The Effects of Creative Dramatics on Vocabulary Achievement of Fourth Grade Students in a Language Arts Classroom: An Empirical Study

AnnRené Joseph
Seattle Pacific University

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The Effects of Creative Dramatics on Vocabulary Achievement of Fourth Grade Students in a Language Arts Classroom: An Empirical Study

by

AnnRene Joseph

A dissertation submitted in partial fulfillment of the requirement of the degree of Doctor of Education

Seattle Pacific University

2013

Approved by

Dr. Arthur K. Ellis, Ed.D., Chairperson of the Dissertation Committee

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Program Authorized to Offer Degree

SCHOOL OF EDUCATION

Date

MARCH 18, 2014

Dr. Rick Eigenbrood, Ph.D., Dean, School of Education
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by

AnnRené Joseph

Dissertation
Presented to the Faculty of the Graduate School of Education at Seattle Pacific University
In Partial Fulfillment of the Requirements for the Doctor of Education Degree

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Seattle Pacific University

Abstract

The Effects of Creative Dramatics on Vocabulary Achievement of Fourth Grade Students in a Language Arts Classroom: An Empirical Study

by

AnnRené Joseph

Chairperson of the Dissertation Committee: Dr. Arthur K. Ellis,

School of Education

That the arts enhance academic achievement has been a claim of educators for the past century. An empirical and replicable study to investigate this claim was needed. This experimental study examined whether and to what extent the use of creative dramatics interventions increased the vocabulary achievement of fourth grade students in a language arts classroom. The 20-day study was conducted across five weeks of school – for 45 minutes each day – during the normally scheduled language arts instruction block. It included a pretest, 17 consecutive school days of instruction, and a posttest. A retention test was administered five weeks later. Three fourth grade teachers were randomly assigned to a random sample of 83 fourth graders. The study was conducted at a Learning Assistance Program (LAP) reading and math school, in a large school district in rural and unincorporated Pierce County, in Washington State. Students were randomly divided among two treatment groups utilizing creative dramatics interventions, and one control group using established district strategies. Teachers used identical and collaboratively created lesson plans developed from the adopted district language arts curriculum. The dependent variable was a teacher-researcher developed
criterion-referenced vocabulary test covering the unit of instruction. Two experimental
groups employed 15-20 minutes of different creative dramatics interventions, each day.
The control group students experienced the district adopted language arts Readers’
theatre component. Teachers were taught the treatment interventions by the investigator.

Descriptive statistics were used to describe the demographics of the sample, while
inferential statistics were used to calculate the differences between groups. Statistical
analyses included parametric (one-way between-groups ANOVA, one-way repeated
measures ANOVA, and mixed between-within subjects ANOVA), and nonparametric
procedures (Kruskal-Wallis, Mann Whitney U, and Friedman) to analyze data generated
by the pretest and posttest gains, and the retention test (re-administration of the pretest
and posttest). All three groups maintained vocabulary achievement from posttest to
retention test, at the same rate. Findings provide statistically significant evidence that
students who practiced the creative dramatics interventions had greater vocabulary
achievement versus the control group. Replication of this study is recommended with a
larger sample size and stricter controls to validate the results.
Chapter One

Introduction

Purpose of the Study

The central purpose of this experimental study is to examine the effects of a creative dramatics intervention on the vocabulary achievement of fourth grade students. A randomized pretest-posttest control group design with a five week follow-up retention test was employed (Campbell & Stanley, 1963; Gall, Gall, & Borg, 2007). For the purposes of this study, creative dramatics is defined as “a dramatic enactment (led by the teacher) of a story, setting, and/or characters. This is an experiential, process-based activity, not a performance for an audience. The teacher may assume a role” (Office of Superintendent of Public Instruction [OSPI], 2011d, p. 133). This definition is taken from the Washington State K-12 Options for Implementing the Arts Standards through Theatre by Grade Level (OSPI, 2011d). The definition used to define vocabulary is from Stahl and Nagy (2006); whereas, they wrote, “Vocabulary refers to students’ knowledge of word meanings” (p. 3).

Background

Connecting the study of arts education (dance, music, theatre, and visual arts) to academic achievement in other cognitive areas has been a quest of educational researchers for over 60 years (Benoit, 2003; Burchenal, Housen, Rawlinson, & Yanawine, 2008; Catterall, 2009; Conard, 1992; Eisner, 1998; Hetland, Winner, Veenema, & Sheridan, 2007; Kardash & Wright, 1987; Mages, 2008; Podlozny, 2000; Winner & Cooper, 2000; Winner, Goldstein, & Vincent-Lancrin, 2013a, 2013b; Winner & Hetland, 2000). However, Massey and Koziol (1978) stressed that the skeptics
regarding the value of *creative dramatics*, as well as proponents of basic skills “have repeatedly noted the paucity of empirical evidence to support such claims” (p. 92).

An experimental study is warranted to: (a) examine this claim, (b) provide replicable procedures for further research and analysis, and (c) provide empirical data to address the extent to which the claims that arts and academic achievement have cause and effect potential when the arts are treated as an academic subject; and specifically, exploring any causal relationship between *creative dramatics* instruction and vocabulary development on student achievement (Mages, 2008; Podlozny, 2000; Vitz, 1983; Winner & Hetland, 2000). Additionally, Vitz (1983) referenced the need for empirical data regarding using the arts to improve student achievement, and recommended that, “Educational systems concerned with accountability need research to validate the claims of the beneficial effects of creative drama” (p. 17).

There is a gap in the empirical research that specifically examines the effects of *creative dramatics* on vocabulary achievement for students at the elementary level. Podlozny (2001) wrote that results of her meta-analysis showed that classroom drama had a positive, robust effect on six of the seven verbal outcomes she examined (Podlozny, 2000). Supporting the need for this present study, Podlozny (2001) reported, “Vocabulary appeared to be enhanced by drama as well (mean weighted $r = .14$)” (p. 104). However, she cautioned readers and future researchers that this latter effect size, unlike the other six in her study, was not statistically significant, citing that the 95% confidence interval for this effect (vocabulary) spanned zero. Podlozny (2001) summarized this result and stated “Hence, research has not yet demonstrated a reliable relationship between drama instruction and vocabulary development” (p. 104).
Consequently, Winner and Hetland (2001a) noted in their executive summary regarding the results of Podlozny’s (2000) meta-analysis, “In all cases, students who enacted texts were compared to students who read the same texts but did not enact them” (p. 2). The results and recommendations stated provide the rationale and need for this study, in an effort to examine the described gap in the research regarding the effects of classroom drama on vocabulary achievement, as well as the types of interventions employed in the examination of such effects.

Winner and Hetland’s (2001a) recommendations and rationale for the need for such as study, such as this present study, to further examine and delineate the specific components of classroom drama that may influence academic achievement, was echoed in the Winner et al. (2013a) Organisation for Economic Co-operation and Development (OECD) report on the “Cognitive Outcomes of Theatre Education” found in Art for Art’s Sake?: The Impact of Arts Education, and in the Art for Art’s Sake? Overview. Regarding the report’s results about theatre education around the world, Winner et al. (2013a) referenced Podlozny (2000) and wrote, “Strong evidence shows that theatre education in the form of enacting stories in the classroom (classroom drama) strengthens verbal skills, but there is no evidence for a link between theatre training and general academic skills” (p. 7).

This present study addresses this research gap by employing an experimental study to isolate the effects of creative dramatics on vocabulary achievement for students at the elementary level. Particularly, this study examines student achievement gained at the fourth grade level, taught by certified K-8 elementary classroom teachers, in a public Learning Assistance Program (LAP) elementary school, in a large rural school district,
and with sustained instruction in creative dramatics interventions occurring during the regular school day, for 17 consecutive school days. The procedures and methods of this study are reported and detailed, in an effort to provide an empirical study and data that is replicable and affordable, and strategically investigates the effects of creative dramatics on the vocabulary achievement of fourth grade students in a language arts classroom.

Additionally, a practical aim of this study is to provide classroom teachers with a rationale in support of integrating creative dramatics components into lessons. The review of the literature regarding creative dramatics and academic achievement, as well as the present investigation are designed to provide insights concerning the effects of creative dramatics and vocabulary achievement by elementary age students in daily learning activities; whereas, creative dramatics is treated as a core academic subject and provided on a daily basis and in a sustained manner.

Rationale for creative dramatics instruction research. McMaster (1998) provided a rationale for the need for such research regarding creative dramatics, and wrote,

Drama. Drama is an invaluable tool for educators because it is one of the few vehicles of instruction that can support every aspect of literacy development. Drama encompasses all four of the language arts modalities and is an effective medium for building decoding, vocabulary, syntactic, discourse, and metacognitive knowledge. Drama activities encourage the affective aspects of reading and emergent literacy, accomplishing this within a valuable social context. Drama begins with the concept of meaningful communication and provides multiple opportunities for social interaction and feedback. These
interactions offer the kind of support Vygotsky (1978) deems necessary for internalizing new knowledge. Above all, drama activities are extremely effective in fostering a community of learners who choose to participate in independent reading activities. (McMaster, 1998, pp. 574-5)

Consequently, the specific focus on vocabulary achievement through the use of creative dramatics supports educational reforms examining this type of subject integration regarding state and national educational reform efforts. Deasy (2002), in referencing a compendium of 62 studies regarding arts (dance, music, theatre, and visual arts) educational research, noted that schools integrating the arts into the curriculum as an essential component of a comprehensive educational reform strategy were documenting positive changes in the school environment and improved student performance.

**Rationale for vocabulary instruction and achievement research.** Stahl and Nagy (2006) supported the rationale for such an examination regarding vocabulary achievement. They wrote, “Our vocabulary, even more than our accent, gives away our social and educational background. As a major factor in determining what we can understand, it opens or closes access to sources of information that will impact our future” (p. 3). Further, they stressed, “Perhaps one of the most important reasons why teachers need to pay attention to vocabulary is that vocabulary knowledge is cumulative. The more words you know, the easier it is to learn yet more words” (Stahl & Nagy, 2006, p. 6).

**Significance of the Study**

This study will provide a detailed analysis of previous studies regarding the correlation and effects of creative dramatics instruction on student achievement,
particularly at the elementary level; and, more specifically, at the fourth grade level, regarding cause and effect for vocabulary achievement, for which there is a gap in the research. Specifically, this study was designed to address former methodological problems that threatened the validity, reliability, and credibility of *creative dramatics* research. Further, this study sought to control for and limit these threats through empirical design, and proven methodology and methods. Purposefully, this study presents a strong philosophical and theoretical foundation for the methods employed in the *creative dramatics* treatment conditions regarding teaching and learning.

Additionally, this study supports the current educational climate created by the reauthorization of the *No Child Left Behind/Elementary and Secondary Education Act* (NCLB/ESEA) (U.S. Department of Education [USDOE], 2002); as well as the national and state mandates regarding the implementation of the “Common Core State Standards for English Language Arts and Literacy (CCSS_ELA)” (National Governors Association Center for Best Practices & Council of Chief State School Officers [NGA_CBP & CCSSO], 2010). Both the NCLB/ESEA and the CCSS_ELA promote the use of *creative dramatics* as a core arts subject, as well as a subject that could be effectively integrated with other subjects to improve student achievement, specifically in the area of English Language Arts and Literacy (NGA_CBP & CCSSO, 2010, pp. 10-12). With the advent of these national and state mandates and focus on high-stakes academic improvement and testing tied to educational funding sources, educators and administrators look to research regarding possible academic improvement strategies that are able to support a high-stakes academic environment. Specifically, educators look to empirical studies in classrooms, such as this study, regarding the possible effects of *creative dramatics* on vocabulary achievement.
achievement in fourth grade students integrated with language arts instruction (Massey & Koziol, 1978; Podlozny, 2000; Vitz, 1983; Winner & Hetland, 2000).

Winner and Hetland (2000) stressed the need for such a study. They concluded, “Research demonstrating a causal role for the arts (whether this role is direct or indirect) must be experimental in design” (p. 5). Additionally, Winner and Hetland (2000) noted, “True experimental research, with random assignment of students and teachers to arts vs. control classrooms, is very difficult to carry out in the real world of schools” (p. 5). Further, they recommended to future researchers that, “If a positive effect is found, it is necessary to distinguish between two kinds of interpretations” (p. 6). Winner and Hetland (2000) defined these two types of interpretation as follows:

Instruction in the arts might result in greater academic improvement than does direct academic instruction. This is one possibility. Or instruction in the arts, when integrated with academic instruction, might result in greater academic improvement than does academic instruction without the arts. This is a second possibility. We found far less evidence for the first of these conclusions than for the second, more plausible claim. (p. 6)

This present study examined the second interpretation, where instruction in the arts, when integrated with academic instruction, might result in greater academic improvement than does academic instruction without the arts – specifically – creative dramatics and vocabulary achievement.

Additionally, this study supports and provides empirical data in support of the recent work reported in the National College Board review of *The Arts and the Common Core: A Review of Connections Between the Common Core State Standards and the*
National Coalition for Core Arts Standards (NCCAS) Conceptual Framework, (The College Board, 2012, pp. 21-2; 53-4); whereas, the use of creative dramatics techniques is recommended as a means to teach English language arts. Consequently, this study required an examination of highly qualified and certified classroom teachers teaching the arts (creative dramatics) as an integral part of basic education, and as an essential, core, and academic subject, per Washington State law and expectations for RCW 28A.150.210, as passed by the Washington State Legislature (Washington State Legislature [WSL], 1993). Therefore, daily and sustained creative dramatics interventions occurred during the school day and during the regularly scheduled 45 minute language arts block.

Additionally, this study provided the opportunity for creative dramatics instruction to be taught and integrated into the language arts curriculum in an attempt to enhance vocabulary development and student achievement learned through participation in a school district required language arts unit. Insight gained from this type of data and linkage has cognitive implications; whereas, one academic subject — the arts (which includes creative dramatics) — could positively impact another academic subject — language arts (which includes vocabulary achievement).

Research Questions

This study examines the effects of a creative dramatics intervention on the vocabulary achievement of fourth grade students in a language arts classroom. The four research questions which drive this inquiry follow:

1. Does the use of creative dramatics (a dramatic enactment led by the teacher of a story, setting, and/or characters) strengthen the vocabulary achievement in fourth
grade students in a language arts classroom, as measured on a criterion-referenced vocabulary test of the language arts unit of study?

2. Does the use of *creative dramatics* (a dramatic enactment led by the teacher of a story, setting, and/or characters) through improvised student movements and singing the vocabulary words, strengthen the vocabulary achievement in fourth grade students in a language arts classroom, as measured on a criterion-referenced vocabulary test of the language arts unit of study?

3. Does the use of *creative dramatics* (a dramatic enactment led by the teacher of a story, setting, and/or characters) through improvised student enactments and reenactments of the story using the vocabulary words in context, strengthen the vocabulary achievement in fourth grade students in a language arts classroom, as measured on a criterion-referenced vocabulary test of the language arts unit of study?

4. Is there an interaction effect between the time and condition (time = pretest, posttest, and retention test administrations), and condition (condition = *creative dramatics* and vocabulary words [CDVW], *creative dramatics* and story retelling enactments [CDSR], and control group [CG]), to strengthen the vocabulary achievement in fourth grade students in a language arts classroom, as measured on a criterion-referenced vocabulary test of the language arts unit of study?

**Contributions of the Study**

Therefore, this present study examined the effects of *creative dramatics* on vocabulary achievement, per the recommendations of Podlozny (2000), to future researchers. Specifically, this study built upon Podlozny’s (2000) meta-analysis results
and recommendations by defining creative dramatics, with an approved state definition of such, and further examined the specific components of the creative dramatics constructs with the design and implementation of two different creative dramatics intervention methods. The creative dramatics methods employed were also specifically defined with approved state definitions of such, and were further grounded on theoretical and methodological constructs – with these methods being employed in the pedagogy provided by the randomly assigned fourth grade classroom teachers, as taught by the study investigator.

Specifically, this study included two independent variables. These independent variables were: (a) creative dramatics and vocabulary words (CDVW), and (b) creative dramatics and story retelling enactments (CDSR). Additionally, this study included one dependent variable. The dependent variable was a teacher and researcher developed criterion-referenced vocabulary test of the language arts unit of study which was designed to cover and teach all of the vocabulary words of the content (four stories) covered during the five-week study.

Creative dramatics strategies were employed by the two treatment group teachers, and presented to and experienced by their students, as methods for teaching and learning the vocabulary words of the content (four stories) covered during the five-week study. Two experimental groups employed 15-20 minutes of different creative dramatics interventions, daily, representing the two independent variables. One creative dramatics treatment group experienced the investigator created and adapted ‘bravo X strategy’ (Booth, 2007) warm-up, and employed singing and rhythmically chanting the vocabulary words with creative dramatics pantomime to demonstrate the vocabulary words and the
vocabulary word definitions (Himmele & Himmele, 2011; Kodály, 1974), as well as individually drawn story summary booklets (Edwards, 1979). One creative dramatics treatment group experienced the standing BrainDance (Gilbert, 2006) warm-up, and employed enacting the vocabulary words through story enactment, and re-enactments for the story summaries (Podlozny, 2000). The control group students experienced the district adopted language arts Readers’ theatre component (Houghton Mifflin Reading, 2005; OSPI, 2011d). Daily reflection notebooks (Ellis, 2001a), without teacher feedback (Shoop, 2006), and Readers’ theatre re-enactments, were utilized as district language arts adoption strategies for story summaries.

Further, the content (four stories) covered during the five-week study was measured on a teacher and researcher developed criterion-referenced test measuring only the 31 vocabulary words learned in the four stories, and representing the dependent variable. Specifically, this study will provide sufficient information for an effect size calculation. Finally, this study will provide a replicable, generalizable, and affordable pathway for future research and researchers regarding the use of creative dramatics to increase the vocabulary achievement of fourth grade students in a language arts classroom.

Terms and Definitions

The terms used in this study require definitions for consistency and clarity regarding past and present research; as well as for future research. Podlozny (2000), cited the need for such definitions due to researchers in the arts, (specifically drama), having little conversation with each other (p. 239). Further, Somers (2001) stated the
need for terms and definitions in his commentary about Podlozny’s (2001) findings and presentation, citing the need for a common lexicon (p. 108).

Therefore, the terminology used throughout this document follows that given in the *Washington State K-12 Arts Learning Standards* (Office of Superintendent of Public Instruction [OSPI], 2011a); as well as the *Washington State K-12 Options for Implementing the Arts Standards through Dance by Grade Level* (OSPI, 2011b); the *Washington State K-12 Options for Implementing the Arts Standards through Music by Grade Level* (OSPI, 2011c); the *Washington State K-12 Options for Implementing the Arts Standards through Theatre by Grade Level* (OSPI, 2011d); and the *Washington State K-12 Options for Implementing the Arts Standards through Visual Arts by Grade Level* (OSPI, 2011e). The teacher in this study is a Highly Qualified Teacher (HQT), as defined by the *Office of Superintendent of Public Instruction Highly Qualified Teacher Resource Manual* (OSPI, 2012, pp. 9-10). The specific certification endorsement for a HQT in this study is referred to as an *Elementary Teacher – Grades K-8* (Professional Educators Standards Board Program Support [PESB_PS], 2014). (Refer to Appendix A for the Elementary Education Endorsement Competencies – Grades K-8). Further, the *Washington State K-12 Arts Learning Standards* (OSPI, 2011a), used in this study, were cited by the National College Board in *A Review of Selected State Arts Standards* (College Board, 2011), as one of eight states to provide examples for the development of *A Review of Connections Between the Common Core State Standards and the National Core Arts Standards Conceptual Framework* (College Board, 2012).

Additionally, some intuition definitions (e.g., informal definitions) of terms that are used in this study are included for specificity and clarity, as recommended by
previous researchers. A complete list of terms and definitions are provided in the Appendices section of this dissertation (see Appendix B). Some key terms requiring definitions referenced throughout the dissertation follow. Unambiguously, these definitions introduce the philosophical and theoretical underpinnings of this study, such as Aesthetics (Adler, 1994; Broudy, 1950, 1972, 1980; Eisner, 1984, 1998, 2002; Reimer, 2003); Essentialism and Perennialism (Adler, 1982, 1994; Broudy, 1974; Eisner, 1968, 1984, 1998, 2002; Eisner & Day, 2004; Hirsch, 1996); Progressivism (Dewey, 1900, 1902, 1916, 1934, 1938); and Constructivism (Bruner, 1966, 1983, 1986a, 1986b, 1990, 1996, 2006; Piaget, 1962, 1968, 1969; Steiner, 1997; Vygotsky, 1922, 1962, 1966, 1978). The aforementioned philosophical and theoretical underpinnings of this investigation are presented and discussed in detail as they relate to this study in Chapter Two and specifically defined in Appendix B for reference and in efforts to create a pathway for future researchers.

Art. “Art is a quality of doing and of what is done” (Dewey, 1934, p. 214).

Arts disciplines. “The arts in Washington State have been defined by the Office of Superintendent of Public Instruction (OSPI) and the State Board of Education (SBE) as dance, music, theatre, and visual arts” (OSPI, 2011a, p. 2).

Arts integration. Arts integration, also referred to as interdisciplinary or integrated teaching, refers to – in this study – as one subject specifically focused on benefitting the other; whereas, creative dramatics is used to enhance vocabulary achievement. This was defined by Fogarty (1991), as a shared model; insomuch as, “The shared model views the curriculum through binoculars, bringing two distinct disciplines together into a single focused image. Using overlapping concepts as organizing
elements, this model involves shared planning or teaching in two disciplines” (p. 62). Russell-Bowie (2009) referred to this type of model of integrating the arts as *service connections*, and wrote, “Service connections within subjects occur when concepts and outcomes are learned and reinforced in one subject by using material or resources from another subject with no specific outcomes from the servicing subject” (p. 5). Further, the outcomes of one subject are promoted at the expense of the other subject (Brophy & Alleman, 1991; Cawthon & Dawson, 2011).

**BrainDance.** The standing *BrainDance*, was developed by Anne Green Gilbert and is “comprised of eight fundamental movement patterns that we move through in the first year of life” (Gilbert, 2006). These eight movements are experienced by individuals in the following sequential order: breath, tactile, core-distal, head-tail, upper-lower, body-side, cross-lateral, and vestibular” (pp. 36-8).

‘Bravo X strategy’. The ‘bravo X strategy’ is a *creative dramatics* strategy, created and adapted by the present study investigator, for the present study; whereas, the ‘bravo X strategy’ is jumping for joy from a *core* to a *distal* standing position and into a fully extended body ‘X’ position while saying (or singing) the word ‘bravo’ (Booth, 2007; Dalcroze 1930; Gilbert, 2006; Laban 1971; OSPI, 2011b). An additional adaptation of the investigator created ‘bravo X strategy’ is to sing an ‘*a cappella*’ octave (such as from middle C to C above middle C) while jumping from the *core* to the *distal* position and into a full body ‘X’ position.

**Classroom drama.** *Classroom drama* refers to acting out stories that are used in the regular academic curriculum, with classroom drama being used as a way of supporting the curriculum and as an integral part of the curriculum (Podlozny, 2001,
Creative drama. Davis and Behm (1978) defined *creative drama* as “an improvisational, non-exhibition, process-centered form of drama in which participants are guided by a leader to imagine, enact, and reflect upon human experiences” (p. 10). Similarly, Ross & Roe (1977) wrote “Creative drama includes all forms of improvised drama, such as dramatic play, pantomime, puppet shows, and story dramatization” (p. 383).

Creative dramatics. Creative dramatics is “a dramatic enactment (led by the teacher) of a story, setting, and/or characters. This is an experiential, process-based activity, not a performance for an audience. The teacher may assume a role” (OSPI, 2011d, p. 133). Similarly, McCaslin (1990) wrote “Creative dramatics is defined as an improvisational, nonexhibition, process-centered form of drama in which participants are guided by a leader to imagine, enact, and reflect upon human experiences” (p. 5).

Creativity. “The quality of using imagination rather than imitating something; the ability to produce something new or to generate unique approaches and solutions” (OSPI, 2011c, p. 135).

Drama. “Drama is a three dimensional study. It involves learners using resources with which they are already confident: talk, play, and action; resources they have been using for many years by the time they are six” (Herbert, 1982, p. 48).

Dramatic play. “Dramatic play is a child’s natural way of playing, of dramatizing and pretending” (Siks, 1958, p. 106). Siks further wrote, “Dramatic play” is a term which refers to creative playing centering around an idea, a situation, or a person, place, or thing. It generally utilizes the dramatic
elements of characterization, action, and dialogue. It seldom has plot. It unfolds spontaneously. It is fragmentary and fun. (Siks, 1958, p. 106)

**Integrated arts – dance, music, creative dramatics, and visual arts.** A succinct definition for *integrated arts*, for the purpose of this dissertation, is the natural tendency for one or more arts (dance, music, theatre, and visual arts) to embed itself with the other, as in dancing to music, or acting and singing to music, or drawing to music, as in an interdisciplinary curriculum; however, specific to the arts disciplines (Cave, 2011; Gilbert, 2006).

**Interdisciplinary curriculum.** “An interdisciplinary curriculum is aimed at helping students to find connections between subjects and to use different ways of knowing” (Ellis & Fouts, 2001, p. 22). Bresler (1995) defined interdisciplinary instruction as “maintaining traditional subject boundaries while aligning content and concepts from one discipline with those of another” (p. 31).

**Investigator.** “The investigator is defined as the person who designs the experiment and interprets the data” (Gall et al., 2007, p. 395).

**Language arts.** “All four of the major language arts – listening, speaking, reading, and writing – are involved in creative drama” (Ross & Roe, 1977, p. 383).

**Participants.** “In studies of human beings, the term *participant* is generally preferable to the term *subjects*” (Rudestam & Newton, 2007, p. 89).

**Play.**

Play is the source of development and creates the zone of proximal development. Action in the imaginative sphere, in an imaginary situation, the creation of voluntary intentions and the formation of real-life plans and volitional
motive – all appear in play and make it the highest level of preschool development. (Vygotsky, 1966, p. 16)

**Readers’ theatre.** Readers’ theatre is defined as “an orchestrated reading that relies primarily on vocal characterization and does not include the elements of visual theatre, such as costuming, sets, or blocking in the presentation” (OSPI, 2011d, p. 137).

**Role-plays.** Role-plays are “acting things out or demonstrating comprehension using the body” (Himmele & Himmele, 2011, p. 71).

**Role-playing.** Refer to the definitions for classroom drama, creative drama, creative dramatics, drama, and dramatic play; which are five terms used synonymously to define the constructs of creative dramatics as the focus of this study investigation; and, used in conjunction together, provide a clear definition for a pathway for research replication; and incorporate the constructs of role-playing.

**Symbolic play.** “Symbolic play fosters tools such as analogizing, modeling, play-acting, and empathizing by involving a make-believe world where one thing stands for another” (Root-Bernstein & Root-Bernstein, 1999, p. 249).

**Vocabulary.** “Vocabulary refers to students’ knowledge of word meanings” (Stahl & Nagy, 2006, p. 3).

**Overview and Structure of Dissertation**

The following chapters provide detail on this investigation into the effects of the use of creative dramatics to strengthen the vocabulary achievement of fourth grade students in a language arts classroom. Chapter Two provides a literature review of the theoretical underpinnings and research most pertinent to the four research questions. Chapter Three provides a delineation of the methodology and the methods used by the
researcher (referred to as the investigator) to conduct the research in a school setting with student participants. Further, Chapter Three details the treatment pedagogy taught to the three randomly assigned classroom teachers by the investigator. Chapter Four provides the results related to each of the four research questions through descriptive and inferential statistics. Chapter Five provides an overview and discussion of the research findings and results, limitations of the study, recommendations for future research, implications for classroom practice, and concluding remarks. References and appendices complete the dissertation.
Chapter Two  

Literature Review

Introduction

Investigation into the philosophical, theoretical, and methodological aspects of creative dramatics is extensive. This study, as referenced in Chapter One, examined how instruction in creative dramatics, when integrated with language arts, might result in greater academic achievement than does instruction in language arts without creative dramatics—specifically—examining the relationship between creative dramatics and vocabulary achievement (Podlozny, 2000). Accordingly, the literature review that follows examined empirical studies where creative dramatics interventions, when integrated with language arts instruction, might result in greater academic improvement than does instruction in language arts without creative dramatics interventions; thus, following the recommendations regarding this specific research interpretation by Winner and Hetland (2000).

Creative Dramatics Defined

What is creative dramatics? The term creative dramatics has been associated with a myriad of definitions since becoming an official curricular subject (Ward, 1947). Ward (1930, 1947) developed an entire course of study and curricular objectives for the Evanston, Illinois school system, centered on the systematic approach to dramatic activity and learning. Some of the most common terms used interchangeably with creative dramatics studies and interventions will be shared in this chapter, as well as a complete list of terms and definitions used in Appendix B. For clarity, the multiple terms used for creative dramatics are presented in this chapter, in italics, to assist the reader with
distinguishing these terms in the narrative. The ambiguity of such terms, throughout the
literature review, posed an additional challenge to the investigator when sorting through
the literature regarding creative dramatics; further validating the need for lucidity of
definitions, as referenced by earlier researchers on this subject. Mages (2008) noted that,
“Researchers and theorists have employed a large vocabulary of terms to refer to the
same, similar, or related constructs as the one defined here as creative drama” (p. 130).
Hence, the need for a clear definition of creative dramatics for this study was needed.

Therefore, this study investigator utilized the state adopted definition for creative
dramatics from the Washington State K-12 Arts Learning Standards (OSPI, 2011a); and
intentionally using and citing the definition for creative dramatics from the glossary of
the Washington State K-12 Options for Implementing the Arts Standards through Theatre
by Grade Level (OSPI, 2011d). The rationale to use the state adopted definition for
creative dramatics was to provide a consistent, clear, research-based, and easily available
definition of creative dramatics as a foundation for this study; as well as a definition that
could be utilized for future studies about creative dramatics (Conard, 1992; Kardash &
Wright, 1987; Mages, 2008; Podlozny, 2000; Silvern, Taylor, Williamson, Surbeck, &
Kelley, 1986).

Thus, the Washington State K-12 Options for Implementing the Arts Standards
through Theatre by Grade Level (OSPI, 2011d) defined creative dramatics as “a dramatic
enactment (led by the teacher) of a story, setting, and/or characters. This is an
experiential, process-based activity, not a performance for an audience. The teacher may
assume a role” (p. 133). This specific definition of creative dramatics is process-based;
whereas, *creative dramatics* instruction is cognitive in nature, and treated as a core, basic, essential, and academic subject for all learners (Conard, 1992; OSPI, 2011d).

Further validating the need for such definition, Silvern et al. (1986) noted the major concern in the field was the “lack of a consistent definition of the construct” (*creative dramatics*), and recommended the “consistent use of operational definitions” as a solution to this problem and the confusion it creates for current and future researchers (pp. 73-4). Specifically, Mages (2008) cautioned, “Although scholars select particular terms to refer to very distinct concepts or practices, other scholars use those same terms to denote different ideological constructs” (p. 130). Silvern et al. (1986) and Mages (2008) present a span of 22 years of research where the recommendations by researchers regarding the need for a clear definition defining the constructs for research in *creative drama, classroom drama, and creative dramatics*, had been ignored (Conard, 1992; Kardash & Wright, 1987; Mages, 2008; Podlozny, 2000; Silvern et al., 1986).

In addition, Somers (2001) stressed the need for a common lexicon regarding the myriad of various terms and definitions that are used in empirical studies regarding *creative dramatics* and their effects on academic outcomes. Consequently, Mages (2008) argued, “The lack of consensus about the meaning of the terminology used in drama research makes it difficult to synthesize the research or to draw conclusions across studies” (p. 131).

Therefore, in addition to the definition of *creative dramatics* (OSPI, 2011d), the following terms, as referenced in previous studies and meta-analysis regarding *creative dramatics*, are defined for clarity – if referenced – throughout this study; as they are some of the most common terms used in studies regarding elementary-age students. In addition
to the brief list of terms and definitions, presented in this chapter of the dissertation, a complete list of terms and definitions used throughout the study is provided in Appendix B; for clarity of the study constructs, as well as to address the recommendation of the researchers of the studies cited in this study from 1950 through 2013.

Wagner (1998), when referencing informal drama, recommended definitions for the following terms: *socio dramatic play, role playing, role, symbolic play, self-directive dramatization, or thematic-fantasy play* (pp. 3-5). Specifically, Smilansky (1968) studied the effects of *sociodramatic play*; Singer (1973) studied the effects of *imaginative play*; and Galda (1982) studied *playing about a story* – explicitly – the narrative competence of play, storytelling, and story comprehension. Further, Wagner (1998) referred to the following terms as the most common terms used in studies that she reviewed of elementary-age children regarding drama in schools as, *creative drama, creative dramatics, process drama, role drama,* and *educational drama or drama in education (DIE)* (Heathcoat & Bolton, 1995).

Additionally, Conard (1992) noted that one of the problems that surfaced in her meta-analysis of empirical studies regarding *creative dramatics* was the failure of researchers to document clear definitions for the following terms, such as *role playing, improvisation, socio-dramatics, story dramatization,* and *pantomime,* and noted, “These terms were used in a variety of ways by as many researchers” (p. 65). Additionally, Podlozny (2000), in reference to her 80 study meta-analysis reviewing *drama education* wrote, “The labels used for ‘drama’ (i.e., sociodrama, *creative dramatics,* thematic fantasy play) have no set definitions, especially in the research with young children” (p. 239). Interestingly, Mages (2008) grouped many of the aforementioned *creative
dramatics terms and defined them for her meta-analysis as “creative drama research.” She referred to “creative drama research” as “the nexus of a number of academic disciplines: cognitive psychology, language acquisition, reading achievement, early childhood education, and educational drama” (Mages, 2008, p. 130). Subsequently, the multiplicity of terms presented, thus far, and throughout this chapter as a part of the literature review, further illustrates the difficulty and confusion that researchers and students experience regarding attempts to determine if past studies that cited creative dramatics as treatments were, in fact, measuring the same conditions.

**What is creative drama and is it different from creative dramatics?** DuPont (1992) used the following definition for creative drama in her study of *The Effectiveness of Creative Drama as an Instructional Strategy to Enhance the Reading Comprehension Skills of Fifth-Grade Remedial Readers*. Davis and Behm (1978) defined creative drama as “an improvisational, non-exhibitional, process-centered form of drama in which participants are guided by a leader to imagine, enact, and reflect upon human experiences” (p. 10). Further, Ross and Roe (1977) referred to creative drama, and referenced it, as such, in all forms of improvised drama, such as dramatic play, pantomime, puppet shows, and story dramatization. There is similarity between the Davis and Behm (1978) definition of creative drama and the definition of creative dramatics used in this study; whereas, creative dramatics is defined as “a dramatic enactment (led by the teacher) of a story, setting, and/or characters. This is an experiential, process-based activity, not a performance for an audience. The teacher may assume a role” (OSPI, 2011d, p. 133).
Consequently, the literature review focused on studies using *creative dramatics*, creative drama, classroom drama, and drama; whereas, the terms *creative dramatics* and *creative drama, classroom drama, drama*, and *dramatic play*, as defined in Chapter One of this dissertation – as well as in Appendix B – are used synonymously. Essential to specify; however, is that the following terms – *plays* and *puppet shows* – were not a part of this study, literature review, treatment options, or the terms and definitions.

**Creative drama and drama in education (DIE).** Wagner (1998) stated, “The goal of educational drama is to create an experience through which students may come to understand human interactions, empathize with other people, and internalize alternative points of view” (p. 5). Further, Wagner (1998) wrote, “In educational drama, the participants encounter a situation or problem, but the dialogue and gestures they produce are a response to the circumstances the group is imagining and improvising” (p. 6). Conversely, drama in education (DIE), or “process drama” (Heathcoat & Bolton, 1995; O’Neill, 1994), is defined as “a dynamic method of teaching and learning according to which both the students and the teacher are working in and out of a role” (OSPI, 2011d, p. 136).

Again, the following four established definitions – *classroom drama, creative drama, creative dramatics*, and *drama* – will be used synonymously to represent the constructs of *creative dramatics*, as presented in this study. This effort was intentionally made to address the on-going and current need and recommendation stressed by Mages and others “to develop a common vocabulary with established definitions” (Mages, 2008), regarding *creative dramatics*, as well as other terms discussed in this chapter in the literature review. Further, the broad definitions of *classroom drama* (Podlozny,
creative drama (Davis & Behm, 1978; Ross & Roe, 1977) and drama (Herbert, 1982), are included in the constructs of the research-based definition for creative dramatics found in the Washington State K-12 Options for Implementing the Arts Standards through Theatre by Grade Level (OSPI, 2011d, p. 133). Consequently, the use of the term creative dramatics will be used synonymously to represent all four of the aforementioned and following definitions throughout, and for the remainder of this study, and follow.

**Synonymous terms for creative dramatics.**

*Classroom drama. Classroom drama* refers to acting out stories that are used in the regular academic curriculum, with classroom drama being used as a way of supporting the curriculum and as an integral part of the curriculum (Podlozny, 2001, p. 99).

*Creative drama. Davis and Behm (1978) defined creative drama as “an improvisational, non-exhibitional, process-centered form of drama in which participants are guided by a leader to imagine, enact, and reflect upon human experiences” (p. 10). Similarly, Ross & Roe (1977) wrote “Creative drama includes all forms of improvised drama, such as dramatic play, pantomime, puppet shows, and story dramatization” (p. 383).*

*Creative dramatics. Creative dramatics is “a dramatic enactment (led by the teacher) of a story, setting, and/or characters. This is an experiential, process-based activity, not a performance for an audience. The teacher may assume a role” (OSPI, 2011d, p. 133). Similarly, McCaslin (1990) wrote “Creative dramatics is defined as an
improvisational, nonexhibitional, process-centered form of drama in which participants are guided by a leader to imagine, enact, and reflect upon human experiences” (p. 5).

**Drama.** “Drama is a three dimensional study. It involves learners using resources with which they are already confident: talk, play, and action; resources they have been using for many years by the time they are six” (Herbert, 1982, p. 48).

**Historical Background**

DuPont (1992) cited Winifred Ward of Northwestern University in Evanston, Illinois, as “a pioneer in the field of creative dramatics” (p. 41). Further, DuPont (1992) quoted Ward’s thoughts regarding creative dramatics as, “What children do is more significant to them than what they see and hear” (Ward, 1947, p. 1). Significantly, Ward’s philosophy has been referred to as learning-by-doing, hands-on-learning, or experiential learning and she has acknowledged that her methodologies are rooted in John Dewey’s pragmatic idealism and progressivism (DuPont, 1992; Saunders & Shepardson, 1987; Wagner, 1998; Ward, 1947).

Wagner (1998) further wrote, “The field that began as creative dramatics is primarily attributable to the work of Winifred Ward” (p. 6). Interestingly, Wagner provided a succinct summary that linked Ward’s work to Jane Addams of Hull House in Chicago, Illinois; thus, providing validation that creative dramatics constructs in public education have been a part of educational programs for over 120 years (Wagner, 1998). Wagner (1998) wrote:

Ward was a student of Charlotte Chorpenning at Hull House, who, in turn, was a student of Neva Leona Boyd, whose mentor and teacher was Edith de Nancrede, the artist who brought to life Jane Addams’ vision of establishing theatre at a
settlement House. Ward was followed by well-known practitioners such as Rita Christ and Anne Thurman at Northwestern University and teacher-writers in the field such as Ward’s students Geraldine Sik, Nellie McCaslin, and Richard Crosscup, who became leaders in the field. (p. 7)

**Philosophical and Theoretical Underpinnings**

*Creative dramatics* is defined as “a dramatic enactment (led by the teacher) of a story, setting, and/or characters. This is an experiential, process-based activity, not a performance for an audience. The teacher may assume a role” (OSPI, 2011d, p. 133). This specific and cognitive definition of *creative dramatics*, by nature, supports the artistic processes of creating, performing, and responding, which infer that ‘*art is a way of knowing*’ through process, experience and emotion (Broudy, 1972; Bruner, 1966; Cole & Means, 1981; Dewey, 1934; Eisner, 2002; Medina, 2008; Piaget, 1969; Reimer, 2003; Sternberg, 1988, 1997; Vygotsky, 1922; Zull, 2002). Further, the philosophical, theoretical, and methodological foundations used in the instructional methods for teaching and learning of all four arts disciplines are built upon the artistic processes of creating, performing, and responding. These artistic processes naturally engage and involve all types of learners in learning opportunities which are cognitive, affective, social, and psychomotor in nature. Subsequently, creating, performing, and responding to learning, of which are the constructs of *creative dramatics*, are found within the educational philosophies, theories, and methodologies presented and cited in this study.

Thus, the eclectic educational philosophies and theories which undergird this study espouse the belief that the intelligence and interests of individual students are innate, unique, and able to be ‘*drawn out*’ or ‘*led out*’ through the methods embedded in

Further, the psychological and developmental constructs of learning demonstrated through the experience of *creative dramatics* involve play, discovery, exploration, fantasy, imagination, reflection, and motivation. These constructs of learning are evidenced through the artistic processes of creating, performing, and responding; whereas, students are able to demonstrate individual and collective problem-solving skills and processes through personal expression of self and others (Erikson, 1963, 1982; Maslow, 1968; Piaget, 1969; Rogers, 1961; Vygotsky, 1966). Significant to the students and supportive of the research, methodology, and methods of this study are that dance, music, theatre, and visual arts are considered as core, academic, and essential subjects (Herbert, 2004) and an integral part of basic education in Washington State, per RCW 28A.150.210 (Washington State Legislature [WSL], 1993).
Doctrine of Interest, Progressivism and Constructivism, Perennialism and Essentialism, and Creating, Performing, and Responding

The roots of *creative dramatics* are found throughout history, and are referenced through key educational philosophies and theories discussed in this chapter. The artistic processes of creating, performing, and responding have been and are considered as underpinnings of the educational philosophies previously cited in this study regarding Constructivism, Essentialism, Perennialism, and Progressivism, and are succinctly defined in Appendix B. Regarding the diverse stances and opinions that educational leaders and policies create promoting one philosophy over another, the common constructs of the artistic processes –creating, performing, and responding –naturally engage students to create, perform, and respond to teaching and learning in unique and individual ways of knowing. Specifically, *creative dramatics* resides in all of the aforementioned philosophies, theories, and methodologies.

The Greek philosophers – Socrates, Plato, and Aristotle (Taylor, Hare, & Barnes, 1999) are studied and represented extensively throughout formal drama instruction. Each of these philosophers, famous for being the intellectual authorities of the ages, espoused the needs of students to create meaning, demonstrate excellence and knowledge, and reflect upon individual, as well as collective learning, doing, and being. These philosophers each taught and wrote about interest, expertise, discovery, discourse, excellence, appreciation, wonder, and joy at life and living – all considered key attributes of and embedded in the constructs of *creative dramatics*.

Quintilian, the first century Roman educator, is credited with the *Doctrine of Interest* based upon the ideal that students should study what they want to study; and
further, that school curriculum and methods should be centered on the interests of those students (Castle, 1970; Ellis, 2004; Quintilian, 1938, 1987). Castle (1970) wrote of Quintilian, “We discern, then, in Quintilian the conservative reformer, the innovator in method rather than of purpose” (p. 43). Further, Castle noted that Quintilian could have been the first serious student of the pupil’s reaction to teaching (p. 41). Castle’s reference to Quintilian as student as well as teacher, provides context to the central constructs that creative dramatics instruction provides in the classroom, per the definition of this study; whereas, the teacher is focused on the student’s reaction to the teaching and learning of vocabulary words through creative dramatics experiences allowed by the teacher; whereas, the teacher may assume a role as facilitator, observer, or participant.

Further encouraging the interest of the child in learning, and incorporating the philosophy of Romanticism of his day, Jean-Jacque Rousseau (Archer, 1964) emphasized experiential and relational learning in educational settings; also referred to as ‘child-centered’ learning as opposed to teacher and school structured learning (Ellis, 2004). Although the ideal of a totally free educational environment in which to learn gained Rousseau great fame, his ideas are not practical for educational settings with more than one child.

John Dewey (1900, 1902/1990, 1916, 1934), has been credited with bringing this progressive and ‘child-centered’ philosophy of education to America. The progressive philosophy of educational theory is referred to as ‘learning by doing’ (Wagner, 1998). Ellis (2004) summarized Dewey’s importance in America’s public schools, writing, “John Dewey’s work at the University of Chicago Laboratory School from 1894 to 1904 gave national visibility to his ideas of education for democracy, community involvement
in learning, student empowerment, and applied problem solving” (p. 30). Broudy (1974) wrote, “Progressivism is a ‘task-oriented, problem-solving process’ urged by Dewey” (p. 25). Moreover, Dewey is credited with asserting that students attend school because of the social aspects that attending school provides (Dewey, 1900, 1902/1990, 1916, 1934, 1938). Dewey (1916) wrote, “Not only is social life identical with communication, but all communication (and hence all genuine social life) is educative. To be a recipient of a communication is to have an enlarged and changed experience” (p. 5). Further, Dewey encouraged meaningful experiences or ‘doing’ and ‘thinking’ that the arts could provide to students, in progressive schools, and philosophically defined ‘art as experience’ in the book titled as such (Dewey, 1934). Dewey (1934) wrote, “The significance of art as experience is, therefore, incomparable for the adventure of philosophic thought” (p. 297). Further, Broudy (1974) provided a clear summary of Dewey’s progressive educational goals, and wrote, “The kind of doing that Dewey regarded as educative was a doing that verified or falsified a hypothesis or a proposal, it was a doing by thinking” (p. 25).

Moving forward from progressivism to constructivism, with the foundations of the creative dramatics constructs, is the philosophy of the Russian Psychologist, Lev Vygotsky, also known for introducing the term and theory for the Zone of Proximal Development, oftentimes referred to as the ZPD (Vygotsky, 1962/1986, 1966). Ellis (2001) defined the ZPD as “the range between which a learner can solve problems independently and the learner’s ability to benefit from expert guidance” (pp. 88-89). Vygotsky’s theory has been used extensively in sports and the arts, where a coach or an arts specialist or a private instructor – acting as a ‘teacher-guide’ – will lead a student to
growth by a suggestion, by modeling, and by mentoring; whereas, the student constructs personal meaning in the learning process as a part of this growth (McLeod, 2010; Vygotsky, 1922). In particular, Vygotsky (1962/1986) observed how the origins of children’s writing development began in the concrete symbolism of play and drawing; and further indicated the significance of dramatic play as a foundation for literacy (Vygotsky, 1962/1986, 1978). Consequently, Vygotsky’s philosophy of constructivism (Vygotsky, 1962/1986, 1966, 1978) utilized the social aspect of Dewey’s progressivism (Dewey, 1916), and inspired the constructivist ‘theory of knowledge’ (Bruner, 1966).

Wagner (1998) summarized that both drama and collaboration foster children creating ZPDs for each other; and further, provided a seamless segue between Vygotsky (1966) to Bruner (1966), comparing creative dramatics with interactive play and discovery learning, and wrote:

Two of the most generative learning theories to demonstrate the value and explain the efficacy of drama in the classroom are those of the brilliant Russian psychologist Lev Vygotsky ([1962], 1986, 1978) and Jerome Bruner (1983, 1986a, 1990). Both see cognitive growth as dependent upon interactive play and upon children imagining themselves acting in worlds that are developmentally a bit above their actual physical and intellectual level. Both provide a solid foundation for using drama in the classroom as a way that deepens and enlarges understanding. (p. 15)

Ellis (2004) provided an illustration of Bruner’s Theory of Instruction (1966), which included an instructional model with three key precepts: (a) Enactive learning or learning with hands-on experience; (b) Iconic learning or learning with imagery; and (c)
Symbolic learning or learning with abstract ideas (p. 99). Ellis (2004) further stressed, “Bruner’s argument was that curriculum materials must be appealing, inviting, and otherwise capable of empowering the student as active learner” (p. 99); thus, making a vivid connection to the constructs embedded in the creative dramatics treatment interventions created for and examined in this study. Students who experienced creative dramatics with reading were able to experience what they read, as opposed to simply experiencing the act of reading (DuPont, 1992).

