest. The data from the scores met three of four assumptions that must be met for the paired t test. The data can be described as (a) having a continuous dependent variable and (b) the independent variable is categorical with two related groups. The data (d) also has no significant outliers as determined by the box plot in Figure 10. The test for normality is the only assumption not met and is discussed below.

The researcher used the SPSS Explore feature to test the growth scores for outliers by requesting box plots of the data set. There were no outliers in the growth data, as assessed by inspection of a box plot for values greater than 1.5 box lengths from the edge of the box. In Figure 10, one can see the results for the difference data set.

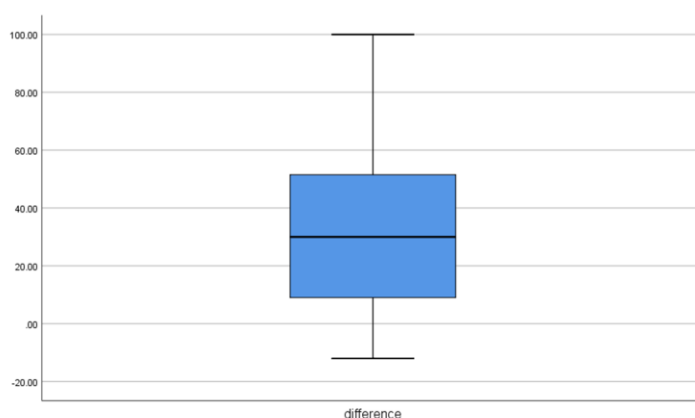


Figure 10. Box Plot to Determine Outliers on Score Differences.

The growth scores ($p < .02$) reject the null hypothesis ($p < .05$) for the Shapiro-Wilk Test and were not normally distributed as assessed. This test of normality result is found in Table 3.

Table 3

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
difference	.134	47	.034	.944	47	.024

This table shows the violation of the test for normality and is noted here; however, according to Laerd Statistics (2015a), “non-normality does not affect Type 1 error rate substantially and the paired-samples t-test is often considered robust in this regard” (para 3).

The mean difference in student growth scores after teachers participated in the professional blended learning with coaching was higher ($M=70.489$, $SD=25.977$) than the mean difference in student growth scores before teachers participated in the course with coaching ($M=36.361$, $SD=29.066$); however, the standard deviation was higher in the difference of the first pair of assessment growth scores, meaning there was greater variability within the difference of the preintervention student growth scores compared to the difference of the postintervention student growth scores based on the standard deviation respectively. These results are illustrated in Table 4.

Table 4

Paired Samples Statistics

Pair	M	N	Std. Deviation	Std. Error Mean
Preintervention Growth Scores	36.3617	47	29.06696	4.23985
Postintervention Growth Scores	70.4894	47	25.87753	3.77463

Note. M=Mean, N=Sample Number, SD=Standard Deviation, SEM=Standard Error Mean.

The paired samples statistics table (Table 4) presents the mean difference between the two variables, postintervention growth scores minus preintervention growth scores, as well as different measures of variability in the first section of the table.

Table 5

Paired Samples T Test

	Paired Differences					t	df	Sig. (2- tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 Postintervention Growth Scores – Preintervention Growth Scores	34.12766	28.93968	4.221	25.631	42.625	8.085	46	.000

The analysis of both sets of growth scores elicited a mean increase of 34 points 95%CI [25.631, 42.625] in postintervention growth scores compared to preintervention growth scores. The postintervention growth scores elicited a statistically significant increase compared to the preintervention growth scores $t(46)=8.085$, $p<.001$, $d=1.17$. There was a statistically significant difference between means ($p<.05$); and therefore, we

can reject the null hypothesis and accept the alternative hypothesis. The null hypothesis assumes that the true mean difference is equal to zero. The two-tailed alternative hypothesis assumes that is not equal to zero.

Wilcoxon signed test. The Wilcoxon signed-rank test determines whether there is a median difference between paired or matched observations (Laerd Statistics, 2015c). This test is considered the nonparametric equivalent to the paired samples t test and is suggested as an alternative to the paired samples t test when violation of normality results occur in the paired samples t -test result (Laerd Statistics, 2015c).

The researcher used SPSS to conduct this test on the same data set. There are four assumptions for the Wilcoxon Signed Test. As the original data set was asymmetrical, it was determined by consulting Laerd Statistics (2015c) that a Signed Test would be conducted. The test results are included in Figure 11 as a step in the research process.

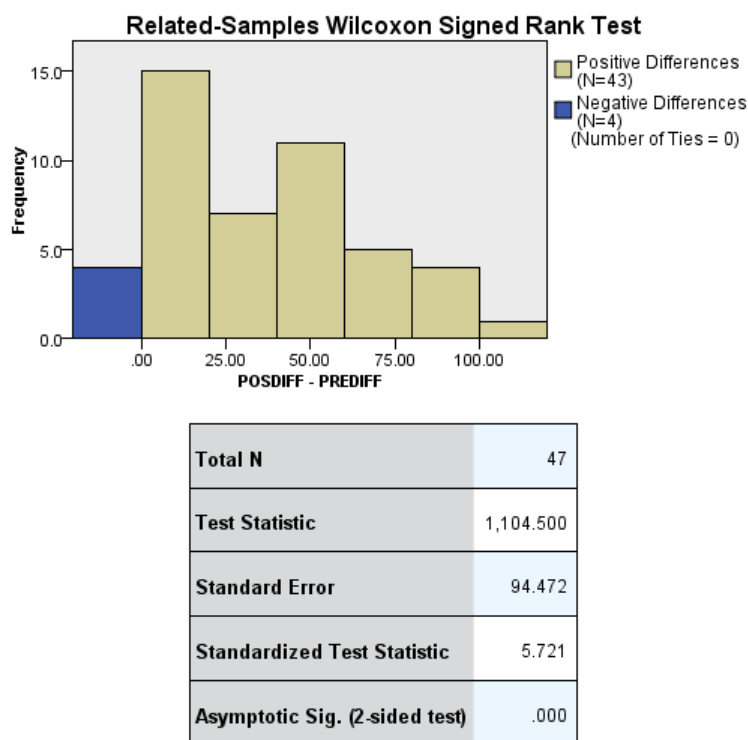


Figure 11. Related-Samples Wilcoxon Signed Rank Test.

Sign test. The next step after the violation of the assumption of normality in the paired sample t test and the violation of the assumption of asymmetry in the Wilcoxon Signed Rank Test was to run a sign test in SPSS. The researcher presents the results in Figure 12. They follow the same pattern as the paired samples t test and the Wilcoxon Signed Rank test with a p value $< .001$. The researcher gathered 47 sets of pretest and posttest scores from teachers to understand the benefits of the blended professional learning with coaching course sequence versus teacher preintervention methods of teaching vocabulary. The researcher used an exact sign test to compare the growth scores from the vocabulary assessment scores for the two trials.

Hypothesis Test Summary				
	Null Hypothesis	Test	Sig.	Decision
1	The median of differences between PREDIFF and POSDIFF equals 0.	Related-Samples Sign Test	.000	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Figure 12. Results of the Related-Samples Sign Test

Forty-eight pairs of scores from student participants in classes were analyzed to show the impact of the professional blended learning course with coaching on student learning as measured by the differences in pre and posttest scores preintervention compared to pre and posttest scores postsequence. The researcher used an exact sign test to compare the differences in scores in the two trials. The difference in postassessment scores elicited a statistically significant median increase in scores (76) compared to the difference in pretest scores (26), $p < .001$.

Quantitative results regarding the impact on student learning. The paired samples t -test results elicited a statistically significant increase in growth scores after teachers participated in the professional blended learning course compared to the difference in scores before the course began $t(46)=8.085$, $p < .001$, $d=1.17$. There was a statistically significant difference between means ($p < .05$), and therefore, one can reject the null hypothesis and accept the alternative hypothesis. As stated before, the Shapiro-Wilk test of normality indicated that the data set violated the assumption of normality; however, according to Laerd Statistics (2015a), “non-normality does not affect Type 1 error rate substantially and the paired-samples t -test is often considered robust in this regard” (para 3). The researcher had 47 paired samples, well over the five paired samples

required to run the test which adds to the robustness of the study. The researcher also conducted a related samples signs test and received similar results with $p < .001$ as the significance score. It should be noted that as the data set violated the test of normality for the paired samples t test and the test of asymmetry for the Wilcoxon Signed Rank test, the signs test is a less powerful statistical test due to the violation of these two assumptions and can be used without these two assumptions in place (Laerd Statistics, 2015b).

Member Checking

Member checking is a way for qualitative data to be confirmed and validated by participants in the study (Creswell & Miller, 2000). An opportunity is provided to the participants to see the data presented from their interviews and correct anything they see presented in the research counter to their intent (Creswell & Miller, 2000). After completing Chapters 4 and 5, the researcher shared results with participants in the study to provide this important lens for the researcher as a way of triangulating the qualitative data in the study.

Summary of Chapter 4

Chapter 4 consists of findings and results organized by research question from this mixed-method study on the impact of blended professional learning. The researcher presented the qualitative findings from preintervention interviews and postintervention interviews along quantitative results from the CoI and Student Assessment Results using the organization presented in the research matrix (Appendix C). Chapter 5 discusses the implications and recommendations emerging from these findings along with limitations of the study and ideas for future research.

Chapter 5: Conclusions and Recommendations

Professional learning is a field that touches the lives of every teacher and every school district. When professional development offerings are described by teachers as irrelevant and ineffective (Boston Consulting Group, 2014, p. 3), researchers must identify ways in which professional learning can be enhanced or changed to meet the needs of teachers and ultimately students.

This study sought to find the impact of offering blended professional learning with coaching focused on TPRS® on teacher perception, teacher knowledge, classroom practice and instruction, and student learning. Five teachers signed up for the volunteer course sequence and shared their experience through two interviews, a survey, coaching sessions, and the sharing of student vocabulary assessment scores from before the professional blended learning course and after the professional blended learning course.

Summary of Findings and Results

The finding and results add to the growing body of literature on blended professional learning with coaching along with cross-curricular vocabulary instruction methods. Specific themes from findings and results include teacher perceptions and impact on vocabulary instruction; the impact on use of technology in the classroom; the impact of blended professional learning with coaching on teachers and their practice; and finally, the impact on student learning.

Teacher perceptions about how students learn vocabulary were challenged, and all five participants in the study planned to change components of classroom practice for teaching vocabulary. Teachers did not describe vocabulary learning as boring and lifeless after the course, rather they describe the learning as exciting and fun. Teachers

planned to use Marzano's (2004) strategies and TPRS® in their classrooms because of the study. Teachers rated the training high in their experience and indicated they would like to see it continue, as they believe other educators would benefit from the topics presented.

As a result of the training, the teachers learned new technology tools and learning games to utilize with students. Linear classroom practices of vocabulary lists and copied definitions transformed into multifaceted living online tools that students can access, add too, discuss, collaborate with, act out, and interact with using new vocabulary.

Teachers value the autonomous learning process that an online course offers with time for collaboration with a coach. They would also like the added component of interaction either face to face or synchronously with classmates. Teachers valued the flexibility of the time line to work with their schedules. Teachers indicated that the course could be shared with others to impact beyond the immediate school into other areas of vocabulary learning practice and theory.