Play and fantasy as integral paradigms of creative dramatics. Additionally, Vygotsky (1966) was compared and contrasted with the Theory of the Stages of Intellectual Development (Piaget, 1962, 1968, 1969), and connected by Ellis (2001), in describing how philosophies are connected to theories and how theories are connected to research (pp. 12, 21). Further, Vygotsky (1966) is credited with theorizing about the importance for children exploring fantasy worlds and using their imaginations in the context of drama (Mages, 2008). Consequently, in defining play, and the necessity of such in the cognitive, affective, and social development of children, particularly preschool age children, Vygotsky (1966) stressed,

Play is the source of development and creates the zone of proximal development. Action in the imaginative sphere, in an imaginary situation, the creation of voluntary intentions and the formation of real-life plans and volitional motives all appear in play and make it the highest level of preschool development. (p. 16)

Similarly, Piaget (1962), in his theory of the stages of development, also stressed the importance of play and drama in his book Play, Dreams, and Imitation in Childhood (Piaget, 1962). Singer (1973) in his book The Child’s World of Make-Believe:
Experimental Studies of Imaginative Play summarized Piaget’s (1962) theory of the origins of play and developed within the framework of Piaget’s cognitive processing system. Singer (1973) wrote:

For Piaget, play derives from the child working out two fundamental characteristics of his mode of experience and development. These are *accommodation*, which represents an attempt to imitate and interact physically with the environment, and *assimilation*, which represents the attempt to integrate externally-derived percepts or motor actions into the relatively limited number of schemata or differentiated motor and cognitive skills available at a particular age.

Whereas mastery play clearly involves an attempt to accommodate to the environment as in the case of a child seeking to grasp a rattle or exploring the dimensions of movement of a mobile by pushing it back and forth and laughing at the motion, symbolic play seems more associated with the assimilation process. (p. 13)

Piaget observed, recorded, and advanced his theory of the intellectual, physical, emotional, and social stages of development with his own children in their home environment, where his children constructed their own learning, built on what they had experienced in an earlier stage of development. Piaget’s theory has been referred to and summarized in educational methodology for practitioners as ‘*telling is not teaching*’ (Ellis, 2004, p. 33; Piaget, 1962, 1968, 1969).

Further, Piaget (1962) and Vygotsky (1966) showed how pretend play parallels cognitive development; and consequently, provide two of the most generative learning theories to demonstrate the value and explain the efficacy of drama in the classroom
Finally, although Piaget is considered a constructivist, he contrasts from Dewey and Vygotsky; whereas, the learning environment of Piaget’s children was controlled in the sense that it was a home laboratory, as opposed to a more social and regular educational school setting theorized and philosophized, as well as observed by Dewey and Vygotsky. Piaget’s theory was developed in an environment where learning was more individually based, although experiential. His theories are a key component of child and educational psychology and have been credited with the educational advancement of teaching and learning strategies and methods based upon the developmental stages of students and their environmental and heredity factors (Piaget, 1962, 1968, 1969).

Ellis (2004) found some common ground for the teachings of Dewey and Piaget, and noted that both the educational philosophies of Dewey and Piaget agree, “Teaching is the creation of an environment in which students can grow intellectually, socially, and morally” (p. 33). As has been presented, Dewey, Vygotsky, and Piaget referenced the worth of play, discovery, and problem-solving as significant constructs of their philosophies and theoretical constructs regarding teaching and learning methodologies; thus, their philosophies and theories are foundational in creative dramatics education.

“Arts for art’s sake”. Eisner (1998, 2002) believed that the arts are perennial, essential, and the essence of aestheticism; thus, should be taught solely for the purpose of what the arts teach that no other subject can teach. Eisner (1998, 2002, 2005a, 2005b), while considered a visual artist, wrote and advocated on behalf of the specific study of all four arts disciplines being available for all learners, delineating the similarities as well as the differences that each arts discipline – dance, music, theatre, and visual arts – provides
that is perennial (the ability to change the world), as well as essential (the preparation to succeed in the world as it is). Eisner (2005a) cautioned current educational reform efforts to boost test scores, and cited Dewey’s progressive educational philosophy as a reason for educators to be concerned regarding current practices. Eisner (2005a) stressed, “Such an approach has narrowed the curriculum and blinkered our vision of what the progressive educators – those educators influenced by John Dewey’s philosophy of education – used to call the ‘whole child’” (p. 15). He further posed the question to educators, “Can a child be anything but whole?” (Eisner, 2005a, p. 16). Whereas, the arts are a part of basic education in Washington State, the aforementioned statement from Eisner validated the essential and perennial nature of the argument “arts for art’s sake”. Further, Eisner (2002) advocated for what the arts teach that no other subject can teach, and stressed how the arts are necessary subjects, in the curriculum, to be studied and experienced by all learners (pp. 70-92).

Similar to Eisner (1998, 2002), Reimer (2003), believes that music is perennial, essential, and the essence of emotional knowledge that can be taught and learned; however, only through the study and experience of music as a cognitive domain, in and of itself. Reimer argued that music should be taught because it is a form of non-conceptual cognition that must be felt through mental capacities (Reimer, 2003). Further, he espoused that “Philosophy requires “language-think.” Music requires “sound-think.” Philosophy creates word-meanings. Music creates sound-meanings” (Reimer, 2003, p. 1). Reimer’s (2003) writings move forward from music as aesthetic education to music and its synergy to the arts as a form of musical and artistic intelligence, with music
as the foundation to the other arts and other learning; nonetheless, essential learning for all students and taught by specialists who are musically intelligent (Reimer, 2003).

Mortimer Adler (1994), espoused the ideals of the classical studies of the philosophers, and included the arts as a part of these great ideals in educational settings in his book *Art, the Arts, and the Great Ideas*. Adler (1994), considered a perennialist, believed that the arts were a part of civilization’s enduring ideas, and should be included as a part of the study for all learners regarding these great ideas in education; thus, providing students with perennial subjects that have the power to change the world. In an elitist sense, Adler (1994) also believed that people who were uneducated and underprivileged could not fully appreciate or understand “arts for art’s sake” for lack of knowledge and experience with beauty and beautiful things; thus, the need for the inclusion of the arts for all learners – specifically in public schools – as a part of an elitist education – where the best for the best and highest in society is the best for all in society.

Winner et al. (2013a), in their report and overview entitled “Art for Art’s Sake”, argue that “The primary justification of arts education should remain the intrinsic importance of the arts and the related skills that they develop” (p. 15).

Hirsh (1996) also believes that the arts are essential for all learners; however, the essentialists believe that essential education prepares students for the world as it is. Hirsh’s essentialist philosophy and declaration for standards and expectations for essential subjects is credited with inspiring the current national movement toward standards-based education. The state of Washington has approved state standards for reading, writing, mathematics, science, social studies, the arts (dance, music, theatre, and visual arts), health and fitness, and communications – all considered “essential” subjects
in Washington State law and policy, since 1993, with the passage of RCW 28A.150.210, (WSL, 1993); thus, providing a strong foundation for this present study.

Broudy (1950, 1972, 1974, 1980), was considered a champion for the study of aesthetics in all four arts disciplines, as well as the infusion of the arts with all of education and within and through all subjects. Broudy’s (1950, 1972, 1974, 1980) writings are referenced as a part of teaching and learning philosophy and learning in pre-service and post-service studies for generalist educators, as well as education specialists, specifically in the courses for arts specialists regarding dance, music, theatre, and visual arts – all of which are core, academic, and essential subjects in Washington state per state law, as referenced earlier. Broudy (1950, 1972, 1974, 1980) valued the development of imagination as a fundamental purpose of education, thus validating the constructs of creative dramatics. The following quote typifies Broudy’s philosophy about how the study of arts education is perennial and essential for all learners, as well as a successful way to provide the unique cognitive, affective, and psychomotor learning that only study in the arts can provide. Broudy (1980) wrote, “The arts when studied as general education should supply what no other discipline does: the strange and wonderful synthesis we call knowledgeable feeling and feelingful knowledge” (Broudy, 1980, p. 7).

Further, Broudy’s writings compare aesthetics with regards to educational experiences with dramatic structure; having a beginning, middle, and ending, and espousing, “This is why each segment of experience that has aesthetic or dramatic form can be cherished for its own sake” (Broudy, 1972, p. 36). Consequently, Broudy (1974) believed in the necessity of problem-solving as essential to education, of which the process of creative dramatics instruction presents to students, and presented the
following definition regarding the importance of problem-solving as perennial, essential, aesthetic, and dramatic in nature. Broudy (1974) wrote the following definition for problem solving:

**Problem-solving.**

Problem solving or heuristics is the test of didactics (the formal study of logically-organized subject matters), but it is not a substitute for them. To paraphrase Immanuel Kant, didactics without heuristics are empty; heuristics without didactics are likely to be no more than palaver. (Broudy, 1974, p. 25)

Supportively, Rabkin (2002) wrote, “Advocates for arts education have long made an essentialist argument for the arts: they are such an important dimension of life that they must be included among core academic subjects” (p. 2). Rabkin’s declaration for inclusion of the arts with core academic subjects was realized in Washington State in 1993 with the passage of the *Basic Education Act* (BEA) RCW 28A.150.210 (WSL, 1993), and the federal law *No Child Left Behind Elementary and Secondary Education Act* (*NCLB/ESEA*) and legislation (USDOE, 2002).

**Arts are Essential Academic Learning Requirements (EALRs) in Washington State**

**Background of education reform in Washington State.** Washington State established four common learning goals for all students in the state of Washington in efforts to ensure that all children have the opportunity to achieve at high levels and are provided with an essential education. These four learning goals follow, as they provided the philosophical foundation for the use of *creative dramatics* instruction to improve student academic achievement in vocabulary development, as both subjects are
considered essential and a part of the basic education requirements for all learners in Washington State.

*Washington State’s Basic Education Act (BEA) RCW 28A.150.210* (WSL, 1993). The four BEA learning goals follow:

a) Read with comprehension, write effectively, and communicate successfully in a variety of ways and settings and with a variety of audiences.

b) Know and apply the core concepts and principles of mathematics; social, physical, and life sciences; civics and history, including different cultures and participation representative government; geography; arts; and health and fitness.

c) Think analytically, logically, and creatively, and to integrate different experiences and knowledge to form reasoned judgments and solve problems.

d) Understand the importance of work and how performance, effort, and decisions directly affect future career and educational opportunities. (OSPI, 2011a, p.1)

Additionally, the arts disciplines (dance, music, theatre, and visual arts), as a part of the basic education requirements in Washington State, have state adopted *Washington State K-12 Arts Learning Standards* (OSPI, 2011a) which include the four arts essential academic learning requirements (EALRs) used as a foundation for the *creative dramatics* instructional methods employed in the two treatment interventions of this study. The arts learning standards and EALRs are required to be taught by all certified elementary generalist educators per the Revised Code of Washington – RCW 28A.655.070 (WSL,

**Washington State K-12 arts learning standards, 2011** (OSPI, 2011a). The following are the four Arts learning standards that are required to be taught to all K-12 learners, per state law, and as referenced.

- The student understands and applies arts knowledge and skills in dance, music, theatre, and visual arts.
- The student uses the artistic processes of creating, performing/presenting, and responding to demonstrate thinking skills in dance, music, theatre, and visual arts.
- The student communicates through the arts (*dance, music, theatre, and visual arts*).
- The student makes connections within and across the arts (*dance, music, theatre, and visual arts*) to other disciplines, life, cultures, and work. (OSPI, 2011a, pp. 4-7)

Further support for the arts being considered as academic, basic, core, and essential subject areas, in Washington State, were laws requiring and funding the development and adoption of the *Washington State K-12 Arts Learning Standards* (OSPI, 2011a); and the *Washington State K-12 Options for Implementing the Arts Learning Standards through Dance* (OSPI, 2011b); the *Washington State K-12 Options for Implementing the Arts Learning Standards through Music* (OSPI, 2011c); the *Washington State K-12 Options for Implementing the Arts Learning Standards through Theatre* (OSPI, 2011d); and the *Washington State K-12 Options for Implementing the*
Arts Learning Standards through Visual Arts (OSPI, 2011e) – as essential learnings for all students – kindergarten through grade 12. Further, teachers in Washington State are now able to assess their students in each arts discipline – at the elementary, middle, and high school levels – with the use of state developed and approved arts classroom-based performance assessments (CBPAs) that measure if students know and are able to do what the Washington State Arts Learning Standards and options for meeting the standards in dance, music, theatre, and visual arts require students to know and be able to do or demonstrate. Accountability of instruction in arts education is validated via the use of individualized arts classroom-based performance assessments (CBPAs), available for dance, music, theatre, and visual arts, with clear and consistent rubric measurements, which were piloted psychometrically across the state of Washington in remote, rural, suburban, and urban school districts. Specifically, school districts in Washington State are required to file an annual verification implementation report, per RCW 28A.230.095 (WSL, 2006). This report requires school districts to report to the OSPI regarding student access to arts instruction through annual reporting of the use of the Washington State Arts Classroom Based Performance Assessments in Dance, Music, Theatre, and Visual Arts (OSPI, 2003, 2006, 2008), such as the Theatre Grade Five: Center Stage Star (OSPI, 2003, 2006; 2008; 2008-2009; 2009-2010), and/or other strategies that measure the Washington State Arts Learning Standards (OSPI, 2011a). These resources hold all 295 school districts in Washington State, accountable to state education law regarding the Arts Essential Academic Learning Requirements and Performance Assessments per RCW 28A.655.070 (WSL, 2007) categorizing the arts as basic education to be taught and accessible to all learners per RCW 28A.150.210 (WSL, 1993).
All of these resources are available for free download and use for students at:

Further, the arts classroom-based performance assessments were designed specifically for
Washington State students, with the Riverside Publishing Company (RPC), as summative
performance assessments. The development timeline and specifics regarding the arts
classroom-based performance assessments can be found at the John’s Hopkins University
New Horizons website at:

The aforementioned state laws and resources validate that study in the arts
disciplines (dance, music, theatre, and visual arts) is academic, basic, core, and essential
for kindergarten through grade 12 students in Washington State. These arts performance
assessments are currently being used as both summative and formative assessments by
classroom teachers and by certified and highly qualified teachers in dance, music, theatre,
visual arts, as well as with adaptations for media arts by career and technical education
teachers, and in all types of educational settings (Anderson, Krathwohl, & Bloom, 2001;
Black & Wiliam, 1998; Brophy, 2007; Ellis, 2006; Englebright & Mahoney, 2012;

Washington State laws and policies regarding arts education, as presented in this
chapter, provide the support and rationale for teachers to teach the arts and for
administrators to support the arts being taught in all schools and for all learners,
kindergarten through grade twelve, with access to free and state developed and piloted
resources that were psychometrically piloted; and further met the strict state processes for validity and reliability, including formal adoption by OSPI and public posting on OSPI web sites for arts education, with free access and download. Further, Washington State provides 11 of the 13 nationally reported key indicators for state accountability in providing arts education for all learners in public education, as reported in the *State of the States 2012: Arts Education State Policy Summary* (Arts Education Partnership, 2012). Frequently asked questions (FAQs) regarding arts education laws, policies and practices in Washington State can be found on the Washington State Board of Education (WSB) web site at: http://www.sbe.wa.gov/faq.php (Washington State Board of Education, 2012).

Forthcoming are the developing *National Coalition for Core Arts Standards*, which are currently in draft form and undergoing national review and piloting. These developing and updated voluntary national arts standards will replace those first approved in 1994 (Consortium of National Arts Education Associations, 1994) as voluntary guidance for arts instruction across the nation.

**Social, Emotional, Developmental, Physiological, and Intellectual Theories**

Additionally, various social, emotional, developmental, physiological, and intellectual theories that are familiar to educators and education leaders were examined and reviewed, as foundational to the basic need of all students to experience arts education and instructional practices – which included *creative dramatics* education. Specifically, the following theories are included in this study as they each contain constructs of the arts, and specifically, constructs of *creative dramatics*. Referred to as cognitive, affective, social, and psychomotor domains in the practitioner vernacular; the
importance of knowing how students learn is indicative to success as a teacher. Interestingly, the use of creative dramatics provides teachers the ability to observe students naturally experiencing and exhibiting understanding of knowledge in all four learning domains.

Noteworthy, in the review of these theories, is that the arts and creative dramatics may also be referred to as creativity in some of these sources. Further, these sources were reviewed for their mention of the social, emotional, developmental, physiological, and intellectual needs that children inherently have to dance, sing, act, create, and make music, and play, from birth and throughout life. Specifically, the psychologies and theories referenced are presented in alphabetical order – and by theory; similar to the terms and definitions presented in this study, and for ease of referral. Each cited theory provides some validation regarding the need for educational experiences in creative dramatics for all learners. Many of the concepts presented were embedded in the methods employed in the development of the two treatment conditions for creative dramatics instruction for this study.

**Arts for all.** Arts for all is a theory regarding the cognitive, developmental, and psychological need for arts education as essential to life and living for all students, as taught by specialists and enhanced by other educators (Davis, 2008).

**Art as emotion.** Art as emotion is a theory of enriching the practice of teaching by exploring the biology of learning, including art as an emotional state of learning (Zull, 2002).

**Cooperative learning theory.** Cooperative learning theory is also referred to as social interdependence theory and cooperative learning (Johnson & Johnson, 2009).
**Discovery learning.** Discovery learning is a theory of developmental sequences that advances from motor or sensory (enactive), or ‘hands-on’ representation to concrete images (iconic) and then to abstract representation (symbolic) (Bruner, 1966; Ellis, 2004, p. 99). This theory is also referred to as a *Theory of Instruction* (Bruner, 1966).

**Emotional intelligence.** Emotional Intelligence is a theory referred to as EQ. The Emotional Competence Framework encompasses five areas: self-awareness, self-regulation, motivation, empathy, and social skills (Goleman, 1995).

**Flow.** Flow is a theory regarding the psychology of engagement with everyday life, particularly when learning and experiencing activities which are enjoyable and of interest (Csikszentmihalyi, 1996, 1997; Gardner, Csikszentmihalyi, & Damon, 2001, p. 5).

**Growth and creativity.** Growth and Creativity is a theory regarding the essence of being and becoming a person (Rogers, 1961).

**Learning styles theory.** Learning Styles is a theory that students learn in four different ways or styles: aural, visual, kinesthetic, and tactile (Dunn & Dunn, 1992).

**Multiple intelligences theory.** (Gardner, 1983, 1993, 1999a, p. 72, 1999b, pp. 33-4, 41-3, 47). (See *Ways of Knowing* in this section on social, emotional, developmental, physiological, and intellectual theories).

**Practice.** Practice is a theory of excellence and expert performance (Ericsson, 1996, 2008; Hattie, 2009).

**Stages of development.** Stages of Development theory is a developmental and psychological theory regarding the stages of life (Erikson, 1963, 1982).
**Self-actualization.** Self-Actualization is a theory regarding the psychology of being (Maslow, 1968).

**Social justice theory and culturally responsive education.** Social Justice is a theory of culturally appropriate educational experiences regarding race, ethnicity, gender, social and economic status, and mental, emotional, and physical differences and exceptionalities (Apple & Beane, 1995; Hanley & Noblit, 2009; Keifer-Boyd, Emme, & Jagodzinski, 2008; Kohn, 1999; Kozol, 1991; Payne, 1996; Steele, 2010).

**Successful intelligence.** Successful Intelligence is a theory espousing how practical and creative intelligence determine success in life (Sternberg, 1997).

**Theory of origins of play.** The characteristics of experience and development are *accommodation* (an attempt to imitate and interact physically with the environment) and *assimilation* (an attempt to integrate externally-derived percepts into motor and cognitive skills at particular ages) (Piaget, 1962; Singer, 1973).

**Triarchic theory of intelligence.** A triarchic or three-way theory of mental abilities is identified as: contextual intelligence, experiential intelligence, and componential intelligence. Additionally, six factors of this theory include: spatial ability, perceptual speed, inductive reasoning, verbal comprehension ability, memory, and number ability (Sternberg, 1988).

**Ways of knowing.** The *Theory of Multiple Intelligences* espouses eight intelligences or ‘ways of knowing’ which are defined as: linguistic, logical-mathematical, musical, bodily-kinesthetic, spatial, interpersonal, intrapersonal, and naturalist (Gardner, 1983, 1993, 1999a, p. 72, 1999b, pp. 33-4, 41-3, 47). (Two additional intelligences – the spiritual and existential intelligences – were not examined in this investigation).
Zone of proximal development (ZPD). The ZPD is defined as the range between where a learner is able to problem solve independently and where a learner will benefit from expert guidance to advance beyond the current level of personal independence to a higher level of personal independence (Vygotsky, 1962/1986, 1966).

Arts Education Philosophies, Methodologies, and Pedagogies of this Study

The following educational methodologies and pedagogies incorporate the philosophical and theoretical constructs presented thus far, in this chapter. Further, each of the following arts education methodologies contains constructs embedded in creative dramatics, and naturally integrates dance, music, theatre, and visual arts concepts and skills. The cognitive, affective, social, and psychomotor, as well as somatic methods of each methodology, were taught by the investigator to be employed with knowledge and intention by the treatment teachers. Further, each methodology is based upon researched philosophical and pedagogical constructs for the teaching of dance, music, theatre, and visual arts techniques and skills for arts education specialists and performance majors. Additionally, each of these specific methodologies are included in the Washington State K-12 Arts Learning Standards (OSPI, 2011a); and the Washington State K-12 Options for Implementing the Arts Learning Standards through Dance (OSPI, 2011b); the Washington State K-12 Options for Implementing the Arts Learning Standards through Music (OSPI, 2011c); the Washington State K-12 Options for Implementing the Arts Learning Standards through Theatre (OSPI, 2011d); and the Washington State K-12 Options for Implementing the Arts Learning Standards through Visual Arts (OSPI, 2011e), thus providing state adopted and approved vocabulary and methods as the foundation of this study’s constructs. The underlying philosophical underpinnings,
theories, pedagogies, and methodologies used in the study are listed in alphabetical order, with reference; and each has equal importance to the treatment conditions in this study (Dalcroze, 1930; Kodály, 1974; Laban, 1971; Orff, 1974/1980; Steiner, 1997). These aforementioned methodologies follow; and the specific methods employed are further discussed and detailed in Chapter Three, as well as delineated in Appendix C.

Further, the aforesaid arts education methodologies employed, regarding the effects of creative dramatics on vocabulary achievement, were based on sound artistic philosophies of theory and practice; as well as with developmentally appropriate strategies for teaching and learning with all types of learners, and including culturally sensitive constructs, as well as students with exceptionalities (Thomas, 2006). Consequently, these selected methodologies incorporated discovery learning, problem-solving, creativity, imagination, improvisation, and pantomime (refer to Appendix B). Student participants experienced learning activities through aural, visual, kinesthetic, and tactile strategies taught and experienced through creative dramatics intervention treatments; whereas, cognitive, affective, social, and psychomotor skills, as well as somatic methods were embedded to ‘pull out’, ‘to lead forth’, and to ‘draw out’ what lies within each individual student, as in the Latin definition for educate or educere (Ellis, 2004).

The specific creative dramatics interventions employed in this study allowed for the students to incorporate the constructs of creative dramatics and vocabulary, as well as integrated arts, via arts integration; as well as through the spontaneous connections to dance, music, and visual arts activities (Alber & Foil, 2003; Cave, 2011; Danko-McGhee & Slutsky, 2007; Deasy, 2002; Gilbert, 1979, 1992, 2000, 2006; Gullatt, 2008;
Hannaford, 1995; Heinig & Stillwell, 1974; Hemenway, 2010; Hetland, 2013; Johnson, 1998; Stevenson, 2006); thus, further demonstrating each student’s unique and individual understanding and meaning of the learning process. Specifically, the spontaneous connections and additions of the other arts disciplines (dance, music, and visual arts), through *creative dramatics*, revealed each student’s ability to transfer the learning from one situation to another – independently and collectively – as well as uniquely and creatively. Subsequently, the transfer of knowledge from the experiences learned in and through the constructs of one academic and cognitive subject – *creative dramatics* – to another academic and cognitive subject – vocabulary achievement, was evidenced through a test of vocabulary achievement in a language arts unit of study.

The study treatment pedagogies and methodologies follow in alphabetical order for easy reference.

**Dalcroze and Eurythmics Method.** The Dalcroze Eurhythmics Method of instruction teaches concepts of rhythm, structure, and musical expression using movement, and is the concept for which Dalcroze is best known. It focuses on allowing the student to gain physical awareness and experience of music through training that takes place through all of the senses, particularly kinesthetic (Dalcroze, 1930; Findlay, 1971; Landis & Carder, 1972; Schnebly-Black & Moore, 1997).

**Kodály Method.** The Kodály Method of instruction is a way of developing musical skills and teaching musical concepts beginning in very young children. This method uses children’s folk songs, solfège hand signs, pictures, movable-do, rhythm symbols and movements, and syllables for students to physically experience music, and musical sounds and singing. It was first introduced in Hungary but is now used in many
countries, either alone or in combination with other methods. A cappella singing is stressed as the foundation for musicianship, utilizing rhythm, beat and body percussion (Bacon, 1977; Choksy, 1974; Kodály, 1974; Landis & Carder, 1972; Nash, 1974; Wheeler & Raebeck, 1972).

**Laban Method.** Laban established a method of instruction referred to as choreology; as well as the research into the ‘art of movement’. Further, Laban invented a system of dance notation, now referred to and known as *Labanotation* or *Kinetography Laban*. A credit to the dance world, Laban was the first person to develop community dance and was adamant about dance education reformation. His legacy was and is rooted in the philosophy that dance should be made available to and experienced by everyone (Gilbert, 1979, 2000, 2006; Laban, 1971; Nash, 1974; Whitelaw & Wetzig, 2008).

**Orff-Schulwerk Method.** The Orff-Schulwerk Method of instruction is a way to teach and learn music. It is based on things children like to do: sing, chant rhymes, clap, dance, and keep a beat on anything near at hand. These instincts are directed into learning music by hearing and making music first, then reading and writing it later (Cave, 2011; Landis & Carder, 1972; Nash, 1974; Orff, 1974/1980; Thomas, 2006; Wheeler & Raebeck, 1972).

**Steiner and Eurythmy Method.** The Steiner or *Waldorf* Method of instruction using *Eurythmy* is a new art form of movement and was termed as such and created by Rudolf Steiner, the father of the *Steiner Waldorf Schools*, also referred to as *Waldorf Schools* (Clouder & Rawson, 1998, p. 7; Steiner, 1997). *Eurythmy* is an art, like modern dance or sculpture, and defined as the “art of movement” – movement as an expressive and performance art form (Steiner, 1997). In a slightly modified form, it can also be
applied therapeutically, similar to the way the painting can be applied as a form of therapy, known as Art Therapy (Steiner, 1997). Waldorf Schools are the legacy of the Steiner methods, where the arts (dance, music, theatre, and visual arts) are embedded into all instruction and as the essence for the study of all things, through meaningful and engaged learning experiences (Clouder & Rawson, 1998; Nordlund, 2013; Petrash, 2002; Pusch, 1993; Steiner, 1997).

**Integrated Arts: Dance, Music, Creative Dramatics, and Visual Arts**

A succinct definition for integrated arts, for the purpose of this dissertation, is the natural tendency for one or more arts (dance, music, theatre, and visual arts) to embed itself with the other, as in dancing to music, or acting and singing to music, or drawing to music, as in an interdisciplinary curriculum; however, specific to the arts disciplines (Cave, 2011; Gilbert, 2006).

In the case of this study, students in the two treatment groups created creative dramatics inspired motions that resembled dance. Simultaneously, students sang and rhythmically chanted, clapped, snapped, and stomped the syllabic and phonetic vocabulary sounds of their weekly vocabulary words and phrases; while – at the same time – acting out the movements to the words and definitions, using their speaking and singing voices, and employing body percussion techniques. Further, students enacted story characters through their imaginations and spontaneous motions. Additionally, students summarized stories through images and enactments of each story. Finally, students used metaphoric body movements of animate objects to experience the eight sequential movements of the five-minute standing BrainDance (Gilbert, 1979, 2006).
An example of *integrated arts* is where an arts specialist in dance, music, theatre, and visual arts utilizes state arts standards, and incorporates the practices, methodologies, and philosophical pedagogies of all four arts disciplines to create an eclectic arts curriculum; whereas, the synergy of multiple ‘ways of knowing’ and experiencing the arts as a whole are presented and experienced in and through the teaching and learning activities employed, such as is the case of this present study. Specifically, students in this study, experienced *creative dramatics* constructs, and instinctively incorporated the constructs of dance, music, and visual arts into the *creative dramatics* treatments (Cave, 2011; Choksy, 1974; Clouder & Rawson, 1998; Dalcroze, 1930; Edwards, 1979; Gilbert, 1979, 1992, 2000, 2006; Gray, 1987; Hemenway, 2010; Landis & Carder 1972; Montessori, 1971; Nash, 1974; Orff, 1974/1980; Petrash, 2002; Pierini, 1971; Pink, 2006; Pusch, 1993; Richards, 1967, 1971; Riggs, 1980; Schnebly-Black & Moore, 1997; Wheeler & Raebeck, 1972).

**Interdisciplinary Arts or Arts in the Content Areas or Arts Integration**

Interdisciplinary arts, arts in the content areas, arts integration, and integrated or interdisciplinary curriculum or instruction, are four terms that are used often, and which mean the same thing. For the purposes of this study, all four of these terms will represent interdisciplinary arts. A clear definition is needed, and is provided. Ellis and Fouts (2001) defined interdisciplinary or integrated curriculum as such; whereas, “An interdisciplinary curriculum is aimed at helping students to find connections between subjects and to use different ways of knowing” (p. 22). They further connected the roots of the theoretical constructs of interdisciplinary learning to the progressive educational
philosophy of Dewey. Thus, Dewey (1934) wrote, regarding arts integration and integrated arts:

Only the psychology that has separate things which in reality belong together holds that scientists and philosophers think while poets and painters follow their feelings. In both, and to the same extent in the degree in which they are of comparable rank, there is emotionalized thinking, and there are feelings whose substance consists of appreciated meanings or ideas. ... Thinking directly in terms of colors, tones, images, is a different operation technically from thinking in words... There are values and meanings that can be expressed only by immediately visible and audible qualities, and to ask what they mean in the sense of something that can be put into words is to deny their distinctive existence. (pp. 73-4)

Thus, the interdisciplinary model used in this study involved using creative 
dramatics to increase vocabulary achievement; and reflects the definition of Ellis and Fouts (2001), regarding student connections through different ways of knowing. Another definition for this type of teaching is commonly referred to as interdisciplinary or integrated teaching; whereas, one subject specifically focuses on benefitting the other. Further, Bresler (1995) defined interdisciplinary instruction as “maintaining traditional subject boundaries while aligning content and concepts from one discipline with those of another” (p. 31).

The study design included student participants learning the vocabulary words for the required language arts unit of study through the experience of two creative 
dramatics treatment interventions. Each treatment intervention was designed to provide
interdisciplinary creative dramatics learning experiences while teaching vocabulary words, and to improve vocabulary achievement. Although the state learning standards for both creative dramatics and language arts were taught through the treatment interventions, only the vocabulary achievement of the students was assessed over the course of this present study pretest-posttest control group design.

Thus, Fogarty (1991) further defined this narrowly focused type of interdisciplinary teaching and learning strategy as the shared model. She wrote, “The shared model views the curriculum through binoculars, bringing two distinct disciplines together into a single focused image. Using overlapping concepts as organizing elements, this model involves shared planning or teaching in two disciplines” (Fogarty, 1991, p. 62). Additionally, Russell-Bowie (2009) referred to this model of arts integration as a “service connections” model or “one subject servicing learning in another subject” (p. 5). Brophy and Alleman (1991) referred to this type of model as one where the outcomes of one subject are promoted at the expense of the other, such as in this study; whereas, the outcomes of vocabulary achievement are promoted at the expense of the creative dramatics. This view is further researched and reported in the Dana Consortium Report on Arts and Cognition: Learning, Arts, and the Brain (Gazzaniga, 2008).

The research regarding arts integration during the school day is prolific (Burnaford, Brown, Doherty, & McLaughlin, 2007; Deasy 2002; Stevenson, 2006; Stevenson & Deasy, 2005). Additional references that discuss the educational implications that arts integration and interdisciplinary arts education present for learners; as well as espouse similar positions as the aforementioned, are included in this literature
The Debates for and against Interdisciplinary Arts or Arts in the Content Areas or Arts Integration

Winner and Hetland (2000) cautioned educational researchers, leaders, and teachers in their introduction to The Journal of Aesthetic Education’s special issue: The Arts and Academic Achievement: What the Evidence Shows, warning educators,

The arts are important in their own right and should be justified in terms of the important and unique kinds of learning that arise from the study of the arts. We should not expect more, in terms of transfer, from the arts than we expect from other disciplines. We do not justify the presence of mathematics education by whether such study leads to stronger skills in English or Latin; nor should we justify the presence of arts education by whether such study leads to stronger skills in traditional academic areas. (p. 7)

Nonetheless, Winner and Hetland (2000) encouraged the study of possible transfer and causal effects – such as this study – as, “Important for what it can tell us about how the mind works and how skills are or are not related in the brain” (p. 7). Further, they wrote, as this study examines, that such research studies are important for any effects that may be found that would benefit teaching and learning (Winner & Hetland, 2000).

Additionally, and in support of the aforementioned argument, Cramer, Ortlieb, and Cheek (2007) wrote, “Drama is a verb for learning and the key to making curriculum connect in an eclectic educational system. Words do not always transfer across cultures and experiential backgrounds, but expression does” (p. 35).
Is there adequate support for interdisciplinary arts education from arts educators and classroom educators? Donmoyer (1995) provided a valid and visionary argument made by arts specialists in dance, music, theatre, and visual arts, regarding some negative outcomes of ‘just anyone’ being able to teach the arts. Donmoyer (1995) stressed that arts educators, who are specialists in their arts subject area domains; argue, and with valid concern, that interdisciplinary arts would allow for the arts to be taught by certified teachers with little – if any – arts experience or training. Further, if every teacher could be a teacher of the arts, school district administrations might be inclined to eliminate arts specialists’ positions in favor of classroom generalists providing the instruction (of which they are certified to teach). Consequently, Donmoyer (1995) envisioned that the time provisions in elementary teacher contracts currently being met by dance, music, theatre, and visual arts specialists, would be met by science, or math, or other subject areas that classroom teachers felt less qualified to teach than in the arts. Nonetheless, Donmoyer (1995) stressed that,

Although the possibilities alluded to are real, I, for one, am willing to press ahead and make the case for integrating the arts by using them – along with other forms of symbolization – as modes of learning and methods of teaching. (p. 9)

Interestingly, Donmoyer (1995) was correct in his predictions of what could happen if and when arts integration and interdisciplinary arts became a possibility for schools and districts. Noteworthy, was the onset of NCLB/ESEA (USDOE, 2002) and its mandates to ensure that the arts were taught by ‘highly qualified and certified instructors’, which included certified specialists in the four arts disciplines, as well as certified kindergarten through grade eight classroom teachers. The key piece in
NCLB/ESEA (USDOE, 2002) that assisted arts specialists in states where arts subjects were clearly defined, such as Washington State, was the mandate that any teacher of a core subject area (of which the arts are defined in Washington State) had to be highly qualified and certified by specific endorsements for the core subject areas being taught. Thus, the national law provided students and parents with the confidence that the teachers who were teaching a core subject, such as the arts (dance, music, theatre, and visual arts), were trained in and had passed endorsement competency testing in the core subject matter being taught. The expected result was that districts, school administration, parents, teachers, and students could be confident that those teachers teaching core subjects knew how to teach the subject they were assigned to teach, with competence, as well as with the expected experience and teaching pedagogy skills to inspire students to learn the subject. Specifically, states (such as Washington) had to create and provide endorsement competency criteria and expectations, with accompanying assessment exams, for teacher endorsement competencies for dance, music, theatre, and visual arts, in order for teachers to be considered “highly qualified” per the NCLB/ESEA (USDOE, 2002).

Hence, in 2007, the six endorsement competencies for the arts – dance, music (choral, general, and instrumental), theatre arts, and visual arts were reviewed and updated, to align with the developing Washington State arts learning standards, and the Washington State arts performance assessments for grades pre-school through 12. These six endorsement competency areas were revised 2013 (PESB, 2014). Further, the endorsement competency for the Elementary Education Endorsement Competencies – Grades K-8, was revised and approved by the Professional Educator Standards Board in
2007, and also updated and approved in 2014 (PESB, 2014) to include competencies and skills in all four arts disciplines (see Appendix A), and in alignment with the Washington State K-12 Arts Learning Standards (OSPI, 2011a). The seven aforementioned and updated endorsement competencies for 2013 and 2014 can be found at: http://program.pesb.wa.gov/endorsements/list.

Requiring endorsement competencies and highly qualified status for teachers posed as many difficulties as it did possibilities. Regardless, the goal to provide the best possible instructional opportunities for students, via highly qualified and certified teachers, was and is a common vision that supports this requirement as an effective mandate of NCLB/ESEA (USDOE, 2002). Further, this mandate envisioned possibility to increase student achievement and provide equal access to learners through quality instruction. However, the concern for arts educators remains, insomuch as generalist educators, as well as educators with advanced degrees in such areas as interdisciplinary arts, curriculum integration, and arts integration, may or may not have any specific training in or coursework in arts education methodology or experience; or, at best, limited training, such as one arts methods class with instruction in each arts discipline for a week, as provided in a course on integrated arts instruction, or arts education methods, as a requirement for the degree.

Although the debate exists and presents unique issues in schools, the answer to the question as to whether there is support for arts integration, interdisciplinary arts, and integrated arts instruction in elementary and secondary school is “yes” and “maybe.” The evidence presented in this chapter regarding correlation to academic achievement, albeit difficult to replicate or generalize, is present. The fact remains that generalist educators
are certified and highly qualified to teach the arts, and are expected to teach the arts as a core and academic subject as in the case of reading, writing, mathematics, science, social studies, health and fitness, and communication, per BEA (WSL, 1993). Further, the arts are to be taught in alignment with the *Washington State K-12 Arts Learning Standards* (OSPI, 2011a).

Student participants (at the study school site) received weekly instruction from a specialist in music, quarterly instruction from a specialist in visual arts, and weekly integrated dance instruction, provided by a specialist in physical education. The *creative dramatics* instruction component was a missing piece of instruction (at the study school site). Consequently, *creative dramatics* treatment interventions for the participants in this study were taught by the classroom teachers. Therefore, the study provided a missing curricular link for the students and teachers (at the study school site) through the practice of arts integration, and in compliance with state mandates and expectations for the generalist classroom teachers. The willingness of the teachers and students to participate was exhibited with enthusiasm (Patrick, Hisley, Kempler, & College, 2000). Further, the study focus regarding the integration of *creative dramatics* with language arts follows a pathway of national research; whereas, *creative dramatics* integration with language arts supports the *Common Core State Standards* (NGA & CCSSO, 2010) regarding recommendation for such integration practices (Robelen, 2012). Additionally, the *creative dramatics* interventions, and the interdisciplinary approach for academic achievement in vocabulary achievement support the 21 Century Skills framework for preparation for students for their personal and professional life and work (Partnership for 21st Century Skills, 2004).
Empirical Studies of Creative Dramatics: Meta-Analyses and Experimental Designs: Drawing Singular Conclusions from Large Groups of Studies

Empirical research utilizing creative dramatics constructs to language arts has been studied extensively since 1950 (Conard, 1992; Kardash & Wright, 1987; Mages, 2008; Podlozny, 2000, 2001; Vitz, 1983; Wagner, 1998; Winner & Cooper, 2000; Winner & Hetland, 2000, 2001a, 2001b, 2002). As referenced throughout this study, the lack of a consistent structure has beset the statistically significant studies that provide evidence to the claim that creative dramatics does improve the verbal abilities of students. In fact, there is statistical evidence that creative dramatics does improve the academic achievement in verbal abilities – in every area except vocabulary achievement (Podlozny, 2000, 2001).

Explicitly, studies regarding the examination of the causal effects of the use of creative dramatics to strengthen vocabulary achievement in the upper elementary grades, during the school day, and with the treatments being administered by the classroom teacher, are absent in the literature regarding this focus. Confirmations to this statement are validated in the meta-analyses of the following: (Conard, 1992; Kardash & Wright, 1987; Mages, 2008; Podlozny, 2000; Vitz, 1983). Further, Podlozny (2000) reported that she found only 10 studies that qualified for her meta-analysis regarding this specific examination.

Nonetheless, while the necessity for more clarity in the definitions of creative dramatics studies and the precise methodology used in the studies examined and included in the meta-analyses remain ambiguous, the enthusiasm to examine the connections between creative dramatics and language and verbal abilities remains. The studies that
provide the foundation for this examination and which are cited throughout follow
(Benoit, 2003; Chappell & Chainman-Taylor, 2013; Conard, 1992; Dansky, 1980;
DuPont, 1992; Galda, 1982; Gray, 1987; Kardash & Wright, 1987; Mages, 2008; Massey
& Koziol, 1978; McMaster, 1998; Moore & Caldwell, 1993; Pellegrino, 1984; Pellegrino

Criteria for the literature review inclusion of studies with creative dramatics
and language arts connections. Similar to Mages (2008), this study examined a review
of studies that focused on the creative dramatics aspects and constructs of teaching and
learning, and not on students presenting a ‘play’ or going to the ‘theatre’. Additionally,
this study was concerned with creative dramatics treatment interventions that occurred
during the regular school day. Further, the two different creative dramatics treatment
interventions, employed in this study, were integrated within the language arts class, and
taught by the regular education certificated teachers. Specifically, the two different
creative dramatics treatment interventions were integrated with the instruction of the
adult authored stories and vocabulary words of the district required curriculum. Mages
(2008) referred to this type of design as “Story-Based Improvisation” (p. 132). She
further defined this form of drama research, and wrote, “Stories are read or told to the
participants. Then the participants are invited to enact dramas based on the stories that
they have heard” (p. 133).

Additionally, the following meta-analyses and studies were conducted from 1987
to 2008, examining the effects of creative dramatics and academic achievement in
elementary students, and covering studies beginning in 1960. Mages (2008) also cited
Kardash and Wright (1987), and noted that their reasoning for selecting studies after 1960
was a strategy to ensure the inclusion of the most comprehensive set of relevant studies, within a span of more than four decades, that investigated drama’s effect on academic outcomes, such as language development.

Interestingly, all of the following meta-analyses and studies reported statistical significance with regards to the use of classroom drama and verbal skills (Conard, 1992; Dansky, 1980; DuPont, 1992; Galda, 1982; Gray, 1987; Kardashian & Wright, 1987; Mages, 2008; Massey & Koziol, 1978; Pellegrino, 1984; Pellegrino & Galda, 1982; Podlozny, 2000; Vitz, 1983, 1984; Wagner, 1998). However, and unfortunately, there were no studies presented by any of those reported in this literature review which provided clear details for possible replication. Indeed, the research is fraught with inconsistencies and requirements that would not allow for replication, as has been referenced throughout these chapters. Studies included costly research grants, or funding, that would require difficult, if not unattainable replication with the education requirements of the present local, state, and federal mandates, and within the constructs of the school day.

The need for such a study as this study, to conceivably add evidence in the reported gap in the empirical research regarding the causal effects of creative dramatics on vocabulary achievement, and provide prospect of replication, was a goal of this study. Albeit difficult to conduct such a study, the effort and intention were worth the challenge, of which the results will reveal. The rationale, theory, declaration, and recommendations for such research and support from previous researchers provided a strong foundation to move forward with an empirical design containing strict controls and design toward a pathway for future replication (Benoit, 2003; Conard, 1992; Dansky, 1980; DuPont, 1992; Galda, 1982; Gray, 1987; Kardashian & Wright, 1987; Mages, 2008; Massey &
Interestingly, Duffelmeyer and Duffelmeyer (1979) noted that teaching vocabulary through experience and *creative dramatics* has been used as an effective strategy of foreign language teachers, in order to assist students in understanding the language and as an improvement over verbalization of the words in isolation. Therefore, they stressed, “An effective medium for vocabulary instruction is dramatization. Dramatization helps clarify the meanings of words by indicating experiences associated with them” (p. 59). Additionally, Himmele and Himmele (2011) wrote, “Vocabulary also lends itself well to drama. Words produce images. Even fuzzy words, like *ambiguous*, that are hard to define, may be great to act out using facial expressions and body motions” (p. 72). Further, Zull (2002) validated making the learning physical through the use of *creative dramatics* and *visual arts* by writing, “Language isn’t the only way we test our ideas, of course. We may act them out, we may show them in gestures, or we may make drawing of plans or images” (p. 208).

Therefore, to connect this study literature review and advance the need for such a study regarding the effects of *creative dramatics* interventions to strengthen vocabulary achievement of fourth grade students in a language arts classroom, it is necessary to reiterate the following seminal meta-analysis of Podlozny (2000) regarding *classroom drama* and verbal ability. This specific *Project Zero* review, entitled *The Arts and Academic Achievement: What the Evidence Shows*, appeared in an invited double issue of *The Journal of Aesthetic Education*, published in the fall of 2000, and was edited by Ellen Winner and Lois Hetland. The magnitude of this review summarized all of the
research the team of researchers could find, at the time, from 1950 – 1999, regarding the
correlations with and through the arts and academic achievement. Winner and Hetland
(2001a, 2001b) stressed the value of verbal skill and vocabulary achievement and; futher, acknowledged the meta-analysis of empirical studies about drama education conducted by Podlozny (2000) as significant. Similar to this study’s investigation, Podlozny (2000) posed the research question for her meta-analysis, asking, “Does classroom drama help children develop verbal ability?” (p. 239). Podlozny (2000) reported the following, “The results of the seven meta analyses [107 studies reduced to 80] show clearly that the answer is yes. Drama instruction has a positive, robust effect on the range of verbal outcomes” (Podlozny, p. 264). Further, Podlozny (2000) wrote,

The results of these meta-analyses are very encouraging for educators who wish
to use drama in the classroom to promote deeper learning in a variety of verbal
domains. Clearly, drama is an effective tool for increasing achievement in story understanding, reading, achievement, reading readiness and writing. (p. 268)

Indeed, Rose and Parks (Rabkin, 2002), when referring to the findings from Podlozny (2000), summarized, “The primary effects researchers found [Podlozny (2000)] were related to drama’s impact on verbal ability” (7). Podlozny (2001) restated her original report regarding the seven verbal outcomes which were reviewed in the aforementioned meta-analysis (Podlozny, 2000), and summarized, “Results showed that classroom drama had a positive, robust effect on six of the seven verbal outcomes examined here” (p. 103). Regarding the purpose, significance, and contributions that this present study could possibly reveal, Podlozny (2001) further wrote,
Vocabulary appeared to be enhanced by drama as well (mean weighted $r = .14$). However, this latter effect size, unlike the other six, was not statistically significant (the 95% confidence interval for this effect spanned zero). Hence research has not as yet demonstrated a reliable relationship between drama instruction and vocabulary development. (p. 104)

Consequently, Podlozny (2001) encouraged future researchers to further examine the possibilities of a reliable relationship between drama instruction and vocabulary development and expressed the need for such studies. Podlozny’s research and encouragement provided impetus for the specificities, design, and methods of this study. Further, Podlozny (2000) stressed the lack of replication studies conducted within the field of *creative-drama* research due to missing information. Interestingly, Mages (2008) stressed the lack of studies that could be replicated due to methodological flaws, as well.

Two of the meta-analyses used in Podlozny’s (2000) report, one by Kardash and Wright (1987) and one by Conard (1992) are further discussed in this study. Reviews of the empirical literature of Vitz (1983) as well as the meta-analysis of Mages (2008) are also discussed. Additionally, individual empirical studies consistently sighted in the literature that are relevant to this study will be referenced, including a study by Benoit (2003). Results derived from the aforementioned five meta-analyses, as well as their recommendations are reported.

Kardash and Wright (1987), in their meta-analysis addressing the question “Does Creative Drama Benefit Elementary School Students?” reported the need for more detailed documentation of study and sample characteristics; specifically describing the experimental treatment(s) and control group treatments. Their meta-analysis consisted of
only two journal articles and 14 dissertations produced between 1965 and September, 1984 (p. 12). Kardash and Wright (1987) cited the following recommendations for future research, which included: clearly describing the creative drama treatment(s), how long each treatment lasted, and the number of treatment sessions per week. Additionally, Kardash and Wright (1987), in describing the studies examined in their meta-analysis reported that 75% of the studies used a control group; however, researchers failed to describe the types of activities that were provided to students in this group. Further, they cautioned that without this type of specific documentation, it is not possible to determine whether the positive effects associated with participation in creative drama were due to specific aspects of the drama treatment, or to a Hawthorne effect (p. 17).

Further summarizing the conclusions of Kardash and Wright (1987), they recommended that future studies provide: (1) a detailed reporting of exactly what was done; (2) describe how behavior was measured; (3) increase sample size in treatment groups to greater than 16; and (4) create classroom groups that would provide generalizability for replication (p. 17). Additionally, Kardash and Wright (1987) recommended studies that investigated the effectiveness of creative drama as a function of who implements the treatment, with specific details about who provided the intervention treatment to the students, such as a trained specialist, or a classroom teacher, and specifically whether the effects are tempered by teachers’ years of classroom experience. Finally, Kardash and Wright (1987) encouraged a major effort to be made to publish the research of graduate students with creditable studies as well as research conducted by professionals not bound by the constraints of graduate school (pp. 17-8).
Podlozny (2000) conducted one of the most widely reported meta-analyses examining the effect of classroom drama and including 80 studies – 10 of which were focused on vocabulary achievement. Podlozny’s (2000) meta-analysis included the results of seven meta-analyses on seven verbal outcomes. The seven verbal outcomes that were examined included were: “(1) story understanding (oral measures); (2) story understanding (written measures); (3) reading achievement; (4) reading readiness; (5) oral language development; (6) vocabulary; and (7) writing” (p. 241). Regarding the need for this present study, Podlozny (2001) wrote, “A statistically significant link between vocabulary achievement and classroom drama was the only area of the seven outcomes investigated that did not provide statistical significance” (p. 104).

Podlozny (2000) noted that she found the research regarding the various cognitive effects of drama in childhood reported primarily positive results. Further, she reported, “Despite this consistency in findings, however; the empirical literature on this topic is beset with several weaknesses” (p. 239). Summarizing the results, Podlozny (2000) cited these weaknesses as: (1) very little conversation among researchers; (2) rare replication of studies; (3) inconsistency of measures; (4) a range from “excellent” to “poor” regarding the methodology and reposting of results; and (5) unclear or no set (or consistent) definitions (across studies), regarding the labels used for “drama” (i.e., sociodrama, creative dramatics, thematic fantasy play), especially in the research with young children (p. 239).

Eight years prior to Podlozny’s study, Conard (1992) used 20 studies in her analysis. She listed five recommendations for future researchers:
(1) Researchers should be encouraged to report quantitative data, especially descriptive statistics; (2) creative drama studies should include detailed documentation of exactly what was done, how it was done, and how the effects were measured; (3) detailed reporting of study characteristics would facilitate research synthesis; (4) studies that do not show statistical significance should be considered for publication; and (5) creative dramatics should be included in the core curriculum at the elementary level. (p. 67)

A decade later, Benoit (2003) found significance in favor of a treatment group who studied United States History using creative dramatics. Benoit (2003) worked with 73 fourth and fifth graders in a rural and remote school district, and personally provided the intervention treatment to the creative dramatics group. The students received 40 minutes a day of creative dramatics instruction for three weeks. Additionally, Benoit (2003) developed the criterion-referenced multiple choice posttest that was also used as the retention test. After a retention test was conducted five weeks after the study, Benoit reported:

It would appear, therefore, that when students act out history lessons, they score higher on a comprehension test than groups that studied history using the traditional curriculum at least initially. However, this investigation did not yield evidence that they retain the material better than the other groups when tested a second time five weeks later. (pp. 70-1)

Benoit (2003) wrote that limitations to her quasi-experimental study included unequal and non-randomized groups, causing threats to the internal and external validity, as well as the specific criterion-referenced test measuring the lessons that she developed,
and not measuring a required course of study. Further, a limitation and threat to the validity and reliability was Benoit (2003) providing the treatment to the experimental group. She cautioned future researchers to account for such limitations if thinking of conducting studies for replication (Benoit, 2003).

Hetland (1999) also cautioned future researchers in her methodological review of the popular Mozart effect. Summarizing, Hetland (1999) stressed that it would be poor judgment, and lacking in wisdom to base decisions about educational programming on the findings of studies that fail to eliminate alternative hypotheses or, in her words, “fail to clearly define the nature, measurement, and scope of the interventions and outcomes” (p. 2).

**Arts as “Process” versus Arts as “Product”**

Conard (1992) made a clear distinction between the arts as “process” versus the arts as “product”, putting the responsibility on the educational system as the entity that determines the purpose of arts learning for students. She emphasized the difference between the two by providing definition for distinction for educators, policy makers, and researchers. Conard (1992) wrote, “The arts as “product” places the arts in the performance and entertainment realm, categorized largely as the affective domain” (p. 2). Further, she wrote, “The arts as “process” represents a form of using the arts as a framework or medium for learning and promotes a view of the arts as cognitive” (Conard, 1992, p. 2). Additionally, Conard (1992) stressed, “Drama as a vehicle for learning integrates and incorporates all the components of language arts. It provides students with the opportunity to express themselves spontaneously in a variety of situations, and can function as a tool for cognitive development” (p. 25); thus, connecting
the use of *creative dramatics* to the state of Washington definition and focus of the arts as “process” for this study (OSPI, 2011d). Consequently, Conard (1992) noted, “Classroom drama is multidimensional thus requiring the use of the affective, cognitive, and psychomotor domains” (p. 26).

Specifically, Conrad’s (1992) reference to the affective, cognitive, and psychomotor domains provided a clear connection to the philosophical and theoretical underpinnings regarding the artistic processes of creating, performing, and responding discussed in this chapter. The artistic processes of creating, performing or presenting, and responding are inherent in all four arts disciplines (dance, music, theatre, and visual arts) which includes *creative dramatics* instruction, and; therefore, provide the foundational constructs of this study with the arts taught as a “process” to meet the affective, cognitive, and psychomotor domains discussed in this chapter. Conard (1992) further stressed,

The arts as “process” is the model that has fostered the learning-through-the-arts concept. Since both the affective and cognitive domains are essential for human development, using the arts as a catalyst for teaching other disciplines promotes a blending of the intellect and the emotions. (p. 2)

Zull (2002) restated this amalgamation by ascertaining in his theory that learning in and through the arts is an emotional state of learning.

**Arts Education in Public Elementary Schools: 1999-2000 and 2009-2010**

Currently, the re-authorization of the United States Department of Education *No Child Left Behind Elementary and Secondary Education Act* and legislation described arts education as “essential to every child’s education,” and includes the arts (dance,
music, theatre, and visual arts) as one area of the *core subjects* (USDOE, 2002). Yet, with the focus on accountability for states, school districts, and schools to strive for and ensure that all students meet (be proficient) in state and national standards in reading and mathematics by 2014; the result of high-stakes testing in the areas of reading, language arts, and mathematics has negatively impacted and diminished, and in many states, eliminated some, if not all, arts instruction from schools across America (Gagging & Brent, 2010). Lehman (2012) summarized this dilemma and wrote, “A single-minded emphasis on the few subjects to be tested has often tended to distort the curriculum by squeezing out the arts and humanities, thus undermining the balance that has traditionally characterized American education” (p. 29).

**Fast response survey system (FRSS).** In efforts to measure the effect of the *No Child Left Behind Elementary and Secondary Education Act* (USDOE, 2002), the *Fast Response Survey System* (FRSS) conducted a national survey in the fall of 2009, regarding how much instruction is being offered in dance, music, theatre, and visual arts in elementary and secondary education across America and conducted by the *United States Department of Education, National Center for Educational Statistics, Fast Response Survey System* (FRSS) report for 2009-2010 (USDOE, 2010). This report was compared with similar data collected in the 1999-2000 school year (USDOE, 2010). Further, the surveys included elementary and secondary schools, elementary and secondary school arts specialists, and elementary school classroom teachers. Interestingly, of the 1,802 sampled elementary schools, the following was reported regarding the availability of arts education in the 2009-2010 school year.
Consequently, Indicator 30 of the United States Department of Education, National Center for Educational Statistics, Fast Response Survey System (FRSS) report for 2009-2010 (USDOE, 2010) is presented in this study, to provide further rationale and context of the need to show the importance of creative dramatics at the elementary level as an essential, core, basic, and academic subject area for all learners (Parsad & Spiegelman, 2012). Indicator 30 measured the availability of drama and (or) theatre education, and follows:

**FRSS 2009-2010 Results Indicator 30: Availability of Drama/Theatre**

**Education.** In the 2009–10 school year, 4 percent of public elementary schools offered instruction that was designated specifically for drama/theatre during regular school hours. This percentage represents a decrease from 1999–2000, when 20 percent of elementary schools offered the subject during regular school hours. Elementary schools also provided information on the ways in which drama/theatre was incorporated into other subject areas. Schools could report more than one method of incorporating drama/theatre into their program of study. In the 2009–10 school year, 29 percent of elementary schools taught drama/theatre as part of their English or language arts curriculum, and 30 percent reported this approach to teaching drama/theatre in 1999–2000. In addition, 46 percent of elementary schools indicated that drama/theatre activities were integrated into other curriculum areas in 2009–10. The percentage of elementary schools that integrated drama/theatre activities into other curriculum areas differed by poverty concentration, with 39 percent of schools with the highest poverty concentration reporting this approach to teaching the subject compared
with 50 percent and 59 percent of schools with the two lowest poverty concentrations. (p. 46-7)

The significance regarding the need for this study is evidenced from the results of the FRSS data. Although Washington State teachers were invited to be a part of the FRSS survey, the responses are not quantifiable by state. Specifically, the data regarding the percentage of schools that receive drama instruction in schools in the United States have been significantly reduced over the last decade; whereas, only four percent of the 1,802 schools surveyed offered drama or theatre instruction in 2009-2010, which represents a decrease from 20 percent in 1999-2000, for a total decrease in instruction in drama or theatre of 16 percent of the schools surveyed in the past decade. Further, 29 percent of elementary schools taught drama or theatre as part of their English or language arts curriculum, and 30 percent reported this approach to teaching drama/theatre in 1999–2000. In addition, 46 percent of elementary schools indicated that drama/theatre activities were integrated into other curriculum areas in 2009–2010. According to a report by Parsad and Spiegelman (2012) high poverty schools averaged lower and higher, percentages, depending upon the poverty level (p. 46-7).

The fact that 29 to 46 percent of the elementary schools who responded indicated that drama and theatre activities were integrated into either their English or language arts curriculum, as well as other curriculum areas, provides confidence for the possibility of more creative dramatics instruction in the future, specifically in the area of integrating creative dramatics, drama, or theatre instruction with language arts instruction. Further, this present study provides statistically significant data to support this aim.
Conclusion

Replication specifics. This present study is replicable, which will be further detailed and explained in Chapters Three, Four, and Five. The specifics of this study for possible replication include: (a) embedding creative dramatics with the district adopted language arts curriculum, on a daily basis, for at least five weeks of school; (b) training and utilizing the classroom teachers to provide the creative dramatics treatment interventions; (c) allowing for approximately one hour a week of sustained and standards based creative dramatics instructional activities, which included at least 15-20 minutes of creative dramatics treatment interventions per day, provided during the language arts period, and for 17 consecutive school days; and (d) utilizing a pretest-posttest control group experimental design study with randomization of all students of an entire grade level and of all of the teachers in that grade level. Additional replication specifications include: (e) creative dramatics treatment interventions provided through two different creative dramatics treatment interventions; (f) creative dramatics treatment interventions taught to the classroom teachers by the researcher, who was also the investigator in this study; as well as a certified arts education specialist in all four arts disciplines; and (g) the creation of a teacher and researcher developed criterion-referenced test measuring a district adopted unit of study in the language arts basal. The dependent variable teacher-researcher designed criterion-referenced test was designed to assess only the vocabulary words that would be covered in the specific unit of study (four stories), which included only those 31 vocabulary words. The detailed specifics for the methods of the study are further detailed and explained in Chapter Three.
The specific focus on *creative dramatics* research was conducted to provide opportunity to establish a line of research and pathway for replication and generalizability, and to address a gap in the research literature regarding the causal effects of the use of *creative dramatics* to strengthen vocabulary achievement. The attempts of this investigation clearly define the nature, measurement, and scope of the interventions and outcomes (Hetland, 1999); whereas, the specific details regarding this study are provided throughout the literature review, dissertation chapters, and appendices.

**Summary of literature review.** Finally and as previously reported in this study, there is a dearth of empirical evidence that reveals causal effects of the use of *creative dramatics* to strengthen vocabulary achievement. Previous empirical studies that would provide possibility for replication are ambiguous in nature; an issue that has been referenced by previous researchers, and specifically cited in this chapter (Mages, 2008; Podlozny, 2000, 2001; Winner & Hetland, 2000, 2001a, 2001b, 2002). The lack of replication possibilities or a current pathway of empirical research in the area of study regarding causal effects of the use of *creative dramatics* to strengthen vocabulary achievement presents a gap in the research. Therefore, this study provides a pathway addressing this research gap via an empirical design. An experimental design format was employed to be conducted during the school day and with classroom teachers in one grade level. District adopted curriculum and state adopted standards were incorporated and aligned with national standards and 21st century skills. The incorporation of the recommendations from the studies and meta-analyses of previous researchers who examined these essential academic subject areas of study – *creative dramatics* and vocabulary achievement – are evident and have been presented in this chapter. Further,
this study includes a clear and consistent list of terms and definitions to clarify the constructs of the research investigation (Benoit, 2003; Conard, 1992; DuPont, 1992; Kardash & Wright, 1987; Mages, 2008; Podlozny, 2000; Vitz, 1983; Wagner, 1998).

Therefore, the terminology used throughout this document follows that given in the Washington State K-12 Arts Learning Standards (OSPI, 2011a); as well as the Washington State K-12 Options for Implementing the Arts Standards through Dance by Grade Level (OSPI, 2011b); the Washington State K-12 Options for Implementing the Arts Standards through Music by Grade Level (OSPI, 2011c); the Washington State K-12 Options for Implementing the Arts Standards through Theatre by Grade Level (OSPI, 2011d); and the Washington State K-12 Options for Implementing the Arts Standards through Visual Arts by Grade Level (OSPI, 2011e), as well as specifically cited definitions from cited sources which describe the constructs of this present creative dramatics investigation regarding causal implications for vocabulary achievement.

The declaration for such an empirical pathway regarding causal effects of the use of creative dramatics to strengthen language arts, as well as vocabulary achievement, has spanned the research since 1950. The use of mixed methods research has also been encouraged, although not specifically examined in this study (Conard, 1992; DuPont, 1992; Kardash & Wright, 1987; Mages, 2008; Podlozny, 2000; Vitz, 1983; Wagner, 1998; Winner & Hetland, 2000). A replicable, generalizable, and statistically significant relationship was lacking linking creative dramatics and vocabulary achievement at the upper elementary level. Furthermore, there are even fewer studies examining the effects of creative dramatics on vocabulary achievement which have been conducted during the school day – while utilizing the district adopted language arts curriculum – and,
specifically, with the classroom teachers providing the interventions (Conard, 1992; Kardashian & Wright, 1987; Mages, 2008; Massey & Koziol, 1978; Podlozny, 2000, 2001; Vitz, 1983, 1984; Winner et al., 2013a, 2013b; Winner & Hetland, 2000, 2001a, 2001b, 2002).

Specifically, Massey and Koziol (1978), in their review of studies about *creative dramatics*, noted many problems in the research methodologies, some of which have been referenced earlier in this investigation. Massey and Koziol (1978) wrote, “Related problems included ambiguity about the context in which the creative dramatics activities took place and no consistency in the delineating of the role of the teacher or in the sequencing of different activities (p. 91).” Further, Massey and Koziol (1978) cautioned that although *creative dramatics* interventions have shown intermittent academic significance, the methods employed inhibit a pathway of replication and generalizability of empirical research to substantiate the claims above and beyond the initial study which showed statistical significance. Other research reviews, which followed Massey and Koziol (1978), and included (by date) are: Brizendine and Thomas (1982), Vitz (1983), Wagner (1998), Mages (2008), and Winner et al., 2013a, 2013b). Further, research meta-analyses reviewing the effects of *creative dramatics* – cited in this study – and included (by date) are: Kardashian and Wright (1987), Conard (1992), and Podlozny (2000).

The recommendations set forth by these researchers addressed the “on-going” inconsistencies in the studies reviewed and conducted regarding threats to the internal and external validity of the methods employed. Conard (1992) wrote of her meta-analysis results, “The results have not been consistent. While some studies have been empirically sound, methodological problems have plagued other studies” (p. 2). Further,
Conard (1992) detailed the methodological problems she referred to as, “Small sample sizes, questionable inter-rater and test reliabilities, poor design, and low statistical power are factors which can obscure the effects of worthwhile treatment variables” (p. 2).

Nonetheless, the interest for such studies and dissertations, such as this present study, continues. It was the intention of this investigator to design an empirical study that would address the recommendations and concerns of previous investigations; thus providing the possibility of a pathway for generalizability and replication regarding the use of creative dramatics to strengthen the vocabulary achievement of fourth grade students in a language arts classroom.

This literature review and present study are limited to studies that focus on upper elementary children (grades three through six) without any severe mental, emotional, or physical impairment. Further, the literature review in this study does not include studies involving research for dance, music, and visual arts; however, such studies are cited throughout and where appropriate, to support the methods and treatments employed during this study.

Specifically, this study examined the relationship and causal effects of the use of creative dramatics to strengthen the vocabulary achievement in three randomly assigned fourth grade classrooms, which included all student participants who were assigned to receive language arts instruction from regular education teachers in a public school setting. Two randomly fourth grade classrooms experienced different creative dramatics interventions representing the independent variables. One randomly assigned fourth grade classroom was the control classroom. The creative dramatics treatment interventions were designed by and taught to the fourth grade teachers by the study
investigator. The three fourth grade teachers were also randomly assigned and trained in the *creative dramatics* interventions by the study investigator.

Accordingly, and with regards to the educational significance of this study; and in support of the need for the further examination of the causal effects of the use of *creative dramatics* to strengthen vocabulary achievement, McCaslin (1980) wrote, “No activity provides a greater variety of opportunities for learning than *creative dramatics* regardless of the level” (p. 259). Therefore, for the purposes of this study; and as referenced earlier, *creative dramatics* is specifically defined as “a dramatic enactment (led by the teacher) of a story, setting, and/or characters. This is an experiential, process-based activity, not a performance for an audience. The teacher may assume a role” (OSPI, 2011d, p. 133).

The purposes of this study are to show the causal effects of the use of *creative dramatics* to strengthen the vocabulary achievement of fourth grade students in a language arts classroom, addressing this gap in the literature, and providing a reliable and valid pathway for continuous study and replication. These purposes, coupled with this present investigation, are in efforts to support arts education – dance, music, theatre, and visual arts – as core, basic, and academic subjects; as well as, essential, perennial, and cognitive subjects to be taught to all learners, and utilizing *creative dramatics* as the core arts discipline in this examination. Thus, this study postulates that the use of *creative dramatics* contributes to higher levels of vocabulary achievement for fourth grade students in a language arts classroom.

Further, the *creative dramatics* treatments for this study were specifically designed to support the decades of scientific research regarding the five critical areas of effective reading instruction reported as phonemic awareness, phonics, fluency,
vocabulary, and comprehension by the National Institute of Child Health and Human Development (NICHD, 2000). These five constructs of effective reading instruction are inherent in the study treatment interventions, methodology, and methods employed. Consequently, all aspects of this study are intended to promote an established line of research with efforts to create a pathway regarding the causal effects of the use of creative dramatics to strengthen vocabulary achievement; as well as to contribute to develop a paradigm for this line of research for future researchers, including possible replication of this study (Conard, 1992; DuPont, 1992; Kardash & Wright, 1987; Mages, 2008; Podlozny, 2000; Vitz, 1983; Wagner, 1998; Winner, et al., 2013a, 2013b; Winner & Hetland, 2000, 2001a, 2001b, 2002).
Chapter Three

Methodology

Introduction

The purpose of this study was to examine the effects of the use of creative dramatics to strengthen the vocabulary achievement of fourth grade students in a language arts classroom, with an empirical investigation; specifically in an effort to contribute to the examination of the gap in the research literature regarding the effects of the use of creative dramatics and vocabulary achievement. Additionally, this investigation attempted to contribute to the establishment of a pathway for future replication and possible generalization of the study findings.

Validating the need for such a study, Conard (1992) wrote, “…many experimental studies have been done examining the effects of using creative dramatics as an instructional strategy to enhance the acquisition of cognitive skill. The results have not been consistent” (p. 2). Furthermore, in a large body of creative dramatics literature, few experimental studies have narrowed the focus to the effects of the use of creative dramatics interventions on vocabulary achievement (Podlozny, 2000, 2001; Mages, 2008; Winner et al., 2013a, 2013b).

Thus, this chapter describes the methods and procedures of this study that were used to measure the effects of creative dramatics interventions as a process and a cognitive subject. A description of the experimental pretest-posttest control group research design follows, which includes an explanation of the power analysis that was used to determine the sample size. The research design is followed by a description of the two experimental groups and the control group; as well as the treatment interventions
employed by the teachers, so as to clearly present how the mechanics of the study were taught and implemented. Then, a description of the study schedule is present. This section is followed by a description of the 83 student participants, including narrative details and tables showing the academic “at-risk” factors of the study student sample from a Learning Assistance Program (LAP) reading and math school. This section is followed by the random assignment process of the students and the teachers. Next, instrumentation section is delineated, including the presentation of the dependent variable validity and reliability. Next, the program evaluation component is detailed – regarding the use of the district adopted language arts curriculum in this study – as it was a critical aspect for approval to conduct the present investigation in the study school district and school. Next, the setting and description of the school and district, as well as the study logistics are detailed. The procedures and apparatus follow, including descriptions regarding the materials, interventions, resources, lesson plans, teacher training, necessary paperwork, investigator presence, treatment fidelity, and teacher experience. This section is followed by the school and district schedule, including the amount of *creative dramatics* interventions employed, testing protocols, representative design, and internal and external validity controls. Finally, the data analysis, and the limitations and delimitations are presented; followed by a chapter summary. This chapter provides the context and the actual research steps that were taken, and serves as a reference point for the reporting of the study results presented in Chapter Four.

**Creative dramatics instruction as “process”**. The foundational construct of this study provides instruction in *creative dramatics* utilizing the definition of the arts as “process” and cognitive in nature; further recognizing instruction in *creative dramatics* as
a core, academic, and basic subject area for all learners. Conard (1992) validated this viewpoint, and wrote, “The arts as “process” represents a form of using the arts as a framework or medium for learning and promotes a view of the arts as cognitive” (p. 2). Consequently, the study investigator included the constructs for creative dramatics as a “process” in the design structure for a pretest-posttest control-group design experimental study; and created a replicable eight-step process for possible replication and generalizability, which follows. The affective and psychomotor constructs of creative dramatics were inherent in the structure of the experiment and necessary to human development; however, were not measured.

**Eight-step methodology for creative dramatics research.** The following Eight-step Methodology for Creative Dramatics Research was designed by the present study investigator which addresses many of the key recommendations of earlier investigations and provides clarification regarding all aspects of the present study pretest-posttest control group design experiment. The eight steps of the present study empirical design include: (1) creative dramatics interventions taught in a public school setting and during the school day, for 15-20 minutes per day; (2) creative dramatics interventions provided to all of the students in one specific grade level (fourth grade), and in one specific school; (3) creative dramatics interventions integrated into the school and district adopted language arts curriculum; specifically one unit of study covering four stories; (4) creative dramatics interventions aligned to Washington State arts and reading standards, and further aligned to the national common core state standards – with clear definitions of study constructs; (5) creative dramatics training for the classroom teachers, utilizing methodologies and learning constructs included in the state education arts and reading
learning standards, and enhancing to the district language arts curriculum; (6) *creative dramatics* interventions taught to the classroom teachers by the study investigator (who was a certificated arts education specialist and administrator); (7) *creative dramatics* intervention training for teachers that occurred within the confines of the school contractual agreements; and which required one hour or less of individual teacher time for training; and further provided within two days prior to the commencement of the study (to control for internal and external threats to the study); and (8) *creative dramatics* interventions provided to the randomly assigned student participants by the randomly assigned classroom teacher participants.

Thus, this study was an attempt to address the research gaps regarding the recommendations of previous researchers calling for a clear pathway for replication and involving a quantitative study design. Those recommendations, as referenced in Chapter Two, were incorporated into the study methodology and design, and are repeated in this chapter.

**Research Design**

This investigation of *creative dramatics* instruction and its effects upon the vocabulary achievement of fourth grade students in a language arts classroom consisted of a 20-day study, with a randomized pretest-posttest control-group design and a five-week follow-up retention test (Campbell & Stanley, 1963; Gall et al., 2007). The study lasted for 19 consecutive school days, and during one month of school. The pretest was administered on day one of the study, followed by 17 days of treatment, and followed by the administration of the posttest on day nineteen. The retention test administration
followed after five weeks, which included following the winter holiday vacation, and completed the study with the twentieth day. Table 1 presents a diagram of the study.

Table 1

*Pretest-Posttest Control Group Design*

<table>
<thead>
<tr>
<th>Group</th>
<th>Pretest</th>
<th>Treatment</th>
<th>Posttest</th>
<th>Retention Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>R₁</td>
<td>O₁</td>
<td>X₁</td>
<td>O₂</td>
<td>O₃</td>
</tr>
<tr>
<td>R₂</td>
<td>O₄</td>
<td>X₂</td>
<td>O₅</td>
<td>O₆</td>
</tr>
<tr>
<td>R₃</td>
<td>O₇</td>
<td>Control</td>
<td>O₈</td>
<td>O₉</td>
</tr>
</tbody>
</table>

*(Sources: Campbell & Stanley, 1963, p. 13; Gall et al., 2007, p. 398).*

R₁ = Randomly assigned experimental group I
R₂ = Randomly assigned experimental group II
R₃ = Randomly assigned control group

**Random assignment.** In addition to the random assignment of the 83 student participants involved in this study, the three fourth grade teachers were randomly assigned to one of three groups, per the investigator-designed process, and as referenced earlier in this chapter (refer to Appendices D and E). To further illustrate the research design used in this study, the three randomly assigned groups follow:

- R₁ = randomly assigned Experimental Group I = Creative Dramatics Vocabulary Words (CDVW) = IV₁;
- R₂ = randomly assigned Experimental Group II = Creative Dramatics Story Retelling (CDSR) = IV₂; and
- R₃ = randomly assigned Control Group (CG).

**Dependent variable.** The dependent variable of this study was a teacher and investigator developed criterion-referenced vocabulary test measuring the vocabulary
words and content of four stories covered during the five-week study (see Appendix F). The vocabulary test was designed to measure the 31-vocabulary words included in the school district’s adopted language arts curriculum: *Theme 2: American Stories: Focus on Plays* (Houghton Mifflin Reading, 2005). Raw scores from the three test administrations were used in the data analysis to calculate both the descriptive and inferential data collected. Since the test items were equally weighted, the possible raw scores on the instrument ranged from 0 to 31; thus satisfying the assumption for the use of an interval test for the use of parametric procedures. The same dependent variable teacher-researcher criterion-referenced vocabulary test was used for the pretest, posttest, and retention test administrations, and is discussed further in the instrumentation portion of this chapter (Black & Wiliam, 1998; Holcomb, 1999; McMillan, 2007; Taylor & Nolen, 2005, 2008; Wiggins, 1998; Wiggins & McTighe, 2005).

**Independent variables.** The independent variables referred to in Table 1 as the treatment included two treatment groups. These groups were referred to as: (1) Group One, which represented Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW); whereas, students experienced the use of *creative dramatics* through improvisation of the vocabulary words and vocabulary word definitions to learn the vocabulary words; and (2) Group Two, which represented Experimental Group II – Creative Dramatics and Story Retelling (CDSR); whereas, students experienced the use of *creative dramatics* through improvised story enactments and reenactments to learn the vocabulary words. Further explanation of the two independent variable *creative dramatics* treatment interventions for Experimental Group I and Experimental Group II,
follow; as well as explanation of the district adopted Readers’ theatre strategy experienced by the Control Group. The Control Group was not a comparison group.

**Power analysis.** A power analysis was conducted to determine the number of subjects necessary to detect any effects that might result from the independent variable. Statistical power “refers to the probability that a particular test of statistical significance will lead to rejection of a false null hypothesis” (Gall et al., 2007, p. 143). The use of one-way between groups analysis of variance (ANOVA) was selected for the statistical analysis of the differences in performance of the three groups of student participants and will be further explained in the data analysis section of this chapter, and in detail in Chapter Four. Gall et al. (2007, p. 145) recommend a minimum of 51 subjects for a three group analysis of variance at the significance level of .05. To estimate the statistical power of the pretest-posttest gains, the sample size, level of significance, directionality of a test (two-way), and the effect size were considered in combination (Gall et al., 2007, p. 145). After consideration of these four factors, it was determined that the three fourth grade classrooms at this study school site would provide an adequate participant sample size of $N = 83$ to meet these criteria, in which a $p$ value of .05 would result in statistical power at the .7 level, for a large effect size (Gall et al., 2007, pp. 142-5). Further, the pretest and posttest gains were analyzed with a participant listwise $N = 76$, thus meeting the criteria of at least 51 student participants needed for the possibility of rejecting a false null hypothesis. Next, the pretest-posttest, and five week follow-up retention test were analyzed with a participant listwise $N = 68$, also meeting the criteria sample size of at least 51 student participants to obtain a large effect size at the significance level of 0.05, and resulting in statistical power at the .7 level (Gall et al., 2007).
Therefore, the student participant sample of $N = 83$ for this investigation met the criteria of at least 51 student participants in which a $p$ value of .05 could result in statistical power at the .7 level, or a large enough effect size that would lead to the rejection of a false null hypothesis (Gall et al., 2007, pp. 142-5). Specifically, the student participants $N = 83$ included in the present study represented 100% of the fourth grade students who were enrolled in the regular education fourth grade classrooms who were required to receive instruction in the district adopted language arts curriculum. As referenced earlier in this chapter, two students enrolled after the study began, creating the study $N = 83$. Noteworthy is that no students involved in the study withdrew from the fourth grade during the time-frame of the present study.

**Description of the Three Randomly Assigned Study Groups $N = 83$**

Three fourth grade classrooms in the study school resulted in a student participant $N = 83$. The following three classrooms were randomly assigned as were the three fourth grade teachers (refer to Appendices D and E). The descriptions of these three study groups follows:

**Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW).** The treatment interventions for the Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) included teaching the required vocabulary words with creative dramatics movements, while rhythmically singing and chanting the vocabulary words and their definitions through creative dramatics with pantomime to represent the words. Students copied, echoed, and mirrored the teacher’s movements and rhythm patterns for the vocabulary word syllables initially, as well as initiated movements that could be incorporated by all of the student participants. All students in
Experimental Group One participated in the *creative dramatics* improvisations of each of the 31 vocabulary words and each of the 31 vocabulary word definitions.

**Experimental Group II – Creative Dramatics and Story-retelling (CDSR).**

The treatment interventions for the Experimental Group II – Creative Dramatics and Story-retelling (CDSR) included teaching the required vocabulary words with *creative dramatics* through story retelling enactments (CDSR); whereas, students volunteered or were assigned to enact the story scenes in small groups and stress the vocabulary words in their narrative, as they enacted the scenes in small groups, one-by-one, thus retelling the story through *creative dramatics* improvisation of narrative and actions, and through involvement of every child in the classroom enacting at least one character per story.

**Control Group (CG).** Students in the Control Group (CG) learned the vocabulary words and content (four stories) covered during the five-week study, through following the lesson design of the district required language arts unit, co-created by the three present study teachers. These students read the same story texts as those in the two *creative dramatics* treatment classrooms. These students retold the story, utilizing a *Readers’ theatre* format as recommended in the study school district adopted language arts curriculum (Houghton Mifflin Reading, 2005). The *creative dramatics* intervention for the Control Group (CG) was the *Readers’ theatre* strategy already incorporated and recommended for use in this study *Theme 2: American Stories: Focus on Plays* (Houghton Mifflin Reading, 2005, p. 181N). *Readers’ theatre* is defined as “an orchestrated reading that relies primarily on vocal characterization and does not include the elements of visual theatre, such as costuming, sets, or blocking in the presentation”
(OSPI, 2011d, p. 137). It was the intention that each student in the Control Group would be able to read a part of the story by participating in the Readers’ theatre strategy at least once per week. The Control Group was not a comparison group, as referenced earlier.

**Study Schedule – Five Weeks of School – One Reading Unit of Study**

This study covered 17 consecutive school days of treatment interventions from November 2, 2011 through November 30, 2011. A pretest was given on November 1, 2011, prior to the study commencing. The pretest was followed by 17 consecutive school days of treatment interventions. A posttest was given on December 1, 2011, following the 17 days of consecutive treatment interventions. A retention test was given on January 3, 2012, approximately five weeks following the retention test, and following the winter holiday vacation. All three test administrations used the study dependent variable teacher-researcher developed criterion-referenced 31-question vocabulary test covering the content of the study (four stories). The 31 vocabulary words were those required for students to learn in the four stories covered during the study for Theme 2: American Stories: Focus on Plays (Houghton Mifflin Reading, 2005). This particular theme was the study school district adopted language arts curriculum for fourth grade reading, and all fourth grade students across the district were studying the same unit at the same time. The teaching of the 31 vocabulary words was included in the collaboratively developed teacher designed lesson plans covering the four story content of the language arts unit (Houghton Mifflin Reading, 2005).

For the purposes of this study, “Vocabulary refers to students’ knowledge of word meanings” (Stahl & Nagy, 2006, p. 3) and language arts includes “All four of the major language arts – listening, speaking, reading, and writing – are involved in creative drama”
(Ross & Roe, 1977, p. 383). Included in each lesson was a creative dramatics intervention, which was the independent variable for the two experimental creative dramatics classrooms, which were: Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) and Experimental Group II – Creative Dramatics and Story-retelling (CDSR). Refer to Appendix C for the specificities of the creative dramatics interventions and Readers’ theatre methods employed in this study.

**Study schedule in calendar format.** Figure 1 provides an illustration of the study schedule in a calendar pictorial format of the five-week study. Included are the 17 days of treatment, three test administrations, and teacher absences. Further, Figure 1 provides a calendar illustration of the study from the start to the finish (approximately six months), including the time required for approval by the school district and school site, parent notification, and university approval; as well as the retention test dates. Refer to Appendices G, H, I, and J regarding the approval processes and documents required for the study to occur in a school district and during the school day. These appendices include a Request to Conduct Research in a School District, the Seattle Pacific University Institutional Review Board (I.R.B.) approval, the Research Study Timeline, and a Parent and Guardian Notification Letter for Student Participation. All document plans were completed or created by the investigator. Further, each document was reviewed and approved by the investigator’s doctoral advisor, participating university, and participating school district and school, prior to the study commencing.
### Study Schedule Calendar: Pre-Study Approval, Lesson Plans, Criterion-Referenced Test, Random Assignment, Teacher Training – 20-Day Study – Fall 2011

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
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<tbody>
<tr>
<td><strong>July 12, 2011</strong></td>
<td>Met with district administration to present and gain proposal approval.</td>
<td><strong>September 28, 2011</strong></td>
<td>Met with teachers and principal at study school.</td>
<td></td>
</tr>
<tr>
<td><strong>October 12, 2011</strong></td>
<td>Submitted SPU IRB Request and district request to conduct research</td>
<td><strong>October 19, 2011</strong></td>
<td>Random assignment of classes and training of teachers.</td>
<td><strong>October 14, 2011</strong> District approval to conduct research at study school site.</td>
</tr>
<tr>
<td><strong>October 17-19, 2011</strong></td>
<td>Teacher PLC time to draft 5-week lesson plan and criterion-referenced test.</td>
<td><strong>October 19, 2011</strong></td>
<td>Investigator received draft lesson plans and criterion-referenced test.</td>
<td><strong>October 27, 2011</strong> Random assignment of classes and training of teachers.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>October 26, 2011</strong></td>
<td></td>
<td><strong>October 19-28, 2011</strong> Refinement of Lesson Plans and Criterion-Referenced Test by Investigator</td>
</tr>
<tr>
<td><strong>November 2011: 19 Consecutive School Days of Study and Five-Week Retention Test Follow-Up</strong></td>
<td></td>
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<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>October 31, 2011</strong></td>
<td><strong>November 1, 2011 Pretest Study Begins</strong></td>
<td><strong>2 – Treatment</strong></td>
<td><strong>3 – Treatment</strong></td>
<td><strong>4 – Treatment</strong></td>
</tr>
<tr>
<td><strong>7 – Treatment</strong></td>
<td><strong>8 – No Treatment District in-service</strong></td>
<td><strong>9 – Treatment</strong></td>
<td><strong>10 – Treatment</strong></td>
<td><strong>11 – No School Veteran’s Day Holiday</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Two Subs Exp. Group II Control Group</td>
<td>Two Subs Exp. Group II Control Group</td>
<td></td>
</tr>
<tr>
<td><strong>14 – Treatment</strong></td>
<td><strong>15 – Treatment</strong></td>
<td><strong>16 – Treatment</strong></td>
<td><strong>17 – Treatment</strong></td>
<td><strong>18 – Treatment</strong> Two Subs Exp. Group II Control Group</td>
</tr>
<tr>
<td><strong>21 – Treatment</strong></td>
<td><strong>22 – Treatment</strong></td>
<td><strong>23 – Treatment</strong></td>
<td><strong>24 – No School Thanksgiving Day</strong></td>
<td><strong>25 – No School Thanksgiving Break</strong></td>
</tr>
<tr>
<td></td>
<td>Three Subs Exp. Group I Exp. Group II Control Group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>28 – Treatment</strong></td>
<td><strong>29 – Treatment</strong></td>
<td><strong>30 – Treatment</strong></td>
<td><strong>December 1, 2011 Posttest Study Ends</strong></td>
<td><strong>December Winter Break Dec. 19-30, 2011</strong></td>
</tr>
<tr>
<td><strong>January 2, 2012</strong></td>
<td><strong>January 3, 2012 Retention Test</strong></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

*Figure 1. Study Schedule Calendar: Calendar Pictorial Format of Five Week Study*
Description of Study Participants $N = 83$

Participants in this study sample consisted of 83 randomly assigned fourth grade students and three randomly assigned fourth grade teachers in a public school classified as a full Learning Assistance Program (LAP) school, with focus areas in reading and math, and located in rural and unincorporated Pierce County in a large school district in the state of Washington. The school enrollment at the time of this study (November 1, 2011 through December 1, 2011) was 651 students in grades kindergarten through sixth grade. This study school fourth grade enrollment was 91 students. Eighty-one fourth grade students were enrolled in the regular education fourth grade classes at the beginning of this study. An additional eight fourth grade students, classified as English Language Learners (ELL), were housed in one of the school’s four Independent Learning Centers (ILCs) during this study language arts block, and were not included in the study due to their required ELL intervention. Two additional fourth grade students enrolled during this study, raising the student participants in the study from an $N = 81$ to an $N = 83$.

Socio-economic status (SES). The study school site was classified as a full Learning Assistance Program (LAP) school, with focus areas in reading and math, which classified 100% of the population as “at-risk.” The study school serves a diverse neighborhood population where 50.3% of the students qualified for participation in the federally funded free-and-reduced lunch program, a statistic commonly used to indicate poverty level, and referred to as socio-economic status (SES); thus considered an academic “at-risk” factor to those students who qualify. The percentage of fourth grade students in this study who qualified for participation in the federally funded free-and-
reduced lunch program was 52.6%. Legally, any identification data regarding the specific students who receive free-and-reduced price meals is strictly confidential.

**Special programs.** Special programs available at the study school, and in accordance with the state classifications, included the school being classified as a Learning Assistance Program (LAP) school with focus areas in reading and math, Special Education, English Language Learners (ELL), and four Independent Learning Centers (ILCs). An ILC provides specific instructional interventions and specialists for qualifying students for portions of the regular education school day through individual and small group instruction and intervention, depending upon the ILC classification. The four ILCs at the study school are: (a) Special Education Preschool (18 students who are not included in the school enrollment count and receive only half day instruction); (b) Primary ILC (10 students); (c) Intermediate ILC (16 students); and (d) ELL (80 students). Eight students in the fourth grade total enrollment of N = 91 were enrolled in the ILC serving ELL students and were not included in this study (N = 83), as referenced earlier. It is central to clarify that the fourth grade statistics included for the present school district and state reported SES demographic data was N = 91, and included the eight ELL students who did not participate in this study.

Additionally, this study school houses a Young Men’s’ Christian Association (YMCA) before-and-after school program, beginning at 6:30 a.m. and ending at 6:30 p.m. In addition to this study school being labeled as a 100% Learning Assistance Program school site for reading and math, the percentages of the student population enrolled in special programs during the 2011-2012 school year, and in accordance to current
Washington State classifications for such, were 13% special education, 10.5% transitional bilingual, 1% Section 504, and 0.3% foster care.

**Race and ethnicity.** Table 2 illustrates the race and ethnicity data and compares the study school student race and ethnicity statistics to the study school district and study state race and ethnicity statistics for 2011-2012. Table 2 was created to illustrate this comparative data for future generalizability and replication of the study school with similar schools and school districts, and in other states and nations (OSPI, 2011f).

Table 2

**Race and Ethnicity Statistics for Study School, Study School District, and Washington State**

<table>
<thead>
<tr>
<th></th>
<th>Study School N = 654</th>
<th>Study District N = 17,453</th>
<th>Washington State N = 1,043,536</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Percentage</td>
<td>Total</td>
</tr>
<tr>
<td>American Indian/Alaskan Native</td>
<td>11</td>
<td>1.7%</td>
<td>368</td>
</tr>
<tr>
<td>Asian</td>
<td>42</td>
<td>6.4%</td>
<td>1,159</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>4</td>
<td>0.6%</td>
<td>374</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>46</td>
<td>7.0%</td>
<td>1,533</td>
</tr>
<tr>
<td>Black</td>
<td>48</td>
<td>7.3%</td>
<td>1,718</td>
</tr>
<tr>
<td>Hispanic</td>
<td>109</td>
<td>16.7%</td>
<td>2,213</td>
</tr>
<tr>
<td>White</td>
<td>403</td>
<td>61.6%</td>
<td>10,882</td>
</tr>
<tr>
<td>Two or More Races</td>
<td>37</td>
<td>5.7%</td>
<td>734</td>
</tr>
</tbody>
</table>

The demographic data regarding the race and ethnicity mix of the enrollment of the study school, and in accordance with the state classifications for such follows, with 1.7% American Indian/Alaskan Native, 6.4% Asian, 0.6% Pacific Islander, 7.0% Asian/Pacific Islander, 7.3% Black, 16.7% Hispanic, 61.6% White, and 5.7% Two or More Races.

**Academic “at-risk” factors.** The 83 student participants were randomly assigned to the three classroom groups, and the three randomly assigned teachers were each assigned to one of the three classroom groups. Random assignment of participants from the three regular education fourth grade classrooms was employed in efforts to create homogeneity among the three classroom groups regarding gender, ability level, socioeconomic status (SES), and other academic risk factors, and including race and ethnicity. Of the 83 fourth grade student participants of this study, 41 were male and 42 were female, one received special education, two were English Language Learners (ELL), two were classified McKinney-Vento (homeless), and 35 qualified for free or reduced lunch. Excluding gender, a total of 40 study students fit into the following subgroups which included special education, ELL, homeless, and low SES, commonly referred to in educational literature as “at-risk” factors to academic performance.

Academic “at-risk” factors were an essential consideration in striving for homogeneity of variance of groups, required for the use of parametric analyses. Experimental Group I (CDVW) included 15 students with “at-risk” factors, Experimental Group II (CDSR) included 13 students with “at-risk” factors, and Control Group (CG) included 12 students with “at-risk” factors, for a total of 40 students with “at-risk” factors in this study student sample. As a result, approximately 50% of the students in this study
sample were classified with “at-risk” factors, which is essential information for possible replication and generalizability of results.

**Dynamic indicators of basic early literacy skills (DIBELS).** An additional “at-risk” factor considered in the random assignment for the study participants included the “at-risk” factors for reading, due to the school classification as a LAP reading and math school, and due to high SES classification of the school (over 50%). Further, students were classified as “at-risk” for reading as a result of the tri-annually administrated *Dynamic Indicators of Basic Early Literacy Skills (DIBELS)* (Good et al., 2010). *DIBELS* are a set of oral reading fluency assessments used for universal screening and progress monitoring in grades kindergarten through sixth. *DIBELS* are standardized assessments used throughout the study school district and school to determine if students are at the current grade benchmark for reading, or have some gaps in reading learning, or need intensive reading assistance due to being diagnosed at least one year behind their current grade level (Good et al., 2010). The *DIBELS* assessments were given to the student participants in the fall, winter, and spring, as well as every two weeks for student participants identified with “some risk” and “at-risk” as illustrated in the following table. These *DIBELS* “on-going” assessments did not interfere with this study, nor were they conducted during the study treatment sessions. The confidential *DIBELS* assessment classification was provided by the study school secretary to the investigator, for purposes of classroom comparison for this study. Refer to Table 3 for the chart illustrating the *DIBELS* academic risk factor by treatment group for the total present study student sample *N* = 83. The “at-risk” factors, by classroom condition, regarding the *DIBELS* assessment, were closely equal, as the data in Table 3 illumines.
Table 3

*Academic “At-Risk” Factor from Dynamic Indicators of Basic Early Literacy Skills (DIBELS) by Treatment Group N = 83*

<table>
<thead>
<tr>
<th></th>
<th>Low Risk (At benchmark for reading by grade level)</th>
<th>Some Risk (Some gaps in reading)</th>
<th>High Risk (Behind more than one grade level in reading)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Experimental Group I</strong> (Creative Dramatics and Vocabulary Words [CDVW]) <em>n = 28</em></td>
<td>19</td>
<td>5</td>
<td>4</td>
<td>28</td>
</tr>
<tr>
<td><strong>Experimental Group II</strong> (Creative Dramatics and Story Retelling [CDSR]) <em>n = 27</em></td>
<td>20</td>
<td>5</td>
<td>2</td>
<td>27</td>
</tr>
<tr>
<td><strong>Control Group (CG)</strong> <em>n = 28</em></td>
<td>19</td>
<td>6</td>
<td>3</td>
<td>28</td>
</tr>
<tr>
<td><strong>Total N = 83</strong></td>
<td>58</td>
<td>16</td>
<td>9</td>
<td>83</td>
</tr>
</tbody>
</table>

(Source: The study school secretary provided the confidential DIBELS classification to the study investigator).