Teacher interviews and the quantitative results indicate with a high level of confidence that student posttest results improved after teachers participated in the blended learning with coaching course on TPRS®. The paired samples *t*-test results elicited a statistically significant increase in growth scores after teachers participated in the professional blended learning course compared to the difference in scores before the course began $t(46)=8.085, p<.001, d=1.17$. Based on these results and the fact that the pretest questions originated from the lower levels of Bloom's Taxonomy and the posttest toward the mid to high level, the researcher is confident that after participants complete the professional blended learning with coaching course, student learning can improve in

both quality and quantity of score.

Limitations of Study

In this section, the limitations and delimitations of the study are discussed. These include limitations and delimitations determined before the study began and at the study's completion.

First, the researcher's relationship with participants could be viewed as a limitation. Due to the nature of working closely with participants to develop lessons, this plan was the best choice for the synchronous coaching component, as teacher involvement was solicited from the researcher's home institution; however, this choice (also a delimitation) could have limited the freedom participants felt about being honest with the researcher. Participants reported feeling comfortable with the researcher during the qualitative interviews; however, their reporting may have been affected by the relationship that the participants shared with the researcher.

Second, the researcher is a world language teacher trained in world language methods who worked with a variety of teachers from differing backgrounds. For this reason, the researcher and participants worked together to avoid mistakes in understanding and depth of instruction. The researcher had to work hard to understand components of the classes. For example, in video design class, the researcher had to first learn about different camera lenses, technical jargon like j-cuts and l-cuts, and more before she was able to help the teacher design lessons and stories using these concepts. The teacher provided a buffer for any misinformation as it was developed by the researcher.

The methodology for the study included a pre-interview. This interview took

place after participants assessed, taught, and gave a postassessment employing their own personal method for teaching vocabulary. The researcher conducted the postinterview after teachers completed the entire virtual professional learning with coaching sequence along with the opportunity to preassess, teach lessons using methods from the course and give a postassessment. The researcher created the pre and postinterviews from research and examples found during the literature review. The researcher's bias may have been affected by prior knowledge of the participant; however, to protect against bias, the researcher submitted questions to the dissertation committee for feedback and clarification.

The methodology also included a description of the impact on student learning. As a single study, it would be impossible to link student achievement to professional development empirically; however, student vocabulary pre and postassessment from before the intervention and after the intervention could inform the research base and provide ideas for future study. This study had certain limitations, as the assessment measured different words. The pre and postassessment were implemented both times to provide for prior student knowledge of words and their meanings. It was impossible for the two sets of assessments administered to be the same, as participant initial pre and postassessment and final pre and postassessment must measure different words. This component was limited by the fact that the participant was administering the tests to the same group of students not providing a control group. When analyzing the data, this limitation was present. The assumption of normality in the paired samples *t* test was also violated, adding to this limitation. These results caused the use of two other statistical tests. First, in the Wilcoxon Signed Rank Test where the violation of symmetry was

violated, resulting in the use of a less powerful Related Samples Sign Test. All tests resulted in the same statistical significance of $p < .001$.

Finally, due to time limitations, the number of participants had to remain low to allow the researcher to meet with all participants to plan the lesson. This limitation could have affected the transferability of the results, as the population studied was five teachers. The researcher also could not plan for specific participants or age groups the study would serve, as the workshop was offered on a volunteer basis. Time limits may have also affected the quality of the professional learning. Yoon et al. (2007) found the most gains in student achievement when participants received approximately 49 hours of professional development. The scope and sequence of this project did not meet this standard due to time limitations. Also adding to the time limitations were snow days and bomb threats (Associated Press, 2018) that occurred in the spring semester, making for a tighter window than originally expected for teachers to complete the study.

A few delimitations occurred because of and after the study, and they are discussed below. The delimitations were choices made by the researcher and are mentioned here as factors that affected or could have affected the study.

First, the number of participants had to be limited due to the fact that the researcher needed enough time to work with each one as a coach. The participants were also volunteer participants and for this reason did not represent a cross section of the teaching population. All five were female teachers with whom the researcher had a previous collegial relationship.

Second, the CoI results were too alike and too small to garner results from the statistical study recommended by the committee governing the survey. While the $n=5$

was met, it was the lowest number of possible responses; the main issue came in that the responses had little variability which rendered the PCA null, as it relied on a variety of responses to arrive at a positive Eigen value. As a result, the researcher discussed the quantitative results in Chapter 4 and provided descriptive statistical analysis.

Implications of Findings

Participants in the study were hungry for new ways to receive professional learning that were timely, relevant, make a difference, and have a lasting impact on their sphere of influence. Although participants in the study were unaware of the study by the Bill & Melinda Gates Foundation (Boston Consulting Group, 2014), their list of what makes a good professional learning experience was remarkably similar to those findings. Specifically, the Boston Consulting Group (2014) study mentioned that professional development should be relevant, interactive, delivered by someone who understands teacher experiences, and sustained over time; and that teachers should be treated like professionals (Boston Consulting Group, 2014, p. 4). Professional learning has not yet evolved to include multiple sessions, virtual offerings, or coaching for the majority of teachers in the researched district; however, studies like this one and others looking at how adult learning models and online blended learning can provide new avenues to explore in professional learning for districts like this one around the state. Teachers in the study know what quality professional learning looks like, and they know how to assess professional learning. They just need opportunities for quality, relevant, timely, and impactful professional development with added reflective practices such as coaching to help them grow.

Every teacher needs a coach. Participants reported that having someone ask them

questions, provide feedback, and support them in implementing the things they learned “made all the difference.” Effect size studies by Joyce and Showers (1982, 2002) show the powerful implications of professional learning with coaching. This study added the component of flipping professional learning by making the course a virtual experience. When learning virtually, teachers had freedom to learn at their own pace, digest the material, and interact with colleagues all before meeting with a coach. As a result of the study, the researcher, in collaboration with her dissertation chair, developed the DeBord-Brown Model of Blended Learning and Coaching in Figure 13 as a model for further study.

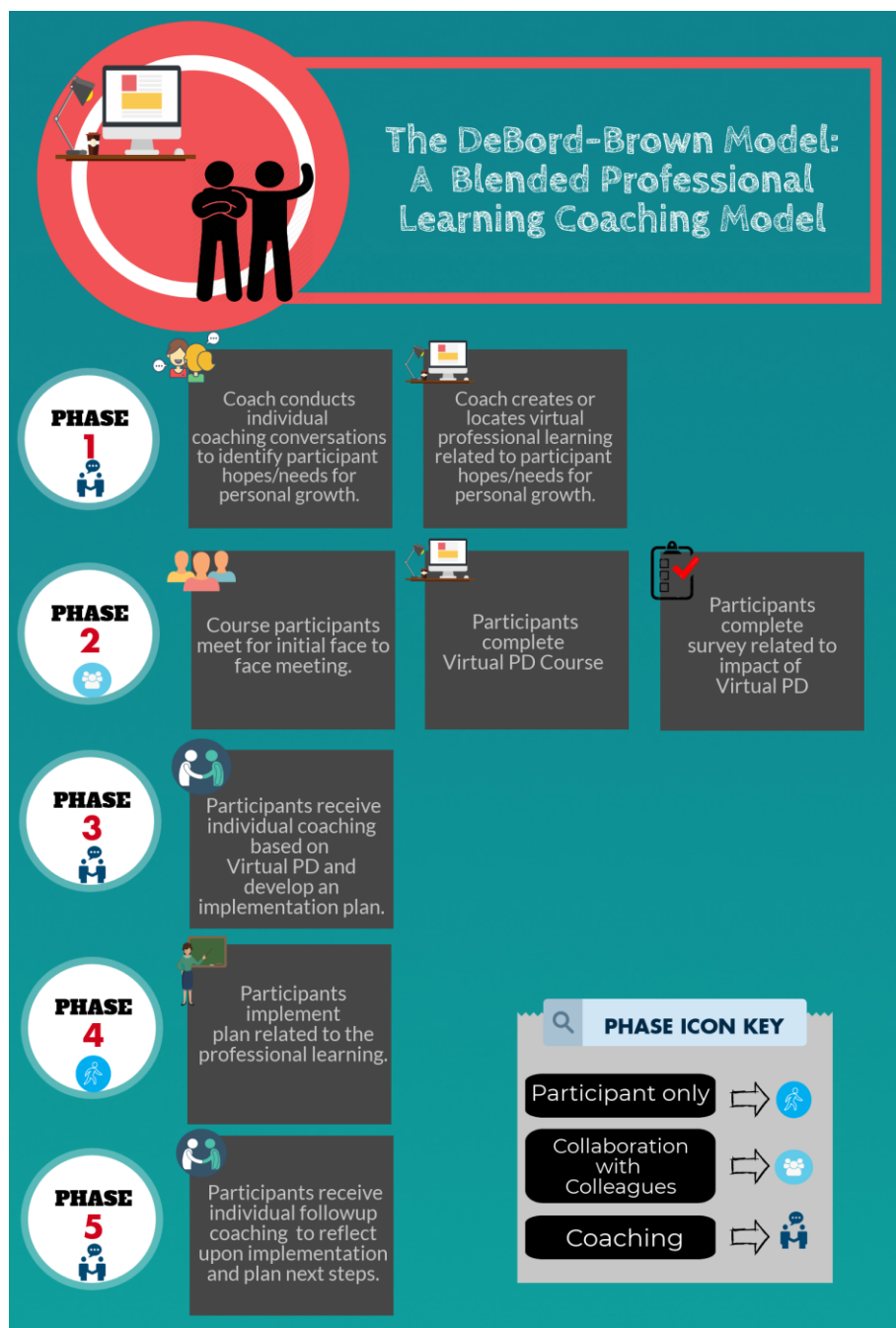


Figure 13. The DeBord-Brown Model of Professional Blended Learning and Coaching.

This flipped blended model allowed teachers to formulate questions before the coaching sessions and gave the coach and the teacher common vocabulary with which to

plan lessons and assessments. The DeBord-Brown Model has implications to change how teachers receive professional development. The model mirrors the research process followed by the researcher, with two added components resulting from the study. A participant mentioned having a synchronous face-to-face class meeting before the course begins. She related how this meeting would have allowed her to share with other members of the group and make connections with them before the course began; therefore, the researcher added this component to the model in Phase 3. The researcher also added a final coaching session in place of the final interview to reflect on the process and allow the coach and teacher to make future plans. Adding this component could allow the coach to complete the cycle of coaching by learning what went well in the lessons, how teachers need more support, and what could have changed to help the teacher's practice and overall experience. This model and the new components provide implications for further study in the area of professional learning for teachers. The success of the model with the vocabulary course creates an opportunity for future research to determine how the model impacts other professional learning topics outside of vocabulary learning.

The study also has implications in the realm of vocabulary learning. Taking vocabulary learning and making it explicit, while also connecting it to prior learning, has implications for all classrooms (Marzano, 2004). Participants saw firsthand the power of connecting vocabulary to a story and actions using TPRS®. They watched as students personalized vocabulary by acting out words on video and by finding online images to connect with literature and course concepts. Every teacher except Mrs. H. changed her assessments after the course. Mrs. H. kept her matching format due to the needs of

students she had in the course. Each of the others saw that by giving an open-ended preassessment, they could more clearly see what students had learned. Pretest scores were lower due to the more rigorous requirements; however, posttest scores were higher. Participants were pleasantly surprised to see the postassessment scores where students grew tremendously. This experience was not as clear with the initial pre and postassessments participants gave using matching and fill-in-the-blank items. Mrs. F. noted how she wanted to do all of her assessments like this one for the upcoming school year, as she saw her students make connections with course content more clearly. The varied approach that TPRS® offers provides implications for schools to explicitly teach vocabulary and connect it to a variety of topics and stories, using a variety of tools to personalize learning and retention. The next section discusses recommendations arising from the research study and the implications of the findings and results.