**Random Assignment Process**

The 83 fourth grade students from three self-contained fourth grade classrooms were randomly assigned to three classroom conditions using a random assignment procedure designed by the study investigator, specifically for the study (refer to
Appendices D and E). The investigator-designed random assignment process involved a *five-step process* created to avoid and overcome the obstacle of *faulty randomization procedures* (Gall et al., 2007, p. 400), and in an attempt to create equivalent treatment groups. The *five-step random assignment process* was specifically developed for and piloted with this study, to examine whether such a process could be conducted by certified staff and in efforts to strive for homogeneity of variance of groups, which is an underlying assumption for the use of parametric tests in empirical studies (Green, Salkind, & Akey, 2000). Field (2009) defines the necessity of homogeneity of variance, by stating, “This assumption means that the variances should be the same throughout the data. In designs in which you test several groups of participants this assumption means that each of these samples comes from populations with the same variance” (p.133). As referenced earlier in this chapter, the study school is defined as a school-wide Learning Assistance Program (LAP) reading and math public school which adds credibility to the assumption that all of the students in the study were from populations with the same variance. The investigator-designed random assignment process included five-steps, specifically designed to involve the teachers of this study, and in efforts to demonstrate to the teachers, through their personal involvement in the actual randomization of their classrooms, that they could trust in the process of randomization. This direct participation of the three fourth grade classroom teachers was facilitated by the investigator. Gall et al. (2007) referenced teacher trust in the randomization process as a possible issue and suggest having a credible witness observe the randomization process (p. 400). Therefore, a district assigned central office administrator was asked and assigned to be a witness to the randomization process of this study, and was present.
An agenda with an outline of what would occur during the 60 minutes allotted for this study randomization process was prepared by the investigator and given to the teachers and to the independent district office observer at the beginning of the 60 minute randomization process session (see Appendix D). Following a review of the agenda, which detailed what would be accomplished in the hour long meeting, the investigator provided a hand-out to the study teachers and to the independent district office observer; further detailing the five-step random assignment process for this study (see Appendix E). The agenda for the study randomization process was collected by the investigator following the successful randomization of the students into their randomized classrooms. A detailed review of the randomly assigned student classrooms was conducted, immediately following the five-step random assignment process; whereas, the study teachers, followed by the school principal and secretary, reviewed the newly created randomized fourth grade student class lists. This review was conducted in order to ensure that there were no restrictions regarding any students being placed in the same classroom. Fortunately, the randomly assigned class lists were approved without any changes.

Each teacher was given a copy of their approved randomized classroom lists during their follow-up treatment trainings with the investigator, which commenced one hour following the randomized process meeting and was conducted in an adjoining office space, at the school site. The five-step random assignment process resulted in a representative mix of the overall student sample in each of the three classroom groups, with regards to gender and academic “at-risk” factors.
It is necessary to mention that both the Experimental Group II and the Control Group received an extra female student after the study began, resulting in this study size sample $N = 83$. Efforts were made to assign those students to randomly assigned groups to keep the gender balance, which occurred. Further, contractual agreements remained in effect in all aspects of the present study. The tables further identifying the gender of the treatment groups are presented in Chapter Four.

**Instrumentation**

**Dependent variable – pretest, posttest, and retention test.** The pretest, posttest, and retention test instrument for this study was a teacher and researcher-designed measure that was aligned with the state, school district, and school learning objectives for the district adopted language arts unit of study for fourth graders. This study assessment, referred to as the dependent variable was designed by the study teachers and researcher. The vocabulary test was a 31-question teacher-researcher designed criterion-referenced multiple choice vocabulary test that measured the required 31-vocabulary words that were to be learned in the content (four stories) in the specific language arts unit (Cronbach, 1982; Houghton Mifflin Reading, 2005; Wiggins, 1998). This study test instrument development was approved by the school district curriculum administrator and building principal; whereas both the face validity and content validity of the instrument met with their approval (Vogt, 2005). Further, raw scores were used in the data analysis to calculate the descriptive and inferential data. Since the 31-test items were equally weighted, the possible raw scores on the instrument ranged from 0 to 31 and provided for interval test data as required for parametric procedures (Field, 2009; Gall et al., 2007).
**Dependent variable validity.** The development of this study teacher-researcher criterion-referenced vocabulary test aimed to accurately measure with reliability and validity of the 31-vocabulary words that were to be taught in the language arts unit of study (Wong & Wong, 1998, p. 207). The formative assessment design of this dependent variable followed recommendations for a valid and reliable instrument and instrumentation development structure for research regarding *creative dramatics* and academic achievement; whereas the test measured the 31-vocabulary words in the unit of study (four stories) or exactly the vocabulary words that would be taught, as opposed to variables not under investigation in the study (Conard, 1992; Galda, 1982; Kardash & Wright, 1987; Mages, 2008; Massey & Koziol, 1978; Pellegrini, 1984; Pellegrini & Galda, 1982; Podlozny, 2000; Vitz, 1983; Wagner, 1998; Winner & Cooper, 2000; Winner & Hetland, 2000). Additionally, the formative assessment recommendations, development, implementation, and measurement guidelines – espoused and piloted by published educational researchers – were employed in the design of the instrument (Black & Wiliam, 1998; McMillan, 2007; Taylor & Nolen, 2005, 2008; Wiggins, 1998; Wiggins & McTighe, 2005).

**Dependent variable reliability.** Two internal consistency estimates of reliability were computed for this study dependent variable, a teacher and researcher-designed 31-question criterion-referenced multiple choice vocabulary test. These were Cronbach’s alpha coefficient and a split half coefficient, referred to as a Spearman-Brown corrected correlation (Cronbach, 1982; Green et al., 2000). The Cronbach’s alpha and split-half coefficients were .7 and .66, (rounded to .7) respectively for the posttest, and .774 (rounded to .8) and .777 (rounded to .8) respectively for the retention test, each indicating
satisfactory reliability (Field, 2009, pp. 674-6). According to Cronbach (1951), Nunnally and Bernstein (1994), and Vogt (2005), Cronbach’s alpha scores above .70 “suggest that the items in an index are measuring the same thing” (p. 71). (Refer to Appendix K for reliability indexes).

The teacher and researcher designed 31-question criterion-referenced multiple choice vocabulary test included three types of multiple choice designs. Students were asked to match vocabulary words to definition words or phrases for the vocabulary words included in stories one and three; to select a letter response from three vocabulary word definition phrases for each of the vocabulary words included in story two; and select a letter response from four vocabulary word definition words or phrases for each of the vocabulary words included in story four. The test administrations took place in the students’ regularly assigned classroom, (instead of the randomly assigned classrooms).

**Program Evaluation Component**

Fourth grade students were selected for this study due to an ongoing program evaluation in the school district regarding the effectiveness of the current reading and language arts curriculum adoption at the elementary level. Specifically, the program evaluation regarding the reading language arts textbook adoption – *Houghton Mifflin Reading: Grade 4-Traditions: Theme 2: American Stories: Focus on Plays* (Houghton Mifflin Reading, 2005), included a focus on plays. Consequently, *Theme 2: American Stories: Focus on Plays* (Houghton Mifflin Reading, 2005) could be evaluated effectively for this study regarding vocabulary development and achievement, as the language arts adoption included lesson plan strategies to integrate other subjects with the language arts and reading instruction, which included the integration of the arts, specifically, creative
dramatics. Four of the five stories contained in *Theme 2: American Stories: Focus on Plays* (Houghton Mifflin Reading, 2005), were covered during the month long (17 consecutive school days) present study. The fifth story in *Theme 2*, and not a part of this study, involved a focus on genre – specifically – plays or creative drama. A reading strategy that could be used with this story, and recommended as a part of the language arts adoption, included students reading the fifth story in a *Readers’ theatre* format. For the purposes of this study, *Readers’ theatre* is defined as “an orchestrated reading that relies primarily on vocal characterization and does not include the elements of visual theatre, such as costuming, sets, or blocking, in the presentation” (OSPI, 2011d, p. 137).

Since the *Readers’ theatre* strategy was included as a part of *Theme 2: American Stories: Focus on Plays* (Houghton Mifflin Reading, 2005), which was the theme covered in this study, the *Readers’ theatre* strategy was utilized as a part of the lesson plan for the Control Group (CG).

**Professional learning communities (PLCs).** This study school district curriculum administration was interested in examining whether the components of the current language arts unit could be measured for vocabulary development and achievement by incorporating the *Readers’ theatre* strategy as a part of the control group, as well as other creative dramatics strategies with the two treatment groups. Additionally, the school district was interested in finding out if classroom teachers would be able to collaboratively develop a valid and reliable criterion-referenced test that would accurately measure student achievement on vocabulary words taught in the district adopted language arts curriculum, and to do so during district provided collaborative teacher planning time, also referred to as professional learning communities or PLCs.
Teacher collaboration, conducted during *district provided* professional learning community (PLC) planning time, and provided for teachers in this study school district and school, was expected of certificated educators during contractually scheduled planning periods. Specifically, the school district and individual schools provided certificated teachers with contractual and scheduled *common planning time* regarding teacher PLCs by grade level. Consequently, grade level collaboration which focused on district adopted curriculum resources, as proposed for this study, supported teacher professional development regarding *in-district in-service*, in the study school district.

Additionally, the PLC time, proposed for the study, was to be conducted, implemented, and evaluated at the *home school site*, or the teacher assigned teaching location, also meeting school district expectations. Therefore, if successful, the PLC strategy employed in this study for the study teachers to develop valid and reliable criterion-referenced tests for reading themes, could be replicated with this specific reading unit – *Theme 2: American Stories: Focus on Plays* (Houghton Mifflin Reading, 2005) – and with other teachers across the school district. Additionally, if successful, the PLC process and focus could be generalized to other reading units. Furthermore, should the teacher and researcher developed criterion-referenced vocabulary test prove to be valid and reliable, the PLC collaborative process to create such tests for district adopted curriculum could be transferable to other English and language arts units, as well as to other subject areas regarding district adopted curriculum, and with other elementary schools in this study school district. Additionally, the results from this study would provide the school district and school with a successful example of the effectiveness of collaborative teacher grade
level PLC time, with measurable student achievement, and in a relatively short amount of time (20 school days or one unit of study).

Accordingly, the National Center for Literacy Education/National Council of Teachers of English (NCLE/NCTE, 2013) supported this type of professional development and collaboration of teachers during the school day. In the executive summary of the NCLE/NCTE (2013) report, a key recommendation to school administration and policy makers was to “Embed the collaboration of educators in the school day. This is critical for deep student learning and is a necessary prerequisite to the success of other school reforms” (p. 3). In the case of this present study, the PLC time, which was allowed to create a common lesson plan for this study unit of study, Theme 2: American Stories: Focus on Plays (Houghton Mifflin Reading, 2005), provided an opportunity for the teachers to begin to bond as a new fourth grade team of three teachers coming together in a PLC format to design language arts lesson plans and formative assessments. Further, the PLC time afforded the teachers the opportunity to collaborate in the development of a draft criterion-referenced test to measure student achievement on the unit of study that would be taught from their collaborative lesson plans. Valid and reliable formative assessment measures were well researched, and the following sources were reviewed to refine and format the criterion-referenced test, utilized in this present study, for use as a model of a valid and reliable instrument as created by the teachers who would use the test with their students (Black & Wiliam, 1998; Brophy, 2007; Covey, 1989; Danielson, 2002; Dickinson, 2002; Dickinson & Neuman, 2006; Donahue & Stuart, 2010; Dufour, Dufour, Eaker, & Many, 2010; Dunn & Dunn, 1992; Edwards, 1979; Eisner, 1984; Ellis, 2006; Englebright & Mahoney, 2012; Fay & Fund, 1995; Fiske, 1999;

Furthermore, for the purposes of this study, professional development for teacher professional learning communities (PLCs) is broadly defined as a “comprehensive, sustained, and intensive approach to improving teachers’ and principals’ effectiveness in raising student achievement” (Soine, 2011, p. 9). A vital piece of the study was that all three of the fourth grade teachers involved in this study would be teaching the same thing, and at the same time as the rest of the school district fourth graders – the language arts unit of study – Theme 2: American Stories: Focus on Plays (Houghton Mifflin Reading, 2005); therefore, the students in these classes would continue to follow the school district schedule regarding time frames and schedules for specific curricular units to be taught, whereas students and teachers involved in this study would be in sync with the remainder of the school district. The district schedule determined when the study would start and end. The investigator aligned the study accordingly.

The interest of the school district curriculum department regarding this type of program evaluation, and the implications of the current reading adoption with regards to the effectiveness of arts integration, created an opportunity for the investigator to conduct this study experiment. The Theme 2: American Stories: Focus on Plays (Houghton Mifflin Reading, 2005) included learning connections to the arts, math, science, and social studies; therefore, aligning with state learning goals, reading and arts learning
standards, and common core state standards for English language arts, as referenced earlier. Consequently, the investigator included the goals of the school district in the design of the study parameters.

**Parent and guardian letter.** Equally, the concerns about the disruption to the daily flow of the school day that often accompany random assignment and curriculum review were addressed. To address this valid concern, a parent and guardian letter was created by the investigator and approved by the school principal and district curriculum administrator. The *Parent and Guardian Letter of Notification for Student Participation* was sent on the study school letterhead under the signature of the school principal on the day prior to the study commencing. Specifically, the letter was sent to communicate to parents and guardians that students would be randomly assigned to one of the three current fourth grade teachers, and that students would be experiencing their reading instruction from a fourth grade teacher who may or may not be their currently assigned classroom fourth grade teacher, and for a period of one month of school, from November 1, 2011 through December 1, 2011. Parents and guardians were encouraged to contact the school principal if they had any questions or concerns. This official communication resulted in 100% of the 83 student participants randomly assigned for this study being able to fully participate. Refer to Appendix J, for a copy of the *Parent and Guardian Notification Letter for Student Participation*.

**Setting**

**District description.** The study school district is the 13th largest school district in Washington State, with an estimated enrollment of nearly 18,000 students, and covers over 215 square miles in southeast Pierce County. According to the school district
website, a recent demographic study showed the present school district community had more than 90,000 residents and referenced that it is one of the fastest-growing regions in the Washington State. Consequently, during the 2011-2012 school year, the school district is a collection of rural and suburban areas that comprises one-eighth of Pierce County, and includes eight unincorporated communities, and one incorporated community. The study school site is one of 17 elementary schools (kindergarten through grade 6). Additionally, the school district includes six middle schools (grades 7 through 9), three comprehensive senior high schools (grades 9 through 12), an alternative high school (grades 9 through 12), and one online academy, and houses the Pierce County Skills Center for district and county students.

**School description.** This kindergarten through sixth grade elementary school is located in rural and southeast Pierce County. This school is located within an unincorporated and rural community area, and serves a rural neighborhood that includes middle to lower middle class housing developments, single-family homes on acreage, and low-income housing and apartments, including several mobile home parks. This school is considered a neighborhood school; however, according to the school principal, the entire student body population is bused to the school site, due to the high volume of traffic on main roads surrounding the school. Furthermore, the study school is defined as a school-wide Learning Assistance Program (LAP) reading and math public school due to the high level of students who are reported as performing below their grade levels in reading and math. The LAP program is supported by the state of Washington, and schools receiving these funds provide supplemental instruction (in reading and math) to
the regular educational programming, and to students in small groups. Student progress is monitored frequently through formal and informal assessments.

This study school, which has been in existence for four years, is a new school, and one of 17 such elementary schools in this school district. The school was three years old at the time of this study (2011-2012). The school site is located in what had been a high-growth area of the school district, and enrollment growth increased throughout the course of the 2011-2012 school year, from a total school enrollment of 654 for the October 1, 2011 state enrollment report, to 663 for the May 1, 2012 state enrollment report.

An indication of continuous growth was evidenced by the presence of two classroom portables on the school site. The school enrollment continues to grow, according to the building principal. Additionally, parent involvement is strongly encouraged, embraced, and expected at the school. The Parent Teacher Association (PTA) had 58 registered members during the 2011-2012 school year, with a student enrollment of 663 students.

**Arts education at study school.** Arts education is treated as a core, academic, essential, and basic academic subject content area at the study school and in the study school district, per Washington State laws and regulations – RCW 28A.150.210 (WSL, 1993) and RCW 28A.230.095 (WSL, 2007). At the time of the study investigation, the fourth grade students received instruction from a music specialist for 50 minutes once a week and from a visual arts specialist for 50 minutes once a week. The music and visual arts specialists utilized the *Washington State K-12 Options for Implementing the Arts Standards through Music by Grade Level* (OSPI, 2011c) and the *Washington State K-12 Options for Implementing the Arts Standards through Visual Arts by Grade Level* (OSPI,
Further, fourth grade students received instruction from a physical education specialist for 50 minutes once a week, whereas the *Washington State K-12 Options for Implementing the Arts Standards through Dance by Grade Level* (OSPI, 2011b) were integrated. Additionally, fourth grade students were able to participate in orchestra for 50 minutes twice a week, taught by an orchestra specialist, and during the school day. The orchestra specialist utilized the *Washington State K-12 Options for Implementing the Arts Standards through Music by Grade Level* (OSPI, 2011c). The music and visual arts specialists also utilized the *Washington State K-12 Arts Learning Standards* (OSPI, 2011a), as a part of the school and district focus on state standards alignment in all basic subject areas for highly qualified and certified teachers who provide instruction in those subject areas, per the *Elementary and Secondary Education Act/No Child Left Behind. Arts in Education* (USDOE, 2002), and in compliance with the *Highly Qualified Teacher Resource Manual: Guidelines and Workbook* (OSPI, 2012).

**Fourth grade classroom locations.** All three teacher participants in this study were housed on the second floor of the main school building of the study school. The three fourth grade classrooms were located next to each other. Further, these three fourth grade classrooms were located on the same side of the second floor hallway, and in the intermediate portion of the main school building. Each classroom had a separate hall entrance door, and two of the classrooms were connected with a door in the back of those classrooms. The logistics of the classrooms in this study provided for an ideal, orderly, and swift transition of students from their regularly assigned classrooms to their randomly assigned classrooms, resulting in three to five minutes of daily passing time to and from classrooms; thus resulting in a minimal loss of instructional time, or 85 minutes
of lost instructional time, due to the classroom transitions, over the 17 days of treatment interventions.

Procedure and Apparatus

The procedure and apparatus of the methods of this study follow, due to the need for specific detail regarding the training, implementation, materials, and reporting of the methods employed in such a study, as recommended by earlier researchers (Conard, 1992; Mages, 2008; Podlozny, 2000; Vitz, 1983). The following details of the methods employed are presented for future replication and generalizability of the study methods and procedures and in efforts to create a pathway for future studies on creative dramatics interventions during the school day, as taught by classroom teachers, and with the use of district adopted language arts curriculum – and specifically – regarding vocabulary achievement.

Materials used for the study. The curriculum used for this study investigating the effects of the use of creative dramatics to strengthen vocabulary achievement of fourth grade students in a language arts classroom was purposely selected for compatibility with this study school district. The lessons were taken from Theme 2: American Stories: Focus on Plays (Houghton Mifflin Reading, 2005), which was this study school district’s adopted language arts curriculum for fourth grade reading, and from the collaboratively developed teacher designed lesson plans covering the four story content. Included in each lesson was a creative dramatics intervention, which was the independent variable for each of the three experimental groups. The creative dramatics interventions were different for both Experimental Group I and Experimental Group II, and designed by the investigator as the two independent variables for the study. The
creative dramatics for the Control Group was the Readers’ theatre strategy already incorporated in the district adopted language arts curriculum Theme 2: American Stories: Focus on Plays (Houghton Mifflin Reading, 2005).

Although the focus of this study was focused on the creative dramatics interventions, which were taught to Experimental Group I and Experimental Group II, it is necessary to restate that the Control Group was assigned the creative dramatics strategy of Readers’ theatre, or a method of retelling the stories and already provided as an arts integration strategy in this study district adopted language arts curriculum (Houghton Mifflin Reading, 2005, p. 181N). Additionally, the addition of individual reflection notebooks, wherein each student was able to share what was learned in the daily lesson, was employed. This strategy was an adaption to the I learned reflection strategy (Ellis, 2001b), as reported in previous research on reflection and metacognition (Bond, 2003; Evans, 2009; Johnson, 2004; Shoop, 2006). However, instead of daily papers being passed out and collected for this strategy, students were provided individual notebooks with their names on the front of the notebooks. These notebooks were provided by the investigator. The reflection notebooks were passed out by the teacher and student helpers, during the last five minutes of the class period, during the 17 days of the study, for students to write about what they learned during each class session. The notebooks were collected by the teacher and student helpers prior to the end of the language arts block and class session. The Readers’ theatre and reflection notebooks were referred to as treatments to the Control Group teacher. These two strategies were employed so that all three teachers had treatment strategies to implement with their students; thus controlling for the extraneous variables that may affect the internal validity
as referenced earlier in this chapter, as well as the John Henry effect (Gall et al., 2007; Vogt, 2005). The Control Group teacher did not read or comment in the reflection notebooks or to the individual students about what they wrote. Therefore, this was a reflection activity without teacher feedback, and thus not an attempt to replicate the results of possible effect from such intervention, as was the case in the aforementioned research studies which incorporated the I learned reflection strategy (Ellis, 2001b).

As referenced earlier in this chapter, and restated in this section on Procedure and Apparatus, all of the lessons for all three groups in this study were aligned with this study school district and Washington State language arts learning standards and arts learning standards. This clearly stated alignment of lesson objectives by the investigator was reviewed during the teacher treatment training sessions that preceded the study, thus reinforcing how the study treatments supported and enhanced expected learning standards. Further, this alignment to current teacher and curriculum adoption diffused any potential for or concern, by the teachers and school district, about the loss of instructional time. Additionally, this stated alignment provides the curricular details regarding the required instructional expectations of a school and district in alignment with the study treatment goals for future generalizable and replication specificities.

Creative dramatics interventions. Creative dramatics is defined as “a dramatic enactment (led by the teacher) of a story, setting, and/or characters. This is an experiential, process-based activity, not a performance for an audience. The teacher may assume a role” (OSPI, 2011d, p. 133). Thus, creative dramatics methodology includes the elements of dramatic play. Siks (1958) provides a clear definition for dramatic play, as follows:
“Dramatic play” is a term which refers to creative playing centering around an idea, a situation, or a person, place, or thing. It generally utilizes the dramatic elements of characterization, action, and dialogue. It seldom has a plot. It unfolds spontaneously. It is fragmentary and fun. (p. 106)

These creative dramatics definitions provided a theoretical and methodological enhancement to the creative dramatics focus and definition in this study, and referenced earlier, as well as in full alignment with the aforementioned Washington State K-12 Arts Learning Standards and Arts EALRs (OSPI, 2011a). This definition and foundational detail is included to clearly identify to the reader what creative dramatics activities looked like in this study and for possible replication purposes of these specific treatment interventions in future studies.

Vitz (1983) cited poor methodological design and training in the Youngers (1977) study where examining the effects of creative drama on 300 fourth graders was studied, with insignificant findings, with relation to the treatment and measures employed. As stated earlier in this section, Vitz (1983) challenged those conducting future research, such as this investigator, to more thoroughly train classroom teachers with the treatments that were to be employed. Due to contractual constraints, a total of 45-50 minutes of training was employed for each of the three teachers, as previously described, which included 15-20 minutes of group training, and 30 minutes of individualized training per teacher.

Integration of the Washington State K-12 Arts and K-10 Reading Learning Standards and national Common Core State Standards. One part of the training with
the teachers included a review of *Washington State K-12 Arts Learning Standards* (OSPI, 2011a) and the *Washington State K-12 Options for Implementing the Arts Standards through Theatre by Grade Level* (OSPI, 2011d), with a specific focus on *creative dramatics*, and the strategies and arts education methods and methodology associated with these instructional options. Consequently, the training and preparation for the teachers by the investigator included the four state education agency arts education learning standards being demonstrated and modeled by the investigator, and referred to as “*vocabulary CD training,*” for the purposes of this experiment and as presented in Chapter Two.

The use of state and national standards further supported the essential and perennial need for the instruction of language arts, *creative dramatics*, and the arts, thus incorporating the affective, cognitive, and psychomotor connections they provide, to the student, and as referenced throughout this study. The investigator determined to provide the study teachers with the necessary resources they needed to teach; whereas, the teachers would not need to take time to search for or attempt to find the resources expected to be covered in the study treatment interventions and lesson plans. Therefore, the state and national standards, as well as the definitions underpinning this study are included throughout this chapter, for referral and use in replication attempts of this study.

*State reading and arts learning standards, and national core state standards for English and language arts – grade four.*

1. **Reading EALR 1:** The student understands and uses different skills and strategies to read. **Component 1.1:** Use word recognition skills and strategies to read and comprehend text. Apply understanding of phonics. Read words containing complex letters patterns and/or word families (e.g., -ive or -eive, -ield) in isolation and in context. Apply multi-syllabic decoding when reading words in all text. (OSPI, 2004, p. 8)
2. **Arts Essential Academic Learning Requirements (EALRs) 1-4:** (1) The student understands and applies arts knowledge and skills in dance, music, theatre, and visual arts. (2) The student uses the artistic processes of creating, performing/presenting, and responding to demonstrate thinking skills in dance, music, theatre, and visual arts. (3) The student communicates through the arts (*dance, music, theatre, and visual arts*). (4) The student makes connections within and across the arts (*dance, music, theatre, and visual arts*) to other disciplines, life, cultures, and work. (OSPI, 2011a, pp. 4-7)

3. **Common Core State Standards: Reading Standards for Literature K-5; Key Ideas and Details.** (1) Determine a theme of a story, drama, or poem from details in the text; summarize the text. (2) Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text. (3) Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events. (4) Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character’s thoughts, words, or actions). (5) Compare and contrast two or more characters, settings, or events in a story or drama, drawing on specific details in the text (e.g., how characters interact). (NGACBP CCSSO-CCSS ELA, 2010, pp. 10-12)

Moreover, as referenced in this chapter, the district adopted language arts curriculum was integrated with the aforementioned state and national standards and learning goals. Consequently, **Theme 2: American Stories: Focus on Plays** (Houghton Mifflin Reading, 2005) was integrated with the **Washington State K-12 Arts Learning Standards** (OSPI, 2011a, pp. 4-7), besides the **Reading K-12 Grade Level Expectations: A New Level of Specificity, Washington State’s Essential Academic Learning Requirements, Grade Four** (OSPI, 2004). Consequently, incorporated into the study was the state reading essential academic learning requirement: **(EALR) 1: Component 1.1** (OSPI, 2004, p. 8); and further integrated the state reading and language arts standards with the nationally adopted **Common Core State Standards for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects, Reading Standards for Literature K-5, Fourth Grade** from the National Governors Association.

**Washington State arts elements and principles chart.** Each teacher was given a copy of the aforementioned state and national arts, reading, and language arts standards, as well as a one-page poster of the *Arts Elements and Principles* (OSPI, 2011a, p. 8). These resources reviewed the four arts EALRs, and further provided the study teachers with review and illustration of the cognitive strategies embedded in the *creative dramatics* treatments. Further, these resources included the concepts, skills, and content that would be taught and integrated into the language arts lessons through the *creative dramatics* treatments in a colorful poster format that was easy for daily referral with the lesson plans.

**Lesson plans.** The initial draft lesson plans were collaboratively created by the three study teachers for the five-story unit *Theme 2: American Stories: Focus on Plays* (Houghton Mifflin Reading, 2005) during their professional development learning community (PLC) time, and in preparation for this study, and prior to the study commencing, during the month of October, 2011. It was explained to the teachers, by the investigator, to collaboratively create the lesson plans for the five-stories included in the *Theme 2: American Stories: Focus on Plays* (Houghton Mifflin Reading, 2005), and to create the lesson plan as they would plan to teach it, without thought of a research study. The draft lesson plan was sent to the investigator two weeks prior to the study initiation for review, refinement, and addition of the *creative dramatics* study treatments. The fifth story of the unit was deleted from the study due to school and district schedules that would adversely disrupt the daily *creative dramatic* treatment interventions.
Consequently, the vocabulary words for the fifth story were deleted from draft vocabulary test, resulting in the 31-question vocabulary test finalized for use as the dependent variable for the pretest, posttest, and retention test administrations.

Thus, following a review of the initial draft lesson plans created and submitted by the teachers to the investigator, the *creative dramatics* strategies and treatments for each teacher were added to the collaboratively created initial draft lesson plan design. Interestingly, the *Readers’ theatre* strategy was not specified in the initial draft lesson plans created collaboratively by the teachers, nor were any other *creative dramatics* or arts integration strategies included, referenced, or specified; although these strategies were recommended and detailed in the teacher’s edition of the district adopted language arts curriculum and throughout the selected unit of study – *Theme 2: American Stories: Focus on Plays* (Houghton Mifflin Reading, 2005).

In order to ensure that the *creative dramatics* interventions for this study were conducted properly and consistently over the course of the 20-day study, scripted lesson plans for each of the 17 lessons for the treatment, as well as for the three test administrations for the pretest, posttest, and retention test, were provided for the three teachers of the two treatment groups and one control group. The three teacher participants were trained prior to the study commencing, with instructions regarding their need to follow the lesson plans with precision. An adapted version of a Teacher Daily Lesson Log and Reflection Sheet (Bond, 2003; Evans, 2009) was provided to and used by the study teachers to provide daily written feedback to the investigator, and was further adapted for this study by the investigator, per the present study teacher recommendations (see Appendix L).
The refined and final lesson plans, created by the investigator, for each individual classroom condition, were an enhancement of the initial draft lesson plans, which were collaboratively created by all three teachers, and of which covered the five-week study time frame, as well as the 31 vocabulary words of the content (four stories). Each teacher received a copy of the weekly lesson plan for their specific treatment group in an individual email from the investigator, sent and received at the beginning of each week of the study. These individual emails with the lesson plans were also copied to the study school principal and to the investigator, to keep all aspects of the study and instruction available to the school principal. The three study teachers did not see nor were they to share their specific lesson plans with each other. The lesson plans were further refined week by week, and provided the details for each classroom condition, covering the content (four stories), and review, and scheduled to fit within this study school and study school district calendar. Further, each teacher was provided with any and all resources for their specific lessons, if necessary, with all being prepared and supplied by the investigator, and presented to the teachers at the start of the specific language arts lesson, and prior to the lesson beginning. Additionally, the teachers provided notes to the investigator, on a weekly basis, as to what was accomplished each day of the study, by crossing out or adding to the “hard copy” of the weekly lesson plans, and as a way to communicate to the investigator, regarding the actual instruction that occurred throughout the 45 minute language arts sessions in each classroom condition. Group emails were sent to all three teachers, on a daily basis, with updates and information that pertained to all three of teachers, as necessary. Daily emails, if needed, were brief and encouraging,
thus allowing for continuous communications and in efforts to promptly answer any concerns or questions regarding the study.

Further, the teachers agreed to follow the specifics of the lesson plans for their randomly assigned group and to let the investigator know, as soon as possible, regarding any concerns they may have regarding the appropriate delivery of the treatment interventions or any specificities of the lesson plan. Refer to Appendices M, N, O, P, and Q, to see copies of the initially designed lesson plan, and for the copies of the revised lesson plans for the Control Group, Experimental Group I – CDVW, and Experimental Group II – CDSR, as well as a sample of the story scene strips provided for the creative dramatics enactments and re-enactments for Experimental Group II – CDSR.

The lesson plans were – intentionally and specifically – aligned to the Washington State learning standards for reading and the arts, as well as the national common core state standards for language arts (fourth grade), as presented. These standards were provided to the study teachers for their reference and focus, and to support the instructional practices expected of teachers in their district, as well as for all teachers in Washington State.

Further, the definitions for creative dramatics, language arts, Readers’ theatre, and vocabulary, as presented in the Terms and Definitions in Chapter One, are presented here, again. The provision of state and district resources were intentional to ensure that the study teachers and students would have clarity regarding what they were supposed to teach, learn, and be able to do; thus, in efforts, on the part of the investigator, for study participants to meet and exceed probable expectations (Adler, 1982, 1994; Deiro, 2005; Fried, 1995; Purkey & Novak, 1984; Wong & Wong, 1998).
Adler (1982) described learning as active – not passive – involving the use of the mind and not just the memory; and further, as a process of discovery; whereas, the student is the focus of the teaching and learning process. Further, Adler (1982) wrote in support of the perennial and essential examination of the relationship and natural integration concepts that exist between the arts (creative dramatics) and language development (vocabulary achievement), as this study espouses.

**Terms and definitions.** The following terms and definitions for *creative dramatics*, *language arts*, *Readers’ theatre*, and *vocabulary* reiterate the specific detail of the context, definition, and meanings underlying this study (refer to Appendix B).

*Creative dramatics.* Creative dramatics is “a dramatic enactment (led by the teacher) of a story, setting, and/or characters. This is an experiential, process-based activity, not a performance for an audience. The teacher may assume a role” (OSPI, 2011d, p. 133). Similarly, McCaslin (1990) wrote “Creative dramatics is defined as an improvisational, nonexhibitionial, process-centered form of drama in which participants are guided by a leader to imagine, enact, and reflect upon human experiences” (p. 5).

*Language arts.* “All four of the major language arts – listening, speaking, reading, and writing – are involved in creative drama” (Ross & Roe, 1977, p. 383).

*Readers’ theatre.* *Readers’ theatre* is defined as “an orchestrated reading that relies primarily on vocal characterization and does not include the elements of visual theatre, such as costuming, sets, or blocking in the presentation” (OSPI, 2011d, p. 137).

*Vocabulary.* “Vocabulary refers to students’ knowledge of word meanings” (Stahl & Nagy, 2006, p. 3).

The study teachers were not aware of what types of different *creative dramatics* interventions had been assigned to the students in each of their randomly assigned classrooms. Teachers were told that the three interventions were employed as a part of a
program evaluation component of the district adopted language arts curriculum entitled *Theme 2: American Stories: Focus on Plays* (Houghton Mifflin Reading, 2005). Further, it was stressed to the teachers, by the school administration and the study investigator, that the study treatments would provide investigation as to how and if the use of *creative dramatics* strategies would strengthen the vocabulary achievement of their students, while receiving daily instruction in the district adopted language arts curriculum. The *Parent and Guardian Notification Letter for Student Participation* identified the present study as a program evaluation for the district adopted language arts curriculum (see Appendix J).

Teachers were informed, by their principal and by the investigator, that each of them would be employing a different *creative dramatics* treatment intervention, and that they were not to discuss the interventions with each other or with their students, due to the validity and the reliability of the research study. Further, the teachers were informed that they would be taught the *creative dramatics* intervention treatments by the study investigator, and that the training would require 30 minutes of individualized instruction with each teacher. Additionally, the training would occur on the same day as the random assignment process – following that activity – and within the contracted school day, and during their parent-teacher conference week, for their convenience, and just two days prior to the study commencing (refer to Appendices C, D, E, J, and R).

**Teacher training.** Prior to meeting with the study investigator; yet after agreeing to participate in the study, the three fourth grade teachers were told by their school principal that they would be adding arts education integration strategies to the district required district adopted language arts curriculum – *Theme 2: American Stories: Focus*
on Plays (Houghton Mifflin Reading, 2005), and that these strategies would be taught to them by the investigator just prior to the study commencing. Additionally, the teachers were told that all three classroom condition group strategies were designed to enhance and improve student achievement. The three classroom condition groups were assigned as Group One, Group Two, and Group Three, with each teacher providing a different treatment with a focus to examine student achievement in vocabulary words through creative dramatics interventions. The assignment of group names to each teacher, as opposed to two experimental groups and a control group, was intentional and designed to control for and to reduce the possibility of the John Henry effect, also referred to as compensatory rivalry by the control group and referenced as one of the 12 internal threats to the validity of an experiment (Gall et al., 2007, p. 387).

The study schedule was drafted and reviewed by the investigator with the study teachers, following the random assignment process. The school and school district calendar, as well as the teacher required district in-service days, necessitated a five week study time frame, and the reduction of the initial 25-day study to a 20-day study.

Whereas two-thirds of each of the teachers’ regularly assigned students would be experiencing different creative dramatics treatments, the teachers were encouraged to not ask questions such as, “What did you do in language arts block today?” of students who were not in their randomized classroom, nor were they to share what students did in their randomly assigned group. Specifically, the study teachers were asked to not discuss the creative dramatics interventions they were trained to employ with each other or with their regularly assigned classrooms. Similarly, the study students were told by their teachers not discuss what they were learning with their classmates in their randomly
assigned classrooms. Further, all students were encouraged to exhibit their best behaviors while passing to and from their randomly assigned classrooms, as well as to have good attendance and to do their best work during their language arts block sessions, as this would help to ensure the maximum amount of time for the study learning activities.

Consequently, the students returned to their regularly assigned classroom following the language arts block. The investigator was a hall monitor during the passing of students to and from their regularly assigned classrooms to their randomly assigned classrooms, as well as during the time that the students passed back from their randomly assigned classrooms to their regularly assigned classrooms. Refer to Appendix C for the specifics of the Teacher Training and Intervention Treatment Methods and strategies, as well as to the treatment fidelity portion of this chapter.

Experimental group I – creative dramatics and vocabulary words (CDVW).

The Experimental Group I – CDVW creative dramatics treatment strategy included a daily five minute creative dramatics “warm-up”. The five-minute daily warm-up activity for students in Experimental Group I – CDVW involved students singing “hello” to their teacher and to each other, and using the syllabic and phonetic a cappella ‘solfège’ or ‘sol-mi-la’ three-tone melody as the tune used to chant the names of students, as in the folk song Rain, Rain, Go Away (see Figure C1). Additionally, the CDVW group daily started their treatment with the study investigator created “bravo X strategy” as a segue “warm-up” to the randomly assigned classroom; whereas, students jumped for joy from a core to a distal standing position and into a fully extended body ‘X’ position while saying or singing the word “bravo” (refer to Appendices B and C).
Following the *creative dramatics* warm-up, students experienced 10-15 minutes of *creative dramatics* improvisation with the story vocabulary words and vocabulary word definitions, during the first 15-20 minutes of each language arts class session. This type of treatment intervention is referred to by Podlozny (2001) as *creative drama* activities, and includes pantomime, movement, and improvised dialogue (pp. 102-3). The approach to enhancing vocabulary development with the use of drama by having students actively practice vocabulary definitions through physical movement was reported by Alber and Foil (2003), and referenced in Himmele and Himmele (2011, p. 72). Following the *creative dramatics* treatment, students experienced the language arts lesson plan which included district hand-outs and basal instruction for 20-25 minutes.

Students in Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) learned the vocabulary words and content (four stories) covered during the five-week study through researched *creative dramatics* techniques that allowed the students to act out the weekly vocabulary words and definitions with improvised movements, initially led by the teacher, and with student input. Students were able to chant and sing the phonetic and syllabic sounds of the vocabulary words and definitions, using body percussion (clapping, slapping, snapping, stomping) and syllabic rhythms for the vocabulary words and vocabulary word definitions as part of the *creative dramatics* treatment intervention. Then, students acted out the definitions to the vocabulary words using *creative dramatics* techniques. Consistently, and each day of the week the students sang, clapped, stomped, and chanted the syllables and definitions of each of the vocabulary words in the story for that week. Students in the CDVW treatment group expanded this intervention by initiating the singing the names of their classmates, as well.
Further, when the students re-read the story, they were encouraged by their teacher to
sing, chant, and act out the vocabulary words and definitions – individually and as a class.
The treatment interventions were created from the recommended pedagogies included in
the Washington State K-12 Arts Learning Standards (OSPI, 2011a). The pedagogies
included in the methodology of these treatment interventions are detailed in Chapter Two,
and cited in the references (Dalcroze, 1930; Kodály, 1974; Laban, 1971; Orff 1974/1980;
Steiner, 1997). Further, these pedagogies are referenced and included in the Teacher
Training and Intervention Methods for this study, in Appendix C. The goal was for every
student in the classroom to initiate the creative dramatics movements for a vocabulary
word; as well as the creative dramatics actions for at least one definition of a vocabulary
word, as there were 31 vocabulary words learned in the four stories.

Warm-up strategy for experimental group I – creative dramatics and vocabulary
words (CDVW). The five-minute daily warm-up activity for students in Experimental
Group I – CDVW involved students singing “hello” to their teacher, using an a cappella
‘solfège’ or ‘sol-mi-la’ three-tone melody, as well as jumping for joy using the “bravo X
strategy”, and included neck, shoulder, and stretches shared in the teacher training.

Story summary strategy for experimental group I – creative dramatics and
vocabulary words (CDVW). Three of the four stories were reviewed during the fourth
week of the study, which was a three-day school week due to the Thanksgiving holiday.
Each of the three stories, already covered, were summarized by each student drawing a
four-page story booklet, which included a cover page and one page each for students to
summarize each story with a beginning, middle, and ending, and with instructions to use
the vocabulary words in their summary, via a folded 8 ½” x 11” white sheet of
construction paper. While summarizing the first story, students began to spontaneously draw pictures to summarize their writing and vocabulary words. Drawing was an optional summary strategy recommended in the district language arts adoption (Houghton Mifflin Reading, 2005). Consequently, the summary booklets were officially added as the summary strategy treatment for the Experimental Group I – CDVW for the remaining three story booklets, and the students were encouraged, by their teacher, to draw and write their summaries. For variety, the instructions for the summary booklet for the fourth story included students summarizing and drawing to the questions of who, what, where, when, why, and how of the story with a four-page story booklet. These booklets included a folded 8 ½” x 11” white sheet of construction paper and included a title page, as well as the summary images, writing, and vocabulary words for who and what on one page, where and when on one page, and why and how on one page.

**Experimental group II – creative dramatics and story-retelling (CDSR).** The Experimental Group II – CDSR treatment strategy included a daily five minute *creative dramatics* “warm-up” of a metaphorical adaptation of the 5-Minute Standing BrainDance (Gilbert, 1979, 2006). Following the *creative dramatics* warm-up, students experienced the language arts lesson plan which included district hand-outs and basal instruction for 20-25 minutes. During the last 10-15 minutes of each class period students utilized the use of *creative dramatics* improvisation by retelling each story with improvised student enactments of scenes using the story vocabulary words. Story scene strips were provided to the teacher, by the study investigator, to expedite selecting groups of students by scene to enact the stories. This treatment intervention is referred to by Podlozny (2001) as enactment with structure (pp. 100-1). The enactment of the story began on the second or
third language arts session for each of the content (four stories) covered during the five-week study. This enactment process occurred after the students had first heard or read the story, either by the pre-recorded CD, included and provided in school district adopted language arts curriculum (Houghton Mifflin Reading, 2005); or by the teacher and students reading the story out loud, or by the students silent reading the story. The goal was for each child in the classroom to have at least one character part in one of the story scenes each week. Students in Experimental Group II – Creative Dramatics and Story-retelling (CDSR) learned the vocabulary words and content (four stories) covered during the five-week study, through researched creative dramatics techniques that allowed the students to act out the four unit stories through improvised creative dramatics enactments and reenactments of each of the four stories covered during the study. The initial lesson plan included story enactment every day of creative dramatics treatment interventions.

Warm-up strategy for experimental group II – creative dramatics and story-retelling (CDSR). The five-minute daily warm-up activity involved students in the Experimental Group II – CDSR, in the eight sequential movements of the Standing BrainDance (Gilbert, 2006, pp. 36-9), using a metaphorical adaptation with creative dramatics to allegorically represent each of the eight movements. Such as, the movement for breath represented a balloon being inflated and deflated while the students were inhaling and exhaling. Additionally, the CDSR group daily started their treatment with the ‘bravo X strategy’ as a segue “warm-up” to the randomly assigned classroom; however, did not receive the ‘bravo X strategy’ on a consistent basis. Therefore, it was not included as a part of their recorded treatment (refer to Appendix C).
Story summary strategy for experimental group II – creative dramatics and story-retelling (CDSR). Three of the four stories were reviewed during the fourth week of the study, which was a three-day school week, due to the Thanksgiving holiday. Each of the three stories, already covered, were re-enacted – one per day – as a part of the summarizing and review strategy required in the school district adopted language arts curriculum (Houghton Mifflin Reading, 2005). Again, the goal was for each student to have an opportunity to re-enact a story character, per day, per story.

Control group (CG). The Control Group – CG instruction included daily five minutes of silent reading at the beginning of each class session. Then, students experienced the language arts lesson plan which included district hand-outs and basal instruction for 20-25 minutes. The last 15 minutes of the class period included 10 minutes for the district adoption Reader’s theatre strategy (Houghton Mifflin Reading, 2005), whereas students were selected by their teacher to read the character lines of the story scenes, one scene at a time, by coming up to the front of the classroom, in a line, and reading the lines of the characters from the story scenes. Following, the last five minutes of every language arts class period, the individual student reflection notebooks were passed out and the students wrote what they learned in the lesson that day. The investigator returned at the end of each class period and took the reflection notebooks out of the classroom. The initial lesson plan included Readers’ theatre reading every day.

Students in the Control Group (CG), learned the vocabulary words and content (four stories) covered during the five-week study by following the lesson design of the required language arts unit, co-created by the three present study teachers. These students read the same story texts as those in the two creative dramatics treatment
classrooms; however, they did not enact those (Winner & Hetland, 2001). These students retold the story, utilizing a Readers’ theatre format (Groff, 1978; OSPI, 2011d, p. 137), as recommended in this study school district adopted language arts curriculum (Houghton Mifflin Reading, 2005), and included as a creative dramatics strategy for story five of the reading unit (which was not a part of the study). Additionally, during the final five minutes of each language arts session, this Control Group of students wrote about what they learned in the language arts block in their daily reflections in a personal journal; however, this was an activity in isolation, not to be reviewed or commented on, or utilized by the Control Group teacher (Shoop, 2006).

Warm-up strategy for the control group (CG). The five-minute daily warm-up activity for students in the Control Group involved silent reading for the first five minutes of each class session, as the selected ‘warm-up’ chosen by the Control Group teacher. Students were instructed, by their teacher, to bring books that they wanted to read during this time. Specifically, these books were different from the language arts books and stories. Intermittingly, students were allowed to experience the “bravo X strategy”, following the five minutes of “silent reading” and prior to their lesson beginning. The “bravo X strategy” was used, by the Control Group teacher, as a reward to the students, for coming into the randomly assigned classroom quietly, bringing all of the materials requested for the lesson (including the book for silent reading), and reading silently for five minutes, while the teacher took roll and prepared materials for the lesson. The “bravo X strategy” occurred in the Control Group classroom at least four times during the study, or once per week, without consistency as to when it would occur during the week. Therefore, it was not measured as a treatment, method, or strategy.
Story summary strategy for control group (CG). Three of the four stories were reviewed during the fourth week of the study, which was a three-day school week, due to the Thanksgiving holiday. Each of the three stories, already covered, were summarized; whereas, students retold the three stories utilizing the Readers’ theatre format of the district adopted language arts curriculum (Houghton Mifflin Reading, 2005). Students were selected, by the teacher, to stand up in front of the class and read the stories as the characters of the stories by story scene. The goal was to read through one story per day, and for every student to have an opportunity to read the lines of a story character at least once per day, per story (refer to Appendix C).

The decision to add the individual and personal reflection journals was assigned as a daily summarizing strategy, for the Control Group, to reduce the internal validity threat of a John Henry effect. The John Henry effect is defined as, “A tendency of persons in a control group to take the experimental situation as a challenge and exert more effort than they otherwise would” (Vogt, 2005, p. 161).

Hawthorne Effect and John Henry Effect. Kardash and Wright (1987) stressed the importance of clearly describing the types of activities, if any, for the students in the control group, stressing that without such documentation, it would be impossible to determine whether the positive effects associated with the treatment(s) in creative dramatics were due to the specificities of the treatment or to a Hawthorne effect (p. 17). The Hawthorne effect is defined as, “A tendency for subjects of research to change their behavior simply because they are being studied” (Vogt, 2005, p. 140). Therefore, to further control for both the John Henry and Hawthorne effects (Vogt, 2005), the three study groups were referred to as Group One, Group Two, and Group Three, during the
randomization process and throughout the course of the study; as well as in any conversations with study teachers, student participants, and school personnel. Each teacher believed they were providing creative dramatics activities in alignment with and in enhancement of their district adopted language arts curriculum (Houghton Mifflin Reading, 2005).