Recommendations

Recommendations are presented in three sections below. First, the researcher gives recommendations for professional practice. These recommendations are for teachers and other professionals who receive professional learning each year. Second, the researcher gives recommendations for local, state, and national leaders related to professional learning for educators. Finally, the researcher gives suggestions for future research in the fields of professional blended learning with coaching and vocabulary instruction.

Recommendations for Professional Practice

The following recommendations for professional practice are based on the findings of the study and provide recommendations for teachers and other educational

professionals to be involved in their own professional learning. These recommendations grew out of the implications and findings of the study.

Practice reflecting, listening, and soliciting feedback to grow. As a researcher, listening to the voice of the teacher during the coaching sessions was powerful. Dewey (1933) said, “We do not learn from experience. We learn from reflecting on experience” (p. 78). Taking time to listen to colleagues, solicit feedback, and both receive and provide support is integral to teacher growth. Bright (1996) related the following from his article:

The key skill in developing and maintaining professional competence is continuous learning (Argyris and Schon, 1974), which “reflective practice” accepts and achieves. The use of “old” models of previous situations may represent past learning, but they do not represent current learning about a current unique client situation, and/or the ongoing learning involved in assessing and modifying the relevance and form of use of “old” knowledge in a current situation. (p. 162)

In the researcher’s experience, reflection is not often something teachers find time for in their daily experience, perhaps due to the daily barrage of tasks, student needs, and state and local requirements that need to be fulfilled. The results, however, when sharing with a coach or colleague, can help shore up misunderstandings or miscommunications, strengthen classroom instruction and practice, and prove inspirational for further growth in teaching as they “develop and maintain professional competence” (Bright, 1996, p. 162) by continuously learning about themselves and their students.

Seek opportunities for training and collaborate with colleagues. The

researcher saw the value of collaboration in the virtual professional development course. Teachers were encouraged by what their colleagues shared and realized they were in similar situations. “Participation in a blended learning community of practice creates reciprocal growth opportunities in which teachers can develop as professionals across multiple domains” (Trust & Horrucks, 2016, p. 645). The researcher recommends that teachers take advantage of the wide variety of professional learning topics available virtually to create or join a professional learning community or network where they can encourage other colleagues and grow personally.

Advocate for more academic coaches and training for those who would be coaches. It is easy to recognize the need for athletic coaches; however, the need for academic coaches may be even greater. The researcher learned in university courses the anecdote that even NFL players have coaches; in fact, they may have several coaches for different roles they play. Research for Action collected data from 2,000 teachers in 26 Pennsylvania high schools where teachers received instructional coaching (Charner & Medrick, 2017). Of those teachers, 35% received one-to-one coaching once or twice a month; 91% of those teachers said, “Their needs were addressed by their coach” (Charner & Medrick, 2017, p. 2). Teachers are learners; and just as students need teachers and coaches to learn, adults need guidance, along with someone to ask engaging questions, provide encouragement and support, and challenge them to grow as well.

Seek out and use a variety of tech tools and cross-curricular methods to teach vocabulary. Teachers should find new ways of presenting, interacting with, and discussing vocabulary to increase student learning and engagement. A variety of apps, tech tools, collaborative learning sites, and presentation applications are available to help

students create, design, analyze, and synthesize learning. Sound vocabulary learning theories like Marzano's (2004) six steps for building academic vocabulary and Bransford et al.'s (2000) theory for HPL provide a theoretical grounding for multifaceted instruction. These theories, coupled with effective instructional design using multimedia instruction, help foster learning (Mayer, 2001). Employing cross-curricular methods like TPRS® allows students to make connections across a variety of media (Mayer, 2001) and gives them experiences with vocabulary to create mental models and connections with prior experiences.

Advocate for professional learning tailored to the needs of teachers. Finally, teachers need to advocate for their own professional learning so administrators and districts find ways to offer training that is relevant, timely, practical, and tailored to their needs as teachers. Professional learning needs to span more than a one-session workshop (Ball & Cohen, 1999) and provide follow-up to the training (whether it be blended or otherwise). Teachers provide this type of training to their students every day. Therefore, they already see the success of longitudinal teaching that spans a longer time frame and yields results they can see (Yoon et al., 2007). Finding unique ways to advocate for these types of professional learning provides teachers with the tools, practices, and strategies they need to reach students. In the next section, the researcher provides recommendations for state, district, and school leaders.

Recommendations for State, District, and School Leaders

The following recommendations for state, district, and school leaders are based on the findings and results of the study and provide recommendations for teachers and other educational professionals to be involved in their own professional learning. Grounded in

the research and experience of the researcher, these recommendations grew out of the implications and findings of the study.

Value and invest in what teachers need most. Studies from Boston Consulting Group (2014) show that teachers want more from professional development and that one session of professional development has little to no effect on teacher learning. The Standards for Professional Learning (Learning Forward, 2013) indicated that “Professional Learning that increases educator effectiveness and results for all students integrates theories, research, and models of human learning to achieve its intended outcome” (p. xiii). The researcher recommends that state, district, and school leaders look at current research related to professional learning and how they can provide professional development opportunities that are the most effective for their teachers. Professional development needs to “occur within learning communities committed to continuous improvement, collective responsibility, and goal alignment” (Learning Forward, 2013, p. xiii). Teachers in the study wanted professional learning to be tailored to what they need most and is relevant to their practice.

Provide training in explicit vocabulary instruction using a variety of methods. Teachers may be the best link for students in situations of lower socioeconomic distress to have success in learning vocabulary and reading. Vocabulary knowledge is directly related to reading ability, and a student needs to know at least 90-95% of the words they are reading to have successful comprehension of a text (Nagy & Scott, 2000). The researcher suggests that state, district, and school leaders search for ways to provide training for teachers in explicit vocabulary instruction. This training would support both students and teachers in learning that is integral to success.

Hire and train more coaches. The researcher recommends that any school, district, or state work diligently to make hiring and training coaches a reality. Every teacher needs a coach. Charner and Mean (2017) conducted a year-long study of 220 teachers receiving instructional coaching; 89% of teachers indicated that their classroom practice changed after 1 year of coaching, and 100% of those coached beyond a year indicated that their classroom practice changed. Teachers reported that the three ways their practice changed most were “using more formative assessments, more willingness to try new instructional techniques, and adjusting instruction based on formative assessments” (Charner & Medrich, 2017, p. 4). Coaches also need to receive professional learning to be the kind of coach that helps teachers thrive (Charner & Medrich, 2017). During the research project, two teachers shared what they wanted in a coach. They wanted coaches to be patient, good at listening, and nonjudgmental while also providing strategies and tools to help them reach their students. Seeing the success of these five teachers firsthand with only two coaching sessions helps the researcher recommend the use of coaches and coaching to build collegial relationships and to extend the effectiveness of professional face-to-face and virtual learning.

Suggestions for Future Research

Professional learning for teachers will continue to be important. As long as there are students, teachers will need training. The results of this study offer several implications for future research.

1. In the future, researchers should study and consider when and how long schools offer professional development. As teachers are those who are receiving instruction, finding out the best time, interval, and scheduling

procedures from those affected would be a relevant and appropriate study.

2. Replicating the study with a different professional development theme is integral to see how the DeBord-Brown Model for blended professional learning with coaching works outside of virtual vocabulary professional development.
3. The researcher believes that a longer study over the course of a semester may yield even stronger results as professional learning with over 49 hours of time invested yields stronger results (Yoon et al., 2007).
4. Replicating the study with teachers who do not have an initial relationship with the researcher would allow one to see the part played by relationship in the results.
5. Replicating the study with teachers in middle and elementary school to get a perspective on how lower grade level teachers respond to coaching and how students respond to and interact with course material would provide data on how the study impacts teachers and classes of younger learners.

In the future, one might ask questions such as these:

1. Which part of the professional blended learning with coaching had the most impact on student learning?
2. Do student scores grow when the topic of professional development is changed but the coaching component remains?
3. How would the results of the study change if the professional learning were offered face to face with the added component of coaching?
4. How would students view the new learning process compared to their

teacher's previous method of instruction? Could they notice and articulate changes?

These questions resulted from careful consideration of the findings and results indicated by the study. Thorstein Veblen, an economist, said, "The outcome of any serious research can only be to make two questions grow where only one grew before" (Vandermeij & Vandermeij, 2015, p. 258). With no exception, that has been the result of this study. More questions and implications for further research have materialized from the study that could not be answered by the inquiry alone.

Summary of Chapter 5

Most professional learning for teachers has not changed since its inception as a method of continuing education for teachers (Ball & Cohen, 1999). Even though teachers report that a majority of their professional development is irrelevant and not tailored to their needs as teachers (Boston Consulting Group, 2014), workshop style professional development is the norm in most districts around the nation (Ball & Cohen, 1999). Joyce and Showers (2002, p. 77) showed the effect size of professional development is less than 0.00; however, when adding coaching to the professional development, the effect size jumps to 1.42. Hattie (2015) noted that anything over a 0.40 is a significant effect size. This effect size signifies that the impact of providing professional development with coaching could increase professional learning growth significantly. This study sought to find the impact of providing professional development with coaching on teacher perceptions, teacher knowledge, classroom practice, and student learning.

Many implications for further research and reform of professional learning

resulted from the study. The results of the study can provide best practices for providing professional blended learning with coaching for future districts wanting to implement this professional learning model and course into their practice. The student learning results could be shared with schools, districts, and states as a way to show how providing professional blended learning with coaching on TPRS® vocabulary instruction resulted in statistically significant median increases, $z=5.543$, $p<.001$. Participant experiences and suggestions will also be shared as the researcher continues to ask questions about professional blended learning with coaching.

References

- About Universal Design for Learning. (2015, May 11). Retrieved January 13, 2018, from <http://www.cast.org/our-work/about-udl.html#.Wlq2jK55WCh>
- Anderson, R., & Nagy, W. (1991). Word meanings. In R. Barr, M. Kamil, P. Mosenthal, and P.D. Pearson, (Eds.), *Handbook of reading research*, Vol. 2. New York: Longman.
- Arbaugh, B., Cleveland-Innes, M., Diaz, S., Garrison, D., Ice, P., Richardson, J. & Swan, K. (2008a). CoI survey. Retrieved November 23, 2017, from <https://coi.athabascau.ca/coi-model/coi-survey/>
- Arbaugh B., Cleveland-Innes M., Diaz S., Garrison D., Ice P., Richardson J., & Swan K. (2008b). Developing a community of inquiry instrument: Testing a measure of the community of inquiry framework using a multiinstitutional sample. *Internet and Higher Education*, 11, 133-136. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.457.2233&rep=rep1&type=pdf>
- Archer, A. L., & Hughes, C. A. (2011). *Explicit instruction: Effective and efficient teaching*. New York: Guilford Press.
- Asher, J. (1969). The total physical response approach to second language learning. *The Modern Language Journal*, 53(1), 3-17. doi:10.2307/322091
- Associated Press. (2017, July 26). NC budget cuts hit people and programs to help poor schools. Retrieved July 25, 2018, from <https://www.usnews.com/news/best-states/north-carolina/articles/2017-07-26/nc-budget-cuts-hit-people-and-programs-to-help-poor-schools>

Associated Press. (2018, April 12). Superintendent says no more dismissals after nine bomb threats. Retrieved July 22, 2018, from

<https://www.apnews.com/b84fe1e2237a41bcb060ee762ddb4a>

Baker, S., Simmons, D., & Kame'enui, E. (1998). *Vocabulary acquisition: Synthesis of the research*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, Educational Resources Information Center.

Ball, D., & Cohen, D. (1999). Developing practice, developing practitioners: Toward a practice-based theory of professional education. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession*, 3-32. San Francisco, CA: Jossey-Bass.

Barrett, P. (2018, June 19). An astute approach to the pros and cons of TPRS. Retrieved from <http://barrett.lang-learn.org/2018/6/19/5914/>

Beal, D. (2011). The correlates of storytelling from the TPRS method of foreign language instruction on anxiety, continued enrollment, and academic success in middle and high school students (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3449943)

Bex, M. (2015, September 20). TPRS®/CI as explicit instruction. Retrieved September 23, 2017, from <https://martinabex.com/2015/01/18/tprsci-as-explicit-instruction/>

Black, P., Harrison, C., Lee, C., Marshall, B., & Wiliam, D. (2003). *Assessment for learning: Putting it into practice*. Maidenhead: McGraw-Hill Education.

- Boston Consulting Group. (2014). Teachers know best: Teachers' views on professional development. Retrieved from <http://collegeready.gatesfoundation.org/wp-content/uploads/2015/04/Gates-PDMarketResearchDec5.pdf>
- Bransford, J., Brown, A. L., Cocking, R. R. (2000). *How people learn: Brain, mind, experience, and school*. Washington, DC: National Academy Press.
- Bright, B. (1996). Reflecting on "reflective practice." *Studies in the Education of Adults*, 28(2), 162.
- Brune, M. K. (2004). Total physical response storytelling: an analysis and application (Unpublished master's thesis). University of Oregon.
- Butin, D. W. (2010). *The education dissertation: A guide for practitioner scholars*. Thousand Oaks, CA: Corwin.
- Buxbaum, Y. (2000). *Storytelling and spirituality in Judaism*. Northvale, NJ: Aronson.
- Cardenas, M. (2001). The challenge of effective vocabulary teaching. *PROFILE Issues in Teachers' Professional Development*, 2(1), 8-16.
- Charner, I., & Medrich, E. (2017). *Educator-centered instructional coaching: What the research says*. Durham, NC: FHI 360 National Institute for Work and Learning.
- Cook V. (1993) The input hypothesis model. In *Linguistics and second language acquisition. Modern Linguistics Series*. Palgrave, London. Retrieved June 9, 2018, from https://doi.org/10.1007/978-1-349-22853-9_3
- Cottrell, S. (2014, February 25) Guest post: A TPRS rebuttal by Carol Gaab. Retrieved from <http://musicuentos.com/2014/02/carol-gaab/>
- Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory into Practice*, 39(3), 124-130.

- Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (2nd ed.). Thousand Oaks, CA: Sage.
- Darling-Hammond, L., Bransford, J., with LePage, P., Hammerness, P., & Duffy, H. (Eds.) (2005). *Preparing teachers for a changing world: What teachers should learn and be able to do*. San Francisco: Jossey-Bass.
- Demands of teaching taking its toll on public school teachers, survey finds. (2016, May 09). Retrieved July 20, 2018, from <http://weac.org/2016/05/09/demands-of-teaching-taking-its-toll-on-public-school-teachers-survey-finds/>
- Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the educative process* (Revised ed.). Boston: D. C. Heath.
- Earl, L. M. (2013). *Assessment as learning: Using classroom assessment to maximize student learning*. Thousand Oaks, CA: Corwin Press.
- Effective Adult Learning, a Toolkit for Teaching Adults. (2012). [ebook] Northwest Center for Public Health Practice, University of Washington, School of Public Health. Retrieved July 24, 2018, from <https://www.ag.ndsu.edu/evaluation/documents/effective-adult-learning-a-toolkit-for-teaching-adults>
- Egan, K. (1986). *Teaching as storytelling: An alternative approach to teaching and curriculum in the elementary school*. Chicago: University of Chicago Press.
- Ellis, E. (2002). *The clarifying routine: elaborating vocabulary instruction*. Retrieved July 31, 2017, from <http://www.ldonline.org/article/5759>

- Fisher, D., Frey, N., & Hattie, J. (2016). *Visible learning for literacy, grades K-12: Implementing the practices that work best to accelerate student learning*. Thousand Oaks, CA: Corwin/A SAGE Company.
- Flesch, R. (1955). *Why Johnny can't read and what you can do about it*. New York: Harper & Row.
- Frank, A. W. (2010). *Letting stories breathe: A socio-narratology*. Chicago: University of Chicago Press.
- Freedra, S. (2018, July 18). What 10 years of k-12 online professional development taught New Hampshire - EdSurge News. Retrieved July 20, 2018, from <https://www.edsurge.com/news/2016-07-23-what-10-years-of-k-12-online-professional-development-taught-new-hampshire>
- Gaab, C. (2006, March). *TPRS®: Evolution or creation?* Retrieved from <http://optimizingimmersion.com/wp-content/uploads/2015/04/TPRS®-Evolution-or-Creation.pdf>
- Goddard, R. D., Hoy, W. K., & Hoy, A. W. (2000). Collective teacher efficacy: Its meaning, measure, and impact on student achievement. *American Educational Research Journal*, 37(2), 479-507.
- Gregg, K. (1984). Krashen's monitor and Occam's razor. *Applied Linguistics*, 5, 79-100.
- Gross, S. (2005). How to do PQA. Retrieved May 2, 2018, from <http://susangrosstprs.com/articles/HOWtoPQA.pdf>
- Hartman, G. (2011). Marzano six-step process for teaching vocabulary. Retrieved July 15, 2018, from <http://fhsvocabulary.pbworks.com/w/page/44177321/>

- Hattie, J. (2015). The applicability of Visible Learning to higher education. *Scholarship of Teaching and Learning in Psychology*, 1(1), 79-91. Retrieved from <http://dx.doi.org/10.1037/stl0000021>
- Hayles, B. (2012, November). Mme Hayles and the TPRS experiment. Retrieved August 6, 2018, from <http://mmehayles.blogspot.com/2012/11/the-stress-of-last-month.html>
- Hedstrom, B. (2012). *The basics of TPRS: Workshop notes and pre-reading*. Retrieved July 17, 2018, from <http://www.brycehedstrom.com/wp-content/uploads/2011/09/THE-BASICS-OF-TPRS2.pdf>
- IBM Support. (2016, September 07). FACTOR does not print KMO or Bartlett test for Nonpositive Definite Matrices. Retrieved July 22, 2018, from <https://www-01.ibm.com/support/docview.wss?uid=swg21476768>
- Johnson, C., & Johnson, D. (2009). Why teach vocabulary? (Online). Retrieved February 1, 2018, from https://www.engageny.org/file/2476/download/why_teach_vocabulary.pdf
- Joyce, B., & Showers, B. (1982). The coaching of teaching. *Educational Leadership*, 40(1), 4-10.
- Joyce, B., & Showers, B. (2002). *Student achievement through staff development* (3rd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.
- Knowles, M. (1984). *The adult learner: a neglected species* (3rd ed.). Houston, TX: Gulf Publishing.

- Konner, M. (2010). The cultural evolution of storytelling and fairy tales: Human communication and memetics. Retrieved July 15, 2018, from <http://assets.press.princeton.edu/chapters/s9676.pdf>
- Koo, C. L., Demps, E. L., Farris, C., Bowman, J. D., Panahi, L., & Boyle, P. (2016). Impact of flipped classroom design on student performance and perceptions in a pharmacotherapy course. *American Journal of Pharmaceutical Education*, 80(2), 33. Retrieved from <http://doi.org/10.5688/ajpe80233>
- Krashen, S. D. (1982). *Principles and practice in second language acquisition*. Oxford: Pergamon.
- Krashen, S. (1989). We acquire vocabulary and spelling by reading: Additional evidence for the input hypothesis. *Modern Language Journal*, 73(4), 440-464. Retrieved from <http://dx.doi.org/10.2307/326879>
- Krashen, S. D., & Terrell, T. D. (1983). *The natural approach: Language acquisition in the classroom*. Hemel Hempstead: Prentice Hall International English Language Teaching.
- Ladson-Billings, G. (1994). *The dreamkeepers*. San Francisco: Jossey-Bass Publishing Co.
- Laerd Statistics. (2015a). Paired-samples t-test using SPSS statistics. *Statistical tutorials and software guides*. Retrieved from <https://statistics.laerd.com/>
- Laerd Statistics. (2015b). Sign test using SPSS statistics. *Statistical tutorials and software guides*. Retrieved from <https://statistics.laerd.com/>
- Laerd Statistics. (2015c). Wilcoxon signed-rank test using SPSS statistics. *Statistical tutorials and software guides*. Retrieved from <https://statistics.laerd.com/>

- Leachman, M., Masterson, K., & Figueroa, E. (2018, February 28). A punishing decade for school funding. Retrieved July 20, 2018, from <https://www.cbpp.org/research/state-budget-and-tax/a-punishing-decade-for-school-funding>
- Learning Forward. (2013). Standards for professional learning. Retrieved from <https://learningforward.org/docs/default-source/commoncore/tplstandards.pdf>
- Lichtman, K. (2012). Research on TPR storytelling. In B. Ray & C. Seely, *Fluency through TPR storytelling* (6th ed.). Berkeley: Command Performance Language Institute.
- Lichtman, K. (2015). Research on TPR storytelling. In B. Ray & C. Seely, *Fluency through TPR storytelling* (7th ed.). Berkeley: Command Performance Language Institute.
- Liu, D. (2015). A critical review of Krashen's input hypothesis: Three major arguments. *Journal of Education and Human Development*, 4(4), 139-146.
doi:10.15640/jehd.v4n4a16
- Marzano, R. (2004). *A six-step process for teaching vocabulary*. Retrieved November 14, 2017, from http://fhsvocabulary.pbworks.com/f/marzano_mong.pdf
- Marzano, R. (2009). The art and science of teaching: Six steps to better vocabulary instruction. *Teaching for the 21st Century*, 67(1), 83-84. Retrieved from <http://www.ascd.org/publications/educational-leadership/sept09/vol67/num01/Six-Steps-to-Better-Vocabulary-Instruction.aspx>

- Marzano, R. (2018). Vocabulary. Retrieved June 7, 2018, from https://www.marzanoresearch.com/vocabulary?dir=asc&limit=5&order=sort_name
- Marzano, R., & Pickering, D. (2005a). *Building academic vocabulary: Teacher's manual*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Marzano, R., & Pickering, D. (2005b, July). *Chapter 1. The need for a program to build academic vocabulary*. Retrieved October 28, 2017, from <http://www.ascd.org/publications/books/105153/chapters/The-Need-for-a-Program-to-Build-Academic-Vocabulary.aspx>
- Mayer, R. E. (2001). *Multimedia learning*. Cambridge, England: Cambridge University Press.
- Mbucy21. (2009). "Cognitive load exercise." Retrieved October 8, 2017, from www.youtube.com/watch?v=Rc705-WS2l4&t=1s
- McLeod, S. A. (2009). Short term memory. Retrieved from www.simplypsychology.org/short-term-memory.html
- Nagy, W. E., & Herman, P. A. (1985). Incidental vs. instructional approaches to increasing reading vocabulary. In R. D. Robinson (Ed.), *Readings in reading instruction: Its history, theory, and development* (pp. 188-196). Boston: Pearson.
- Nagy, W. E., & Scott, J. (2000). Vocabulary processes. In M. Kamil, P. Mosenthal, D. Pearson, & R. Barr, *Handbook of reading research* (Vol. III). Mahwah, NJ: Erlbaum.