Accordingly, each of the study’s randomly assigned classrooms and randomly assigned teachers learned and experienced a different creative dramatics intervention. These efforts were made so that any possible and observed effects could be attributed to the two experimental treatment conditions employed by Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) and Experimental Group II – Creative Dramatics and Story-retelling (CDSR). In addition to examining the effects of creative dramatics as an intervention treatment, each of the two creative dramatics treatment interventions was examined – individually – to specifically and further investigate any differences in the effects of the two creative dramatics intervention strategies. Additionally, these efforts were made to control for the threat to the external and ecological validity of the experiment regarding the Hawthorne effect (Gall et al., 2007, p. 390), as cautioned by Kardash and Wright (1987), as well as efforts to control for the threat to the internal validity of the experiment regarding the John Henry effect with regards to the control group (Gall et al., 2007, p. 387). Gall et al. (2007) cautioned researchers of social experiments, “The most difficult task in doing an experiment is to hold constant or eliminate all extraneous variables that might affect the outcome measured by the posttest” (p. 383). Substitute teachers were an extraneous variable and
will be explained further in the treatment fidelity and internal and external threats to the validity of study sections of this chapter.

**Continuing education credits for study teachers.** The study teachers were informed that regular attendance on their behalf, as well as on the behalf of their students was expected and appreciated, and needed for the validity and reliability of the study treatment interventions. In order to promote and validate a commitment to the study, 30 continuing education credits (CEUs) were provided for the study teachers through the investigator’s university, as referenced earlier, and at no cost to the study teachers. The 30 hours of teacher time included 11 hours prior to the study commencing, which included eight hours for teacher PLC time to create the draft lesson plans and the draft of the criterion-referenced vocabulary test, and three hours for the random assignment process and teacher training with the study investigator. Fifteen hours were earned for the 45 minutes of daily instruction during the 17 days of treatment, and three days of test administration for the pretest, posttest, and retention test (900 minutes or 15 hours). Finally, an additional four hours were added to include teacher weekly planning, and any time with the study investigator; resulting in 30 hours of CEUs or three university credits. Accordingly, the study teachers each received a total of 30 hours of CEU credits or three college credits for participation in the study (see Appendix S).

This inclusion of this specific element of the present study is included for future replication and generalizability of the study. The provision of CEUs for the study teachers proved to be a desirable aspect of approval of the study when the investigator was interviewing with the school district. Further, the ability of the investigator to specify how much teacher time and instructional time would be necessary for the study,
prior to study commencing, proved to be a significant factor regarding the acceptance and approval to conduct the research in the district and school. Consequently, a 20-day study was employed, as opposed to a 23-day study; resulting in a better fit with the school and district calendars, and teacher commitments.

**Confidentiality agreements.** All three teachers agreed to and signed confidentiality agreements regarding the details of the study, their individual treatments, and all communications and resources from the investigator to each of them, prior to, during, and following this study (see Appendix R). Further, the investigator agreed to confidentiality of the study school district, school, teachers, and students involved in the investigation.

**Group “vocabulary creative dramatics (CD) training.”** The group training was a requirement for all three teachers, and involved all three of the study teachers being together for a ‘one time’ explanation of common expectations, and for consistency of these expectations from all three teachers throughout the study. During the group “vocabulary CD training,” the specific logistics and necessary paperwork required of all three teachers were reviewed regarding the 20-day schedule of the study. This review included reviewing the school and district calendar and teacher schedules, which included state holidays, school district in-service, and school activities. It was determined to reduce one week of the study, due to interruptions that would occur during this study treatment time. Therefore, the entire revised study schedule involved 17 days of treatment and three days of test administration; which encompassed 19 consecutive school days (with holiday interruptions for Veteran’s Day and Thanksgiving Vacation), and included interruptions of three teacher required district and school in-service days.
The 20 minutes of “vocabulary creative dramatics (CD) training” also included a review of the process of sending and receiving weekly lesson plans, daily teacher reflection sheets, and how to communicate with the investigator, as well as common creative dramatics training. Lesson plans for each week were sent, via email, by the investigator to each present study teacher, and by the Sunday evening, or prior to school commencing on Monday of each week, and prior to the next week of language arts lessons commencing. The investigator and teachers agreed that the investigator, in addition to providing emailed lesson plans to each teacher, would provide a hard copy of the weekly lesson plans and teacher reflection sheets for the week in a manila envelope marked with the teacher’s name and personally given to the teacher just prior to the first lesson of each week commencing. Therefore, hard copies of the weekly lesson plans were delivered to each teacher prior to the first lesson of each week (on Monday of each week), and just prior to the beginning of the language arts class. Each week of lesson plans and resources were reproduced on a specific and different color of paper (white, yellow, green, blue, and pink), for easy sorting, coding, and reference.

It was agreed that all email communications to the teachers and from the investigator would also be sent to the school principal in efforts to keep her informed. As in all aspects of this study, emails were to be kept confidential and not forwarded or printed, and all communications and aspects of the study would be of a professional and confidential nature. Any concerns would be immediately shared with the administrator, who would reply as soon as possible for clarity or resolution. All aspects of communications with the teachers and school personnel, in this present study, were successful, without exception.
Alignment. State and national learning goals and standards were a focus of this study, regarding English language arts and creative dramatics. Essential, is that this study integrated the district adopted language arts curriculum unit Theme 2: American Stories: Focus on Plays (Houghton Mifflin Reading, 2005) with the state standards for reading and the arts, and further aligned the intervention treatments to the national common core standards for language arts, as shared earlier in this chapter.

Three creative dramatics segue activities were shared with all three teachers, in alignment with the district adopted language arts curriculum, and state and national standards underlying this study. Refer to Appendix C for the specifics of the teacher training and creative dramatics segues and treatments by classroom condition.

Investigator ‘on-site’ for the 20-day study. It was determined that the investigator would be at the study school site each day during the language arts block of instruction. It was agreed that the investigator would also assist as a daily hall monitor as students passed from their regularly assigned classrooms to their randomly assigned classrooms, thus observing the students maintaining respectful and orderly transitions and personal management, which resulted in orderly and disciplined classroom management in the randomly assigned classrooms, and allowed the classroom teachers to remain in their classrooms to receive their randomly assigned students, as well as to monitor one-third of their regularly assigned students who remained in their regularly assigned classrooms. The investigator being ‘on-site’ was a critical aspect of the study treatment fidelity, which follows in the next section of this chapter. Additionally, the investigator provided all necessary resources for the teachers and students.
Treatment fidelity. The term treatment fidelity is referred to by Gall et al. (2007), as “the extent to which the treatment conditions, as implemented, conform to the researcher’s specifications for the treatment” (p. 395). Therefore, it was shared with the classroom teachers, prior to the study commencing, that the study investigator would be going in and out of the three fourth grade classrooms to observe, on a daily basis, during the 45 minute language arts block. This practice was established to ensure treatment fidelity of the study treatment interventions. Further, the teachers were reminded that the investigator would not be providing any treatment to the students, nor teach or assist the teachers in the instructional process or treatments in any of the classrooms. Additionally, it was discussed with the teachers that their attendance and participation to provide the treatment interventions was a critical component of the study. Thus, their daily attendance and providing the treatment interventions was included in the course requirements to earn the hours associated with the three CEU credits that each teacher would earn for their participation in the study.

As referenced the intent of the investigator was to observe what was happening in each classroom on a daily basis and to ensure treatment fidelity for the lessons and treatments in each classroom condition. This daily observation, by the investigator, occurred from the back of each classroom, where a desk was available for the investigator to sit, write, take photographs of each treatment classroom, and take video recordings of treatment interventions while they were occurring. Further, intentional efforts were made to not interrupt or interfere in the instructional process in any way. Additionally, the investigator was available for questions or concerns, and to collect the Teacher Daily Lesson Log and Reflection sheets regarding a daily teacher self-report on
student participation in the study and treatment, at the end of each school day (after students left, and during the teacher planning time).

The investigator was present at the school site from 12:30 p.m. to 4:00 p.m., for each of the 20 days of this study, plus an additional three days, for a total of 23 days of commitment on the part of the investigator. An additional three days of time, prior to the study commencing were required, on the part of the investigator, and included one day each to: (a) meet with the school district administration and the school principal; (b) meet with the teachers and principal to introduce this study; and (c) meet with the teachers and the independent district office observer to conduct the randomization process, and to facilitate the teacher treatment training process. Consequently, treatment fidelity was recorded by the investigator through daily observation in the three present study classrooms for the 17 days of the study treatment and for the three test day administrations, for a total of 20 school days at the school site, during the school study, and three days prior to the study beginning, for study planning with the teachers.

A critical component for those considering the replication of this study in the future is the necessity for the investigator being able to be at the study school site and in the three study classrooms and for an extended period of time each day. This component was necessary to employ into the study guidelines and reporting to ensure treatment fidelity regarding the treatment interventions, and had been a repetitive plea from earlier researchers (Conard, 1992; Mages, 2008; Massey & Koziol, 1978; Podlozny, 2000; Vitz, 1983; Wagner, 1998).

Subsequently, the investigator requested a ‘teacher’s box’ for the duration of the study for communications with the teachers and school administration, and to support the
teachers returning their written reflections to the investigator on a daily basis and prior to
the next day’s lesson. The study investigator’s ‘teacher’s box’ was located on the highest
shelf of the teacher box wall, in efforts to maintain teacher and student confidentiality
regarding the daily communications aspects of the study, and ease of communication for
the teachers. Further, the investigator was allowed to work in multiple teacher work
spaces in the school office area, which included a nurse’s room, a conference room, and
the teachers’ work room. These work spaces allowed the study teachers daily access to
the investigator, if needed, and during the 30 minutes of contracted teacher planning time
at the end of the school day.

On the tenth day of this study (the ninth day of treatment) the school principal
conducted a district required formal observation of the Experimental Group I teacher.
The Experimental Group I teacher continued with the assigned study lesson plan during
her formal observation that included the study treatment intervention for creative
dramatics and vocabulary words. Consequently, the intervention recorded in the
principal’s observation is the Creative Dramatics and Vocabulary Words (CDVW)
treatment. The following is the portion of the principal’s observation that included
written documentation of the Experimental Group I teacher using the creative dramatics
treatment intervention (CDVW) during the observation. The Experimental Group I gave
permission to the investigator and to the principal to include this portion of her
observation in the dissertation. The principal sent the following, from her notes:

“__________ led the students in a warm up exercise in movement/stretching, ending in
“Bravo.” All students participated. ____________ led the students in a word calling “echo song”
involving memorable movement illustrating vocabulary words from the story they were about to
read. The movement included sound effects. ____________ told students what they would be
doing and how to make it more challenging if desired. She stated the objective: students will be
able to summarize using main ideas. A student was called on to read the definition of “summarize”
on the strategy poster on the wall. Students listened to the story, “Boss of the Plains.” When
students heard a vocabulary word read, they acted out the movement established” (study school principal, personal communication, November 15, 2011).

Due to the confidential nature of the teacher formal observation of the Experimental Group I teacher, the investigator did not spend time in the Experimental Group I classroom on the day of the teacher observation. The principal’s notes regarding the teacher observation validated that treatment fidelity was met and the minutes could be counted for study treatment on this day for the students in Experimental Group I. Further, a teacher evaluation can take place during an empirical design, as long as the lesson plan is followed and the treatment intervention is provided as described. The investigator spent 20 and 25 minutes respectively in the Experimental Group II and Control Group classrooms on day 10 of the study, and no time in the Experimental Group I room, due to the principal evaluation and teacher observation for the Experimental Group I teacher.

Specifically, the study treatment fidelity of each classroom condition was reported via an end of study self-report for individual teacher participation in the study – completed by all three study teachers – and anonymous (refer to Appendix T). This investigator created self-report was administered to all three teachers in an after-school meeting, following the posttest administration, and included with the final paperwork collection for the study, and CEU credit paperwork. This meeting with the study teachers included the instructions for the five-week follow-up retention test (which occurred on January 3, 2012), and followed the 19 days of the study, which included the pretest, 17 days of treatment, and the posttest. The CEU credits were completed and submitted to SPU following the successful administration of the retention test on January 3, 2012.

Qualitative methods employed for validation of treatment fidelity. Qualitative methods employed by the investigator to validate treatment fidelity (although not used in
the statistical analyses of this empirical study) were: photographs, video and audio recording of treatment interventions, and approximately 15-20 minutes of time spent in each classroom – on a daily basis – and at different times throughout each 45-minute language arts class session, which included copious notes regarding treatment implementation. Additionally, self-reporting qualitative methods were employed, in the form of daily teacher reflections, weekly lesson plan refinement, as well as study teacher self-reporting on study interventions, and teacher professional information – all completed by the teachers and provided voluntarily to the study investigator. Further, the investigator daily recorded treatment fidelity. Reflection notebooks and story summary booklets were reviewed, copied, and collected by the study investigator for referral, generalizability, and replication possibilities.

**Teacher experience.** The experience of the three present study teachers follows. The Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) teacher had three years of experience (which included two semesters of teaching as a long-term substitute teacher at the present study school site), and was beginning her fourth year of experience as a long-term substitute teacher. The Experimental Group II – Creative Dramatics and Story Retelling (CDSR) teacher had three years of teaching experience, with two years at this study school. The Control Group (CG) teacher had six years of teaching experience, which included three of those years as a substitute teacher, one year as an enhancement teacher for third grade, as well as two years as a continuing contract fourth grade teacher at another elementary school in the present study school district. She had been transferred to this study school for the current school year, due to loss of enrollment at her previous position in the study school district. The Control Group
teacher was the only teacher who had taught the course content (four stories) of the district adopted language arts unit of instruction Theme 2: American Stories: Focus on Plays (Houghton Mifflin Reading, 2005), as she taught fourth grade in her previous assignment, in the same school district, prior to being transferred to the study school, as referenced. Refer to Appendix U for a summary of the investigator created Teacher Survey of Professional Information. The information included in this survey was voluntarily provided by the study teachers to the investigator for inclusion in the dissertation, and maintains their confidentiality, per the study agreement.

**School and District Schedule**

The school district and school calendars and schedules were incorporated into this present study investigation prior to the commencement of the study. This was an intentional action, on the part of the study investigator, in an effort to limit the threats to the factors that may affect the internal and external validity of an empirical investigation, such as the present study. Furthermore, the district and school calendars were taken into consideration in attempts to control for the treatment fidelity of the intervention strategies. Also, during the teacher joint training session, and following the random assignment process, a review of the teacher responsibilities for the teaching of the Washington State K-12 Arts Learning Standards (OSPI, 2011a) occurred. The investigator presented all three study teachers with a copy of the Arts EALRs (OSPI, 2011a), as well as the Washington State K-12 Options for Implementing the Arts Learning Standards through Theatre by Grade Level (OSPI, 2011d), and copies of all supporting documents and materials essential for their lessons. These materials were provided to all three teachers, in a decorative file folder, and for immediate access and reference throughout the study.
These controls were to avoid internal validity issues and to ensure a standards-based focus in the *creative dramatics* treatments and instructional methods, as discussed throughout this chapter. These curriculum expectations and resources were in keeping with those expectations already required by the school district and school, and therefore not in addition to, or different from, what was currently expected of the teachers to use in their instructional methods with their students. The interventions for all three treatment groups also referred to as the classroom conditions (see Appendix C) were taught to the study teachers by the investigator. This individual training followed the random assignment process, and the initial group introduction and explanation to all three teachers, including paperwork details regarding the study confidentiality and expectations.

**Treatment intervention minutes and hours.** A total of 340 minutes of *creative dramatics* treatment interventions per condition group were expected for the 17 days of the study. This amount of time was calculated at 20 minutes per day times the 17 days of treatment interventions, and equaled approximately five hours and 40 minutes of treatment interventions over the 17 days. Five hours and 40 minutes of total time allotted for the *creative dramatics* intervention strategies averaged out to one hour and eight minutes per week, times five weeks, per treatment intervention. Five hours and 40 minutes is approximately one full day of school for most elementary students. Therefore, the treatment strategies were revised to meet the time expectation of 15 to 20 minutes of *creative dramatics* instruction per day, for 17 days. Consequently, the total amount of time allotted for the *creative dramatics* treatment interventions varied from a total of 255 minutes, or four hours and 15 minutes (at 15 minutes per day), to a total of 340 minutes, or five hours and 40 minutes (at 20 minutes per day), should all conditions be met.
The amount of time designated for the treatment enhancements to the regularly required language arts curriculum was deemed reasonable, by the school district administration and school principal, at the time of the research proposal presentation, and provided the impetus for approval from the school district and school to conduct this experimental study. Furthermore, the integration of *creative dramatics* instruction into the language arts block would provide enhancement to the language arts instruction for the fourth grade students involved in the study, by providing instruction regarding the arts discipline of drama – through *creative dramatics* – to these fourth graders. The amount of time involved with *creative dramatics* instruction would approximate the same amount of time allotted for study in dance (included in the physical education instruction), music, and visual arts by other arts specialists (referenced in the school description) or approximately one hour per week. Further, the study *creative dramatics* treatment interventions would provide the added component of arts integration into the language arts unit of instruction. Consequently, the lesson plan drafts were refined and developed so that the *creative dramatics* treatment interventions would take 15-20 minutes per language arts lesson, which allowed time for teacher and student flexibility, as well as for unexpected interruptions that occur in a school setting.

*Teacher absences.* If a teacher was absent, for illness or for professional development, the minutes in the language arts block would not be included in the total *creative dramatics* treatment intervention minutes, due to a lack of *treatment fidelity* by the substitute teachers (Gall et al., 2007, p. 395; Snow, 1974). The Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) teacher was absent one time for teacher in-service. The Experimental Group II – Creative Dramatics and Story
Retelling (CDSR) teacher was absent four times – two absences for teacher in-service and two absences for personal illness. The Control Group (CG) teacher was absent four times – two absences for teacher in-service and two absences for personal illness. Therefore, 15 or 20 minutes of treatment intervention time was subtracted from each classroom condition for each time a substitute teacher was employed, to control and account for the lapse in treatment fidelity (Gall et al., 2007, p. 395). Additional treatment fidelity was compromised when the Experimental Group II – CDSR students did not experience the creative dramatics story enactments on a daily basis when their randomly assigned teacher was present, and further, the Control Group – CG students did not experience the Readers’ theatre activities on a daily basis when their randomly teacher was present.

The investigator’s effort to provide a clear illustration of what happened in each of the three classroom conditions, including the amount of time that was provided for treatment interventions in each of the two creative dramatics intervention classrooms is presented in Figure 2, entitled Summary of Study Intervention Strategies, Minutes, and Hours. Figure 2 also details the three classroom conditions, including the warm-up; treatment intervention; and summary strategies of each classroom condition during the 45 minute language arts block. Further, Figure 2 illustrates the Readers’ theatre and the “I learned” reflection notebook strategies employed in the Control Group condition.
### Summary of Study Intervention Strategies, Minutes, and Hours

<table>
<thead>
<tr>
<th>N</th>
<th>Study Treatment</th>
<th>Teacher Absence</th>
<th>Amount of Treatment at 15 Minutes Per 17 Days = 255 Minutes = 4 Hours and 15 Minutes</th>
<th>Amount of Treatment at 20 Minutes Per 17 Days = 340 Minutes = 5 Hours and 40 Minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>28</td>
<td><strong>Experimental Group I</strong> <em>(Creative Dramatics and Vocabulary Words [CDVW])</em></td>
<td>1</td>
<td>240 minutes = 4 hours</td>
<td>320 minutes = 5 hours and 20 minutes</td>
</tr>
<tr>
<td></td>
<td>Warm-up: <em>Bravo X strategy</em></td>
<td></td>
<td>Creative Dramatics and Vocabulary Words treatment</td>
<td>Creative Dramatics and Vocabulary Words treatment</td>
</tr>
<tr>
<td></td>
<td>Singing/saying “hello”;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Treatment:</strong> Singing and acting out vocabulary words and definitions with creative dramas; acting out vocabulary words in story reading</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Summary:</strong> Story summary booklets with sketch drawings and narrative</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td><strong>Experimental Group II</strong> <em>(Creative Dramatics and Story Retelling [CDSR])</em></td>
<td>4</td>
<td>195 minutes = 3 hours and 15 minutes</td>
<td>260 minutes = 4 hours and 20 minutes</td>
</tr>
<tr>
<td></td>
<td>Warm-up: BrainDance with metaphor movements</td>
<td></td>
<td>Creative Dramatics and Story Retelling treatment with story scene strips</td>
<td>Creative Dramatics and Story Retelling Treatment with story scene strips</td>
</tr>
<tr>
<td></td>
<td><strong>Treatment:</strong> Enact and re-enact stories with creative dramatics</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td><strong>Summary:</strong> Story re-enactments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td><strong>Control Group (CG)</strong></td>
<td>4</td>
<td>195 minutes = 3 hours and 15 minutes</td>
<td>260 minutes = 4 hours and 20 minutes</td>
</tr>
<tr>
<td></td>
<td>Warm-up: Silent Reading</td>
<td></td>
<td>110 minutes of <em>Readers’ theatre</em> plus 85 minutes of reflection journals</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Treatment:</strong> <em>Readers’ theatre</em> story retelling</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Summary:</strong> “I learned” reflection notebooks</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Figure 2. Summary of Study Intervention Strategies, Minutes, and Hours

**Pretest, posttest, and retention test protocols.** The decision to test students in their regularly assigned classrooms was made for the following reasons: (1) to ensure testing administration consistency; (2) to allow for the maximum amount of time for the three test administrations of the study (pretest, posttest, and retention test); and (3) to
allow students to take an exam at their own desks; thus, providing a familiar, comfortable, and uninterrupted testing experience, and to attempt to control for test anxiety issues.

Additionally, the investigator provided sharpened pencils for each test administration to diminish interruptions from students who did not have a pencil or did not have a sharpened pencil. The tests were color coded with a different color paper and dated for each test administration to control for correct data entry by pretest (white), posttest (yellow), and retention test (green); whereas, all tests were created in *Times New Roman* 12 point font; and with upper and lower case lettering in all aspects of the test instrument. One is able to read clearly and easily from these colors of paper and this type and size of font (Burmark, 2002, pp. 22-39). Further, the top of the test included the date of the test administration, as well as spaces for the student to write the teacher name and the student name.

Tests were distributed to the teachers in an opaque envelope at the beginning of each test administration class session, and by the study investigator. All test administrations began five minutes into the regularly scheduled language arts block to allow for any late students and for the instructions to be clearly given to all of the students. Students were directed to do the following via written and verbal instructions by their teachers: (a) write their first and last name and their regular classroom teacher’s name on the top left hand side of the test; (b) read the directions very carefully and select one answer for each question; (c) do your best work; (d) check your answers; and (e) write clearly on all answers. Additionally, the teachers were directed to: (a) instruct the students that they would have the entire period to take the test; (b) instruct students to bring the completed test up to the teacher to put in the test envelope; and (c) instruct
students to bring a book for silent reading and a quiet classroom environment to show respect to other students until all of the students were done taking the test. All tests were collected by the study investigator as soon as all of the tests had been collected and prior to the end of each class period. The study investigator traveled back and forth into all three classrooms during the test administrations and was immediately available to collect the test administration envelopes for all three test administrations. No feedback regarding student scores was given to the teachers or the students regarding the three test administrations, to attempt to control for the external invalidity possibilities of the interaction of pretesting and the treatment (Campbell & Stanley, 1963, p. 17; Gall et al., 2007, pp. 397-8; 405).

These strict testing protocols were followed for all three test administrations, to attempt to control for any threats to the validity and reliability of the test administration process and for future replication instructions and protocols. Efforts were made to ensure that all three of the study teachers were present on the test administration days. Specifically, one of the study teachers was a long-term substitute teacher during the entire research study timeline. Her long-term substitute teacher assignment ended on January 3, 2012; therefore, in order to provide for the consistency in the retention test administration for her students, the retention test had to be administered on January 3, 2012, which was one day back from the two-week December holiday vacation. This may have possibly contributed to student mortality for the retention test. Refer to Appendix F for a copy of the teacher and researcher-designed 31-question criterion-referenced multiple choice vocabulary test created for and piloted with this present study. Refer to Appendices I and V, respectively, for the Research Study Timeline, and the Summary of Study Details.
As stated earlier in this chapter, raw scores were used in the data analysis to calculate the descriptive and inferential data. Since the 31-test items were equally weighted, the possible raw scores on the instrument ranged from 0 to 31 and provided for interval test data as required for parametric procedures (Field, 2009; Gall et al., 2007). Further, only the 31 vocabulary words covered in the four stories were presented to further control for external threats to the validity and reliability of the study dependent variable. Finally, all tests were hand scored by the study investigator and entered into a database created for the study, for use in the research analyses used for the study examination. Refer to Appendix W to view the Descriptive Statistics Histograms for the pretest, posttest, and retention test by classroom condition.

**Representative design.** Efforts to create a representative design experiment that reflected the view of the environment and the learner (Gall et al., 2007; Snow, 1974) was a goal of the investigator, with efforts to increase the generalizability of the findings from the experiment, as well as to limit the internal and external threats to the validity and reliability of the study. Snow (1974) believed that educational researchers should design experiments to reflect this stated view of the environment and the learner; while addressing three key assumptions of representative design. Therefore, the following three assumptions were addressed in the pretest-posttest control group design of this study in attempts at a representative design:

- The characteristics of the environment are complex and interrelated;
- Human beings are active processors of information; and do not react passively to experimental treatments;
• The human organism is complex, and therefore; any experimental intervention is likely to affect the learner in complex ways. (Gall et al., 2007, p. 393; Snow, 1974, pp. 265-91)

Snow (1974) acknowledged that true representative designs are very difficult to achieve in education. The employment of the aforementioned qualitative methods with lesson plans, DV, and observation, allowed the investigator to view the experiment with an emic perspective of the study students and teachers, per Snow’s representative design recommendations (Snow, 1974, pp. 265-291). These aspects included the investigator training the teachers in the creative dramatics interventions for the teachers to provide the treatments to their students, as opposed to the investigator being the treatment, or a different teacher coming into the classrooms to teach. Further, involving the teachers in the processes and aspects of the study that they would be employing assisted in establishing trust between the study investigator and study teachers. The following aspects of teacher involvement in the study have been referenced throughout this chapter, and are reaffirmed in this section, as they were essential to the success of this examination, treatment fidelity, and internal and external validity controls. They include involving the study teachers in the random assignment, lesson plan development, vocabulary test development, intervention training, contractual agreements, continuing education credits, and as leaders in their district – selected for a program evaluation by their school district. Further, the support of their building principal was equally essential.

Additionally, the investigator attempted to be an “invisible” presence in the classrooms. The study teachers reported to the study investigator that they were not aware, nor were their students aware of the investigator coming in and out of the
classrooms during the study. Specifically, the presence of the investigator was not an interruption to instruction. The investigator wore black clothing each day, similar to how a theatre stage hand uniforms, so as to be present – and yet – not visible; in order to pass between the three classrooms without being seen.

**Internal and external validity controls.** The pretest-posttest control-group design with random assignment was selected as the design for this experiment, since it effectively minimizes the 12 threats to the *internal validity* of the study and presents only one main threat to the *external validity*, which is the interaction of pretesting and the treatment intervention(s) (Campbell & Stanley, 1966, p. 17; Gall et al., 2007, pp. 397-8; 405). Gall et al. (2007) described the *internal validity* of an experiment as “the extent to which extraneous variables have been controlled by the researcher” (p. 383). Further, Gall et al. (2007) described the *external validity* of an experiment as “the extent to which the findings of an experiment can be applied to individuals and settings beyond those that were studied” (p. 388). According to Gall et al. (2007), by controlling the factors affecting the internal and external validity of experiments, “a researcher strengthens the power of an experiment to demonstrate a cause-and-effect relationship” (p. 381-392), which was a goal of this investigation and the intent of the investigator. Furthermore, according to Gall et al. (2007), the pretest, posttest, control group design, when designed and conducted correctly, has the best potential for avoiding the 12 internal threats to invalidity.

Specifically, the investigator incorporated the teachers in several aspects of the research study to attempt to control for the possibility of 12 internal and 12 external threats to the validity of empirical studies. The investigator employed aspects to address
these threats were: (1) fourth grade teacher team development of the draft of the initial lesson plan to cover the language arts unit of study to be learned during the study; (2) fourth grade teacher team development of the draft 31-question teacher-researcher developed criterion-referenced vocabulary test measuring the language arts unit of study; (3) fourth grade teacher team involvement in the randomization process of the three classroom conditions, including the randomization of students, and the randomization of the teachers; (4) continuing education credits provided for the teachers for their participation in the research study; and (5) joint teacher training ("vocabulary CD training") to cover logistics, answer questions, and learn common creative dramatics techniques incorporated in the language arts unit of study.

Furthermore, the "vocabulary CD training," or "group training" for all three present study teachers, occurred prior to the individual creative dramatics treatments being taught to the teachers, in an effort to control for the following three internal threats to the validity of this study as defined by Gall et al. (2007). The following internal threats were controlled: (1) experimental treatment diffusion; (2) compensatory rivalry by the control group; and (3) resentful demoralization of the control group and the Hawthorne effect and John Henry effect referenced earlier in this chapter.

Substitute teachers. Substitute teachers were an extraneous variable and an added threat to the internal validity of the experiment (Campbell & Stanley, 1963; Cook & Campbell, 1979; Gall et al., 2007, p. 383). In efforts to control for this internal threat to the validity of the experiment, the same substitute teachers were employed for the same classrooms, when possible. The school principal informed all substitute teachers involved in the study that the study investigator would provide them with a detailed
lesson plan to follow during the language arts block, and to follow the lesson plan given to them by the investigator, due to a program evaluation that was occurring in those classrooms regarding the district adopted language arts curriculum (National Study of School Evaluation, 1998). The lesson plans were provided to the substitute teachers by the investigator just prior to the start of the language arts block of instruction. Substitute teachers were also given a Teacher Daily Lesson Log and Reflection Sheet by the investigator to write down their reflections of the language arts block of instruction (see Appendix L). These reflections were optional for the substitute teachers, and were collected by the investigator before the substitute teachers left for the school day. The substitute teacher reflections were kept in a substitute folder for study referral, by the investigator, regarding student progress by treatment group on days where treatment minutes were not included in the final analyses.

**Data Analysis**

This investigation was experimental; therefore, both descriptive and inferential statistics were computed in analysis of the four research questions. Tests of statistical significance were analyzed ($p < .05$). Additionally, post hoc analyses were conducted to further investigate and specify what kind of differences and where the differences were, following the statistically significant ANOVA; including looking for patterns in the results, due to the exploratory nature of this study investigation.

Descriptive statistics were used to describe the demographics of the sample and included frequencies, means, medians, and standard deviations, as well as skewness and kurtosis statistics for the three randomly assigned group’s dependent variable results.
regarding the pretest, posttest, and retention tests. Refer to Appendix W for the descriptive histograms of these results by treatment group and by test administration.

Inferential statistics were used to calculate the differences between and within the three groups and to address the specific research questions examined in this study investigation. Both parametric (one-way between-groups ANOVA, one-way repeated measures ANOVA, and mixed between-within-subjects ANOVA) and nonparametric procedures (Kruskal-Wallis, Mann Whitney $U$, and Friedman) were used to analyze data generated by pretest and posttest gains and retention test. The non-parametric Kruskal-Wallis was conducted, as it is the non-parametric alternative to a one-way between-groups ANOVA, and allows for the comparison of the scores regarding the continuous dependent variable for three or more groups. This non-parametric test was conducted to further examine the results of the one-way between-groups ANOVA, due to the violation of the Levene’s on the pretest and the posttest, which would indicate non-homogeneity of groups. The Mann Whitney $U$ test was conducted as a pairwise follow-up to the significant Kruskal-Wallis test. The Friedman Test was conducted as the non-parametric alternative to the one-way repeated measures ANOVA, to determine if there was a significant difference somewhere among the three sets of scores. Post-hoc analyses were conducted to identify the differences between the groups. The descriptive and inferential analyses will be further discussed in Chapters Four and Five.

Limitations and Delimitations

Limitations. A major limitation to conducting research in a school setting is the lack of control over intervening or confounding variables. The random assignment of the 83 fourth grade students and three fourth grade teachers delivered a high level of control
during the study; however, such variables as teaching style and personality, teacher attendance patterns, required district in-service, and the school calendar with three vacation days, may have confounded the results of this study. Furthermore, six substitute teachers were employed throughout the study. In efforts to control for this confounding variable which affected the treatment fidelity, the treatment minutes were subtracted on each day in which a substitute teacher was employed. This resulted in an unequal amount of creative dramatics treatment delivered to the two treatment groups; whereas, the Experimental I – Creative Dramatics and Vocabulary Words (CDVW) students experienced and received between 45 to 60 minutes more intervention treatment strategies than did the Experimental II – Creative Dramatics and Story Retelling (CDSR) students (refer to Figure 2). Specifically, the school district calendar proved confounding regarding fitting the design of a five week study within and around vacations, teacher in-service and state holidays, as well as efforts to avoid the holiday concert season which would have conflicted with the language arts block schedule for sustained and consistent treatment interventions.

Noteworthy, the study was completed in 19 consecutive school days during the month of November 2011. The interruption in consecutive treatment days was due to the one-day Veteran’s Day holiday and the two-day Thanksgiving holiday, as well as two required teacher in-service days. Student attendance was affected by these holidays and interruptions; whereas, some students were on vacation with their families for the long weekends provided by these holidays, and during the three days prior to the Thanksgiving vacation.
Further, this study began following parent-teacher conference week; whereas, the students had been coming to school for half-days the week prior to the study. The pretest administration occurred on Tuesday, November 1, 2011, following Monday, October 31, 2011, which was also Halloween. This particular time-frame was mandatory, as all of the present study school district fourth grade students were studying *Theme 2: American Stories: Focus on Plays* (Houghton Mifflin Reading, 2005) beginning on November 1, 2011.

Additional limitations included the loss of 85 minutes of instructional time due to daily passing time minutes, at five minutes per day, times 17 treatment days. Further, subject mortality proved to be a potential issue in the analysis of both the posttest and the retention test analyses. The subject mortality included the listwise $N = 76$ for the pretest and posttest gains (as opposed to a possible $N = 81$), and the listwise $N = 68$ for the retention test (as opposed to a possible $N = 76$). Two students were enrolled into the fourth grade classes after the study began, and after the pretest administration, raising the student participants from a beginning participant $N = 81$ to a participant $N = 83$, as was referenced earlier in this chapter.

An overall summary of students who participated in the three test administrations follows. A total of $N = 79$ students took the pretest; and an $N = 80$ students took the posttest; with a listwise $N = 76$ students present for both the pretest and posttest administrations. Therefore, if all possible students had been present, a maximum listwise $N = 79$ students could have been used for the pretest – posttest gains. Specifically, an $N = 75$ students took the retention test; which followed the two-week December holiday vacation. Consequently, a listwise $N = 68$ students were present for all three test
administrations; which determined that a listwise $N = 68$ students would be the number of participants used for the analyses. Fortuitously, the resulting listwise $N = 68$ students was greater than the $N = 51$ students needed for statistical significance at the confidence level of $p < .05$, as referenced in the power analysis, per Gall et al. (2007, p. 145). They recommend a minimum of 51 subjects for a three group analysis of variance at the confidence level of .05, as detailed earlier in this chapter, and the resulting listwise $N = 68$ participants of this present study met that recommendation.

Particularly, an expectation of the use of random assignment for equality of classroom conditions – including gender, demographic descriptors, and “at-risk” factors – is a goal of empirical studies, and was a key goal of this study investigation. Insomuch as this goal was accomplished; and moreover, within the confines of a public school setting, and including the participation of an entire grade level (fourth grade); this expectation and strength is also a limitation to future replication of the study findings, and may be difficult to meet in a public school setting in any grade level. The involvement of an entire grade level is included in the delimitations of this study, as well.

Another limitation involved the statistical analysis for this study in using a mixed between-within subjects ANOVA. Conard (1992) referenced that Kardash and Wright (1987) used a mixed between-within subjects ANOVA, and noted, “That it combined within group variance with between groups variance in the meta-analysis which tends to make the results difficult to interpret” (p. 28). This limitation will be further discussed in Chapter Four.

An interesting limitation was the fourth grade staff of the study. All three of the fourth grade teachers had less than 10 years classroom teaching experience. Two of the
three teachers had three years of teaching experience, and one teacher had six years of teaching experience. Further, this was the first year that these three teachers had worked together. Two of the teachers had an advanced degree (see Appendix U).

Finally, the timing of the retention test was a limitation; however, necessary regarding testing protocols for this study. As stated earlier, the Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) teacher was a long-term substitute teacher at the study school. Her long-term substitute teacher assignment ended January 3, 2012; therefore, the retention test needed to occur on January 3, 2012, which was one day following the two-week December vacation. Therefore, student subject mortality occurred resulting in a participant listwise N = 68 for the pretest, posttest, and retention test from a possible pretest-posttest gains comparison participant listwise N = 76. It can be inferred that the subject mortality was due to the timing of this test administration following a long school vacation; however, the testing date was necessary for consistency in test administration processes and protocols provided by the Experimental Group I teacher.

Delimitations. Delimitations are limitations on the research design that are imposed by a researcher; in order to restrict the populations to which the results of the study can be generalized (Rudestam & Newton, 2007, p. 105). Delimitations of this study included: (1) the focus on the fourth grade level; (2) the focus on the effect of creative dramatics on the vocabulary achievement of the student participants; (3) the use of this study school district’s adopted language arts curriculum, as well as conducting the study during theme two of the language arts adoption, due to the integrated arts strategies of the particular theme; (4) conducting the study during the school day; (5) involving an
entire fourth grade class as study participants; (6) randomization of the student participants and three teacher participants; and (7) the training of the classroom teachers as the providers of the creative dramatics treatment interventions, by the study investigator.

Additional delimitations included the development and implementation of two different creative dramatics intervention treatment strategies to serve as the independent variables, which were intentionally aligned to the Washington State reading and arts learning standards, as well as to the national common core state standards for language arts at the fourth grade level. Furthermore, the choice to use a teacher-researcher designed criterion-referenced vocabulary test of this study content (four stories) was employed as the dependent variable of the study. Lastly, the decision, by the researcher to use a pretest-posttest control group design has a limitation of an interaction of pretesting with the treatment interventions (Gall et al., 2007, p. 398); further considered a delimitation to this study with regards to replication and generalization.

Summary

This study aimed at measuring the effects of the use of creative dramatics to strengthen vocabulary achievement of fourth grade students in a language arts classroom. Participants in the sample consisted of 83 randomly assigned fourth grade students and three randomly assigned fourth grade teachers. The study was conducted at a large kindergarten through grade six elementary school, classified as a Learning Assistance Program (LAP) reading and math school. The study school is located in rural and unincorporated Pierce County and in the 13th largest school district in Washington State. The three teacher participants were randomly assigned to one of the two treatment groups,
and one control group; thus, resulting in one class of students for each classroom condition.

This study compared the performance of students who experienced *creative dramatics* with vocabulary word learning, and students who experienced *creative dramatics* with story enactment, to students who experienced the district adopted language arts curriculum with *Readers’ theatre*. Scripted lesson plans were provided to the teachers to control threats to the internal validity.

The differences between Experimental Group I and Experimental Group II depended upon their assigned *creative dramatics* intervention treatment; whereas, Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) involved students learning the vocabulary words and definitions with *creative dramatics* movements, body percussion, singing and chanting; and Experimental Group II – Creative Dramatics and Story Retelling (CDSR) involved students learning the vocabulary words through context and story, and through story enactment and reenactment. The Control Group (CG) students learned the vocabulary words through the district provided work sheets and a *Reader’s theatre* format included in the district adopted language arts curriculum.

A teacher-researcher designed criterion-referenced instrument was used for the pretest, posttest, and retention test, and was strictly aligned to the district adopted language arts curriculum – *Theme 2: American Stories: Focus on Plays* (Houghton Mifflin Reading, 2005), and covered the 31 vocabulary words in that theme. Lesson plans were initially created by the study fourth grade teacher team, and from the district adopted language arts curriculum; *Theme 2: American Stories: Focus on Plays*
The initial and draft lesson plans were further refined by the study investigator, with additions that included the two creative dramatics treatment interventions, and the inclusion of Readers’ theatre for the control group, as well as “warm up” or transitional creative dramatics interventions for the two creative dramatics treatment groups, and the addition of silent reading by the control group teacher. Summary strategies for each of the three groups were also added, as reported (see Figure 2 of this chapter).

The criterion-referenced vocabulary test, covering the 31 vocabulary words of the study content (four stories), was further refined and formatted by the study investigator; whereas, one story was eliminated from the study due to time and substance. The dependent variable instrument reliability and its face and content validities were found to be appropriate and acceptable for this study (see Appendix K for the Reliability Indexes).

A pretest-posttest control group research design was employed for this experimental study. The dependent variable was administered three times as a pretest, posttest, and retention test. The study consisted of 19 consecutive school days; which included the pretest, 17 days of treatment, and posttest. The retention test was conducted approximately five weeks following the study, following the December vacation break, and on January 3, 2012; thus, providing the 20th day of the study.

The results of this study were analyzed by conducting one-way analysis of variance (ANOVA) procedures. In addition, a two-way mixed between-within subjects ANOVA was employed. Further, three nonparametric analyses – Kruskal-Wallis, Mann Whitney U, and Friedman, were conducted. Post hoc analyses were conducted to further investigate and specify what kind of differences existed and where the differences
were – regarding the specific *creative dramatics* treatment interventions – following the statistically significant ANOVA. These analyses included looking for patterns in the results, due to the exploratory nature of this study investigation. Chapter Four presents the results of this study in detail.
Chapter Four

Results

Introduction

The purpose of this study was to examine the effects of the use of creative dramatics interventions on the vocabulary achievement of fourth grade students in a language arts classroom. This chapter describes the analysis and interpretation of the data generated by testing students at the beginning and conclusion of the five weeks of intervention, and a retention test administered five weeks later.

First, the sample of student participants will be described, including the gender and academic “at-risk” factors of the student participants of this study by classroom condition. Second, the descriptive statistics from the pretest, posttest, and retention test are reported. Third, the statistical data related to each of the four research questions that drove this inquiry will be presented, including the reporting of the results from the inferential, non-parametric, and post hoc analyses conducted including effect sizes. All analyses measured participant achievement on the dependent variable teacher-researcher developed criterion-referenced 31-question vocabulary test, which covered the course content (four stories) of the district adopted language arts unit of instruction Theme 2: American Stories: Focus on Plays (Houghton Mifflin Reading, 2005), during the five-week study.

The research analyses results will be reported twice for each of the four research questions – one time for the listwise $N = 76$ students who participated in the pretest and posttest administrations, and one time for the listwise $N = 68$ students who participated in the pretest, posttest, and retention test administrations.
Description of the Fourth Grade Student Sample $N = 83$

The unit of analysis in this study was the fourth grade elementary school student. A sample of 83 students from a large, rural, and unincorporated school district in Washington State participated in the study. Vogt (2005) defined a unit of analysis as follows: “Units of analysis are the persons or things being studied” (p. 333). Further, Vogt (2005) clarified, “A particular unit of analysis from which data are gathered is called a case” (p. 333), such as the fourth grade elementary school student in this study. Additionally, Vogt (2005) defined a case as, “A subject, whether an individual person or not, from which data are gathered. A case is the smallest unit from which the researcher collects data” (p. 38). Further, Vogt (2005) stated, “The sample size of a study equals its number of cases” (p. 38). Therefore, the sample size of this present study was $N = 83$.

A description of the characteristics of the fourth grade student participants serves to provide a context for the results associated with the four research questions. The student participant sample will be described in three ways. First, as a total sample by classroom condition with the $N = 83$; secondly, as a sample from the pretest and posttest listwise $N = 76$; and thirdly, as a sample from the pretest, posttest, and retention test listwise $N = 68$, in efforts to clarify, illustrate, and compare the equality of the student participant sample over the course of the study. General demographic data regarding the student participant sample is displayed on Tables 5 through 12.

This present study involved a total $N = 83$ students. This clarification is important to note, so as not to confuse the cases in this study as being three groups. The student attendance for the three test administrations was $N = 79$ for the pretest administration, $N = 80$ for the posttest administration, and $N = 75$ for the retention test
administration. Consequently, since the student sample size varied for the three test administrations, due to attendance and added enrollment, an analysis of listwise \( N = 76 \) was used for the pretest-posttest gains and analysis; further, an analysis of listwise \( N = 68 \) was used for the pretest, posttest, retention test analyses. Table 4 illustrates the total number of students present for each test administration. It is important to note that the total number of fourth graders was \( N = 81 \) at the start of the study; whereas, two students enrolled during the study, creating a total \( N = 83 \). No students withdrew during the study.

Table 4

*Pretest, Posttest, and Retention Test Dates Student Enrollment and Student Attendees*

<table>
<thead>
<tr>
<th></th>
<th>Pretest November 1, 2011</th>
<th>Posttest December 1, 2011</th>
<th>Retention Test January 3, 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total ( N ) Enrolled by Test Administration</td>
<td>( N = 81 )</td>
<td>( N = 83 )</td>
<td>( N = 83 )</td>
</tr>
<tr>
<td>Total ( N ) Present by Test Administration</td>
<td>( N = 79 )</td>
<td>( N = 80 )</td>
<td>( N = 75 )</td>
</tr>
</tbody>
</table>

Overall, the attendance for the pretest and posttest administrations was considered excellent, with only two participants absent for the pretest (which did not include two students who were enrolled following the beginning of the study); which resulted in an \( N = 79 \) present for the pretest; and only three participants absent for the posttest, (which included the two students who had enrolled after the study began); which resulted in an \( N = 80 \) present for the posttest. Significant, Experimental Group I (CDVW) had perfect attendance for the posttest administration. Moreover, only eight participants were absent for the retention test (which followed the December holiday vacation); which resulted in an \( N = 75 \) present for the retention test. The timing of the retention test administration was necessary due to the need to have the Experimental Group I (CDVW) teacher present.
As referenced in Chapter Three, the Experimental Group I (CDVW) teacher was on a long-term substitute teacher assignment (one full-year), and her contract and assignment ended on January 3, 2012; therefore, the retention test administration needed to occur on that day for consistency of testing protocols regarding this study and in the best interests of the students involved in the study for their consistency in the test administration.

Specifically, a total of $N = 81$ was possible for the pretest administration. An $N = 79$ were present for the pretest administration (for an absence of only two students). Further, a total of $N = 83$ was possible for the posttest administration; however, a listwise $N = 79$ was the highest possible comparison, due to the $N = 79$ present for the pretest administration. Thus, an $N = 80$ were present for the posttest administration (for an absence of only three students) and 76 of the 80 students present had been present for both the pretest and posttest; resulting in a listwise $N = 76$ for the pretest-posttest gains statistical analysis. Finally, a total of $N = 83$ was possible for the retention test; however, a listwise $N = 76$ was the highest possible comparison. An $N = 75$ were present for the retention test administration (for an absence of eight students). Consequently, a listwise $N = 68$ was the resulting number of students who were present for all three test administrations, pretest, posttest, and retention test. Fortuitously, the listwise $N = 68$ present for all three test administrations was greater than the $N = 51$ needed for statistical significance at the confidence level of $p < .05$, with the use of ANOVA, as referenced earlier in Chapter Three regarding the power analysis and the possibility of rejecting a false null hypothesis. Therefore, the resulting listwise $N = 68$ who were in attendance for all three test administrations, of this present study, met that recommendation.
Description of the student sample $N = 83$ by randomly assigned classroom condition. The total fourth grade student participant sample $N = 83$ resulted in an equal number of males $n = 41$ and females $n = 42$ for this study. Refer to Table 5 for an illustration of the gender and number of students in each of the three classroom conditions, which included two experimental groups and one control group.