- National Institute of Child Health and Human Development. (2000). *Report of the National Reading Panel. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction* (NIH Publication No. 00-4769). Washington, DC: U.S. Government Printing Office.
- Nilsen, A. P., & Nilsen, D. L. F. (2003). Vocabulary development: Teaching vs. testing. In R. D. Robinson (Ed.), *Readings in reading instruction: Its history, theory, and development* (pp. 196-204). Boston: Pearson.
- Payne, R. K., DeVol, P. E., & Smith, T. D. (2006). *Bridges out of poverty: strategies for professionals and communities*. Highlands, TX: Aha! Process, Inc.
- Prather, L. (2015, November 12). Professional development and adult learning theory. Retrieved January 30, 2018, from <http://www.teachingquality.org/content/blogs/liz-prather/professional-development-and-adult-learning-theory>
- Price, A. (2010). *What are the benefits for teaching and learning of cross-curricular work*. National Teachers Research Panel: Retrieved from <http://www.ntrp.org.uk/sites/all/documents>
- Ray, B., & Seely, C. (2008). *Fluency through TPR® storytelling: Achieving real language acquisition in school*. Pismo Beach, CA: Blaine Ray Workshops.
- Schilling, D. R. (2013, June 13). Knowledge doubling every 12 months, soon to be every 12 hours. Retrieved July 26, 2018, from <http://www.industrytap.com/knowledge-doubling-every-12-months-soon-to-be-every-12-hours/3950>

- Schmitt, N., Jiang, X., & Grabe, W. (2011). The percentage of words known in a text and reading comprehension. *The Modern Language Journal*, 95(1), 26. Retrieved from <http://ezproxy.gardner-webb.edu/login?url=https://search-proquest-com.ezproxy.gardner-webb.edu/docview/863413717?accountid=11041>
- Schoology. (2018, June 25). A blueprint for effective blended professional learning for teachers. Retrieved July 28, 2018, from <https://www.schoology.com/blog/blueprint-effective-blended-professional-learning-teachers>
- Sears, L. (2007). A short history of United States' reading research and instruction: 1900 to 2006. Occasional Paper. Retrieved November 4, 2017, from http://d-scholarship.pitt.edu/7110/1/SearsLA_ETD4-2007.pdf
- Sharma, P. (2014, November 27). The cognitive load theory. Retrieved November 03, 2017, from <http://sharmaparul.blogspot.com/2014/11/the-cognitive-load-theory.html>
- Shoebottom, P. (1996). A guide to learning English. Retrieved November 03, 2017, from <http://esl.fis.edu/teachers/fis/scaffold/page1.htm>
- Silver, M., Adelman, B., & Price, E. (2003, August 8). Total physical response (TPR): A curriculum for adults©. Retrieved August 15, 2018, from <http://www.spring-institute.org/wp-content/uploads/2016/01/Total-Physical-Response-TPR-A-Curriculum-for-Adults.pdf>
- Smith, N. B. (2002). *American reading instruction* (Special ed.). Newark, DE: International Reading Association.

- Stahl, S. A., & Kapinus, B. (2001). *Word power: What every educator needs to know about teaching vocabulary*. Washington, DC: National Education Association.
- Sweller, J., Ayres, P. L., & Kalyuga, S. (2011). *Cognitive load theory*. New York: Springer.
- Traxler, A. E. (1958). Values and limitations of standardized reading tests. In R. D. Robinson (Ed.), *Readings in reading instruction: Its history, theory, and development* (pp. 43-48). Boston: Pearson.
- Trochim, W. (2006). Single group threats. Retrieved February 04, 2018, from <https://www.socialresearchmethods.net/kb/intsing.php>
- Trust, T., & Horrocks, B. (2016). 'I never feel alone in my classroom': Teacher professional growth within a blended community of practice. *Professional Development in Education*, 43(4), 645-665.
- van Nieuwerburgh, C. (2012). *Coaching in education: Getting better results for students, educators and parents*. London: Karnac.
- VanderMey, R., & VanderMey, R. (2015). *Comp 3*. Boston, MA: Wadsworth.
- Ventura, C. (2017, September 22). What's a dotard? Twitter goes wild after Kim Jong Un vocab Trump burn. Retrieved November 03, 2017, from <https://www.usatoday.com/story/news/politics/onpolitics/2017/09/21/dotard-trump-kim-jong-un-merriam-webster/691564001/>
- Vygotsky, L. S. (1987). Thinking and speech (N. Minick, Trans.). (Orig. 1934). In R. W. Rieber & A. S. Carton (Eds.), *The collected works of L.S. Vygotsky. Volume 1: Problems of General Psychology* (pp. 37-285). New York: Plenum Press.

- White, L. (1987). Against comprehensible input: The input hypothesis and the development of second language competence. *Applied Linguistics*, 8, 95-110.
- Willingham, D. T. (2009). *Why don't students like school? A cognitive scientist answers questions about how the mind works and what it means for the classroom*. San Francisco, CA: Jossey-Bass.
- Wilson, S. M., & Berne, J. (1999). Teacher learning and the acquisition of professional knowledge: An examination of research on contemporary professional development. In A. Iran-Nejad & C. D. Person (Eds.), *Review of Research in Education*, 24, 173-209.
- Yoon, K., Duncan, T., Lee, S., Scarloss, B., & Shapley, K. (2007). Reviewing the evidence on how teacher professional development affects student achievement. Issues and answers report, REL 2007 – No. 033. Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southwest. Retrieved from <http://ies.ed.gov/ncee/edlabs>

Appendix A

Preinterview and Postinterview Introductory Script

Hi, _____. For the recording, my name is April DeBord, thanks so much for joining me for the interview today. Can you tell me your name for transcription purposes? You may already know, however let me explain why I have asked you to come here today: This study asks you to participate in a professional learning opportunity on vocabulary instruction. This professional development uses blended learning, which combines a flipped instruction course followed by face-to-face coaching. You will participate in an online training in Canvas and afterward work with me as we create a lesson together employing the methods you learn from the course. Then you will share this lesson with your students. As you have probably already noticed, this interview will be audio recorded. The recording will be transcribed and destroyed after the research is complete in May of 2018. You may leave the interview at any time or decline to answer any questions that you would not like to answer. Do you have any questions before we begin?

*The open-ended nature of the question is such that it could provide useful data for the research question but as it is open ended it may not produce and answer that would inform the question.

Pre PD Interview	Post Full Sequence Interview
1. Describe how you plan, present, and assess vocabulary with your students.	1. After the professional development, how will you plan, present and assess vocabulary with your students?
2. What do you know about best practices with regard to vocabulary instruction?	2. What new knowledge did you gain with regards to best practices in vocabulary instruction as a result of this PD?
3. How would you describe the impact your vocabulary instruction has on students?	3. After the professional development, how would you describe the impact your vocabulary instruction has on students?
4. Tell me your thoughts and experiences with virtual professional development and its impact on your classroom practice. Have you ever received a blended training? If so, how was your experience? If not, what would you expect from a blended experience?	4. Tell me your thoughts about participating in this blended professional learning experience and its impact on your classroom practice. (How did the blended experience compare with past PD experiences? What were its strengths and weaknesses?)

5. Tell me what you know about educational coaching.	5. After the blended professional development, tell me your thoughts on educational coaching.
6. Describe the best professional development you have experienced. What made it valuable?	6. How would you rank this experience compared to other professional development you have experienced? Why? How could it have been improved?
7. Do you have any other thoughts or ideas about vocabulary acquisition or professional learning and coaching to add to the interview?	7. Do you have any other thoughts or ideas about vocabulary acquisition or professional learning and coaching to add to the interview?

Appendix B

Community of Inquiry Survey Instrument

Community of Inquiry Survey Instrument (draft v14)



Note: The Col Survey is an open resource under Creative Commons license. Permission is hereby granted, free of charge, to any person obtaining a copy of the Col survey to use, share, copy, adapt, merge, publish or distribute the document in any medium or format for any purpose, provided that appropriate credit is given, and any modified material is distributed under the same Creative Commons license.

5 point Likert-type scale

1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree

Teaching Presence

Design & Organization

1. The instructor clearly communicated important course topics.
2. The instructor clearly communicated important course goals.
3. The instructor provided clear instructions on how to participate in course learning activities.
4. The instructor clearly communicated important due dates/time frames for learning activities.

Facilitation

5. The instructor was helpful in identifying areas of agreement and disagreement on course topics that helped me to learn.
6. The instructor was helpful in guiding the class towards understanding course topics in a way that helped me clarify my thinking.
7. The instructor helped to keep course participants engaged and participating in productive dialogue.
8. The instructor helped keep the course participants on task in a way that helped me to learn.
9. The instructor encouraged course participants to explore new concepts in this course.
10. Instructor actions reinforced the development of a sense of community among course participants.

Direct Instruction

11. The instructor helped to focus discussion on relevant issues in a way that helped me to learn.
12. The instructor provided feedback that helped me understand my strengths and weaknesses.
13. The instructor provided feedback in a timely fashion.

Social Presence

5 point Likert-type scale

1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree

Affective expression

- 14. Getting to know other course participants gave me a sense of belonging in the course.
- 15. I was able to form distinct impressions of some course participants.
- 16. Online or web-based communication is an excellent medium for social interaction.

Open communication

- 17. I felt comfortable conversing through the online medium.
- 18. I felt comfortable participating in the course discussions.
- 19. I felt comfortable interacting with other course participants.

Group cohesion

- 20. I felt comfortable disagreeing with other course participants while still maintaining a sense of trust.
- 21. I felt that my point of view was acknowledged by other course participants.
- 22. Online discussions help me to develop a sense of collaboration.

Cognitive Presence

5 point Likert-type scale

1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree

Triggering event

- 23. Problems posed increased my interest in course issues.
- 24. Course activities piqued my curiosity.
- 25. I felt motivated to explore content related questions.

Exploration

- 26. I utilized a variety of information sources to explore problems posed in this course.
- 27. Brainstorming and finding relevant information helped me resolve content related questions.
- 28. *Online discussions were valuable in helping me appreciate different perspectives.*

Integration

- 29. Combining new information helped me answer questions raised in course activities.

30. *Learning activities helped me construct explanations/solutions.*
31. *Reflection on course content and discussions helped me understand fundamental concepts in this class.*

Resolution

32. I can describe ways to test and apply the knowledge created in this course.
33. I have developed solutions to course problems that can be applied in practice.
34. I can apply the knowledge created in this course to my work or other non-class related activities.

Appendix C
Research Matrix

Research Matrix			
Research Questions	Tools or Instruments	Data Collected	Methods of Analysis
	Pre PD Interview	<p>Interview Questions</p> <p>#4 Tell me your thoughts and experiences with virtual professional development and its impact on your classroom practice. Have you ever received a blended training? If so, how was your experience? If not, what would you expect from a blended experience?</p> <p>#5 Tell me what you know about educational coaching.</p> <p>#6* Describe the best professional development you have experienced. What made it valuable?</p> <p>#7* Do you have any other thoughts or ideas about vocabulary acquisition or professional learning and coaching to add to the interview?</p>	<p>QUAL Analysis - patterns, stories, themes</p>
<p>RQ1</p> <p>What are teacher perceptions of the blended professional learning design?</p>	Community of Inquiry Survey	COI Likert-Type Data	<p>QUAL Analysis- patterns, themes</p> <p>(The suggested PCA was not possible due to sample size)</p> <p>Descriptive Statistics</p>

	Post Sequence Interview	<p>Interview Questions</p> <p>#4 Tell me your thoughts about participating in this blended professional learning experience and its impact on your classroom practice. (How did the blended experience compare with past PD experiences? What were its strengths and weaknesses?)</p> <p>#5 After the blended professional development, tell me your thoughts on educational coaching.</p> <p>#6 How would you rank this experience compared to other professional development you have experienced? Why? How could it have been improved?</p> <p>#7* Do you have any other thoughts or ideas about vocabulary acquisition or professional learning and coaching to add to the interview?</p>	QUAL Analysis - patterns, stories, themes
<p>RQ2</p> <p>What is the impact of the professional blended learning coaching model on teacher knowledge of vocabulary</p>	Pre PD Interview	<p>Interview Questions</p> <p>#2 What do you know about best practices with regard to vocabulary instruction?</p>	QUAL Analysis - patterns, stories, themes
	Post Sequence Interview	<p>Interview Questions</p> <p>#2 What new knowledge did you gain with regards to</p>	QUAL Analysis – patterns/stories/themes

instruction using TPRS®?		best practices in vocabulary instruction as a result of this PD?	
	Course Discussion Boards	Teacher's Share and Collaborate with Colleagues on Discussion Boards and receive Coaching Feedback	QUAL Analysis – patterns/stories/themes
RQ3 What is the impact of the professional blended learning coaching model on classroom instruction and practice of vocabulary instruction using TPRS®?	Pre PD Interview	Interview Questions #1 Describe how you plan, present, and assess vocabulary with your students. #7* Do you have any other thoughts or ideas about vocabulary acquisition or professional learning and coaching to add to the interview?	QUAL Analysis – patterns/stories/themes
	Post Sequence Interview	Interview Questions #1 After the professional development, how will you plan, present and assess vocabulary with your students? #7* Do you have any other thoughts or ideas	QUAL Analysis – patterns/stories/themes

		about vocabulary acquisition or professional learning and coaching to add to the interview?	
RQ4 What is the impact of the professional blended learning coaching model on student learning of vocabulary using TPRS®?	Pre PD Interview	Interview Questions #3 How would you describe the impact your vocabulary instruction has on students? #7* Do you have any other thoughts or ideas about vocabulary acquisition or professional learning and coaching to add to the interview?	QUAL Analysis – patterns/stories/themes
	Student Assessments Pre PD	Pre and Post Test Scores	Paired Samples T-Test
	Student Assessments Post PD	Pre and Post Test Scores	Paired Samples T-Test
	Post Sequence Interview	Interview Question #3 After the professional development how would you describe the impact your TPRS® vocabulary instruction has on students?	QUAL Analysis – patterns/stories/themes

		#7* Do you have any other thoughts or ideas about vocabulary acquisition or professional learning and coaching to add to the interview?	
--	--	---	--

*The open-ended nature of the question is such that it could provide useful data for the research question, but as it is open ended it may not produce an answer that would inform the question.

Appendix D

Opt Out Agreement for Student as a Parent/Guardian

Gardner-Webb University
Information and Opportunity to Opt Out for your student as a Parent/Guardian

Your child's teacher has agreed to be a part of a professional development research study:

The Impact of a blended professional learning sequence with a focus on Total Physical Response Storytelling

Purpose

The purpose of the research study is to see how blended professional learning in Teaching Proficiency through Reading and Storytelling can impact teacher perceptions and understandings, classroom planning and instruction and student vocabulary learning.

Your child's teacher will be participating in a 3-week course and will then receive follow-up coaching.

As a part of this study, the teacher will be reporting student grades on vocabulary assessments.

No student will be personally identified and this project will be part of his or her regular instruction. Students will not be asked to do anything out of their normal academic sequence. Teachers will assign a random number to their pre and posttest scores and report it to the researcher. Therefore, the researcher will never see their names or identities.

JCPS requests that parents be informed anytime a research study is conducted in a teacher's classroom and this letter serves as notification.

If you choose to opt out please contact your child's teacher and they will not include your child's score in the reported scores.

You may also contact April DeBord, the researcher at 8285062658 or Mr. Jacob Buchanan 8285862177 if you have any questions.

Thank you so much!

Researcher April DeBord Curriculum and Instruction

Appendix E

Screenshots of Raw Data from Interviews in Dedoose and Examples of Transcripts

dedoose
Great Research Made Easy

Dissertation Project | Logout | Account

Home Codes Media Excerpts Descriptors Analyse Memos Training Security Data Set Back Projects

PDF: BM post interview

Page 1 of 6 Selection Mode Text Image

Added: 07/11/2018 Content: adebord Excerpts: 27 Memos: 0 Descriptors: 0

Zoom

Thank you so much, and thanks so much for coming in today. You're amazing.

No problem.

Okay, so, this is our post full sequence interview in the [inaudible 00:00:10]. After the professional development, how will you plan, present, and assess vocabulary with your students?

I really changed my idea of vocabulary instruction. I combined some things I already knew, and some things that I knew I liked. Kind of all put that together and made it with some research to back it up. So, that was helpful for me.

So, moving forward with that, I'm going to do it. I build the stories around my vocabulary, and it's not about what words I'm using, and so that it is then like, some... So, I want to use a variety of words about "what I teach history, or "what is this and including some words that... more academic language instead with that. But I plan to do the stories motions to go along with that to just continue. It was excited to do that and it inspired me to do it.

That's cool.

Impact on Teacher

So, moving forward with that, I'm going to do it. I build the stories around my vocabulary, and it's not about what words I'm using, and so that it is then like, some... So, I want to use a variety of words about "what I teach history, or "what is this and including some words that... more academic language instead with that. But I plan to do the stories motions to go along with that to just continue. It was excited to do that and it inspired me to do it.

That's cool.

Codes

- Great Quotes
- Blended Learning Design
 - Blended Learning Design Post
 - Blended Learning Design Pre
- Best professional development experien...
- Post Intervention Information
 - Impact on Teacher
 - Coaching
 - Collaboration

Type here to search

ENG 2:22 AM
INTL 7/22/2018

dedoose
Great Research Made Easy

Dissertation Project | Logout | Account

Home Codes Media Excerpts Descriptors Analyse Memos Training Security Data Set Back Projects

Project: Dissertation Project

Users: 1
Media: 10
Descriptors: 0
Excerpts: 248
Codes: 26
Code Applications: 300

Import Data
Export Data

Media

Type	Title	Added	User	# Ex	Length
pre interview		07/11/2018	adebord	34	
pre interview		07/11/2018	adebord	24	
post interview		07/11/2018	adebord	20	
pre interview		07/11/2018	adebord	36	
post interview.pdf		07/11/2018	adebord	26	
pre interview		07/11/2018	adebord	16	
post interview		07/11/2018	adebord	34	
post interview		07/11/2018	adebord	27	
pre interview		07/11/2018	adebord	12	
post interview		07/11/2018	adebord	19	

Codes x Descriptor

Set: Default
Field: KB

No Data Available

Codes

- Best professional development experien...
- Blended Learning Design
 - Blended Learning Design Post
 - Blended Learning Design Pre
- Great Quotes
- Post Intervention Information
 - Circling
 - Coaching
 - Collaboration

Excerpts: 248

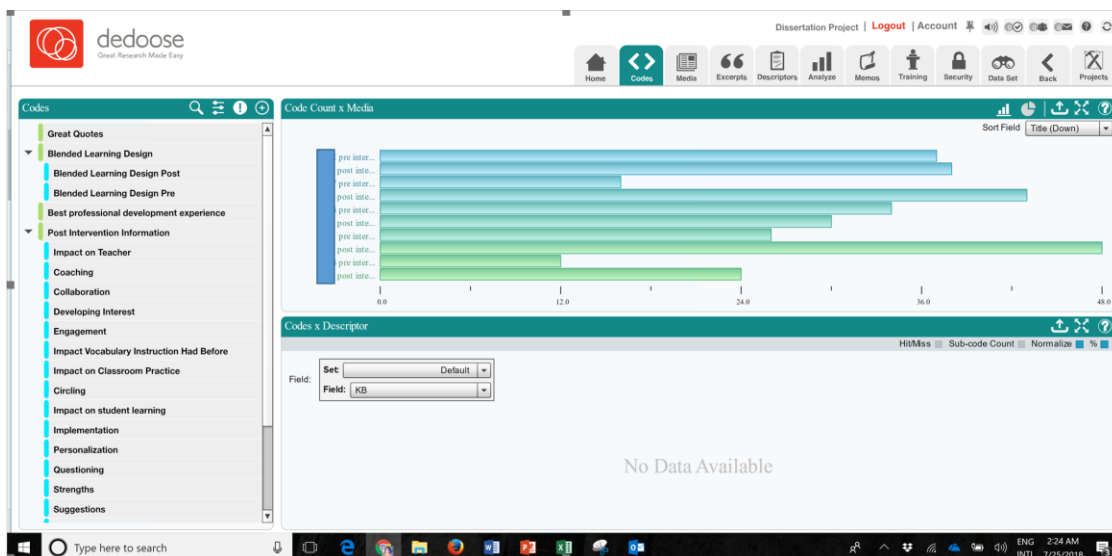
Resource: KQV post interview
Added: 07/11/2018 Username: adebord # Codes: 2
I need to practice on my kids first.

Resource: KQV post interview
Added: 07/11/2018 Username: adebord # Codes: 1
I don't think it could be. I think it was great.

Resource: KQV post interview
Added: 07/11/2018 Username: adebord # Codes: 1

Descriptor Ratios

No Data Available



dedoose Great Research Made Easy

Dissertation Project | Logout | Account

Home Codes Media Excerpts Descriptors Analyze Memos Training Security Data Set Back Projects

Media

Columns & Filters

Search documents...

Selected	Type	Title	User	Date/Time	Excerpts	Length	Descriptors	Memos
<input type="checkbox"/>	Media	post interview	adebord	07/11/2018	19		0	0
<input type="checkbox"/>	Media	pre interview	adebord	07/11/2018	12		0	0
<input type="checkbox"/>	Media	post interview	adebord	07/11/2018	27		0	0
<input type="checkbox"/>	Media	pre interview	adebord	07/11/2018	24		0	0
<input type="checkbox"/>	Media	post interview	adebord	07/11/2018	20		0	0
<input type="checkbox"/>	Media	pre interview	adebord	07/11/2018	34		0	0
<input type="checkbox"/>	Media	post interview	adebord	07/11/2018	34		0	0
<input type="checkbox"/>	Media	pre interview	adebord	07/11/2018	16		0	0
<input type="checkbox"/>	Media	post interview.pdf	adebord	07/11/2018	26		0	0
<input type="checkbox"/>	Media	pre interview	adebord	07/11/2018	36		0	0

Page: 1 of 1. Items: 1-10 of 10

Clear Filters

Delete Selected Select All Select None

Export Selected Add Media

dedoose Great Research Made Easy

Dissertation Project | Logout | Account

Home Codes Media Excerpts Descriptors Analyze Memos Training Security Data Set Back Projects

Active Excerpts

Columns & Filters

Search excerpts...