Table 5

*Gender by Fourth Grade Treatment Group N = 83*

<table>
<thead>
<tr>
<th>Total Students in the Study</th>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group I</td>
<td></td>
<td>13</td>
<td>15</td>
<td>28</td>
</tr>
<tr>
<td>(Creative Dramatics and Vocabulary Words [CDVW])</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental Group II</td>
<td></td>
<td>14</td>
<td>13</td>
<td>27</td>
</tr>
<tr>
<td>(Creative Dramatics and Story Retelling [CDSR])</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Group (CG)</td>
<td></td>
<td>14</td>
<td>14</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>41</td>
<td>42</td>
<td>83</td>
</tr>
</tbody>
</table>

Specifically, two students enrolled into the fourth grade after the study began and following the pretest. Both new students were female. One female was assigned to Experimental Group II, and one female was assigned to the Control Group. These were intentional efforts to keep the class sizes equal, and also in efforts to meet the district and school contractual obligations regarding student class-sizes. No students withdrew
during the study. The sample size resulted being as equal as possible, given the constraints of involving an entire fourth grade class in a public school as the study sample. In addition to an equal number of males and females per classroom condition, the number of students per classroom condition remained equal throughout the study. Although the establishment of equality of groups is a goal of empirical studies, and provides strength to the present study outcomes, it creates a limitation for future replication and generalizability (refer to Tables 5-12).

**Race and ethnicity by classroom condition** \( N = 83 \). Refer to Table 6 for an illustration of the race and ethnicity statistics for student participants in each of the three classroom conditions, which included two experimental groups and one control group.

Table 6

<table>
<thead>
<tr>
<th></th>
<th>White</th>
<th>Asian</th>
<th>American Indian/ Alaskan Native</th>
<th>Black</th>
<th>Asian/Pacific Islander</th>
<th>Two or More Races</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Experimental</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group 1 (CDVW)</td>
<td>22</td>
<td>2</td>
<td>3</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>( n = 28 )</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group II (CDSR)</td>
<td>19</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>( n = 27 )</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Group (CG)</td>
<td>14</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>( n = 28 )</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>55</td>
<td>8</td>
<td>10</td>
<td>5</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

A summary of the race and ethnicity statistics data in Table 6 indicate that the
$N = 83$ total fourth grade student participants in the study numbered 55 Caucasian, eight
Asian, ten American Indian, five Black, one Pacific Islander, and four were Two or More
Races.

**Academic “at-risk” factors by classroom condition $N = 83$.** The 83 student
participants were randomly assigned to the three classroom groups, and the three
randomly assigned teachers were each assigned to one of the three classroom groups.
Random assignment of participants from the three regular education fourth grade
classrooms was employed in efforts to create homogeneity among the three classroom
groups regarding gender, ability level, socioeconomic status (SES) and other academic
risk factors, and including race and ethnicity.

Table 7 provides an illustration of the academic “at-risk” factors for the 40
students in the full study sample of $N = 83$, by classroom condition, and excluding gender,
who fit into the academic “at-risk” factor subgroups follows, and will be referred to in the
description of the student sample for each test administration. This data was also
referenced in narrative in Chapter Three, in efforts to validate the homogeneity of
variance achieved through the random assignment of the three fourth grade classes in this
study. Further, this data, by classroom condition, describes confidential student “at-risk”
indicators. Consequently, the SES percentages for the study participants were provided
to the investigator by the school secretary and validated by the school principal (study
school secretary, personal communication, December 1, 2011). Importantly, this data
was provided without any identification to individual students to maintain the
confidentiality requirements of the district, state, and federal guidelines regarding such information.

Table 7

**Academic “At-Risk” Factor by Treatment Group N = 83**

<table>
<thead>
<tr>
<th></th>
<th>ELL</th>
<th>Special Education</th>
<th>McKinney-Vento (Homeless)</th>
<th>Free/Reduced Lunch</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Experimental Group I</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Creative Dramatics and Vocabulary Words [CDVW])</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n = 28</td>
<td>2</td>
<td></td>
<td>13</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td><strong>Experimental Group II</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Creative Dramatics and Story Retelling [CDSR])</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n = 27</td>
<td>2</td>
<td></td>
<td>11</td>
<td></td>
<td>13</td>
</tr>
<tr>
<td><strong>Control Group (CG)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n = 28</td>
<td>1</td>
<td></td>
<td>11</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td><strong>Total N = 83</strong></td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>35</td>
<td>40</td>
</tr>
</tbody>
</table>

A summary of the data in Table 7 indicates that in the study sample of $N = 83$, two student participants were classified as English Language Learners (ELL), two were classified as McKinney-Vento Education for Homeless Children and Youth, and one was classified for special education learning exceptionality. Thirty-five students in the sample qualified for free and reduced price lunch subsidy indicating social economic status (SES) or a poverty indicator, and referred to as an academic “at-risk” factor.

Academic “at-risk” factors were an essential consideration in striving for homogeneity of variance of groups as required for the use of parametric analyses. The data further reveal that Experimental Group I (CDVW) included 15 students with “at-risk” factors, the Experimental Group II (CDSR) included 13 students with “at-risk” factors, and the Control Group (CG) included 12 students with “at-risk” factors, for a total of 40 students with “at-risk” factors in this study student sample of $N = 83$. As a result, approximately 50% of the participants in this study sample were classified with “at-risk” factors.

**Generalizability of academic “at-risk” factor free and reduced priced lunch percentages.** In efforts to determine the generalizability of the study findings to other schools, districts, and states, the reported percentages for the fourth grade students who qualified for the federally funded free-and-reduced price meals were further compared to all students who qualified for this classification in this study school, as well as to all students who qualified for this classification in this study school district, and further compared to all students who qualified for this classification in Washington State’s 295 school districts. The reported federally funded free-and-reduced lunch program percentages were derived from those provided for the October 1, 2011 state report
regarding this study school, study school district, and statewide data, as reported by the Office of Superintendent of Public Instruction (OSPI) Washington State Report Card (2011-2012), and validated by this study school’s principal (OSPI, 2011f).

Refer to Table 8 for a comparison chart, created by this study investigator, which illustrates the data regarding those students who qualified for the federally funded free-and-reduced price meals, as referenced. The chart illuminates that 52.6% of the fourth grade students, in the present study, were classified as “at-risk” for academic achievement due to the socio-economic status of their family which is a higher percentage of SES qualifiers than the study school, study district, and state percentages.

Table 8

<table>
<thead>
<tr>
<th>Total Number of Students in each Category</th>
<th>Percent of Free and Reduced Price Lunch for 4th Grade Students at Study School</th>
<th>Percent of Free and Reduced Price Lunch for Grades K-6 Students at Study School</th>
<th>Percent of Free and Reduced Price Lunch for K-12 Students in Study School District</th>
<th>Percent of Free and Reduced Price Lunch for K-12 Students in Washington State</th>
</tr>
</thead>
<tbody>
<tr>
<td>N = 91</td>
<td>52.6%</td>
<td>50.3%</td>
<td>42.8%</td>
<td>45.5%</td>
</tr>
</tbody>
</table>

Table 8 provides illustration as to the generalizable nature of the study participants regarding “at-risk” factors in comparison to other grade levels in the study school, across the school district, and throughout the Washington State. As referenced in Chapter Three, the study participants had a slightly higher percentage of free and reduced priced lunch eligibility students than did the study school. Specifically, student participants in the fourth grade classrooms of the present study qualified for 10% more free and reduced priced lunch eligibility as compared to the students in the study school district, and approximately 7% more free and reduced priced lunch eligibility as compared to all students in the state of Washington.

Identification data regarding the specific students who receive free and reduced priced meals is strictly confidential. Therefore, the percentage is reported by grade level, by school, by district, and by state, by full-time equivalent student (FTE), and without student identification. This data is reported to the state education agency in October and May of each school calendar year. Additionally, data is further reported in May of each school calendar year for the data to be reported and included on the state report card for each school district (OSPI, 2011f). Notably, the fourth grade classes in this study had a higher percentage of students who qualified for free and reduced priced meals as compared to the entire study school student body population. Specifically, 52.6% of the fourth grade students in the study qualified for free and reduced priced meals, as compared to 50.3% SES for the K-6 study school; thus, resulting in a difference of 2.3% more SES or “at-risk” students for the fourth grade student participants in the study.

Further, the fourth grade classes in this study had a higher percentage of students who qualified for free and reduced priced meals as compared to the study school district
student population. Specifically, 52.6% of the fourth grade students in the study qualified for free and reduced priced meals, as compared to 42.8% SES for the students in the entire school district; thus, resulting in a difference of 9.8% more SES or at risk students for the fourth grade student participants in the study.

Further, the fourth grade classes in this study had a higher percentage of students who qualified for free and reduced priced meals as compared to the state of Washington student population. Specifically, 52.6% of the fourth grade students in the study qualified for free and reduced priced meals, as compared to an SES of 45.5% for the entire student population for Washington State, resulting in a difference of 7.1% more SES or “at-risk” students for the fourth grade student participants in the study as compared to all students in the Washington State. A comparison of this specific academic “at-risk” factor, also known as socio-economic status (SES) is an important factor regarding the generalizability and possible replication of the study to other schools, districts, and states.

It is important to further clarity that the “at-risk” percentages provided for the SES factor for the fourth grade students in the study, as well as for the study school statistics, and study school district statistics included information regarding eight ELL classified students enrolled in the fourth grade, who were not eligible for participation in the study due to their additional classifications. These eight additional students created the $N=91$ for the fourth grade in the study school. Further, two other students enrolled in the fourth grade at the study school were housed “off campus” due to their additional “at-risk” classifications and were not included in the demographic data percentages.
Description of the pretest-posttest student sample listwise \( N = 76 \) by randomly assigned classroom condition.

The data in Table 9 describes and illustrates the gender and number of students for the three randomly assigned fourth grade classroom conditions with a total listwise \( N = 76 \) for the pretest-posttest student participant sample. Table 9 further reveals an equal number of 38 males and 38 females for these analyses.

Table 9

*Gender by Fourth Grade Treatment Group Comparison Pretest-Posttest Listwise N = 76*

| Students Present for Pretest and Posttest Administrations Listwise N = 76 | Gender |
|---|---|---|---|
| | Male | Female | Total |
| Experimental Group I (Creative Dramatics and Vocabulary Words [CDVW]) | 12 | 15 | 27 |
| Experimental Group II (Creative Dramatics and Story Retelling [CDSR]) | 14 | 13 | 27 |
| Control Group (CG) | 12 | 10 | 22 |
| Total | 38 | 38 | 76 |

Additionally, the race and ethnicity statistics for the pretest-posttest student participants listwise \( N = 76 \), by treatment group follow in Table 10, including the number of student participants present in each classroom condition.
Table 10

*Race and Ethnicity Statistics by Treatment Group Pretest-Posttest Comparison Listwise N = 76*

<table>
<thead>
<tr>
<th></th>
<th>White</th>
<th>Asian</th>
<th>American Indian/Alaskan Native</th>
<th>Black</th>
<th>Asian/Pacific Islander</th>
<th>Two or More Races</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group I (CDVW) $n = 27$</td>
<td>21</td>
<td>2</td>
<td>3</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Experimental Group II (CDSR) $n = 27$</td>
<td>19</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Control Group (CG) $n = 22$</td>
<td>12</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>52</td>
<td>6</td>
<td>8</td>
<td>5</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>


A summary of the race and ethnicity statistics data in Table 10 indicate that the listwise $N = 76$ student participants present for the pretest and posttest administrations numbered 52 Caucasian, six Asian, eight American Indian, five Black, one Pacific Islander, and four Two or More Races.

**Description of the pretest-posttest and retention test student sample listwise $N = 68$ by randomly assigned classroom condition.** Refer to Table 11 for an illustration of the gender by fourth grade treatment group for the pretest-posttest and retention test student participants listwise $N = 68$, showing an almost equal number of
males and females for these analyses with 33 males and 35 females present.

Table 11

*Gender by Fourth Grade Treatment Group Pretest-Posttest, Retention Test Listwise N = 68*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Creative Dramatics and Vocabulary Words [CDVW])</td>
<td>12</td>
<td>14</td>
<td>26</td>
</tr>
<tr>
<td>Experimental Group II</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Creative Dramatics and Story Retelling [CDSR])</td>
<td>10</td>
<td>11</td>
<td>21</td>
</tr>
<tr>
<td>Control Group (CG)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>10</td>
<td>21</td>
</tr>
<tr>
<td>Total</td>
<td>33</td>
<td>35</td>
<td>68</td>
</tr>
</tbody>
</table>

Additionally, the race and ethnicity statistics for the pretest-posttest and retention test student participants listwise $N = 68$, by treatment group follow in Table 12, including the number of student participants present in each classroom condition.
Table 12

Race and Ethnicity Statistics by Treatment Group Pretest-Posttest, Retention Test Comparison Listwise \( N = 68 \)

<table>
<thead>
<tr>
<th></th>
<th>White</th>
<th>Asian</th>
<th>American Indian/Alaskan Native</th>
<th>Black</th>
<th>Asian/Pacific Islander</th>
<th>Two or More Races</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group I (CDVW) ( n = 26 )</td>
<td>20</td>
<td>2</td>
<td>3</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Experimental Group II (CDSR) ( n = 21 )</td>
<td>15</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Control Group (CG) ( n = 21 )</td>
<td>12</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>47</strong></td>
<td><strong>5</strong></td>
<td><strong>7</strong></td>
<td><strong>4</strong></td>
<td><strong>1</strong></td>
<td><strong>4</strong></td>
</tr>
</tbody>
</table>

\( N = 68 \)


A summary of the race and ethnicity statistics data in Table 12 indicate that the listwise \( N = 68 \) student participants present for the pretest, posttest, and retention test administrations numbered 47 Caucasian, five Asian, seven American Indian, four Black, one Pacific Islander, and four Two or More Races.
Descriptive Statistics for Pretest-Posttest Means Listwise $N = 76$

Descriptive statistics calculated from the pretest-posttest measures are displayed in Table 13 for the listwise $N = 76$ in this study investigation of student achievement of vocabulary words during the 17-days of sustained *creative dramatics* treatment interventions.

Specifically, with a listwise $N = 76$, the pretest-posttest means gain for all students was 6.88 words. Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) learned an average of 8.0 words from the pretest to the posttest. Experimental Group II – Creative Dramatics and Story Retelling (CDSR) learned an average of 7.41 words from the pretest to the posttest. Control Group (CG) students gained an average of 4.86 words from the pretest to the posttest.

Table 13 illustrates that the average student in the listwise pretest-posttest comparison, across all three classroom conditions learned approximately seven vocabulary words; and further accomplished this gain in 17 consecutive school days. Specifically, the means of the three classroom conditions illustrates those participants in both of the *creative dramatics* intervention groups scored higher than participants in the control group.
**Table 13**

*Descriptive Statistics for Mixed-Between-Within Subjects ANOVA Comparing Pretest-Posttest Means Listwise $N = 76$*

<table>
<thead>
<tr>
<th>Test Administration</th>
<th>Condition</th>
<th>Mean</th>
<th>SD</th>
<th>$N/n$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pretest (0-31)</strong></td>
<td>Experimental Group I (Creative Dramatics and Vocabulary Words [CDVW])</td>
<td>20.19</td>
<td>5.219</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Experimental Group II (Creative Dramatics and Story Retelling [CDSR])</td>
<td>19.89</td>
<td>3.238</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Control Group (CG)</td>
<td>20.32</td>
<td>4.775</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>20.12</td>
<td>4.415</td>
<td>76</td>
</tr>
<tr>
<td><strong>Posttest (0-31)</strong></td>
<td>Experimental Group I (Creative Dramatics and Vocabulary Words [CDVW])</td>
<td>28.19</td>
<td>3.126</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Experimental Group II (Creative Dramatics and Story Retelling [CDSR])</td>
<td>27.30</td>
<td>2.181</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Control Group (CG)</td>
<td>25.18</td>
<td>3.936</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>27.00</td>
<td>3.298</td>
<td>76</td>
</tr>
</tbody>
</table>
Table 14 and Figure 3 follow, and further illustrate the results of the mixed-between-within subjects ANOVA descriptive statistics comparing the pretest and posttest means gain scores on vocabulary words – by student, with a listwise $N = 76$.

Specifically, Table 14 and Figure 3 exemplify the comparisons and gains between the three treatment conditions in the study; creative dramatics and vocabulary words (CDVW); creative dramatics and story retelling (CDSR), and the control group (CG).

Table 14

*Pretest-Posttest Means Gain Scores Comparisons on Vocabulary Words by Treatment Group Listwise $N = 76$*

<table>
<thead>
<tr>
<th>Group</th>
<th>$n/N$ by Group</th>
<th>Pretest-Posttest Means Gains by Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group I (Creative Dramatics and Vocabulary Words [CDVW])</td>
<td>$n = 27$</td>
<td>8.0</td>
</tr>
<tr>
<td>Experimental Group II (Creative Dramatics and Story Retelling [CDSR])</td>
<td>$n = 27$</td>
<td>7.41</td>
</tr>
<tr>
<td>Control Group (CG)</td>
<td>$n = 22$</td>
<td>4.86</td>
</tr>
<tr>
<td>Total</td>
<td>$N = 76$</td>
<td>6.88</td>
</tr>
</tbody>
</table>
Figure 3. One-Way ANOVA Pretest-Posttest Means Gain Scores on Vocabulary Words Listwise $N = 76$.

Research Analysis

Both parametric (one-way between groups ANOVA, one-way repeated measures ANOVA, and mixed between-within subjects ANOVA) and nonparametric procedures (Kruskal-Wallis, Mann Whitney $U$, and Friedman) were used to analyze data generated by pretest and posttest means gains and retention test results. Further, post hoc procedures were conducted to determine what the differences were and where the differences were between the three classroom conditions. The analyses were conducted twice in order to answer the four research questions for the pretest-posttest student sample of listwise $N = 76$, and for the pretest-posttest, and retention test student sample of listwise $N = 68$. Therefore, the research questions are presented twice, to report the results of the pretest-posttest, as well as the separate results for the pretest-posttest, and retention test.
A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship between the performance of students who received the *creative dramatics* and vocabulary words intervention (Experimental Group I-CDVW), students who received the *creative dramatics* and story retelling intervention (Experimental Group II-CDSR), and students who received the *Readers’ theatre* option in the district adopted language arts curriculum (Control Group-CG). “ANOVA is generally robust to violations of the assumption that treatment groups have equal variances, especially when the sample sizes are equal” (Vogt, 2005, p. 280).

Since the sample sizes were equal for each classroom condition, ANOVA could be used with confidence as the statistical analyses. The randomly assigned \( N = 83 \) at the beginning of the study included 41 males and 42 females in all three classrooms. The study sample size, or total number of *cases* equaled \( N = 83 \), and was randomly divided equally among the three treatment classrooms; whereas, the student *cases* in each treatment group included: Experimental Group 1 – Creative Dramatics and Vocabulary Words (CDVW) \( n = 28 \); Experimental Group II – Creative Dramatics and Story Retelling (CDSR) \( n = 27 \); and the Control Group (CG) \( n = 28 \) as reported earlier in this chapter.

A 3 x 3 factorial mixed between-within subjects analysis of variance (ANOVA) was employed as the analysis for this study for the pretest, posttest gains with a listwise \( N = 76 \), as well as for the pretest, posttest, and retention test analysis with a listwise \( N = 68 \) (Tabachnick & Fidell, 2013, p. 216). This analysis tested whether there were main effects for each of the independent variables (*time* and *treatment*), and whether the interaction between the two variables was statistically significant across the three test administrations (Pallant, 2007, pp. 266-74). The study lasted for 19 consecutive school
days, and during one month of school. The pretest was administered on day one, followed by 17 days of treatment, and followed by the administration of the posttest on day 19. The retention test administration followed after five weeks (which included time off for students and teachers with the two-week December holiday vacation) and completed the study with day 20. The pretest-posttest control-group design is illustrated in Table 1 (as presented in Chapter Three) to provide a clear context of the research design and methods employed regarding the study results.

Further, the pretest results for the listwise \( N = 68 \) student participants who took all three test administrations, indicated a fairly high baseline \((M = 20.26, SD = 4.38)\) with the average student already knowing approximately 20 out of the 31 possible words, and this initial level of achievement varied only slightly by classroom condition. Because the students and teachers were randomly assigned to the treatment conditions, pretest differences were minimal, and an analysis of variance for a listwise \( N = 68 \) who took the pretest confirmed that the differences among treatment conditions were not significant; whereas, \( F(2, 65) = .294, p = .746 \). The posttest results regarding vocabulary word gains for the listwise \( N = 68 \) show an average gain of approximately six words per group \((M = 26.88, SD = 3.40)\) over the course of the 17-day treatment period. This gain varied by approximately two to three words by classroom condition, with a means of 28.08 for Experimental Group I (CDVW); a means of 27.14 for Experimental Group II (CDSR); and a means of 25.14 for the Control Group (CG). It can be inferred, from the statistics means, that both creative dramatics treatments groups had higher means gains than the control group; whereas, the results of the ANOVA analyses were such that \( CDVW > CDSR > CG \).
ANOVA is used to test the null hypothesis of equality of means; whereas the research hypothesis is that the students who experienced the *creative dramatics* treatment interventions would learn more vocabulary words over the same time period than their peers in the control condition. Therefore, it can be inferred by the data results that the use of the *creative dramatics* interventions employed in this study resulted in the students who experienced the *creative dramatics* interventions learning more vocabulary words over the same time period than their peers in the control condition. The data analyses used in this study will further illustrate the statistically significant effects of *creative dramatics* on the vocabulary achievement of fourth grade students in a language arts classroom.

Finally, a retention test was administered to all students approximately five weeks following the end of the study and the posttest treatment. The retention test results showed, on average, almost no change from the posttest for the listwise $N = 68$ student participants who took all three test administrations. It can be inferred, from the descriptive statistics means, that most students retained the vocabulary word growth from the unit of study and treatment interventions, and did so following a two-week December holiday vacation from school.

### Research Questions for Pretest-Posttest Analyses Listwise $N = 76$

The results presented in the following section on pretest and posttest gains of the student sample listwise $N = 76$ address the following four research questions that drive this inquiry and are as follows:

**Research question one.** “Does the use of creative dramatics (a dramatic enactment led by the teacher of a story, setting, and/or characters) strengthen the
vocabulary achievement in fourth grade students in a language arts classroom, when measured on a criterion-referenced vocabulary test of the language arts unit of study?” With a listwise $N = 76$, for the pretest and posttest gains the answer to research question one is “yes.”

A one-way between-groups analysis of variance (ANOVA) was conducted to explore the impact of creative dramatics on the vocabulary achievement of fourth grade students, as measured by the teacher-researcher developed criterion-referenced 31-question vocabulary test covering the course content (four stories) of the district adopted language arts unit of instruction Theme 2: American Stories: Focus on Plays (Houghton Mifflin Reading, 2005), during the five-week study. Subjects were randomly assigned to three groups: Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW); Experimental Group II – Creative Dramatics and Story Retelling (CDSR); and the Control Group (CG).

**Results of one-way between groups ANOVA listwise $N = 76$.** There was a statistically significant difference at the $p < .05$ confidence level in pretest and posttest scores for the three treatment conditions of vocabulary words learned by creative dramatics students as compared to their peers in the control group without creative dramatics. Whereas, $F(2, 73) = 4.070, p = .021, \eta^2_p = .10$, indicating a small to medium effect size, and the evidence of a statistically significant impact between the creative dramatics treatment groups and the control group, with a listwise $N = 76$ (students who were present for both the pretest and posttest administrations).

*Levene’s test listwise $N = 76.* The Levene’s Test for Equality of Variances was not violated in the One-way ANOVA pretest-posttest gains, with non-statistical
significance at $F(2, 73) = 1.241, p = .295$, and shows that the variances in gain scores are equal across the three groups; thus meeting the assumption of homogeneity necessary for the use of parametric procedures.

**Pretest-posttest vocabulary word means gains $N = 76$.** Seventy-nine of the 83 students in the sample were present for the pretest, and 80 of the 83 students in the sample were present for the posttest. Seventy-six of the 83 students in the sample were present for both the administration of the pretest and posttest; therefore, a listwise $N = 76$ was used for this analysis of pretest and posttest gains and a comparison of achievement on vocabulary words between groups. The student $n$ for participants in each treatment group who were present for both the pretest and posttest administration and reported in the pretest and posttest gains ANOVA follows: Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) $n = 27$; Experimental Group II – Creative Dramatics and Story Retelling (CDSR) $n = 27$; and the Control Group (CG) $n = 22$, resulting in a total listwise $N = 76$ for the pretest and posttest analysis.

The mean gain for all students was 6.88 words. Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) learned an average of 8.0 words from the pretest to the posttest. Experimental Group II – Creative Dramatics and Story Retelling (CDSR) learned an average of 7.41 words from the pretest to the posttest. Control Group (CG) students gained an average of 4.86 words from the pretest to the posttest. Thus, it can be inferred that all students gained in vocabulary achievement over the 20-day study, and the two creative dramatics treatment intervention groups gained more words than the control group.
Therefore, it can be inferred, from this data, that the intervention of *creative
dramatics* appears to have a statistically significant effect on the vocabulary achievement
of fourth grade students in a language arts classroom, from the pretest to posttest test
administrations, covering 17 days of treatment; thus, answering research question one. Further, it can be inferred that the intervention of Experimental Group I – Creative
Dramatics and Vocabulary Words (CDVW) appears to have a statistically significant
effect on vocabulary achievement from the pretest to posttest as compared to the control
group without *creative dramatics*; thus, answering research question two. Additionally, it
can be inferred that the intervention of Experimental Group II – Creative Dramatics and
Story Retelling (CDSR) appears to have a statistically significant effect on vocabulary
achievement from the pretest to the posttest as compared to the Control Group (CG)
without creative dramatics; thus answering question three.

*Post hoc analyses on pretest and posttest means gain scores listwise N = 76.*

Further analysis was needed to find out which group means differed; therefore, the
following post hoc procedures were conducted to make pairwise comparisons between
the pretest and posttest gains and between the three groups, and in efforts to answer
research questions two and three. Field (2009, pp. 374-5) recommended the use of
*Bonferroni* to guarantee control over Type I error, or falsely rejecting the null hypothesis,
as well as when the number of comparisons are small. Additionally, Field (2009)
recommended the use of *Hochberg’s GT2, Gabriel’s*, and the *Games–Howell* pairwise
test procedures to cope with situations where sample sizes are slightly different. These
post hoc results follow.
Research question two. “Does the use of creative dramatics (a dramatic enactment led by the teacher of a story, setting, and/or characters) through improvised student movements and singing the vocabulary words, strengthen the vocabulary achievement in fourth grade students in a language arts classroom, when measured on a criterion-referenced vocabulary test of the language arts unit of study?” With a listwise $N = 76$, for the pretest and posttest gains the answer to research question two is “yes.”

Post hoc analyses found statistically significant differences at the .05 level of confidence between Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) $n = 27$ and the Control Group (CG) $n = 22$ ($Bonferroni = p < .024$, Hochberg’s $GT2 = p < .024$, and Gabriel’s $p < .024$). The Least Significantly Different (LSD) was also statistically significant between these two groups (LSD = $p < .008$). However, Field (2009) cautioned the use of the LSD procedure warning that it makes no attempt to control Type I error (p. 374), or falsely rejecting a true null hypothesis (Vogt, 2005, p. 330).

Research question three. “Does the use of creative dramatics (a dramatic enactment led by the teacher of a story, setting, and/or characters) through improvised student enactments and reenactments of the story using the vocabulary words in context, strengthen the vocabulary achievement in fourth grade students in a language arts classroom, when measured on a criterion-referenced vocabulary test of the language arts unit of study?” With a listwise $N = 76$, for the pretest and posttest gains the answer to question three is “yes.”

There was a statistically significant difference between the Experimental
Group II – Creative Dramatics and Story Retelling (CDSR) \( n = 27 \) and the Control Group (CG) \( n = 22 \) at the \( p < .05 \) level of confidence, on the Least Significantly Different (LSD = \( p < .030 \)). However, Field (2009) cautioned the use of the LSD procedure warning that it makes no attempt to control Type I error (p. 374).

**Results summary for one-way ANOVA listwise \( N = 76 \).** The post hoc tests show that the most statistically significant differences are between the Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) and the Control Group conditions. The Experimental Group II – Creative Dramatics and Story Retelling (CDSR) showed statistically significant gains on the LSD and is worthy of reporting; however, does not control for Type I errors with unequal samples. The Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) and the Experimental Group II – Creative Dramatics and Story Retelling (CDSR) did not differ significantly in gains in learning from the pretest to the posttest. Both the Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) and the Experimental Group II – Creative Dramatics and Story Retelling (CDSR) outscored the Control Group on the pretest-posttest gains, as illustrated in Table 14 and Figure 3.

**Research question four.** “Is there an interaction effect between the time \((time = [1] \text{ pretest}; \text{ and } [2] \text{ posttest administrations})\) and condition \((condition = [1] \text{ creative dramatics and vocabulary words [CDVW]; } [2] \text{ creative dramatics and story retelling enactments [CDSR]; and } [3] \text{ control group [CG]})\) to strengthen the vocabulary achievement in fourth grade students in a language arts classroom, when measured on a criterion-referenced vocabulary test of the language arts unit of study?” With a listwise \( N = 76 \), for the pretest and posttest gains, the answer for the interaction effect of
time x condition is “yes”. The answer for the main effect of time is “yes”. The answer for the main effect for the condition (treatment interventions) is “no”.

**Results summary and effect sizes for mixed between-within subjects ANOVA**

*for pretest-posttest listwise N = 76.* There was a statistically significant interaction effect between treatment and time, Wilks’Λ = .900, \( F(2, 73) = 4.070, p = .021, \eta_p^2 = .010 \), indicating a small effect size, and evidence of a statistically significant impact of one variable influenced by the level of the second variable. Therefore, it is safe to infer that because there was a statistically significant interaction effect, the impact of one variable (treatment) is influenced by the level of the second variable (time). Consequently, it is reasonable to move forward; yet, with caution, with general conclusions and inferences regarding the main effects (Pallant, 2007). There was a statistically significant main effect for time, Wilks’Λ = .254, \( F(1, 73) = 213.927, p < .001, \eta_p^2 = .746 \), indicating a very large effect size with regards to the three test administrations. All three groups showed an increase in vocabulary test scores from the pretest to the posttest. However, the main effect comparing the three different interventions was not statistically significant, \( F(2, 73) = 1.159, p = .320, \eta_p^2 = .031 \), suggesting no difference in the effectiveness of the three teaching approaches; although indicating a small effect size. However, the test of Between-Subjects Effects combines the data for all three test administrations; therefore, this analysis does not reveal the specific impact of each creative dramatics treatment intervention over time.

Conard (1992) cautioned researchers when interpreting the results from this specific analysis. She noted that Kardash and Wright (1987) used a mixed between-within subjects ANOVA, and wrote regarding this specific analysis, “That it combined
within group variance with between groups variance in the meta-analysis which tends to make the results difficult to interpret” (p. 28).

Therefore, the results from the one-way ANOVA and one-way repeated measures ANOVA for the listwise $N = 76$ provide more insight into the differences between the groups and treatment interventions in answering research questions one, two, and three of this present study. Moreover, the ANOVA results, coupled with the results of the non-parametric equivalent procedures – which are further validated by the results of the post-hoc test procedures – show where there is statistical significance between the creative dramatics interventions as compared to the control, and as compared to each other. Refer to Figure 4 (Marginal Means) or (Profile Plot) which illustrates the pretest and posttest means gains by classroom condition listwise $N = 76$ (Pallant, 2007, p. 261).

![Figure 4. Estimated Marginal Means Pretest-Posttest: Change Over Time by Classroom Condition on the Vocabulary Test Listwise $N = 76$.](image)
Figure 4 can also be referred to as a *time x intervention* effects graph from pretest to posttest. Figure 4 provides illustration of the pretest and posttest means gains, from the output of the mixed-between-within ANOVA (Pallant, 2007; Tabachnick & Fidell, 2013) and further illustrates that both of the treatment groups scored higher when compared to the control group during the 17-day study. Further, the *marginal means* and *profile plots* illustrate an interaction effect between *time and condition* over time, at the beginning of the study, and show the statistically significant effect for the main effect of *time* between the pretest-posttest administrations. Interesting to note, from Figure 4, is that the Control Group participants originally had a higher mean score at the beginning of the study, on the pretest, than the participants in two *creative dramatics* treatment groups, and prior to any treatment interventions being employed. Further, the participants in the Experimental Group II – Creative Dramatics and Story Retelling (CDSR) had the lowest scores on the pretest means.

**Research Questions for Pretest, Posttest, Retention Test Analyses Listwise N = 68**

Seventy-nine of the 83 students in the sample were present for the pretest, and 80 of the 83 students in the sample were present for the posttest. Seventy-five of the 83 students in the sample were present for the retention test. Consequently, 68 students were present for all three test administration (pretest, posttest, and retention test). Therefore, a listwise *N = 68* was used for the analyses of the pretest, posttest, and retention test gains and a comparison of achievement on vocabulary words between the treatment groups. The student *n* for students in each treatment group who were present for the pretest, posttest, and retention test administrations and reported in the pretest, posttest, and retention test ANOVA follows: Experimental Group I – Creative Dramatics and
Vocabulary Words (CDVW) \( n = 26 \); Experimental Group II – Creative Dramatics and Story Retelling (CDSR) \( n = 21 \); and the Control Group (CG) \( n = 21 \), resulting in a total listwise \( N = 68 \) for the pretest, posttest, and retention test analyses.

In efforts to further examine what and where the statistically significant differences were regarding the creative dramatics interventions between the groups and within the groups, further statistical analyses were conducted. These analyses included a one-way between groups ANOVA, further examined by the non-parametric procedures Kruskal-Wallis and Mann-Whitney \( U \); and one-way repeated measures ANOVA, further examined by the non-parametric procedure Friedman. Additionally, post-hoc examinations were conducted with the listwise \( N = 68 \) as they were with the listwise \( N = 76 \) following the pretest-posttest gains one-way ANOVA.

Warner (2013, p. 720) suggested analyzing pretest-posttest data in several different ways (such as an ANOVA on change or gain scores, and a repeated measures ANOVA) to see if all of the different analyses yield essentially the same results; hence the multiple analyses conducted and reported on this study data. Therefore, corresponding non-parametric procedures were conducted for each parametric procedure used, to account for the statistically significant Levene’s Test for Equality of Variances found in the pretest and posttest scores, listwise \( N = 68 \), and to further confirm the statistically significant ANOVA results found in the pretest-posttest scores, listwise \( N = 76 \). Additionally, non-parametric procedures were conducted to further analyze research question four with regards to a possible interaction effect between condition and time, and the possible main effects of time and condition.
The results presented in the following section on pretest, posttest, and retention test gains of the participant sample listwise \( N = 68 \) address the following four research questions that drive this inquiry and are as follows:

**Research question one.** “Does the use of creative dramatics (a dramatic enactment led by the teacher of a story, setting, and/or characters) strengthen the vocabulary achievement in fourth grade students in a language arts classroom, when measured on a criterion-referenced vocabulary test of the language arts unit of study?”

With a listwise \( N = 68 \), for the pretest, posttest, and retention test, the answer for research question one is “yes.”

**One-way between-groups ANOVA, \( N = 68 \).** A one-way between-groups ANOVA on pretest and posttest and retention test gains showed a statistically significant gain of vocabulary words learned by creative dramatics students as compared to their peers in the control group without creative dramatics, on the posttest, and between groups. The ANOVA for the pretest between the groups was not statistically significant \( F(2, 65) = .294, p = .746, \eta_p^2 = .009 \), validating the equality of the three classroom conditions following random assignment of the student participants. The ANOVA for the posttest between the groups was statistically significant \( F(2, 65) = 4.944, p = .010, \eta_p^2 = .132 \), and indicates a small to medium effect size. Additionally, the ANOVA for the retention test between the groups was also statistically significant \( F(2, 65) = 3.498, p = .036, \eta_p^2 = .097 \), and indicates a small effect size. The statistically significant \( F \) statistic for the between groups on the posttest and retention test is evidence that the different gains were statistically significant across the three groups. In order to examine...
the differences between the three classroom conditions, non-parametric and post-hoc procedures were conducted to answer the research questions in this investigation.

*Kruskal-Wallis*. The non-parametric Kruskal-Wallis test was conducted, as it is the non-parametric alternative to a one-way between-groups ANOVA. This non-parametric test was conducted to further examine the results of the one-way between-groups ANOVA, due to the violation of the Levene’s Test for Equality of Variances and the parametric assumption of homogeneity of the variances of the data. A Kruskal-Wallis test revealed a statistically significant difference in vocabulary achievement across the three treatment conditions for the posttest scores: (CDVW, \( n = 26 \), CDSR, \( n = 21 \), CG, \( n = 21 \)), \( \chi^2 (2, n = 68) = 7.905, p = .019 \). The Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) recorded a higher median score (\( Md = 29.00 \)) than both of the other two groups; whereas, Experimental Group II – Creative Dramatics and Story Retelling (CDSR) recorded a higher median score (\( Md = 28.00 \)) than the Control Group (CG), which recorded a median score of (\( Md = 24.00 \)).

Additionally, a Kruskal-Wallis test revealed a statistically significant difference in vocabulary achievement across the three treatment conditions for the retention test scores: (CDVW, \( n = 26 \), CDSR, \( n = 21 \), CG, \( n = 21 \)), \( \chi^2 (2, n = 68) = 8.717, p = .013 \). The Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) recorded a higher median score (\( Md = 28.00 \)) than both of the other two groups; whereas, Experimental Group II – Creative Dramatics and Story Retelling (CDSR) recorded a higher median score (\( Md = 27.00 \)) than the Control Group (CG), which recorded a median score of (\( Md = 26.00 \)).
**Mann-Whitney U.** A Mann Whitney U test was conducted as a pairwise follow-up to the significant Kruskal-Wallis test. This test found statistically significant differences between the vocabulary achievement scores of Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) and the Control Group (CG) on both the posttest and retention test administrations, as well as a statistically significant difference between the vocabulary achievement scores of Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) and Experimental Group II – Creative Dramatics and Story Retelling (CDSR) on the retention test. These pairwise results are reported in the format recommended by Pallant (2007, p. 223) for Mann-Whitney U test results. Specifically, the acronyms for the treatment conditions will be used for a cleaner representation in the equations. Statistical significance is reported at the confidence level of $p < .5$. Subsequently, Pallant (2007) recommended conducting a one-way ANOVA with post-hoc tests to compare the means of the dependent variable scores over three time periods for the three treatment conditions (p. 256). Therefore, the post-hoc analyses results follow.

*Post-hoc analyses one-way ANOVA.* Post-hoc pairwise analyses are meant to specify what kind of statistically significant differences exist in the groups and where these differences are in the groups. Field (2009) recommended the use of Gabriel’s, and the Games–Howell pairwise test procedures to cope with situations where sample sizes are slightly different. Field further recommended the following pairwise test procedures to cope with population variances, which are Tambane’s T2 and Dunnett’s T3. Therefore, the following post hoc analyses further specify what the differences were and where the differences were found, between the three classroom conditions.
Research question two. “Does the use of creative dramatics (a dramatic enactment led by the teacher of a story, setting, and/or characters) through improvised student movements and singing the vocabulary words, strengthen the vocabulary achievement in fourth grade students in a language arts classroom, when measured on a criterion-referenced vocabulary test of the language arts unit of study?” With a listwise \( N = 68\), for the pretest, posttest, and retention test, the answer for research question two is “yes.”

Post hoc analyses for pretest, posttest results listwise \( N = 68 \). The Post hoc analyses for the pretest-posttest listwise \( N = 68\) found statistically significant differences at the \( p < .05\) level of confidence between Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) \( n = 26\) and the Control Group (CG) \( n = 21\) (\( Gabriel = p < .008\), \( Tambane = p < .028\), \( Dunnett\ T3 = p < .028\), and \( Games–Howell = p < .025\)).

Post hoc analyses for pretest, posttest, and retention test results listwise \( N = 68 \). Post hoc analyses between the pretest, posttest, and retention listwise \( N = 68\) found statistically significant differences at the .05 level of confidence between Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) \( n = 26\) and the Control Group (CG) \( n = 21\) (\( Gabriel = p < .031\)). The \( Gabriel\)’s pairwise is designed to cope when sample sizes are different, as in this case. The \( Tambane\)’s \( T2\), Dunnett’s \( T3\), \( Games – Howell\) pairwise comparisons, account for population variances, and did not show statistical significance between the pretest, posttest, and retention test. However, they did show statistical significance between the pretest and posttest differences.
Creative dramatics and vocabulary words compared to the control group. A Mann-Whitney U test revealed a statistically significant difference in the posttest vocabulary achievement levels of CDVW ($Md = 29$, $n = 26$) and CG ($Md = 24$, $n = 21$), $U = 154$, $z = -2.57$, $p = .010$, $r = .38$. Additionally, a Mann-Whitney U test revealed a statistically significant difference in the retention test vocabulary achievement levels of CDVW ($Md = 28$, $n = 26$) and CG ($Md = 26$, $n = 21$), $U = 150.50$, $z = -2.64$, $p = .008$, $r = .39$. These pairwise comparisons reveal statistically significant differences in the vocabulary achievement between CDVW and CG, on both the posttest and the retention test; and further indicate a medium effect size.

Creative dramatics and vocabulary words compared to the creative dramatics and story retelling. A Mann-Whitney U test revealed no statistically significant difference in the posttest vocabulary achievement levels of CDVW ($Md = 29$, $n = 26$) and CDSR ($Md = 28$, $n = 21$), $U = 191.50$, $z = -1.762$, $p = .078$, $r = .26$. However, a Mann-Whitney U test revealed a statistically significant difference in the retention test vocabulary achievement levels of CDVW ($Md = 28$, $n = 26$) and CDSR ($Md = 27$, $n = 21$), $U = 170$, $z = -2.23$, $p = .026$, $r = .33$. These pairwise comparisons reveal a statistically significant difference in vocabulary achievement between CDVW and CDSR on the retention test; however, not on the posttest, and further indicate a medium effect size.

Research question three. “Does the use of creative dramatics (a dramatic enactment led by the teacher of a story, setting, and/or characters) through improvised student enactments and reenactments of the story using the vocabulary words in context, strengthen the vocabulary achievement in fourth grade students in a language arts
classroom, when measured on a criterion-referenced vocabulary test of the language arts unit of study?” With a listwise $N = 68$, for the pretest, posttest, and retention test, the answer for research question three is “no.”

No statistically significant differences were found in the pairwise post hoc comparisons for the pretest-posttest listwise $N = 68$ between the Experimental Group II – Creative Dramatics and Story Retelling (CDSR) $n = 21$ and the Control Group (CG) $n = 21$.

No statistically significant differences were found in the pairwise post hoc comparisons for the retention test between the Experimental Group II – Creative Dramatics and Story Retelling (CDSR) $n = 21$ and the Control Group (CG) $n = 21$.

Creative dramatics and story retelling compared to the control group. A Mann-Whitney $U$ test revealed no statistically significant differences in the posttest vocabulary achievement levels of CDSR ($Md = 28, n = 21$) and CG ($Md = 24, n = 21$), $U = 163.50$, $z = -1.45$, $p = 1.48$, $r = .22$. Additionally, a Mann-Whitney $U$ test revealed no significant difference in the retention test vocabulary achievement levels of CDSR ($Md = 27, n = 21$) and CG ($Md = 26, n = 21$), $U = 185.50$, $z = -.89$, $p = .374$, $r = .123$. These pairwise comparisons reveal no statistical significance in vocabulary achievement on either the posttest or the retention test between CDSR and CG; however, do indicate a small effect size.

strengthen the vocabulary achievement in fourth grade students in a language arts classroom, when measured on a criterion-referenced vocabulary test of the language arts unit of study?” With a listwise \( N = 68 \), for the pretest-posttest and retention test gains, the answer for the interaction effect of \( time \times condition \) is “no”. The answer for the main effect of \( time \) is “yes”. The answer for the main effect for the condition (treatment interventions) is “no”.

**Two-way mixed repeated measures analysis of variance.** The research design and statistical analysis used to answer research question four regarding a possible \( time \times condition \) interaction effect of the study was a two-way mixed repeated measures analysis of variance (ANOVA). The two-way mixed repeated measures ANOVA statistical analysis and 3 x 3 factorial research design provided the ability to examine between-subject variables or factors, as well as within-subject variables or factors (Stevens, 2009; Tabachnick & Fidell, 2013). This analysis is also referred to as a mixed-between-within ANOVA (Pallant, 2007, p. 266; Tabachnick & Fidell, 2013, p. 46), as it compares the variance (variability in scores) *between* the different groups (believed to be due to the independent variable or treatment) with the variability *within* each of the groups (believed to be due to chance). The *between-subject variable or factor* was the experimental treatment with three levels – (1) *creative dramatics* with vocabulary words (CDVW); (2) *creative dramatics* with story-retelling (CDSR); and (3) the control group (CG). The *within-subject variable or factor* was the statistics assessment with three levels – (1) *pretest*; (2) *posttest*; and (3) *retention test* using a 31-item language arts teacher-researcher developed criterion-referenced vocabulary test. This procedure is often referred to in the literature as a “mixed measures” design because the between-
subject factor contains independent groups and the within-subject factor contains repeated measures (Turner & Thayer, 2001, p. 104).

Results summary and effect sizes for mixed between-within subjects ANOVA

for the pretest-posttest and retention listwise $N = 68$. There was not a statistically significant interaction effect between treatment and time, Wilks’Λ = .863, $F(4, 128) = 2.453, p = .49, \eta_p^2 = .071$, indicating a small effect size, and no evidence of a statistically significant impact of one variable influenced by the level of the second variable. Therefore, it is safe to infer that because there was not a statistically significant interaction effect, the impact of one variable (treatment) is not influenced by the level of the second variable (time).

Consequently, it is reasonable to move forward with general conclusions and inferences regarding the main effects (Pallant, 2007). There was a statistically significant main effect for time, Wilks’Λ = .234, $F(2, 64) = 104.812, p < .001, \eta_p^2 = .766$, indicating a very large effect size with regards to the three test administrations. All three groups showed an increase in vocabulary test scores from the pretest to the posttest, and all three groups retained the vocabulary word growth from the posttest to the retention test. The main effect comparing the three different interventions was not statistically significant, $F(2, 65) = 1.893, p = .159, \eta_p^2 = .055$, suggesting no difference in the effectiveness of the three teaching approaches; although indicating a small effect size. However, the test of Between-Subjects Effects combines the data for all three test administrations; therefore, this analysis does not reveal the specific impact of each creative dramatics treatment intervention over time.
As previously referenced, regarding the use of this specific research analysis, Conard (1992) cautioned researchers when interpreting the results from this specific analysis. She noted that Kardash and Wright (1987) used a mixed between-within subjects ANOVA, and wrote, regarding this specific analysis, “That it combined within group variance with between groups variance in the meta-analysis which tends to make the results difficult to interpret” (p. 28). Therefore, the results from the one-way ANOVA and one-way repeated measures ANOVA for the listwise $N = 68$ provide more insight into the differences between the groups and treatment interventions in answering research questions one, two, and three of this present study. The ANOVA results, coupled with the results of the non-parametric equivalent procedures, which are further validated by the results of the post-hoc test procedures, show where there is statistical significance between the creative dramatics interventions as compared to the control, and as compared to each other.