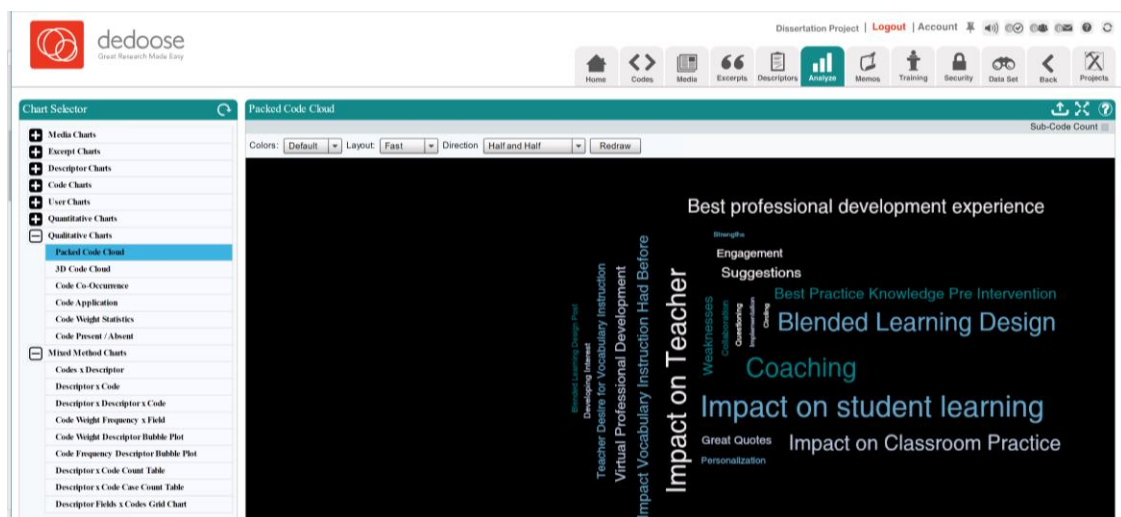
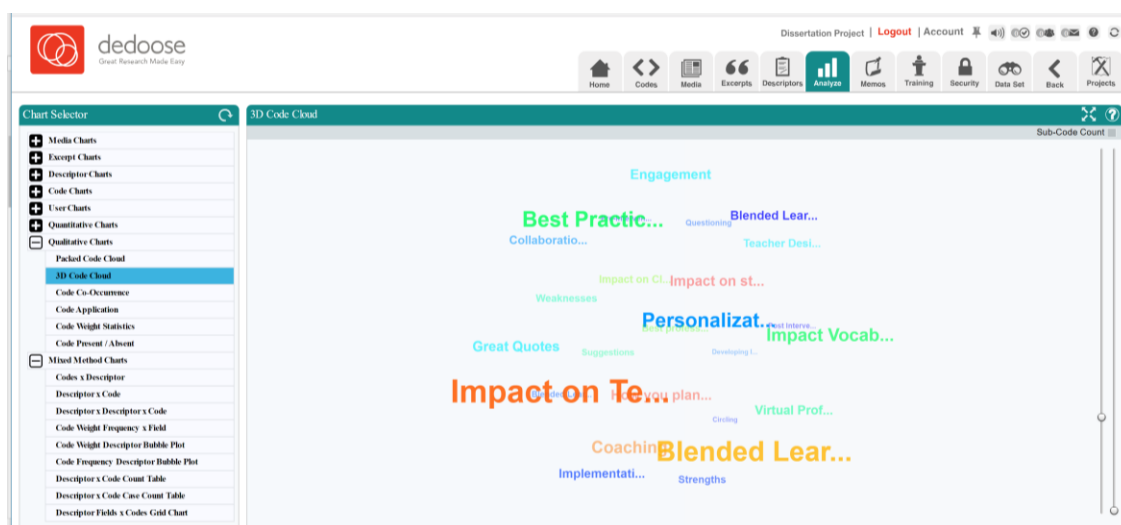
Selected	Type	Media	Date/Time	User	Length	Codes Count	Codes Short	Memos	KB
<input type="checkbox"/>	Media	pre interview	07/11/2018	adebord	76	1	Blended Learning Design	0	
<input type="checkbox"/>	Media	post interview	07/11/2018	adebord	46	1	Impact on student learning	0	
<input type="checkbox"/>	Media	post interview	07/11/2018	adebord	169	0		0	
<input type="checkbox"/>	Media	post interview	07/11/2018	adebord	169	0		0	
<input type="checkbox"/>	Media	post interview	07/11/2018	adebord	169	3	Engagement, Impact on Class...	0	
<input type="checkbox"/>	Media	post interview	07/11/2018	adebord	166	2	Impact on student learning, Im...	0	
<input type="checkbox"/>	Media	post interview	07/11/2018	adebord	26	3	Engagement, Impact on Class...	0	
<input type="checkbox"/>	Media	post interview	07/11/2018	adebord	82	3	Impact on Classroom Practice...	0	
<input type="checkbox"/>	Media	post interview	07/11/2018	adebord	10	1	Blended Learning Design	0	
<input type="checkbox"/>	Media	post interview	07/11/2018	adebord	24	1	Blended Learning Design	0	
<input type="checkbox"/>	Media	post interview	07/11/2018	adebord	16	1	Weaknesses	0	
<input type="checkbox"/>	Media	post interview	07/11/2018	adebord	128	1	Weaknesses	0	
<input type="checkbox"/>	Media	post interview	07/11/2018	adebord	108	1	Weaknesses	0	
<input type="checkbox"/>	Media	post interview	07/11/2018	adebord	79	1	Coaching	0	
<input type="checkbox"/>	Media	post interview	07/11/2018	adebord	42	1	Coaching	0	
<input type="checkbox"/>	Media	post interview	07/11/2018	adebord	79	1	Suggestions	0	
<input type="checkbox"/>	Media	post interview	07/11/2018	adebord	94	1	Suggestions	0	
<input type="checkbox"/>	Media	post interview	07/11/2018	adebord	134	1	Suggestions	0	
<input type="checkbox"/>	Media	post interview	07/11/2018	adebord	420	1	Suggestions	0	
<input type="checkbox"/>	Media	pre interview	07/11/2018	adebord	491	1	How you plan, present and as...	0	
<input type="checkbox"/>	Media	pre interview	07/11/2018	adebord	31	1	How you plan, present and as...	0	
<input type="checkbox"/>	Media	pre interview	07/11/2018	adebord	219	1	Best Practice Knowledge Pre L...	0	

Page: 1 of 12. Items: 1-22 of 248

Clear Filters

Delete Selected Select All Select None

Make Set Add To Set Remove From Set



Appendix F

Example of Coded Interview from Dedoose

Page 2 of 6

Selection Mode ☒ Text ☐ Image

Showing 2 of 2 Codes

Impact on student le...

Great Quotes

That's awesome.

I think that if I continue to do that, they'll do even better long term.

Yeah, because I sprung it right on them. "Hey, let's do this."

Yeah, and it was great. I liked it. It actually got me more ... I was kind of in a ... like, "Oh, I'm not doing a good job with this, that, and the other," but it got me excited for what I was teaching, so that was good.

Now you have some summer, maybe. A little bit, since you're moving to your new house and stuff.

Yeah.

I know we've talked a little bit about it, but what new knowledge did you gain with regards to best practices in vocabulary instruction as a result of the PD?

Some new information and knowledge that I learned about vocabulary instruction is really that it's a combination of things. It can't just be ... I mean it can be, you can use one method, but it's really when you marry all those different things together, that's that sweet spot where students are able to access those vocabulary words and then be able to maintain that information in their personal vocabulary. That was a big moment for me, because I like doing a lot of hand motions and sounds and I do that a lot anyway. Then there's certain things that I hadn't really thought about with questioning and vocabulary and getting them to basically show what they know and what they're learning about the word. Like if I ask a question, like, "Based off the story, what does this mean?" So that they're able to internally think about the word and answer those questions. That was something, the questioning was huge for me and the circling and having them come to that answer and talk about that word, and they're really not thinking about, "Oh, I'm learning this new vocabulary," but they're applying it to that story.

It was ... the combination of all of it was really cool for me, and seeing how it all can work together, and it doesn't have to be this independent, I'm doing this first, and it can

Page 3 of 6 Selection Mode ☒ Text ☐ Image

So tell me your thoughts about participating in this blended professional learning experience and its impact on your classroom practice. How did the blended experience compare with past PD experiences, and what were its strengths and weaknesses?

I think the biggest thing here that was different for me was having the followup with you afterwards. I've done online classes and PD before, and it's like, "Okay, here's all this information. Here you go, here you go, here you go," but it's the end product. Implement this is where a lot of people don't do anything with the PD that they think that that motivated me and kind of helped me figure out, like if I don't know how do I plan it out? How do I write a story? How do I make sure that it's that's personalized to my students and what they can access? I think the just having that coaching from you really was what made the difference for me.

I can learn a lot of knowledge and be like, "Oh, this is a good research strategy to use," but if I'm not implementing that in my classroom and having that support in doing that correctly where it's working, that's kind of where PD has fallen through for me before.

Gotcha. That makes a lot of sense. I like the followup too. I think it makes a lot of sense.

It's accountability. Let's talk about how you would do this and having that person that knows a little bit more about it to kind of say, "Hey, I've tried this before. Have you thought about it in this way?" That was really helpful for me, because sometimes I get stuck and I'm like, "Where do I go next?"

Right. I think it helps to just have somebody to bounce things off of too. That's cool. Did you find any ... well, I said strengths and weaknesses and you said some strengths. Did you find something that maybe you would change about the process?

Not really. I think the online course was very straightforward. I think it was built to where it's not too much. I could go through and do a module and kind of process that and it didn't take me like days and days to get through one module. It was like, okay, here's some information and I really liked the activities that were involved in there to apply what you're learning and to think about it and see what other people think is what I liked too.

Awesome. After the blended professional development, tell me your thoughts on educational coaching. I know you touched on that a little bit.

Yeah. I think it's a must. I think if you want any kind of professional development or implementation of anything, it has to have that coaching follow through from people that know what they're doing with it. I think a lot of times in education it's like, "Okay, we're changing this. We're gonna do it this way," but if you don't have that mentoring and the coaching behind it it's like people are doing their own thing based off what they

Coaching
Blended Learning De...
Great Quotes

Showing 3 of 3 Codes

Page 4 of 6

Selection Mode ☒ Text ☐ Image

improved?

1: I definitely would rank it very high, just because it had ... I was able to do something in my class the next day after I finished the course.

That's awesome.

1: Being able to take it back to my room and seeing how it did work was really good. It's like, "Oh, that's a great idea," but then if you don't go back and do something like ... because you know, you could have very well stopped at the course and "Okay, you're done. You did the course. See what you can do on your own."

Right.

1: But you were like, "Hey, let's form a [inaudible 00:08:47]," and so that really helped me.

It was fun to work with you and learn about your kids.

1: It was fun. It was a lot of fun.

Hunting bears, just like, you know ...

1: And they loved it. They were like "Oh."

And fairy godmother Bekah Mulligan was my favorite.

1: They loved that too. Can't blame them, you know. I'm just so magical.

I love how it did the twirl. I was like, "That's perfect." I was like, "This is the awesomest animation."

1: It's just funny, because it's like they're all boys. They're all like hunting and all that, and then here I am. Fairy godmother again.

It's seriously one of the funnest stories I've ever worked on.

1: Yeah, it was great.

And the Kingdom of Brond.