*Levene’s test listwise $N = 68$. The Levene’s Test for Equality of Variances was violated for the pretest with statistical significance at $F(2, 65) = 3.421, p = .039$, as well as for the posttest with statistical significance at $F(2, 65) = 7.496, p = .001$. However, Levene’s test was not violated for the retention test with non-statistical significance at $F(2, 65) = 1.317, p = .275$. Since Levene’s test does not take account of the covariances, the variance-covariance matrices were compared between groups using the Box’s test. The Box’s Test of Equality of Covariance Matrices, referred to as a Box’s $M$ test result was not violated and was not statistically significant, as an $F$ value greater than .001 was needed in order to not violate this assumption; whereas, (Box’s $M = 14.735; F[12, 18753.901] = 1.144, p = .318$). The Box’s Test of Equality of Covariance Matrices tests
the null hypothesis that the observed covariance matrices of the dependent variable are equal across groups (Field, 2009, p. 604; Tabachnick & Fidell, 2013, p. 253-4; Vogt, 2005, p. 33).

According to Pallant (2007, p. 271), one important reason for interpreting the multivariate statistics provided by SPSS is that multivariate statistics do not require the assumption of sphericity to be met (p. 272). Mauchley’s assumption of sphericity was violated with statistical significance \( p < .05 \) (Field, 2009; Gall et al., 2007; Pallant, 2007; Tabachnick & Fidell, 2013). Pallant (2007) and Field (2003) described the sphericity assumption as an assumption that requires that the variance of the population difference scores for any two conditions be the same as the variance of the population difference scores for any other two conditions and referencing that the sphericity assumption is an assumption that is commonly violated. The effect of violating sphericity is a loss of power, or an increased chance in a Type II error, or wrongly retaining a false null hypothesis (Field, 2003, p. 184; Vogt, 2005, p. 330). Due to the fact that this study was designed to measure pretest and posttest gains following 17 days of treatment interventions, sphericity is not an issue; however, it would be an issue had there been an additional test in the middle of the study, which did not occur (Field, 2003; Pallant, 2007).

Figure 5, follows, and shows the means of vocabulary words learned by each of the three treatment groups on the 31-question vocabulary test regarding the pretest, posttest, and retention test administrations, with a Gain Line Graph illustration showing the changes over time by classroom condition with a listwise \( N = 68 \).
Following, Table 15 illustrates the pretest and posttest means word gains for listwise $N = 68$, as shown in Figure 5. It illustrates a slight decrease in means word gains by classroom condition from the listwise $N = 76$ presented in Table 14 for the pretest-posttest means word gains; however, overall, the gains were maintained from a listwise $N = 76$ for pretest-posttest means gains, and for a listwise $N = 68$ for pretest-posttest means gains and retention test results.

Accordingly, the subject mortality is considered a limitation (as referenced in Chapter Three) regarding the student vocabulary achievement from the pretest-posttest listwise $N = 76$, then to the pretest, posttest, and retention test listwise $N = 68$. Overall, the word means gains of the three groups remained stable, indicating that the students retained their vocabulary achievement over five-weeks, which included the two-week December holiday vacation. Moreover, 65 of the 68 students who were measured on all three test administrations gained vocabulary words throughout the study.

Figure 5. Gain Line Graph for Means of Vocabulary Words Learned by Classroom Condition Pretest, Posttest, and Retention Test Listwise $N = 68$. 
### Table 15

*Pretest-Posttest and Retention Test Means Gain Scores Comparisons on Vocabulary Words by Treatment Group Listwise N = 68*

<table>
<thead>
<tr>
<th>Group</th>
<th>n/N by Group</th>
<th>Pretest-Posttest Means Gains by Student</th>
<th>Retention Test Means Gains by Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group I</td>
<td>n = 26</td>
<td>7.65</td>
<td>- 0.8 of a word loss</td>
</tr>
<tr>
<td>(creative dramatics and vocabulary words)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental Group II</td>
<td>n = 21</td>
<td>7.48</td>
<td>- 0.6 of a word loss</td>
</tr>
<tr>
<td>(creative dramatics and story retelling enactment)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Group (group without creative dramatics)</td>
<td>n = 21</td>
<td>4.48</td>
<td>+ 0.2 of a word gain</td>
</tr>
<tr>
<td>Total</td>
<td>N = 68</td>
<td>6.54</td>
<td>- 0.4 of a word loss</td>
</tr>
</tbody>
</table>

Average Word Gains              

Consequently, the sample sizes were unequal across the three groups due to the student mortality experienced between the three test administrations. Therefore, marginal means take into consideration un-weighted means when comparing the means of unequal sample sizes as in (ANOVA), and when taking into consideration each mean in proportion to its sample size.

Refer to Figure 6 (Marginal Means) or (Profile Plot) which illustrates the pretest and posttest means gains by classroom condition and between the pretest, posttest, and retention test administrations (Pallant, 2007, p. 261). This can also be referred to as a *time x intervention* effects graph from pretest to posttest to retention test.
Figure 6. Estimated Marginal Means Pretest, Posttest, and Retention Test: Change Over Time by Classroom Condition on the Vocabulary Test Listwise N = 68.

Figure 6 illustrates the pretest and posttest means gains, from the output of the mixed-between-within ANOVA (Pallant, 2007; Tabachnick & Fidell, 2013) and further illustrates that both of the treatment groups scored higher when compared to the control group during the 17-day study. Further, these results illustrate that the students retained their vocabulary achievement gained, as reported in the retention test results, which occurred approximately five-weeks following the end of the study. Clearly, the marginal means and profile plots illustrate the lack of an interaction effect between time and condition between the posttest and retention test; further validating that the assessment of the statistically significant main effects of the creative dramatics independent variables is
warranted. Interesting to note, in Figure 6, is that the Control Group originally had a higher mean score at the beginning of the study, on the pretest, than the two creative dramatics treatment groups, and prior to any treatment interventions being employed, as was earlier referenced regarding this analysis for the listwise \( N = 76 \).

The individual student data revealed that the Control Group retained the vocabulary word growth with a .2 of a word increase as reported on the retention test. Further, the two creative dramatics treatment groups lost approximately .5 of a word. Therefore, it is safe to infer that the three groups retained their vocabulary achievement from the posttest to the retention test, which followed five weeks after the study, and included a two-week December holiday vacation. Across all three test administrations, two students in the Control Group (CG) lost vocabulary achievement; whereas, one lost three words, and one lost one word; one student in the Experimental Group I (CDVW) lost two words of vocabulary achievement. Chiefly, all of the students in the Experimental Group II (CDSR) gained vocabulary words across the three test administrations.

To further illustrate the data illustrated in Figure 6, the descriptive statistics for the mixed-between-within subjects ANOVA comparing the pretest, posttest, and retention test mean scores by classroom condition for listwise \( N = 68 \) follows in Table 16.
Table 16

*Descriptive Statistics for Mixed-Between-Within Subjects ANOVA Comparing Pretest-Posttest and Retention Test Means Listwise N = 68*

<table>
<thead>
<tr>
<th>Test Administration</th>
<th>Condition</th>
<th>Mean</th>
<th>SD</th>
<th>N/n</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Experimental Group I (Creative Dramatics and Vocabulary Words [CDVW])</td>
<td>20.42</td>
<td>5.17</td>
<td>26</td>
</tr>
<tr>
<td><strong>Pretest (0-31)</strong></td>
<td>Experimental Group II (Creative Dramatics and Story Retelling [CDSR])</td>
<td>19.67</td>
<td>3.06</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Control Group (CG)</td>
<td>20.67</td>
<td>4.60</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>20.26</td>
<td>4.40</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>Experimental Group I (Creative Dramatics and Vocabulary Words [CDVW])</td>
<td>28.08</td>
<td>3.14</td>
<td>26</td>
</tr>
<tr>
<td><strong>Posttest (0-31)</strong></td>
<td>Experimental Group II (Creative Dramatics and Story Retelling [CDSR])</td>
<td>27.14</td>
<td>2.24</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Control Group (CG)</td>
<td>25.14</td>
<td>4.03</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>26.88</td>
<td>3.40</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>Experimental Group I (Creative Dramatics and Vocabulary Words [CDVW])</td>
<td>27.96</td>
<td>3.46</td>
<td>26</td>
</tr>
<tr>
<td><strong>Retention Test (0-31)</strong></td>
<td>Experimental Group II (Creative Dramatics and Story Retelling [CDSR])</td>
<td>26.52</td>
<td>2.73</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Control Group (CG)</td>
<td>25.33</td>
<td>3.92</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>26.71</td>
<td>3.53</td>
<td>68</td>
</tr>
</tbody>
</table>
The following descriptive tables further illustrate the data reported for the student participants listwise $N = 68$, and provide additional information that has been lacking in previous studies regarding the descriptive data for the classroom comparisons from pretest to posttest, and following with a retention test.

**Descriptive Statistics for Pretest-Posttest and Retention Test:**

**All Measures by All Groups Listwise $N = 68$**

Descriptive statistics calculated from all three measures of the pretest, posttest, and retention test are displayed in Table 17 for the listwise $N = 68$. The range of scores on the pretest was 19 words; the range of scores on the posttest was 12 words; and the range of scores on the retention test was 15 words. The skewness and kurtosis scores are within the normal range (below 1.0) on the pretest and posttest scores, and slightly above the normal range (above 1.0) on the retention test.

Table 17

<table>
<thead>
<tr>
<th>Measure</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>20.264</td>
<td>19.00</td>
<td>18.00</td>
<td>4.386</td>
<td>.471</td>
<td>-.130</td>
<td>19.00 (11 – 30)</td>
</tr>
<tr>
<td>Posttest</td>
<td>26.882</td>
<td>28.00</td>
<td>29.0</td>
<td>3.396</td>
<td>-.755</td>
<td>-.387</td>
<td>12.00 (19 – 31)</td>
</tr>
<tr>
<td>Retention</td>
<td>26.705</td>
<td>27.00</td>
<td>27.0</td>
<td>3.532</td>
<td>-1.147</td>
<td>1.144</td>
<td>15.00 (16 – 31)</td>
</tr>
</tbody>
</table>

The descriptive statistics shown in Table 17 were calculated from the listwise $N = 68$ pretest, posttest, and retention test scores for the three classroom conditions, after deleting all cases (students) who were not present for all three test administrations. These
Descriptive statistics illumine the study analyses for the pretest, posttest, and retention test listwise $N = 68$ who were present for all three test administrations. The three study groups of participants listwise $N = 68$ were divided as follows: Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) $n = 26$; Experimental Group II – Creative Dramatics and Story Retelling (CDSR) $n = 21$; and the Control Group (CG) $n = 21$. Additionally, the descriptive statistics for the pretest, posttest, and retention test by treatment and classroom condition, with a listwise $N = 68$, are reported in Table 18.

Table 18

**Descriptive Statistics: Pretest, Posttest, and Retention Test by Treatment Group Comparison Listwise $N = 68$**

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Pretest</th>
<th>Posttest</th>
<th>Retention Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$N/n$</td>
<td>Mean</td>
<td>Median</td>
</tr>
<tr>
<td>Experimental Group I (Creative Dramatics and Vocabulary Words [CDVW])</td>
<td>26</td>
<td>20.42</td>
<td>19.00</td>
</tr>
<tr>
<td>Experimental Group II (Creative Dramatics and Story Retelling [CDSR])</td>
<td>21</td>
<td>19.67</td>
<td>19.00</td>
</tr>
<tr>
<td>Control Group (CG)</td>
<td>21</td>
<td>20.67</td>
<td>21.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>68</td>
<td>20.26</td>
<td>19.00</td>
</tr>
</tbody>
</table>
As reported in this chapter, as well as in Chapters One, Two, and Three of this study, previous researchers referenced descriptive data as “missing”, and made recommendations to future researchers to include descriptive histograms and data regarding *creative dramatics* studies (Brizendine & Thomas, 1982; Conard, 1992; Kardash & Wright, 1987; Mages, 2008; Massey & Koziol, 1978; Podlozny, 2000, 2001; Vitz, 1983; Wagner, 1998; Winner & Hetland, 2000, 2001a, 2001b, 2002). Therefore, the descriptive data is included in this chapter in narrative, tables, and figures to provide a detailed illustration of the results of this study. Additionally, refer to Appendix W for the histograms of the descriptive data presented and to Figures W1-W12 for a comparison of the individual histograms regarding the data presented in Table 18. Specifically, Figures W1-W3 provide a histogram comparison of the three groups by pretest, posttest, and retention test with a listwise $N = 68$. Further, Figures W4-W12 provide individual histograms for each classroom condition by pretest, posttest, and retention test with a listwise $N = 68$ to correspond with the data presented in Table 16.

**One-way repeated measures ANOVA Listwise $N = 68$.** A one-way repeated measures ANOVA design is used when each subject is measured on the same continuous scale on three or more occasions, such as this investigation (Pallant, 2007). Therefore, a one-way repeated measures ANOVA was conducted to compare scores on the dependent variable teacher-researcher developed criterion-referenced 31-question vocabulary test covering the course content (four stories) of the district adopted language arts unit of instruction *Theme 2: American Stories: Focus on Plays* (Houghton Mifflin Reading, 2005), for three test administrations.
The repeated measures ANOVA showed a statistically significant effect for *time*, Wilks’ Lambda = .25, $F(2, 66) = 98.10, p = .000, \eta_p^2 = .75$. Thus, indicating a very large effect size for the *creative dramatics* treatments over *time*. These scores were compared at Time 1 (*the pretest administration prior to the intervention*), Time 2 (*the posttest administration following the 17 days of intervention*), and Time 3 (*five-week follow-up retention test*). The means and standard deviations for the repeated measures ANOVA are presented in Table 19.

Table 19

*Descriptive Statistics for One-Way Repeated Measures ANOVA Listwise N = 68: Teacher-Researcher Developed Criterion-Referenced 31-Question Vocabulary Test*

<table>
<thead>
<tr>
<th>Time Period</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time 1 (Pretest)</td>
<td>68</td>
<td>20.26</td>
<td>4.40</td>
</tr>
<tr>
<td>Time 2 (Posttest)</td>
<td>68</td>
<td>26.88</td>
<td>3.40</td>
</tr>
<tr>
<td>Time 3 (Retention Test)</td>
<td>68</td>
<td>26.71</td>
<td>3.53</td>
</tr>
</tbody>
</table>

*Friedman test.* The Friedman Test is the non-parametric alternative to the one-way repeated measures ANOVA, and is reported as follows. The results of the Friedman Test indicated that there was a statistically significant difference in the dependent variable 31-question vocabulary word test scores across the three time points (pretest, posttest, and five-week follow-up retention test), $\chi^2 (2, n = 68) = 84.71, p = .000$.

Inspection of the median values showed an increase in the vocabulary achievement of students as measured on the dependent variable from the pre-intervention ($Md = 19$) to the post-intervention ($Md = 28$) and a stable retention at the five-week follow-up retention test ($Md = 27$).
There are no non-parametric procedures to conduct that are equivalent to the two-factor mixed methods ANOVA (Campbell & Stanley, 1963, p. 28; Field, 2009; Pallant, 2007). Consequently, the one-way between-groups ANOVA was conducted to compare the variance (variability in scores) between the three different groups (believed to be due to the independent variable or treatment) with the variability within each of the groups (believed to be due to chance).

**Summary**

Chapter Four presented a description of the analyses and interpretation of the data collected during this present study. As reported, the one-way between-groups ANOVA, as well as the one-way repeated measures ANOVA and the mixed-between-within subjects ANOVA all showed there were statistically significant differences in the means scores at the confidence level of $p < .05$ on the dependent variable across the three groups. Post-hoc analysis tests were conducted to make pairwise comparisons between the pretest and posttest means gains and between the three groups. As presented, statistical significance was found at the confidence level of $p < .05$ regarding the use of *creative dramatics* as a treatment intervention, and regarding the use of both *creative dramatics* interventions in comparison to the control group on the vocabulary achievements of fourth grade student participants in this study for the pretest and posttest gains. Further, statistical significance was found at the confidence level of $p < .05$ regarding the use of *creative dramatics* as a treatment intervention, and regarding the use of *creative dramatics* and vocabulary words (CDVW) across all three test administrations and in comparison to both the *creative dramatics* and story retelling group (CDSR) and the control (CG).
Descriptive statistics were used to describe the demographics of the sample, and detailed the listwise numbers per classroom condition for each of the three test administrations, while inferential statistics were used to calculate the differences between the three groups and to address the specific research questions examined. Both parametric (one-way between groups ANOVA, one-way repeated measures ANOVA, and mixed between-within subjects ANOVA) and nonparametric procedures (Kruskal-Wallis, Mann Whitney U, and Friedman) were used to analyze data generated by pretest and posttest means gains and retention test results. The data gathered revealed a statistically significant difference between the achievements of students who received the creative dramatics treatment interventions in comparison to students in the control group. All three groups of students maintained vocabulary achievement from the posttest to the retention test (re-administration of the pretest and posttest), at approximately the same rate. Student participants in the Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) group outperformed both the students in the Experimental Group II – Creative Dramatics and Story Retelling (CDSR) group, as well as those students in the Control group (CG). Further, the students in the Experimental Group II – Creative Dramatics and Story Retelling (CDSR) group outperformed the students in the Control group (CG).

The statistically significant findings of this study provide empirical evidence that creative dramatics treatments, taught by classroom teachers and integrated into district required language arts instruction, improves the vocabulary achievement of students at the fourth grade level. Consequently, this data provides empirical evidence that the vocabulary achievement gained and maintained by the students who received the
creative dramatics intervention is different from a normal population. Chapter Five will focus upon the discussion of these findings, their relevance, implications, generalizability, and the possibility of the practical significance of these results to classroom practice.
Chapter Five

Discussion

The purpose of this study was to examine the effects of the use of creative dramatics on the vocabulary achievement of fourth grade students in a language arts classroom. An additional intent of the study was to apply the perennial, essential, and progressive philosophical and theoretical underpinnings regarding the necessity of the arts (dance, music, theatre, and visual arts) – with the specific focus on creative dramatics. Further, this study focused on using creative dramatics as a framework or medium for learning vocabulary words. The creative dramatics interventions employed in this study provided a natural blending of the intellect and of emotion through methods that included cognitive, affective, and psychomotor learning constructs; whereas, the “arts as process” was the foundation of the creative dramatics intervention methods employed and experienced by the student participants.

The following three educational philosophies were presented throughout this dissertation, and the underlying theories were discussed throughout this study; and further articulated as three world views. Specifically, the three world views investigated in this study are repeated in this chapter as they are integral to the discussion of the study findings:

• “Arts for art’s sake”, or the study of the arts as perennial and aesthetic values that make up the essence of a good life (Adler, 1982, 1994; Broudy, 1950, 1972; Eisner, 1984; Winner et al., 2013a, 2013b);
“Arts are essential”, and expected academic subjects that should be taught to all learners as a part of the core curriculum (Eisner, 1984, 1998; Hirsch, 1996); and “Learning with and through the arts”; whereas, the arts naturally integrate into learning situations; whereby, students construct and make meaning and transfer from school to life (Bruner, 1996, 2006; Dewey, 1934, 1938; Piaget 1962, 1968; Steiner 1997; Vygotsky, 1922, 1966).

The focus of this study investigation involved the examination of creative dramatics, and per recommendation by previous researchers was clearly defined through Washington State Arts Learning Standards (OSPI, 2011a); whereas, “Creative dramatics is a dramatic enactment (led by the teacher) of a story, setting, and/or characters. This is an experiential, process-based activity, not a performance for an audience. The teacher may assume a role” (OSPI, 2011d, p. 133). As was stated in Chapter Two, this specific definition of creative dramatics – by nature – supports the artistic processes of creating, performing, and responding, which infer that ‘art is a way of knowing’ through process, experience and emotion (Adler, 1982, 1994; Broudy, 1972; Bruner, 1966; Cole & Means, 1981; Csikszentmihalyi, 1997; Dewey, 1934; Eisner, 2002; Gardner, 1999; Goleman, 1995; Medina, 2008; Piaget, 1969; Reimer, 2003; Steiner, 1997; Sternberg, 1997; Vygotsky, 1922; Zull, 2002). The philosophical and theoretical constructs espoused in perennialism, essentialism, progressivism, and constructivism supported the methodologies and methods employed in the intervention treatments regarding the use of creative dramatics techniques to enhance the vocabulary achievement of the fourth grade students in this study.
The definition of *creative dramatics* (OSPI, 2011d, p. 133) used in this study focused on the arts as “process”, as opposed to arts as “product”, such as in a performance method. In support of the efforts of this present investigation’s intent and definition to use *creative dramatics* as “process”, and as a way to increase vocabulary achievement in fourth graders, Conard (1992) wrote:

The arts as “process” represent a form of using the arts as a framework or medium for learning and promote a view of the arts as cognitive. The arts as “process” is the model that has fostered the learning through-the-arts concept. Since both the affective and cognitive domains are essential for human development, using the arts as a catalyst for teaching other disciplines promotes a blending of the intellect and the emotions. (p.1)

Educators and researchers throughout the 20th century and into the 21st century have recommended the use of *creative dramatics* instruction to enhance student cognitive achievement, especially in the areas of language arts and with elementary students. Consequently, the statements that *creative dramatics* strengthens verbal skills are founded and reported (Podlozny, 2000, 2001; Winner & Hetland, 2000; Winner et al., 2013a, 2013b). However, there was yet to be an established pathway of generalizable and replicable empirical studies linking *creative dramatics* to vocabulary achievement.

Therefore, an additional goal and intent of this study was to contribute to the research literature concerning the relationship between *creative dramatics* and vocabulary achievement by providing such a pathway that might yield inferential findings, and based upon the recommendations of the researchers who had attempted the same. Another goal of this study was to find, review, cite, and build upon the empirical
studies regarding *creative dramatics* – as referenced in Chapter One and discussed in Chapter Two. Therefore, the studies and sources cited throughout this dissertation – and included in the references of this study – are included in this chapter, as well, in an effort to provide a concise location for reference of the interest in *creative dramatics* research to future researchers and for future studies. Thus, those studies and sources cited follow, as they are worthy of additional reference for their efforts to further arts education; and specifically, regarding their investigations about *creative dramatics* and academic achievement (Benoit, 2003; Catterall, 2009; Conard, 1992; Dansky, 1980; Donmoyer, 1995; Duffelmeyer & Duffelmeyer, 1979; Dunn, 1995; DuPont, 1992; Eisner, 1998; Freund, 1990; Galda, 1982; Gray, 1987; Hamblen, 1993; Hattie, 2009; Heathcoate & Bolton, 1995; Hemenway, 2010; Herbert, 1982; Herbert, 2004; Hetland, 2013; Johnson, 1998; Kardash & Wright, 1987; Mages, 2008; Mantione & Smead, 2003; Matassarin, 1983; McCasslin, 1980; McFadden, 2010; McMaster, 1998; Meyer, 2004; Myerson, 1981; Neuman & Dickinson, 2001; Omasta, 2012; Parsad & Spiegelman, 2012; Pellegrini, 1984; Pellegrini & Galda, 1982; Pierini, 1971; Podlozny, 2000, 2001; Rabkin, 2002, 2012; Rabkin & Redmond, 2006; Rice, 1972; Robelen, 2012; Ross & Roe, 1977; Russell-Bowie, 2007; Seidel, 2013; Seidel, Tishman, Winner, Hetland, & Palmer, 2009; Siks, 1958; Silvern et al., 1986; Singer, 1973; Smilansky, 1968; Smilansky & Shefatya, 1990; Somers, 2001; Stewig, 1974; Vitz, 1983, 1984; Ward, 1930, 1947; Ware, 2011; Winner & Cooper, 2000; Winner et al., 2013a, 2013b; Winner et al., 2013a, 2013b; Winner & Hetland, 2000, 2001a, 2001b, 2002; Youngers, 1977).
Overview and Discussion of Findings

The purpose of this chapter is to present conclusions and inferences that can be drawn from the findings, as well as recommendations for future research.

This chapter is composed of six sections, which include the overview and discussion of findings, interpretations of findings, recommendations for future research, implications for classroom practice, and conclusions. In the ensuing section the results of the study are discussed in relation to each of the four research questions in this inquiry. This study was a pretest-posttest control group design, and the 83 student participants were randomly assigned to three treatment conditions; which included two different creative dramatics treatment interventions and one control group. The randomly assigned fourth grade teachers and the randomly assigned fourth grade students were not aware of the specifics of the study. The teachers were told by the investigator and their principal that arts education techniques, as taught to the teachers by the investigator, would be integrated into the district adopted language arts curriculum, Theme 2: American Stories: Focus on Plays (Houghton Mifflin Reading, 2005), in efforts to see if the vocabulary achievement of their students would be enhanced due to the interventions employed.

In the following section, the results of the study are discussed in relation to each of the four research questions. The results presented in the subsequent section address the pretest and posttest gains of the student sample listwise $N = 76$, and the pretest and posttest gains and retention test results of the student sample listwise $N = 68$. The results of the statistical analyses used are discussed along with confirmation or confutation of the study results.
Research Question One: Creative Dramatics versus No Creative Dramatics

Research question one. “Does the use of creative dramatics (a dramatic enactment led by the teacher of a story, setting, and/or characters) strengthen the vocabulary achievement in fourth grade students in a language arts classroom, when measured on a criterion-referenced vocabulary test of the language arts unit of study?”

The statistical analyses conducted to determine whether the use of creative dramatics would strengthen vocabulary achievement were statistically significant. The finding of both parametric and nonparametric procedures demonstrated that the use of the two creative dramatics treatment interventions (CDVW and CDSR) resulted in a statistically significant increase in the vocabulary achievement of the students in both of the creative dramatics treatment groups versus the students in the control group from the pretest to the posttest administrations.

The experimental design of the study included the random assignment of classrooms and teachers to the three classroom conditions. As referenced in Chapter Three, all three groups began with co-planned curriculum aligned to the district adopted language arts curriculum and to the state learning standards and national common core state standards.

The creative dramatics interventions occurred for 15-20 minutes per day, over the course of the 17 consecutive school days of the study, providing sustained creative dramatics instruction, over time, as an intervention strategy to teach the 31 vocabulary words required to be learned in the content of the language arts unit of study (four stories). The two independent variables that were manipulated for this study were the use of two different creative dramatics treatments.
Since the independent variables (creative dramatics and vocabulary words and creative dramatics and story retelling) were directly manipulated in this study, it is appropriate to infer that the creative dramatics techniques can be attributed to the cause of the higher achievement levels for students in Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW), and for the students in Experimental Group II – Creative Dramatics and Story Retelling (CDSR), as compared to the students in the Control Group (CG).

Further, the creative dramatics interventions employed in the study required approximately 60 minutes per week. This is approximately the same amount of instruction a specialist in an arts discipline (dance, music, theatre, and visual arts) provides to students in a given week (as reported in Chapter Three); however, delivered on a daily basis.

Likewise, Podlozny (2000) posed the question asking how much drama intervention is needed to have statistical significance and a medium to large effect size. In her meta-analysis results, Podlozny (2000, 2001) noted, “The studies that found less drama time associated with higher effect sizes had much shorter periods of instruction, averaging only 315 to 720 minutes of instruction across all of the studies” (p. 266). Thus, the results of this present study concur with Podlozny’s (2000, 2001) findings. Whereas, the Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) students experienced 320 minutes of creative dramatics, and showed mean gains of 8.0 words. Further, the findings of this study revealed that with less than 315 minutes (Podlozny, 2000, 2001); whereas, the Experimental Group II – Creative Dramatics and Story Retelling (CDSR) experienced 260 minutes of creative dramatics treatments, and
also showed mean gains of 7.41 words. Both of the *creative dramatics* treatment groups outscoed the Control Group, which experienced 260 minutes of the district adopted language arts *Readers’ theatre*, and showed mean gains of 4.86 words. The mean gains of all three groups from the pretest to the posttest, over the 17-day study was 6.88 words per student with a listwise $N = 76$. The differences in the amount of time for the *creative dramatics* treatments by classroom condition were due to the need to subtract treatment minutes when a substitute teacher was employed, to ensure treatment fidelity (refer to Figure 2, Chapter Three).

**Research Question Two: Creative Dramatics and Vocabulary Words versus the Control Group.**

*Research question two.* “Does the use of creative dramatics (a dramatic enactment led by the teacher of a story, setting, and/or characters) through improvised student movements and singing the vocabulary words, strengthen the vocabulary achievement in fourth grade students in a language arts classroom, when measured on a criterion-referenced vocabulary test of the language arts unit of study?”

Since the independent variable (creative dramatics and vocabulary words) was directly manipulated in this study, it is appropriate to infer that the *creative dramatics* techniques can be attributed to the higher achievement levels among the students who experienced this intervention during the 16 days they received treatment interventions, at 15-20 minutes per day, for a maximum of 320 minutes or five hours and 20 minutes. This teacher was absent one time for teacher in-service; thus, only 20 minutes were subtracted from the treatment minutes due to a substitute teacher being a threat to the
treatment fidelity. In a pretest-posttest control group design, the control group serves as a sample of the population for comparison purposes. The students in this treatment group – Experimental Group I – creative dramatics and vocabulary words (CDVW) experienced consistent, as well as sustained creative dramatics engagement and treatment fidelity due to their teacher’s excellent attendance. The results of parametric and non-parametric analyses, as well as the post-hoc analyses revealed statistically significant effects of the creative dramatics treatment interventions between the Experimental Group I – creative dramatics and vocabulary words (CDVW) as compared to the Control Group (CG). Further, there was a statistically significant effect between the retention test results comparing the Experimental Group I – creative dramatics and vocabulary words (CDVW) to the Experimental Group II – creative dramatics and story retelling (CDSR). Therefore, it is appropriate to infer that the creative dramatics intervention techniques from the Experimental Group I results can be attributed to the following equation; whereas, CDVW > CDSR > CG.

In this study, it was assumed that the students in the control group performed just as would other students in the population who had not received creative dramatics interventions. As was reported earlier in this chapter, the mean gain for all students was 6.88 vocabulary words. Noteworthy are the pretest and posttest gains with a listwise N = 76; whereas, the students receiving the creative dramatics and vocabulary words (CDVW) treatment intervention, with a group size n = 27, gained an average of 8.0 words per student. Comparatively, the students in the control group (CG), with a group size n = 22 gained an average of 4.86 words per student.
Research Question Three: Creative Dramatics and Story Retelling versus the Control Group

Research question three. “Does the use of creative dramatics (a dramatic enactment led by the teacher of a story, setting, and/or characters) through improvised student enactments and reenactments of the story using the vocabulary words in context, strengthen the vocabulary achievement in fourth grade students in a language arts classroom, when measured on a criterion-referenced vocabulary test of the language arts unit of study?” Since the independent variable (creative dramatics and story retelling) was directly manipulated in this study, it is appropriate to infer that the creative dramatics techniques can be attributed to the higher achievement levels among the students who experienced this intervention during the 13 days they received treatment interventions, at 15-20 minutes per day, for a maximum of 240 minutes or four hours. The results were statistically significant in the post hoc comparisons between these two groups for the listwise N = 76 for the pretest and posttest test gains; however, not for the listwise N = 68 statistical analyses for the pretest and posttest gains and retention test results.

Specifically, the Experimental Group II teacher was absent four times for teacher in-service and illness; thus, 80 minutes were subtracted from the treatment minutes due to a substitute teacher being a threat to the treatment fidelity on four separate days. In a pretest-posttest control group design, the control group serves as a sample of the population for comparison purposes. In this study, it was assumed that the students in the control group performed just as would other students in the population who had not received creative dramatics interventions. As was reported earlier in this chapter, the mean gain for all students was 6.88 vocabulary words. Noteworthy are the pretest and
posttest gains with a listwise $N = 76$; whereas, the students receiving the creative 
dramatics and story retelling (CDSR) treatment intervention, with a group size $n = 27$, 
gained an average of 7.41 words per student. Comparatively, the students in the control 
group (CG), with a group size $n = 22$ gained an average of 4.86 words per student.

**Research Question Four: Interaction and Main Effects**

**Research question four.** “Is there an interaction effect between the time 
(time = [1] pretest; and [2] posttest administrations) and condition (condition = [1] 
creative dramatics and vocabulary words [CDVW]; [2] creative dramatics and story 
retelling enactments [CDSR]; and [3] control group [CG]), to strengthen the vocabulary 
achievement in fourth grade students in a language arts classroom, when measured on a 
criterion-referenced vocabulary test of the language arts unit of study?” With an $N = 76$, 
for the pretest and posttest gains, the answer for the interaction effect of time x condition 
is “yes”. The answer for the main effect of time is “yes”. The answer for the main effect 
for the condition (treatment interventions) is “no”.

**Results summary and effect sizes for mixed between-within subjects ANOVA**

**for pretest-posttest listwise N = 76.** As reported and detailed in Chapter Four, there was 
a statistically significant interaction effect between treatment and time and indication of a 
small effect size, and evidence of a statistically significant impact of one variable 
influenced by the level of the second variable. Therefore, it is safe to infer that because 
there was a statistically significant interaction effect, the impact of one variable 
treatment) is influenced by the level of the second variable (time). Consequently, it is 
reasonable to move forward; yet, with caution, with general conclusions and inferences 
regarding the main effects (Pallant, 2007). There was a statistically significant main
effect for *time*, and indication of a very large effect size with regards to the three test administrations. All three groups showed an increase in vocabulary test scores from the pretest to the posttest. However, the main effect comparing the three different *interventions* was not statistically significant; thus, suggesting no difference in the effectiveness of the three teaching approaches; although indication of a small effect size. However, the test of Between-Subjects Effects combines the data for all three test administrations; therefore, this analysis does not reveal the specific impact of each *creative dramatics* treatment intervention over time (Conard, 1992).

Therefore, the results from the one-way ANOVA and one-way repeated measures ANOVA for the listwise *N* = 76 provide more insight into the differences between the groups and treatment interventions in answering research questions one, two, and three of this study. Moreover, the ANOVA results, as reported in detail in Chapter Four, coupled with the results of the non-parametric equivalent procedures; and, which are further validated by the results of the post-hoc test procedures, show where there is statistical significance between the *creative dramatics* interventions as compared to the control, and as compared to each other.

**Research question four.** “Is there an interaction effect between the *time* (time = [1] pretest; [2] posttest; and [3] retention test administrations) and *condition* (condition = [1] creative dramatics and vocabulary words [CDVW]; [2] creative dramatics and story retelling enactments [CDSR]; and [3] control group [CG]), to strengthen the vocabulary achievement in fourth grade students in a language arts classroom, when measured on a criterion-referenced vocabulary test of the language arts unit of study?” With an *N* = 68, for the pretest-posttest and retention test gains, the
answer for the interaction effect of \( time \times condition \) is “no”. The answer for the main effect of \( time \) is “yes”. The answer for the main effect for the \( condition \) (treatment interventions) is “no”.

**Results summary and effect sizes for mixed between-within subjects ANOVA**

For the pretest-posttest and retention listwise \( N = 68 \). As reported and detailed in Chapter Four, there was not a statistically significant interaction effect between treatment and time; however, indication of a small effect size, and no evidence of a statistically significant impact of one variable influenced by the level of the second variable. Therefore, it is safe to infer that because there was not a statistically significant interaction effect, the impact of one variable (treatment) is not influenced by the level of the second variable (time). Consequently, it is reasonable to move forward with general conclusions and inferences regarding the main effects (Pallant, 2007). There was a statistically significant main effect for time and indication of a very large effect size with regards to the three test administrations. All three groups showed an increase in vocabulary test scores from the pretest to the posttest, and all three groups retained the vocabulary word growth from the posttest to the retention test. However, the main effect comparing the three different interventions was not statistically significant; thus, suggesting no difference in the effectiveness of the three teaching approaches; although indication of a small effect size. However, the test of Between-Subjects Effects combines the data for all three test administrations; therefore, this analysis does not reveal the specific impact of each creative dramatics treatment intervention over time. As referenced earlier, regarding the use of this specific research analysis, Conard (1992) cautioned researchers when interpreting the results from this specific analysis.
Therefore, the results from the one-way ANOVA and one-way repeated measures ANOVA for the listwise \( N = 68 \) provide more insight into the differences between the groups and treatment interventions in answering research questions one, two, and three of this study. The ANOVA results, coupled with the results of the non-parametric equivalent procedures, which are further validated by the results of the post-hoc test procedures, show where there is statistical significance between the \textit{creative dramatics} interventions as compared to the control, and as compared to each other.

There are no non-parametric alternatives to the mixed between-within subjects ANOVA. Therefore, post hoc pairwise comparisons were used to determine what the differences were and where. These analyses did reveal statistical significance between the two \textit{creative dramatics} treatment groups and were detailed in the results reported in Chapter Four. The retention of vocabulary word achievement of most of the students over the two-week winter vacation resulted with only a .2 word change over time by treatment group.

Specifically, the marginal means plot, and gain line graphs, the pairwise post hoc analyses, as well as the descriptive statistics all indicated improved vocabulary achievement on the dependent variable between the pretest and posttest administrations, when comparing each of the two \textit{creative dramatics} treatment groups to the control group, over time. Furthermore, across the three test administrations, these plots and graphs illustrated no interaction effect between the condition and time with parallel lines further illustrating the significant and sustained gains in the scores of the \textit{creative dramatics} treatment conditions as compared to the scores of the control group.
Therefore, since the independent variables (creative dramatics and vocabulary words and creative dramatics and story retelling) were directly manipulated in this study, it is appropriate to infer that the creative dramatics treatment interventions can be attributed to the higher achievement levels among students who experienced these interventions over the 17-day study, as well as sustained gains from the posttest to the retention test for five weeks following the study completion.

**Retention Test after Five Weeks**

Approximately five weeks following the completion of the study and posttest assessment, the posttest was re-administered to students to measure their levels of retention. The student listwise \( N = 68 \), was diminished by eight students from the pretest-posttest gains. However, all three groups held their achieved gains, with an average of a .2 of a word difference from the pretest-posttest gains between the three treatment groups.

Interesting, is that the Control Group had a higher mean score at the beginning of the study on the pretest than the two treatment groups, and prior to any treatment interventions being employed. Additionally, the Control Group retained the vocabulary word growth with a .2 of a word increase as reported on the retention test; however, not statistically significant. Interesting is that 65 participants of the listwise \( N = 68 \) participants, who were measured on all three test administrations, gained vocabulary words during the study. Further, two students in the Control Group lost vocabulary achievement – one lost three words, and one lost one word, and one student in the Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) lost two words of vocabulary achievement. Worthy, is that no students in Experimental
Group II – Creative Dramatics and Story Retelling (CDSR) lost vocabulary words.

**Effect Sizes**

The study effect sizes ranged from small to medium, to large, depending upon the parametric and non-parametric analyses conducted, and as reported in detail by statistical analysis in Chapter Four. The consistency of the small, to medium, to large *effect sizes* found between the statistics with *creative dramatics* interventions compared to the control group was a statistically significant result of this study. Further, the pairwise comparisons conducted indicated what the differences were and where. Specifically, the pattern of medium to large *effect sizes* found between the *creative dramatics* and vocabulary words (CDVW) intervention in comparison to the control group (CG) were statistically significant and lend validity to possible *practical significance* in teacher practice. Further, there was a medium effect size between the *creative dramatics* and vocabulary words (CDVW) and the *creative dramatics* and story retelling (CDSR) interventions. Both creative dramatics intervention teachers reported they are utilizing the *creative dramatics* interventions with different grade levels and with different subjects. This voluntary reporting validates that *practical significance* or a change in classroom teaching practice, has occurred and is due to the present study *creative dramatics* intervention techniques taught to these teachers by the study investigator.

**Inferences**

The results of this study add statistically significant empirical evidence to the argument in the literature regarding *creative dramatics* and academic achievement in cognitive subject areas; and specifically, provide evidence for the hypothesis that *creative dramatics* has statistically significant effect on vocabulary achievement, at least at the
fourth grade level; thus addressing this particular research gap. Further, these results provide evidence of progress toward a replicable and generalizable pathway in *creative dramatics* research regarding inferential findings; thus, further addressing this gap in the literature.

Additionally, these study results present possibility and reason for more research to be conducted on this topic, and with other grade levels, and for a longer amount of time. Specifically, these study results provide statistically significant empirical evidence supportive of the commonly held belief about the value of arts education being taught as a basic subject that increases academic achievement. The study results further provide statistically significant empirical evidence that *creative dramatics* naturally engages students and provides for learning in the cognitive, affective, and psychomotor domains that are essential for learners. Furthermore, the results provide support for the philosophical construct of “arts as process,” (which was a foundational construct of this study); whereas, *creative dramatics* is viewed as a cognitive subject (Conard, 1992; OSPI, 2011a, 2011d, p. 133). Consequently, these results provide statistically significant empirical evidence with regards to *creative dramatics* instruction, as a means to academic achievement regarding *creative dramatics* and vocabulary achievement with fourth grade students.

Notable are the differences between the pretest and the posttest achievement of the two *creative dramatics* experimental groups. The effect size indicates the *practical significance* of findings, and efforts were made, on the part of the investigator, to secure a school location with a sample size large enough to produce a medium to large effect size, should the creative dramatics intervention treatments show statistical significance at the
confidence level $p < .05$. In addition to reporting overall effect sizes for ANOVAs, *effect size* calculations were also conducted on pairwise comparisons, which provided specific information about what the differences were and where the differences were located between the three classroom conditions, and specifically, the two *creative dramatics* treatment interventions.

Therefore, it can be inferred, from this data, that the intervention of *creative dramatics* appears to have a statistically significant effect on the vocabulary achievement of fourth grade students in a language arts classroom, from the pretest to posttest test administrations, covering 17 days of treatment; thus, answering research question one. Further, it can be inferred that the intervention of *creative dramatics* and vocabulary words (CDVW) appears to have a statistically significant effect on vocabulary achievement from the pretest to posttest as compared to the control group (CG) without *creative dramatics*; thus, answering research question two. Additionally, it can be inferred that the intervention of *creative dramatics* and story retelling (CDSR) appears to have a statistically significant effect on vocabulary achievement from the pretest to the posttest as compared to the control group (CG) without *creative dramatics*; thus answering question three. Additionally, it can be inferred that there was an interaction effect between *time x condition* – from the pretest to the posttest interventions; however not between the posttest to the retention test. Further, there was statistically significant effect for the main effect of *time* from the pretest to the posttest, as well as from the posttest to the retention test. Notably, it can be inferred that the Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) intervention had the most statistically significant effects as compared to the Control Group (CG) from the pretest to
the posttest, as well as from the posttest to the retention test. Moreover, the Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) intervention showed statistically significant effects when compared to the Experimental Group II – Creative Dramatics and Story Retelling (CDSR) from the posttest to the retention test. The Experimental Group II – Creative Dramatics and Story Retelling (CDSR) showed statistically significant effects when compared to the Control Group (CG) from the pretest to the posttest with a listwise \( N = 76 \). However, the Experimental Group II – Creative Dramatics and Story Retelling (CDSR) did not show statistically significant effects with either the pretest to posttest, or the posttest to the retention test when compared with the Control Group (CG) with a listwise \( N = 68 \). Finally, both of the creative dramatics treatment interventions showed statistically significant differences and more vocabulary words learned, when compared to the control group; moreover, the Experimental Group I – Creative Dramatics and Vocabulary Words appears to show consistent statistical significance throughout the study and the three test administrations.

**Homogeneity Issues**

The assumption of homogeneity was violated, as reported in the pretest and posttest scores; however, not evident in the retention test scores, and as reported in Chapter Four. Since homogeneity of groups is an underlying assumption of parametric procedures (Field, 2009; Gall et al., 2007; Green et al., 2000), it was necessary to include nonparametric statistical analyses along with the parametric analyses. The related issue of subject mortality, which further reduced the student \( N = 76 \) to \( N = 68 \), is referenced in the limitations of the study, and detailed in Chapter Four. However, in the case of the subject mortality issue, in this study, the assumption of homogeneity of variances was not
violated in the retention test results with a listwise $N = 68$; whereas, students retained vocabulary gains across the three classroom conditions. Further, listwise analyses were reported, in efforts to provide a clear description of the student sample across the three classroom conditions, and across the three test administrations. Subject mortality will be further discussed in the limitations of this study.

**Summary of Results Discussion**

The results of this study make a strong statement regarding the value of *creative dramatics* interventions that are seamlessly incorporated into the teaching and learning of required vocabulary words in a district adopted language arts unit of instruction. A pattern of results emerged from this study that consistently showed that students who experienced the *creative dramatics* intervention techniques performed better than the students who did not experience the *creative dramatics* intervention techniques. While there are limitations that may diminish the optimistic results, there is reason to speak confidently about the findings of this study.

The primary reason for optimism regarding these results is due to the experimental design of this study; whereas, the random assignment of students and teachers, in a public school, and during the school day, while utilizing a district adopted curriculum reported statistically significant effects for the use of *creative dramatics* to increase the vocabulary achievement of students in the fourth grade. Few empirical studies reported in the literature are of an experimental nature, due to the disruptive impact upon an ongoing school setting, and the difficulty of conducting such a study with classroom teachers providing the *creative dramatics* treatment interventions. Further, and as has been reported in Chapter One and Chapter Two of this dissertation, there is a
gap in the research literature regarding statistical significance for the use of creative dramatics to increase vocabulary achievement. Consequently, this study addresses that research gap with a replicable and generalizable pathway, as well as showing effect size that resulted in reported practical significance by the two treatment teachers. The resulting small, medium, and large effect sizes of this study, as presented and detailed by the statistical analysis presented in Chapter Four, demonstrate that the results obtained in this study carry practical significance. Vogt (2005) defined such as, “Practical significance – said of a research finding that one can put to use that can change practice” (p. 243).

Therefore, the results reported from this study provide both statistical significance, as well as practical significance; adding credibility to the assertion to the implication that the use of creative dramatics results in academic achievement. Students who experienced both creative dramatics intervention treatments consistently outscored their peers who did not experience the creative dramatics intervention treatments.

Furthermore, the findings from this study, as well as additional research and replication of this study’s methods, could meaningfully contribute to the use of creative dramatics as a regular part of the teaching and learning sequence; whereas, the arts – specifically creative dramatics – would be given the sustained and consistent instructional time that is expected and needed for core subjects that are basic to student development. Additionally, the creative dramatics instructional methods taught replicate research supported instructional methods; and are further supported by foundational philosophical and theoretical constructs for and teaching and learning in the arts disciplines of dance, music, theatre, and visual arts.
The results obtained from this study were both statistically and practically significant, which provide support for the assertion that the persistent use of creative dramatics interventions leads to improved vocabulary achievement in fourth grade students. The students who experienced both of the creative dramatics interventions had higher scores than those students in the control group on the pretest-posttest gains, showing statistical significance and supporting effect sizes. Further, gains reported were maintained over three school holiday interruptions— including Veteran’s Day, Thanksgiving vacation, and a two-week December vacation. Specifically, both parametric (one-way between groups ANOVA, one-way repeated measures ANOVA, and mixed between-within subjects ANOVA) and nonparametric procedures (Kruskal-Wallis, Mann Whitney U, and Friedman) were used to analyze data generated by pretest and posttest gains and a retention test administration. The data gathered revealed a statistically significant difference between the achievements of students who received creative dramatics treatments as compared to students in the control group who received the district language arts adoption Readers’ theatre. All three groups of students maintained vocabulary achievement from the posttest to the retention test (re-administration of the pretest and posttest), at the same rate.

Therefore, this study addresses this specific gap in the creative dramatics research and further provides some empirical data to make the case for the use of creative dramatics to increase the vocabulary achievement of fourth grade students in a language arts classroom. Furthermore, this study design addressed recommendations of previous researchers. The five recommendations of Conard (1992) specifically referenced in this study were to: (1) report quantitative data, especially descriptive statistics; (2) include
detailed documentation of exactly what was done, how it was done, and how the effects were measured; (3) provide detailed reporting of study characteristics to facilitate research synthesis; (4) include studies that do not show statistical significance; and (5) include creative dramatics in the core curriculum at the elementary level (Conard, 1992, p. 67).