1: Yes.

Did they think it was hilarious when the brown head person and the blonde head person

Impact on Teacher
Impact on Classroom...

Showing 2 of 2 Codes

Thank you so much, and thanks so much for coming in today. You're amazing.

1: No problem.

Okay. So, this is our post-full sequence interview in the [inaudible 00:00:10]. After the professional development, how will you plan, present, and assess vocabulary with your students?

1: It really changed my idea of vocabulary instruction. It combined some things I already knew, and some things that I knew I liked. Kind of all put that together and made sense with some research to back it up. So, that was helpful for me.

So, moving forward with that, I'm going to do it, kind of, unit by unit and I would like to build the stories around my vocabulary, and it made me be a little bit more thoughtful about what words I'm using, and so that it is things that they might not be exposed to. Like, some ... So, I want to use a variety of words, not just, "What is this specific date about?" since I teach history, or "What is this about, or the other?" From history, but including some words that ... more academic language. So that made me kind of change my mindset with that. But I plan to do the stories, and then the questioning and the motions to go along with that to just continue. Because I saw success with that, and so I was excited to do that and it inspired me to do that for all of my units as I go.

That's cool.

1: Yeah.

Yeah. What did you find, like, I know ... Because you had some pretty hard words.

1: Yeah.

Like, what did you find with the kids? Did you think, like ... did it give you a chance to talk about the word more when you did it?

1: Yes, so we were able to ... a lot of the words, just based off looking at their pre-test scores, they were rough. They had not a lot of exposure. I had one student that he pretty much had an idea of what the word ... he had heard them before, kind of had an idea, but the rest of my students either had never heard the word or had either a wrong idea of what the word meant or they had no idea. It was really helpful for them for us to talk about it, and then put it into context when we talked about the Civil Rights movement. Like, we've already talked about this word, integrate. What does that mean? Why would we want to integrate schools? Those kinds of conversations that we might not have had prior to that.

Page of 6 < > Selection Mode ☒ Text ☐ Image

connecting and making those access points, because I think that's really important and that's one thing I love about the actions. Even if you did it in math, even if the kid sitting beside the kid who does the actions, they see the action. Even if they don't do it.

Exactly. All those different factors and it's very differentiated. My classroom was so diverse in ability and I was still able to, with that story, all of the kids were able to understand what those words meant. From students that can't read all the way up to students that are a little bit higher in proficiency with reading, they were all able to make connections with the words. They might not use it in their vocabulary now, but if they hear someone talking about it, I think some of the kids would understand what that means, a lot of them, and some of them might even start using that vocabulary in future classes.

Yeah.

It was great.

Thank you.

Appendix G

Community of Inquiry Results

Community of Inquiry Survey		
Q1. The instructor clearly communicated important course topics.		
Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	0.00%	0
4	0.00%	0
5	100.00%	5
	Answered	5
	Skipped	0
Q2. The instructor clearly communicated important course goals.		
Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	0.00%	0
4	0.00%	0
5	100.00%	5
	Answered	5
	Skipped	0
Q3. The instructor provided clear instructions on how to participate in course learning activities.		
Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	0.00%	0
4	0.00%	0
5	100.00%	5
	Answered	5
	Skipped	0
Q4. The instructor clearly communicated important due dates/time frames for learning activities.		
Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	0.00%	0
4	0.00%	0

5	100.00%	5
	Answered	5
	Skipped	0

Q5. The instructor was helpful in identifying areas of agreement and disagreement on course topics that helped me to learn.

Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	0.00%	0
4	0.00%	0
5	100.00%	5
	Answered	5
	Skipped	0

Q6. The instructor was helpful in guiding the class towards understanding course topics in a way that helped me clarify my thinking.

Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	0.00%	0
4	0.00%	0
5	100.00%	5
	Answered	5
	Skipped	0

Q7. The instructor helped to keep course participants engaged and participating in productive dialogue.

Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	0.00%	0
4	0.00%	0
5	100.00%	5
	Answered	5
	Skipped	0

Q8. The instructor helped keep the course participants on task in a way that helped me to learn.

Answer Choices	Responses	
1	0.00%	0

2	0.00%	0
3	0.00%	0
4	0.00%	0
5	100.00%	5
Answered		5
Skipped		0

Q9. The instructor encouraged course participants to explore new concepts in this course.

Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	0.00%	0
4	0.00%	0
5	100.00%	5
Answered		5
Skipped		0

Q10. Instructor actions reinforced the development of a sense of community among course participants.

Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	0.00%	0
4	0.00%	0
5	100.00%	5
Answered		5
Skipped		0

Q11. The instructor helped to focus discussion on relevant issues in a way that helped me to learn.

Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	0.00%	0
4	0.00%	0
5	100.00%	5
Answered		5
Skipped		0

Q12. The instructor provided feedback that helped me understand my strengths and weaknesses relative to the course's goals and objectives.

Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	0.00%	0
4	0.00%	0
5	100.00%	5
Answered		5
Skipped		0

Q13. The instructor provided feedback in a timely fashion.

Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	0.00%	0
4	0.00%	0
5	100.00%	5
Answered		5
Skipped		0

Q14. Getting to know other course participants gave me a sense of belonging in the course.

Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	0.00%	0
4	0.00%	0
5	100.00%	5
Answered		5
Skipped		0

Q15. I was able to form distinct impressions of some course participants.

Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	0.00%	0
4	0.00%	0
5	100.00%	5
Answered		5
Skipped		0

Q16. Online or web-based communication is an excellent medium for social interaction.

Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	20.00%	1
4	20.00%	1
5	60.00%	3
	Answered	5
	Skipped	0

Q17. I felt comfortable conversing through the online medium.

Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	0.00%	0
4	20.00%	1
5	80.00%	4
	Answered	5
	Skipped	0

Q18. I felt comfortable participating in the course discussions.

Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	0.00%	0
4	20.00%	1
5	80.00%	4
	Answered	5
	Skipped	0

Q19. I felt comfortable interacting with other course participants.

Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	0.00%	0
4	20.00%	1
5	80.00%	4
	Answered	5
	Skipped	0

Q20. I felt comfortable disagreeing with other course participants while still maintaining a sense of trust.

Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	0.00%	0
4	40.00%	2
5	60.00%	3
	Answered	5
	Skipped	0

Q21. I felt that my point of view was acknowledged by other course participants.

Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	0.00%	0
4	0.00%	0
5	100.00%	5
	Answered	5
	Skipped	0

Q22. Online discussions help me to develop a sense of collaboration.

Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	0.00%	0
4	0.00%	0
5	100.00%	5
	Answered	5
	Skipped	0

Q23. Problems posed increased my interest in course issues.

Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	0.00%	0
4	0.00%	0
5	100.00%	5

Q24. Course activities piqued my curiosity.

Answer Choices	Responses	
----------------	-----------	--

1	0.00%	0
2	0.00%	0
3	0.00%	0
4	20.00%	1
5	80.00%	4
	Answered	5
	Skipped	0

Q25. I felt motivated to explore content related questions.

Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	0.00%	0
4	0.00%	0
5	100.00%	5
	Answered	5
	Skipped	0

Q26. I utilized a variety of information sources to explore problems posed in this course.

Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	0.00%	0
4	0.00%	0
5	100.00%	5
	Answered	5
	Skipped	0

Q27. Brainstorming and finding relevant information helped me resolve content related questions.

Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	0.00%	0
4	0.00%	0
5	100.00%	5
	Answered	5
	Skipped	0

Q28. Online discussions were valuable in helping me appreciate different perspectives.

Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	0.00%	0
4	0.00%	0
5	100.00%	5
	Answered	5
	Skipped	0

Q29. Combining new information helped me answer questions raised in course activities.

Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	0.00%	0
4	0.00%	0
5	100.00%	5
	Answered	5
	Skipped	0

Q30. Learning activities helped me construct explanations/solutions.

Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	0.00%	0
4	0.00%	0
5	100.00%	5
	Answered	5
	Skipped	0

Q31. Reflection on course content and discussions helped me understand fundamental concepts in this class.

Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	0.00%	0
4	0.00%	0
5	100.00%	5
	Answered	5
	Skipped	0

Q32. I can describe ways to test and apply the knowledge created in this course.		
Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	0.00%	0
4	20.00%	1
5	80.00%	4
	Answered	5
	Skipped	0
Q33. I have developed solutions to course problems that can be applied in practice.		
Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	0.00%	0
4	40.00%	2
5	60.00%	3
	Answered	5
	Skipped	0
Q34. I can apply the knowledge created in this course to my work or other non-class related activities.		
Answer Choices	Responses	
1	0.00%	0
2	0.00%	0
3	0.00%	0
4	0.00%	0
5	100.00%	5
	Answered	5
	Skipped	0

Appendix H

Pretest and Posttest Data for Student Scores Pre and Post Sequence

	PreI- Pretest	PreI- Posttest	PosInt- Pretest	PosInt- Posttest	PREDIFF Difference in Pretest and Posttest from before the course	POSDIFF Difference in Pretest and Posttest from after the course
Mrs. D 1	13	63	0	100	50	100
Mrs. D 2	53	100	0	100	47	100
Mrs. D 3	40	53	0	100	13	100
Mrs. D.4	53	63	0	100	10	100
Mrs. D.5	40	60	0	100	20	100
Mrs. D.6	53	100	5	100	47	95
Mrs. D.7	13	47	0	100	34	100
Mrs. D.8	33	53	0	100	20	100
Mrs. D.9	67	73	0	85	6	85
Mrs. E. 1	61	51	0	90	-10	90
Mrs. E. 2	60	100	10	80	40	70
Mrs. E. 3	20	40	0	90	20	90
Mrs. E. 4	21	100	20	100	79	80
Mrs. E. 5	50	100	0	70	50	70
Mrs. E. 6	61	82	0	70	21	70
Mrs. E. 7	40	60	0	60	20	60

Mrs. E. 8	30	50	10	80	20	70
Mrs. E. 9	60	80	20	100	20	80
Mrs. E. 10	50	100	0	90	50	90
Mrs. E. 11	31	100	0	80	69	80
Mrs. E. 12	32	32	0	40	0	40
Mrs. H. 1	100	100	80	100	0	20
Mrs. H. 2	62	100	30	100	38	70
Mrs. H. 3	62	54	40	100	-8	60
Mrs. H. 4	54	69	10	80	15	70
Mrs. H. 5	31	23	60	70	-8	10
Mrs. V. 1	78	100	47	100	22	53
Mrs. V. 2	72	83	21	58	11	37
Mrs. V. 3	72	100	21	68	28	47
Mrs. V. 4	72	100	37	53	28	16
Mrs. V. 5	44	72	21	89	28	68
Mrs. V. 6	61	78	42	58	17	16

Mrs. V. 7	100	100	21	68	0	47
Mrs. V. 8	72	78	53	66	6	13
Mrs. V. 9	78	94	63	95	16	32
Mrs. W. 1	10	95	16	100	85	84
Mrs. W. 2	25	100	16	100	75	84
Mrs. W. 3	5	85	8	92	80	84
Mrs. W. 4	0	60	0	76	60	76
Mrs. W. 5	10	85	16	92	75	76
Mrs. W. 6	15	95	8	100	80	92
Mrs. W. 7	5	75	8	84	70	76
Mrs. W. 8	5	80	8	92	75	84
Mrs. W. 9	10	95	8	92	85	84
Mrs. W. 10	15	85	16	92	70	76
Mrs. W. 11	15	90	8	92	75	84
Mrs. W. 12	20	80	16	100	60	84