In summary of this discussion section, the experimental design of the study offered tight controls for the way the study was designed, implemented, and conducted. Thus, the statistical significance that was obtained is worthy of attention and further examination and investigation by researchers and practitioners, and provides optimism for such a study. It is challenging to conduct empirical research in the public school setting; therefore, given the paucity of experimental studies in this area, this study offers a rare glimpse of learning outcomes that may be obtained from a setting which allows for inferential commentary. Specifically, the random assignment of students and teachers for a research study is the exception, with the restrictions placed upon schools and districts in the current educational climate and with contractual perimeters that are non-negotiable.

Furthermore, the results of this study substantiate and extend the previous research findings in the area of creative dramatics empirical research and academic achievement by (Conard, 1992; Mages, 2008; Podlozny, 2000; Vitz, 1983). Consequently, the results of the data of this study align with the findings of previous research that espouses the use of creative dramatics for academic achievement. Particularly, this study examined the use of creative dramatics in the area of verbal skills (Podlozny, 2000), and further; extends the findings to cause and effect with creative dramatics and vocabulary achievement.
Although there are limitations, as well as delimitations to this study, and which are discussed in the subsequent section, the statistically significant empirical evidence provide detailed data to speak optimistically about the findings and methodology of this study. Consequently, the positive impact on vocabulary achievement of the fourth grade students who received the creative dramatics interventions is notable, and worthy of attention by both researchers and practitioners.

**Limitations**

Although the statistically significant results of the study offer progress toward a replicable and generalizable pathway regarding the use of creative dramatics interventions to increase the vocabulary achievement of fourth grade students in a language arts classroom, there are also limitations to this study that deserve thought. These limitations will be further discussed in the context of five issues related to the study, which follow: (1) internal validity; (2) external validity; (3) delimitations; (4) the measurement of the dependent variable; and (5) the statistical analysis.

**Internal validity.** The control of the threats to the internal validity offered by an experimental pretest-posttest control group design is, feasibly, one of the greatest strengths of this study. Gall et al. (2007) indicate there are no threats to the internal validity in this type of design (p. 398). However, eight potential threats to the internal validity became apparent through the course of the investigation that may pose limits on the impact of the results.

First, the question regarding the homogeneity among the three treatment groups needs to be recognized and discussed. The pretest and posttest measures of homogeneity revealed that the treatment groups were significantly different; however, the retention test
revealed homogeneity. One way to resolve this issue would be to raise the alpha level of significance from $p < .05$ to $p < .10$, which would have been appropriate for a program evaluation, such as was included in this study investigation. It can be inferred that the results could have been homogenous. The decision to include nonparametric statistical procedures for both the posttest and retention test analyses was made in response to the homogeneity issue. Gall et al. (2007) referenced this specific issue, warning researchers that:

Random assignment can be achieved easily in brief experiments that occur under laboratory conditions. The situation is more difficult in field experiments conducted in schools, students’ homes, or elsewhere. It might be a challenge to obtain participants’ cooperation or establish other conditions necessary for random assignment. Furthermore, even if initially equivalent groups are formed through random assignment, the equivalence may break down as the experiment proceeds, for example, by differential attrition in the two groups. (p. 298-9)

Second, the posttest score distribution for the creative dramatics and story retelling group (CDSR) indicated a possible concern with leptokurtosis, or “peakedness of distribution” (Tabachnick & Fidell, 2013, p. 80), indicating that the group scores were not normally distributed. The descriptive statistics also supported the inclusion of nonparametric statistical procedures in the data analyses. As referenced, nine descriptive histograms are included in Appendix W, with the normal distribution curves included for future researchers to view the scores over time and to compare the pretest, posttest, and retention test distributions of all three treatment conditions with a listwise $N = 68$ student participants.
Third, the mortality of student subjects between the pretest to the posttest 
\((N = 81\) to listwise \(N = 76\)), and from the posttest to the retention test (listwise \(N = 76\) to 
listwise \(N = 68\)) needs to be a consideration. The retention test administration date 
(\(January 3, 2011\)), which followed a two-week December vacation, was necessary due to 
testing protocols consistency, as was referenced in Chapter Three. The teacher of the 
creative dramatics and vocabulary words (CDVW) group was on a long-term substitute 
teacher contract, and her contract ended on January 3, 2012. However, the interesting 
result of this subject mortality from the posttest to the retention test resulted in meeting 
the assumption of homogeneity for this test administration.

Fourth, the last five minutes of each 45-minute class session were used differently 
by all three groups. The creative dramatics and vocabulary words (CDVW) group 
teacher had students draw summary booklets to practice the required language arts 
adoption strategy of summarizing; the creative dramatics and story retelling (CDSR) 
teacher had students enacting and re-enacting the stories through the last minutes of each 
class session to summarize; and the control group (CG) teacher had students write 
\(‘I learned’\) statements in reflection journals, which was also a summary strategy 
recommended in the language arts adoption. This meant that over the course of the five 
week study, students experienced different learning strategies that may or may not have 
affected the results.

Fifth, there was a loss of five minutes per day, times 17-days of intervention, for a 
total loss of 85 minutes of instructional time, when students moved to and from their 
regularly assigned fourth grade classrooms to their randomly assigned classrooms. It is
not clear if this type of movement enhances or detracts from student achievement, nor was it measured in this study.

Sixth were confounding variables that posed threats to the study regarding \textit{treatment fidelity}, and variables that were out of the control of the investigator. Confounding variables included six substitute teachers, due to teacher in-service and teacher illness; teacher and student absences due to a flu outbreak during the course of the study; the three study teachers having three to six years of teaching experience, as well as being in their first year as a grade-level team; and vacation days that interrupted the continuity and sustained \textit{creative dramatics} interventions originally designed for the study participants. These interruptions included the one-day Veteran’s Day holiday, the two-day Thanksgiving vacation, and a two-week December vacation. Consequently, the \textit{treatment fidelity} was compromised with the interruptions to instruction from substitute teachers, teacher in-service; as well as from the school and district calendar of events, non-school days, half-days and holidays. \textit{Treatment fidelity} is defined as the extent to which the treatment conditions, as implemented, conformed to the researcher’s specifications for the treatment (Gall et al., 2007, p. 395).

The time frame for the study to be conducted during the month of November, 2011, to integrate the \textit{creative dramatics} interventions with the district adopted language arts curriculum, \textit{Theme 2: American Stories: Focus on Plays} (Houghton Mifflin Reading, 2005), was the only time scheduled for this particular unit to be studied throughout the school district for the fourth grade. Consequently, navigating the five-week study around the three holiday breaks from consecutive schools days was the only option for this examination and not negotiable; and proved to be challenging, yet plausible.
The original design of the five-week study included 25 days, which covered five full weeks of school and a retention test five weeks later. This original design included a pretest on day one; followed by 22 days of treatment; followed by a posttest on day 24. The retention test would provide the 25th day, five weeks following the posttest. As presented in this study, due to the study district and study school calendar, the five-week study had to be adapted to a five-week unit of instruction, which included two holiday vacations in the middle of the study, and a two-week December vacation following the study and prior to the retention test. The resulting study schedule included 17 days of creative dramatics treatment interventions, and three test administration days, for a total of 19 days during five weeks of school, and a retention test completing the 20-day study and following a two-week December vacation. This revised study schedule incorporated a total of 340 minutes of creative dramatics interventions for the student participants in the two treatment groups. This amount of time equaled five hours and 40 minutes of creative dramatics treatments over the course of the 20-day study.

Seventh was the limitation that is presented by the mixed between-within subjects ANOVA is referenced. Conard (1992) referenced that Kardash and Wright (1987) used a mixed between-within subjects ANOVA, and wrote, “That it combined within group variance with between groups variance in the meta-analysis which tends to make the results difficult to interpret” (p. 28). This limitation was discussed and illustrated in Chapter Four with the estimated marginal means figures for the pretest and posttest gains; and for the comparison between the groups regarding the pretest and posttest gains and the retention test results. Again, non-parametric analyses and post hoc pairwise comparisons were employed to compensate for this specific limitation and provide
insight into where the statistically significant differences were between the three groups, and regarding the effect of the two creative dramatics interventions as compared to the control group.

Eighth was the limitation of the fourth grade staff of the study. All three of the fourth grade teachers had less than 10 years classroom teaching experience.

**External validity.** The only limit to the external validity of the experiment with the pretest-posttest control group design is the interaction of the pretesting and the treatment interventions (Gall et al., 2007, p. 398). This issue will be discussed further in the measurement section of this chapter.

**Delimitations.** There are eight delimitations to this study. Delimitations are limitations on the research design that are imposed by a researcher in order to restrict the populations to which the results of the study can be generalized (Rudestam & Newton, 2007, p. 105). These delimitations were referenced in Chapter Three and are presented, again, in this chapter, due to the specifications of this study, and possible replication and generalizability in the future. Delimitations of this study included: (1) the focus on the fourth grade level; (2) the focus on the effect of creative dramatics on the achievement of vocabulary development; (3) the use of this study school district adopted language arts curriculum, as well as conducting the study during theme two of the language arts adoption, due to the integrated arts strategies of the particular theme; (4) the training of the classroom teachers in the creative dramatics treatments, conducted by the study investigator, with the study intention for the classroom teachers to provide the creative dramatics treatment interventions; (5) the development and implementation of two different creative dramatics intervention treatment strategies to serve as the independent
variables, and aligned to the state reading and arts learning standards, as well alignment to the national common core state standards for language arts at the fourth grade level; (6) the choice to collaboratively create, develop, and use a teacher-researcher designed 31-question criterion-referenced vocabulary test of this study content (four stories), employed as the dependent variable of the study; (7) the use of the pretest-posttest control group design which has a limitation of an interaction of pretesting with the treatment interventions (Gall et al., 2007, p. 398); and (8) the use of a teacher created collaboratively developed lesson plan to teach the unit of study (four stories).

Two delimitations were imposed by the study school district and school. The first delimitation imposed by the study school district and school, and included in the design for the control group by the investigator, was the inclusion of the district adopted curriculum Readers’ theatre for creative dramatics instruction with the control group (Houghton Mifflin Reading, 2005). The second delimitation imposed by the study school district was to create a criterion-referenced test that consisted of only the 31-vocabulary words covered in the unit of study (four stories). This delimitation could be considered both a limitation and delimitation. This purposeful limit of words that were to be taught aligned with the district’s PLC plan for the teachers to develop lesson plans and a criterion-referenced test to show student growth and achievement from the start to the conclusion of the unit of instruction to be studied.

Measurement. The pretest, posttest, and retention test instrument for this study was a teacher and researcher-designed criterion-referenced measure that was aligned with the state, and school district, and school learning objectives for the district adopted language arts unit of study for fourth graders. This study assessment and dependent
variable was designed by the study teachers and researcher. The vocabulary test was a 31-question criterion-referenced multiple choice vocabulary test that measured the required vocabulary words that were to be learned in the content (four stories) in the specific language arts unit (Cronbach, 1982; Wiggins, 1998). The test instrument development was approved by the school district curriculum administrator and building principal. The development of criterion-referenced vocabulary test by the study teachers and the investigator aimed to accurately measure with validity and reliability the exact vocabulary words (31 words) that were to be taught in the language arts unit of study (Wong & Wong, 1998). The formative assessment design of this dependent variable followed recommendations for valid and reliable instrumentation in research regarding creative dramatics and academic achievement (Conard, 1992; Galda, 1982; Kardash & Wright, 1987; Mages, 2008; Pellegrini, 1984; Pellegrini & Galda, 1982; Podlozny, 2000, 2001; Vitz, 1983; Wagner, 1998; Winner & Cooper, 2000; Winner & Hetland, 2000). Additionally, the formative assessment recommendations, development, implementation, and measurement guidelines – espoused and pilots by current educational researchers – were employed (Black & Wiliam, 1998; Green & Gundersheim, 2010; Joseph, 2004/2005; McMillan, 2007; Taylor & Nolen, 2005, 2008; Wiggins, 1998; Wiggins & McTighe, 2005).

**Dependent variable reliability.** Two internal consistency estimates of reliability were computed for the pretest, posttest, and retention test instrument, which was a teacher and researcher-designed criterion-referenced multiple choice vocabulary test of 31-words covering the course content (four stories). These internal consistency estimates were a Cronbach’s alpha coefficient and a split half coefficient, referred to as a Spearman-
Brown corrected correlation (Cronbach, 1982; Green et al., 2000). Both resulted in satisfactory reliability, as reported in Chapter Three. Although the reliability was satisfactory, replication of the study would provide additional support for the use of this instrument. There were two questions on the instrument that could be restated. This slight alteration further increased the reliability of the test instrument, which proved satisfactory (refer to Appendix K). A goal of the study was to see if classroom teachers could create a valid and reliable criterion-referenced test measuring the content of a reading unit, during district provided and compensated professional learning community (PLC) opportunities for such collaborative teacher outcomes. This goal was accomplished, and provides generalizability and replication inferences to other reading units, as well as to other grade levels. Specifically, the dependent variable was valid, as it measured what it was designed and supposed to measure, which was students learning the 31 vocabulary words of the unit of study (four stories). Further, the dependent variable was reliable, as it consistently measured the 31 vocabulary words with an “at-risk” demographic sample. It can be inferred that the dependent variable could be used throughout the school district to measure the vocabulary achievement of students learning the same 31 vocabulary words of the unit of study (four stories). It can also be inferred that the same test design could be utilized for learning the vocabulary words of other units of study. Refer to Appendix F for a copy of the dependent variable designed for and used in this study.

**Statistical analyses.** Due to the need to account for the violation of the assumption of homogeneity, it was determined to supplement the original analysis of variance (ANOVA) procedures with nonparametric procedures. While the Kruskal-
Wallis and Mann Whitney $U$ procedures provided confirmatory findings to those of the one-way ANOVAs, and ruled out the issue of non-homogeneity, their inclusion also resulted in a large amount of statistical data and analysis that could be confusing to a reader of this study.

**Recommendations for Future Research**

The answers to the four research questions presented in this dissertation make a small contribution to the body of empirical research on the effects of the use of *creative dramatics* regarding academic achievement in students. However, this investigation specifically targeted the use of *creative dramatics* interventions to strengthen the vocabulary achievement of fourth grade students in a language arts classroom, in attempts to address a research gap regarding statistically significant empirical research regarding this specific examination, and at the upper elementary level. Specifically, this investigation required that classroom teachers provide the intervention and during the school day, which are areas with limited research, as has been reported throughout this dissertation, and prior to this study. Consequently, this investigation has posed many related questions that may inform and encourage future research regarding *creative dramatics* interventions with vocabulary achievement, as well as other pathways.

First, this study provides a generalizable pathway for replication. The study sample was from a Learning Assistance Program (LAP) reading and math school. The investigator provided a comparison of socio-economic status indicators comparing the study school to other schools in the school district, as well as to other districts across the state (refer to Table 2 in Chapter Three and Table 8 in Chapter Four). Noteworthy is the
generalizability of the study constructs to other schools, districts, subjects, grade levels and other states, and possibly, other countries.

Details as to the randomization process, the intervention treatments, and methodology employed, and all aspects of this study, are presented throughout the dissertation as well as in the appendices. Six summary recommendations from this investigator follow: (1) use the resources, as created for this study, and modify them to the classroom conditions; (2) follow the strategies and processes provided; (3) attend to the details referenced and described throughout this dissertation regarding the multitude of issues that can and will affect treatment fidelity; (4) employ an arts specialist to train the classroom teachers in the creative dramatics interventions; (5) use the creative dramatics interventions created for this study, as designed, as they were developed using sound pedagogy; (6) provide 45 minutes to one hour of training time, per teacher. The teacher training should be scheduled as such; whereas 15 minutes includes all three teachers meeting with the investigator to go over study specifics and paperwork and experience the “welcome activity”; subsequently, each teacher meets individually with the investigator to be trained in the specific creative dramatics treatment intervention to be taught and experienced by the participants, and the control group teacher meets to go over the study random assignment and district curriculum expectations – which in this study – were Readers’ theatre and daily reflection notebooks. Specifically, teachers are referred to as Group One, Group Two, and Group Three. All teachers know they will be employing some type of creative dramatics instruction with their lessons. Teachers are not aware of which group they are, or what treatments they are providing. All aspects of the study are kept confidential. The Control Group teacher should not be aware of being
the control, to avoid the *John Henry effect* (Gall et al., 2007; Vogt, 2005); as in the case of this study. A comparison group could be a future option.

This investigation sought to make progress regarding a replicable and generalizable pathway, and one that might yield inferential findings. Therefore, 15 specific recommendations are extended to future researchers and those wishing to replicate this study, with encouragement to use a larger sample, if possible.

1. Researcher should employ classroom teachers for the *creative dramatics* interventions, with a total sample size of 60-100 students (three to four classrooms) for an adequate effect size.

2. Researcher or investigator must be daily at the school site and in the study classrooms to ensure *treatment fidelity*.

3. *Creative dramatics* interventions should occur during the school day, utilizing district adopted curriculum, and covering a unit of instruction, for approximately 17-25 consecutive school days. Include three additional and separate days for the administration of a pretest, posttest, and a retention test.

4. Intervention strategies should align to those presented in this study, and taught to the classroom teachers by the investigator, or by an arts education specialist, trained in arts education pedagogy and practice.

5. Random assignment of students and teachers are necessary for an empirical study and quantitative results, including a full description of the study sample participants, and by listwise test participation, as presented in this study.

6. Involvement, agreement, and confidentiality of the teachers prior to and during the study are necessary. Thirty hours of participation, per teacher,
where required. These hours included planning time prior to the study commencing and regarding the design of the initial draft lesson plans, creation of the draft teacher-researcher designed criterion-referenced vocabulary test, and the discussion of the requirements for the 30 hours needed to earn the continuing education credits (CEU) provided to the participating teachers. These 30 CEU hours included teacher and investigator time for the development of resources, random assignment of students and teachers, training in the intervention strategies for the two experimental group teachers, overview of lesson plan structure and alignment with the district curriculum with the control teacher, implementation of the interventions for 17 school days, testing protocols for the three test administrations, and included three meeting times, after school, with the study teachers and the investigator prior to and following the study.

7. Continuing education credits require partnership with a credible university program and should be provided and paid for by the investigator or a grant supporting the research project.

8. A school district, school site(s), and teachers who are in the study need to be aware of the study parameters, regarding time and commitment to a research study, and regarding full disclosure that an investigator will be in the classrooms on a daily basis throughout the study. The confidentiality (or not) of the school district and school needs to be determined before the onset of the study.
9. A school that recognizes arts education as a core subject and utilizes state and
district arts learning standards, as well as alignment to state standards in the
integrated core subject (vocabulary), are expected, for replication.
Implementation of the study methods in other types of settings is encouraged;
however, may not provide the same results.

10. A program evaluation of district adopted curriculum that includes district
professional learning communities (PLC) collaborative planning time, adopted
curricular alignment expectations, and alignment to state and federal standards
expectations, with attempts at increased student achievement through teaching
and learning strategies, are foundational in this study. Contractual issues will
need consideration and review, and compliance issues and agreements will
need to be stated and addressed prior to the study commencing.

11. A mixed methods study is encouraged, as this study included many qualitative
pieces that were validating to the results; however, were not included in the
analyses or results.

12. Future addition and inclusion of the Washington State Arts Classroom-Based
Performance Assessments, such as the *Arts Classroom-Based Performance
Assessments: Theatre Grade Five: Center Stage Star* (OSPI, 2003/2006),
which is a solo Washington State performance assessment that measures the
*creative dramatics* skills utilized in this study, is encouraged. Recommended
use of this performance assessment as an additional pretest and a posttest
would involve three days prior to the treatment interventions, and three
additional days following the treatment interventions. These extra days would
allow the investigator to individually measure the students on creative
dramatics abilities, and would provide an additional level of homogeneity to
the random assignment of students, per a state rubric; thus, providing
possibility at homogeneity of variance regarding the creative dramatics levels
of students, and the ability to measure each student on the performance
aspects of creative dramatics constructs. The addition of an individual and
formative state developed and approved classroom-based performance
assessment would require additional space to individually conduct the
performance assessment (separate from the student classrooms), and five
minutes of individual student “pull-out” from instruction for each test
administration. The use of a state established classroom-based performance
assessment would provide a valid and reliable instrument and assessment for a
mixed methods study and further possibilities at district and state comparisons,
as well as provide valid and replicable qualitative measures; whereas, students
would be able to individually demonstrate understanding of the creative
dramatics constructs embedded in the study design.

13. Replication of the present study creative dramatics intervention methods
designed for vocabulary achievement at other grade levels, and at different
times of the school year, with similar SES populations; as well as with
dissimilar school demographic populations is encouraged. Consideration of a
replicable study with private, home-school, and charter school populations, as
well as year-round schools, and other alternative educational settings is also
encouraged.
14. Replication of the present study *creative dramatics* intervention methods in studies with other core subjects, such as reading, mathematics, social studies, or with history, literature, foreign languages, and science; or in alignment to and correlation of district and state assessment achievement are additional possibilities.

15. Employing valid and reliable teacher-researcher designed criterion-referenced tests, and state performance assessments (if available), such as in Washington State, such as the aforementioned *Arts Classroom-Based Performance Assessments: Theatre Grade Five: Center Stage Star* (OSPI, 2003/2006) are encouraged, as these tests have been piloted and tested over a decade across Washington State, and provide easily scored rubrics for student measurement and achievement levels regarding measurement of the *creative dramatics* component of the study constructs. These state Arts Classroom-Based Performance Assessments were piloted psychometrically across Washington State in remote, rural, suburban, and urban populations with over 16,000 student samples collected and scored on valid rubrics with reliable results. Findings regarding student achievement on the use of these performance assessments were consistent across all regions, and in comparisons with similar student demographics (Joseph, 2004/2005; OSPI, 2003/2006).

Further, the reliability and validity of the teacher-researcher designed criterion-referenced 31-question vocabulary test created and utilized in this study was essential in this study design. The current investigation examined if classroom teachers could create a valid and reliable criterion-referenced test (with guidance and refinement
from the investigator), as a request of the study school district and for program evaluation purposes. This goal was accomplished with the strategies reported. The ramifications of this achievement, lend to and expand the possibility of the creation of other such teacher-researcher created criterion-referenced tests, aligned to district adopted curriculum, which may provide generalizability of the findings of this study to other language arts units, as well as to other subjects, and to other grade levels. The pilot test of the teacher-researcher developed criterion-referenced test was the pretest test for this investigation, and the pilot for this specific criterion-referenced test included all three test administrations for this study – pretest, posttest, and retention test. The involvement of the teachers in the development of this criterion-referenced test was based upon the recommendations of (Snow, 1974) regarding experiments with representative designs.

Specific investigations constructs, such as what has been described for this study, have been lacking or missing in previous research, and were unambiguous recommendations from previous researchers; and intentionally incorporated into the design of this investigation and recommendations of this study (Conard, 1992; Mages, 2008; Podlozny, 2000). Whereas, the limited body of empirical research regarding the effects of creative dramatics on vocabulary achievement was due, in part, to the lack of an effective dependent variable instrument. Thus, the reliability coefficient of the teacher-researcher criterion-referenced 31-question vocabulary test developed, for this study, provides guidance for future generalizability across cognitive disciplines (including all four arts) and grade levels using such an instrument as the dependent variable. The use of such a reliable instrument, which is in alignment with school district adopted curriculum, could be utilized throughout a school, and across a school district
grade level; and provides many options for future empirical studies with regards to 
creative dramatics and vocabulary achievement; as well as to other arts disciplines 
(dance, music, and visual arts), following the presentation, methods, findings, and 
recommendations of this present study.

The intervention strategies employed and taught to the teachers to implement with 
the students were based on sound pedagogy. The limited time factor of 45 minutes to one 
hour to train the teachers in the creative dramatics interventions strategies required 
expertise, by the investigator, in the teaching and training of teachers, which has been an 
inconsistent factor in previous research (refer to Appendix C). One curriculum unit of 
study for 15-20 minutes a day provided enough time for the creative dramatics 
intervention strategies to have effect, as this study indicates. Teacher and student 
attendance, and consecutive days of treatment, providing the sustained creative dramatics 
interventions of the study design, should be a consideration, if possible. It is imperative, 
on the part of the investigator, to work with teachers, administration, and support staff 
who will be required to be confidential, professional, and enthusiastic about the study; as 
well as to all of the constructs involved in the study; and including honoring all 
contractual agreements.

Further, it is vital for the investigator to be on site and in the classrooms, every 
day, to ensure treatment fidelity, and it is essential to specify this aspect of the study 
when interviewing to conduct the study in a district and in a school, due to the teachers in 
the study understanding that the investigator will be in their classrooms on a daily basis, 
and with regards to contractual agreements for such access to classrooms. Further, a
confidentiality agreement regarding all aspects of the study was a signed agreement, for this study, and a necessary agreement for future studies (see Appendix R).

The importance of and necessity of *treatment fidelity* should be explained to all study teachers and at the same time. Collaborative teacher professional learning community (PLC) time regarding the development of lesson plans, the development of the criterion-referenced test, and the random assignment of students, as well as random assignment of teachers, assisted in the lack of a *Hawthorne* and *John Henry effects* (Gall et al., 2007; Vogt, 2005).

There will be a multitude of daily details to attend to, and surprises that will happen, as well, as the current investigation took place in a public school setting. Efforts to keep *treatment fidelity* and students receiving daily and sustained *creative dramatics* treatment interventions are necessary and challenging. When a substitute teacher was employed, extra efforts on the part of the investigator were needed to further detail and itemize a lesson plan that included minimal and easily implemented treatment instructions. Further, the study school principal informed the substitute teachers to follow directions that would be provided to them at the beginning of the language arts block, by the investigator. The principal also informed the substitute teachers that a research study was in progress and to follow the directions of the investigator, and that all elements of the treatment were to be kept confidential. The treatment interventions continued when a substitute teacher was employed; however, those treatment minutes were not included in the final analysis; due to *treatment fidelity* and implementation.

Further recommendation is to conduct the study in a similar SES school setting, as it will be easier to replicate due to the methods shared in this dissertation, detailing
how classroom teachers provided the *creative dramatics* treatment interventions as taught to them by the investigator, who was an experienced arts education specialist.

In support of the detail of the study parameters presented here, and throughout this dissertation, Podlozny (2000) wrote, “As we seek to understand the intricacies of drama instruction, it is imperative that good research practice is demanded, acknowledged, and supported throughout the field” (p. 268). Finally, replication of this study is recommended with a larger sample size, for five full weeks of school, and with stricter controls regarding the school schedule and teacher attendance, to further investigate, examine, and validate the results, and in efforts to provide the consistent and sustained *creative dramatics* interventions designed for such an investigation.

**Implications for Classroom Practice**

The *effect size* is any of several measures of association of the strength of a relation, and in statistical power analysis, the *effect size* is the degree to which the null hypothesis is false (Vogt, 2005, p. 103). Further, the effect sizes presented in Chapter four, varying from small, medium, and large effects, indicate the *practical significance* of these findings; whereas, teacher behavior regarding the use of the *creative dramatics* interventions of this study may be employed as continuing teacher practice. The small, and medium to large *effect sizes* found between the students receiving *creative dramatics* treatment interventions and the students receiving the district required instruction is an extremely important conclusion of this study. As was referenced earlier in this chapter, both of the *creative dramatics* intervention teachers, in this study, have personally reported to the study investigator that they continue to use the *creative dramatics* interventions learned in the study with their current classrooms.
Challenges turned to opportunity. Further challenges to the design of the study parameters required alignment with the school and district schedule, fulfilling the curriculum assignments, and alignment to state and federal standards and objectives in English and language arts, arts, and common core state standards for English language arts (refer to Chapter Three). Unambiguously, the study treatments had to be conducted at a certain time of day, and within a specific time frame to align with a large school district’s schedule for local, district, and state mandates and events. Therefore, the investigator was required to be at the school site for the 20 days of the study. Three additional days were required prior to the study commencing to: (1) interview and convince school district administration that the study was worthy of investigation, and would provide the school district, school, teachers, and students with desired outcomes; (2) meet the study school teachers and principal to address any concerns, review and refine the study schedule, and create a clear calendar for study (refer to Figure 1); and (3) conduct the random assignment procedure with the teachers, as well as train the teachers in the creative dramatics intervention strategies (which occurred during parent-teacher conference week, and two school days prior to the study commencing). Refer to Appendix I for the Research Study Timeline.

Opportunity. The study results presented an opportunity for educators to teach the adopted district curriculum, while allowing students to construct meaning and make transfer through creative dramatics interventions. The creative dramatics interventions allowed students to be engaged in experiential and process-based discovery learning that included creative imagination, motivation, play, creativity, and learning vocabulary words through creating, performing, and responding constructs. This investigation
presented these constructs through the lens of theory and practice; whereas, students passed from a level of conceptualization to a level of realization.

*Creative dramatics* educational practices, discussed in detail throughout this dissertation, taught cognitive, affective, and psychomotor concepts and skills through aural, visual, kinesthetic, and tactile modalities – thus involving all learners with a blending of intellect and emotion, through the experience of *creative dramatics* as a “process” of cognition. The ability to teach all learners, with minimal to no cost, as presented in this study, provided a means for classroom teachers to engage all learners in learning strategies that produced increased academic achievement – specifically – vocabulary achievement, of fourth grade students. The low SES school setting provided a platform for replication and generalizability that meets social, emotional, and intellectual needs for high quality perennial and essential learning strategies, designed to ‘*draw out*’ and ‘*lead out*’ the artist within each student – and with all manner of student. The students spontaneously incorporated dance, music, and visual arts into the *creative dramatics* interventions, and the teachers spontaneously added enhancement to the required lesson plans that demonstrated their understanding and creativity – while retaining *treatment fidelity* to the intervention strategies. This observed spontaneity on the part of both the teachers and the students demonstrated how the art and science of the *creative dramatics* constructs encouraged individuality and incentive – while at the same time – preserved *treatment fidelity*.

The study was cost effective, easy to implement, and suggests *practical significance*, generalizability, and replication to other units of study within district or school adopted curriculum regarding essential and basic subject areas, as well as to other
grade levels. Further, the collaborative development of a criterion-referenced test to measure a required unit of study, including initially collaboratively developed lesson plans for a required language arts unit of study, met the district and school requirements for teacher collaborative work in professional learning community (PLC) constructs (refer to Chapter Three). Additionally, the study teachers were provided free professional development that met requirements for continuing education credits (CEU) through an accredited university. The opportunity to earn CEU credits was added incentive for the teachers in the study, and validated their collaborative work regarding a collaboratively developed lesson plan and criterion-referenced vocabulary test, and putting their collaborative understanding of learning theory into practice.

The required university paperwork to secure CEU credits was helpful to the study investigator, as well, as it required the investigator to analyze and detail the number of hours that a teacher would need to commit regarding the study, prior to the study commencing. The ‘teacher time’ aspect of the study was presented to the district, principal, and teachers as approximately 30 hours of ‘teacher time’, which included the 15 hours of teaching time with students (which included the entire 45 minute language arts block times 20 days), and 15 hours of ‘teacher time’ in other study aspects, as presented in Chapter Three. The amount of ‘Teacher time’ expected for the study was a crucial detail in presenting a proposal to a district and school personnel. The vetting of this detail, prior to the study beginning, and securing the commitment and agreement of ‘teacher time’ by the teacher participants, assisted the investigator in securing the approval for the study at all levels, as well as meeting the district and teacher contractual agreements. (Refer to Figure 1 and Figure 2 and Appendix V for study details).
Learning outcomes of study. Constructivist theory espouses that students must have ownership over their learning (Bruner, 1966; Dewey, 1934; Piaget, 1962; Vygotsky, 1922, 1962/1988; 1966; 1978). In support of the constructivist theory and how creative dramatics instruction reinforces the values and beliefs of constructivist educational environments, Rice and Sisk (1980) noted that creative dramatics are predicated on the concept that material is not learned until it influences both the thought processes and the feeling processes of individuals. Thus, the creative dramatics approach to learning allows students to assimilate material in a way that is relevant to them (Conard, 1992); whereas, students construct and own their learning. Further, Miller and Mason (1983) referenced how creative dramatics instruction provided a “risk-free” environment where each student can make a contribution. On the topic of the significance of creative dramatics and language development, which includes vocabulary achievement, Conard (1992) wrote,

The total involvement required of creative dramatics is considered the fundamental ingredient that makes drama central to the learning of language for children. It enables them to subconsciously monitor and evaluate what they are saying and how they are saying it. (p. 22)

Regarding the significance of integrating creative dramatics with language development, and specifically vocabulary achievement, Conard (1992) wrote, “Creative dramatics allow students to use language in ways that may be quite different from what they experience in everyday life, thus fostering the development and extension of their language” (p. 22). Additionally, Bruner (1966, 2006) advocated that students be allowed the opportunity to explore and discover learning on their own, and further advocated that
this type of learning was essential to support how students learn. Further, Bruner’s (1996, 2006) theory of developmental sequences (as referenced in Chapter Two) progresses student learning from sensory (enactive learning: with hands-on experience), to concrete (iconic learning: with imagery), and abstract (symbolic learning: with abstract ideas) representations of understanding (Ellis, 2004, p. 99). Bruner’s theory validates the creating, performing, and responding constructs of the creative dramatics interventions employed in this study, as ways of knowing, doing, and being – ways in which students were able to demonstrate understanding, through the creative dramatics interventions and constructs, as supported from the findings of this study.

Practical significance. The statistically significant empirical results of this study investigation have positive instructional ramifications for teaching and learning, in addition to the quantifiable results. Both of the creative dramatics study treatment intervention teachers have remained in contact with the study investigator, and have voluntarily informed the investigator regarding how they are utilizing the creative dramatics treatment interventions taught to them for the study, with their current students. This school year (2012-2013), one of the study treatment teachers is teaching first grade, and one of the study teachers is teaching third grade. Through the personal and voluntary email communications, from the study intervention teachers to the investigator, qualitative data was provided regarding the practical significance of the study, by means of first person evidence that the study intervention teachers have willingly put to use what they learned during the study. Thus, it can be inferred, that the creative dramatics interventions employed in the present study have changed the teaching practice (practical
significance), of those study teachers, due to their participation in the study (Vogt, 2005, p. 243).

Conclusions

The purpose of this study was to provide quantifiable and replicable evidence that the use of creative dramatics interventions integrated into a district adopted language arts curriculum would result in an increase of student vocabulary achievement, as reported on a teacher-researcher designed criterion-referenced 31-question vocabulary test on the content (four stories) of the Theme 2: American Stories: Focus on Plays (Houghton Mifflin Reading, 2005). In a thorough review of the literature regarding creative dramatics interventions, recommendations from former researchers espoused the need for the design of empirical studies with creative dramatics to be narrow, specific, and clearly defined. Furthermore, the creative dramatics interventions in this study were philosophically, theoretically, and methodologically designed so as ‘to lead out’ the artistic inclinations of the teachers and students, in unique ways, and in ways that would be measurable, replicable, and generalizable.

The results of this study provided statistically significant empirical evidence for the use of creative dramatics interventions to improve the vocabulary achievement of fourth grade students in a language arts classroom. The effects of creative dramatics on vocabulary achievement of fourth grade students in a language arts classroom were shown to be statistically significant in the two classrooms where the classroom teachers employed the two researcher-trained creative dramatics treatment interventions.

The creative dramatics interventions were taught to the teachers in a short amount of training time (45 minutes – which included 15 minutes for paperwork for the study and
only 30 minutes of individualized training per teacher). The creative dramatics treatment interventions were implemented with the 83 randomly assigned fourth grade students during the daily language arts block, for 15-20 minutes, daily, and for 17 consecutive school days. The study lasted for only one theme of study (approximately five weeks of school). (Refer to Figures 1 and 2 and to Appendices I and V).

Podlozny (2000) posed a consideration to future researchers, when planning a study, with regards to how many minutes a day, and how many days of treatments might be necessary to show effect. Podlozny (2000) wrote,

It is possible that the actual length of each drama session is less important than the total number of times a participant is exposed to drama. Thus, extending a treatment over more sessions and more weeks may be more effective than having longer sessions over a shorter period of time. The hypothesis tested here was that the more drama instruction, the stronger the effect. (pp. 244-5)

Podlozny’s (2000) hypothesis; whereas, linking a stronger effect size to extending the creative dramatics study intervention treatments over more sessions and more weeks, as possibly being more effective than having longer sessions over a shorter period of time; describes the intent and design specifics of the present 20-day study (refer to Figure 2 and Appendix V).

The results of this study were statistically significant regarding the higher scores and vocabulary word achievement obtained from the participants in the Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) intervention; whereas, those students had three more treatment sessions (or one hour more of intervention strategies across three days) than either the participants in the Experimental
Group II – Creative Dramatics and Story Retelling (CDSR) intervention group (CDSR) and the participants in the Control Group (CG). Furthermore, the creative dramatics and vocabulary words (CDVW) intervention group teacher had the best attendance (absent only one day due to teacher in-service) which allowed for the best treatment fidelity of the three teachers in the study. Specifically, the students in the two creative dramatics intervention treatment groups experienced the vocabulary words and story enactments using the creative dramatics skills that included discovery learning, role-play, pantomime, movement and rhythm activities, and improvised dialogue, as well as singing and chanting, and using body percussion techniques, as explained in Chapter Three. The students in the Control Group experienced creative dramatics through the experience of the district adopted Readers’ theatre integration. The posttest revealed perfect attendance of students in both of the creative dramatics intervention groups – CDVW and CDSR for the posttest administration. Noteworthy, the student participants in both of the creative dramatics intervention groups had more “at risk” factors than the students in the control group (refer to Table 2 and Table 3 in Chapter Three, Table 8 in Chapter Four, and Appendix V). Significant is that the participants in the control group had higher pretest scores than either of the two creative dramatics intervention groups, prior to any creative dramatics treatments being employed. All three randomly assigned teachers were present for all three test administrations and for the training of the test administration, allowing for high levels of treatment fidelity for the dependent variable. Further, all three randomly assigned teachers were present for the random assignment of students, and for the 15 minutes of joint teacher training and paperwork details and lesson plan overview and review, as well as for the 30 minutes of individualized teacher training on the two
different creative dramatics treatment interventions, as well as for the Readers’ theatre, reflection booklets (refer to Appendices C, D, E, and R). A copy of the dependent variable 31-question criterion-referenced teacher-researcher developed test over the unit of study (four stories) is available in Appendix F. The reliability of the dependent variable was acceptable, as reported in detail in Chapter Three and the results of the reliability analyses are presented in Appendix K.

The data gathered in this investigation revealed a statistically significant difference between the achievements of students who received creative dramatics treatments as compared to the students in the control group. All three groups of students maintained vocabulary achievement from the posttest to the retention test (re-administration of the pretest and posttest), at the same rate. The findings of this study provide empirical evidence that creative dramatics treatments taught by classroom teachers and integrated into district required language arts instruction improves the vocabulary achievement of students at the fourth grade level.

However, Eisner (1998) cautioned researchers that, “Appraising the educational effects of an experiment is not merely a matter of finding statistically significant differences between groups or correlations that are statistically significant. The differences, if differences are found, must also be educationally significant” (p. 37).

Consequently, the results of this study provide evidence toward educational significance or practical significance; whereas, the two study teachers who were trained in the creative dramatics interventions in CDVW and CDSR have voluntarily chosen to continue to use the creative dramatics strategies and methods that they learned for the study. Further, these two study teachers are utilizing the creative dramatics strategies
and methods that they learned for the study with different grade levels and with other subject areas; thus, validating Eisner’s advice to researchers, and accomplishing a key goal of this study. A goal for the study interventions was that practical significance would evidence itself, provided the treatment interventions were employed and implemented with the students as taught to the teachers by the investigator. It can be inferred that this goal was achieved.

The current educational climate is such that, although the arts – dance, music, theatre (creative dramatics), and visual arts are considered core, essential, and a part of basic education, as defined in Washington State and in the federal law No Child Left Behind (USDOE, 2002); in reality, arts education and educational experiences have been negatively impacted due to the focus on state and national testing mandates as a result of these laws, specifically in the areas of reading and math, where federal funds are tied to student achievement on state test results in these subjects. These mandates have resulted in limited classroom time, a narrowing of the curriculum, and the arts being treated as optional or elective instruction, as opposed to core, basic, academic, and essential instruction. Although not the initial intention of the mandates, the unintended consequences have resulted in less – not more – arts education and instruction time. Consequently, some districts and schools have limited or eliminated arts instruction – across the study state, as well as across the nation, when educational funding is limited or eliminated, which may imperil student achievement (Deasy, 2004; Ravitch, 2010; Sabol, 2010; Seif, 2013; USDOE & IES, 2010; Zhao, 2009). Thus, the job of instructing students in the arts has become the responsibility of the classroom teacher, especially at the elementary level, and specifically for creative dramatics (USDOE & IES, 2010). Further,
district adopted curriculum, as in the case of this study, encourages classroom teachers to integrate the arts with other core curricular learnings (Houghton Mifflin Reading, 2005). The use of state arts and reading standards, as well as the integration of the two, as well as further integration of the common core state standards, provides an approach to keep creative dramatics in the daily curriculum, in an era where classroom time is limited and performance stakes are high. Whereas, the arts, and in this case, creative dramatics, are core subjects, utilizing creative dramatics in such a manner will assist in this basic subject being offered to students at the elementary level, as opposed to being sidelined in favor of other subjects being measured on “high-stakes” tests.

Thus, this present study offers empirical evidence to policy makers, district leaders, and educators of all disciplines, that standards based arts education, with a focus on the use of creative dramatics interventions, resulted in statistically significant vocabulary achievement, with fourth grade students in a language arts classroom, when provided on a sustained and consistent basis (17 consecutive school days). Further, these results were investigated without additional cost to implement, with limited teacher training, utilizing the district adopted curriculum, taught during the school day, and available to all students in the fourth grade. Furthermore, the demographics of the school and district investigated reveal that the use of such creative dramatics interventions as were employed in this study, may be a significant intervention for students who are struggling in ways that may interfere with their learning achievement. Moreover, the teachers involved in the study treatment interventions reported practical significance at different grade levels, and in different school settings.
There are elementary schools in Washington State where students have access to arts specialists in dance, music, theatre, and visual arts, as well as to interdisciplinary instruction in other core academic subjects, such as science, social studies, and communication, where higher student achievement is reported on state test scores and available on the district web site and state report card web site (Hemenway, 2010; Merrin, 2010a, 2010b; OSPI, 2011f). The evidence of increased academic achievement of students in these schools is further substantiation of the empirical findings of this present study.

Consequently, the importance of the findings of this study support an ever increasing demand for classroom teachers to teach in the manner and methodology employed in the *creative dramatics* treatment interventions provided to the student participants in this study, and specifically with regards to language arts instruction. The results of this study further emphasize the importance of the training of such *creative dramatics* and arts educational methods by an experienced and certified arts educator. Whereas, the theory, methodology, practice, and pedagogy of the *creative dramatics* treatment interventions were taught by the study investigator to the study teachers – who in turn – provided the intervention treatments to the student participants. Further, the treatment and control conditions were daily monitored by the investigator for *treatment fidelity* in the *creative dramatics* interventions being facilitated by the teachers.

The connections between *creative dramatics* and increased student vocabulary have shown some evidence, and the body of empirical studies continues to grow. Pressures on teachers to improve student academic achievement, particularly in the area of language arts, provides reason for using instructional strategies, such as the *creative
dramatics interventions utilized and employed in this study, as ways to enhance teaching that may result in meaningful and transferable student achievement, as reported in the results of this investigation, as well as a means to impact all learners, especially students classified with multiple “at-risk” factors, as reported in this study.

Supplementary, yet necessary to mention, is how the definition used for creative dramatics (OSPI, 2011d), and the construct focus of the creative dramatics treatment interventions as a ‘process’, allowed the student participants to experience and demonstrate the 21st Century Skills involving their intellect and emotion; whereas creative dramatics was taught as “process.” These skills are: problem-solving and critical thinking, collaboration, communication, imagination, perseverance, and creativity (Partnership for 21st Century Skills, 2004), as referenced throughout this dissertation.

Two inferences can be made regarding the Control Group. The first inference is that the district adopted Readers’ theatre treatment, without specific training as to how to implement such methods, is not as effective in raising student vocabulary achievement, as the treatments employed in the two creative dramatics experimental groups in this study. Further, the reflection treatment (students writing what they learned at the end of each class period), without teacher feedback, was not as effective as the visual arts summary booklets, and the creative dramatics and story retelling activities that were used to summarize and re-enact the unit of study in the two experimental group treatments in this study; both of which had teacher feedback. This second finding supports the research findings of Shoop (2006); whereas, she wrote, in regards to the results of her study, “The results of this study suggest the lack of effectiveness of reflection by itself as a method of increasing student achievement” (p. 84).
Further, it can be inferred, per Podlozny (2000), that the more drama instruction, the stronger the effect (pp. 244-5). This was evidenced by the results of the Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) interventions; whereas, the more minutes provided of consistent, sustained, and consecutive creative dramatics treatment intervention, the higher the student test scores. Specifically, the Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) interventions resulted in higher student achievement, and one more hour of total creative dramatics interventions than the students in the Experimental Group II – Creative Dramatics and Story Retelling (CDSR). Further, both of the experimental groups showed statistical significance as compared to the control group (CG) in the ANOVA analyses (refer to Chapter 4).

Based upon this line of inference, and supported by the study results, an additional inference can be made regarding the students in the Experimental Group II – Creative Dramatics and Story Retelling (CDSR) should they have received one more hour of creative dramatics interventions or three more school days of treatment provided by their teacher. Had the trained classroom teacher been present for these three class sessions, it could be inferred that the participant scores may have been higher, and the effect of the intervention may have been greater, as students in this group [CDSR] received one hour less treatment than students in the [CDVW] group due to teacher absences. Consequently, it can be inferred that if all three teachers and all 83 students had perfect attendance and had experienced the creative dramatics treatment interventions with consistency and without any school, district, or holiday interruptions to the sustained creative dramatics instruction – that all three groups of students may have performed at even higher levels; thus, creating an even larger effect size.
Concluding Remarks

It is hope of this investigator that the educational community will embrace and build upon the statistically significant empirical findings, generalizability, and practical significance that this study presents regarding the use of creative dramatics to increase the vocabulary achievement of students. The focus of this study investigation involved the examination of creative dramatics; defined as “a dramatic enactment (led by the teacher) of a story, setting, and/or characters. This is an experiential, process-based activity, not a performance for an audience. The teacher may assume a role” (OSPI, 2011d, p. 133). Specifically, creative dramatics was examined as a process – a cognitive subject – to increase student achievement in vocabulary development with statistically significant empirical results. Consequently, all aspects of this study were intended to promote an established line of research with efforts to create a pathway regarding the causal effects of the use of creative dramatics to strengthen student vocabulary achievement; as well as to contribute to develop a paradigm for this line of research for future researchers, including possible replication and generalizability of this study.

Replication of the study is warranted; with a larger sample size, for a longer period of time, and with stricter controls. Additionally, further exploration is invited, regarding the results of this study and the pathway it presents in the following ways: (1) replicate the use of these creative dramatics interventions as a pathway to increase student vocabulary achievement at the fourth grade level; (2) attempt the use of these creative dramatics interventions to increase student achievement at different grade levels; (3) attempt the use of these creative dramatics interventions to increase student
achievement in other academic areas; and (4) attempt the use of these *creative dramatics* interventions to increase student achievement in dissimilar educational settings.

The study participants demonstrated their learning by telling a story about what they were learning through the *creative dramatics* treatment interventions employed in this investigation. The results of the effects of the *creative dramatics* treatment interventions on the improved vocabulary achievement of the student participants have the potential to inspire, inform, and impart. Specifically, the *creative dramatics* treatment interventions employed in this study provide multiple possibilities for teaching and learning; as well as provide avenue for a replicable and generalizable pathway for future research on the causal effects of the arts on academic achievement in other cognitive subjects. Additionally, the deep theoretical underpinnings of this study, as well as the references cited, provide the strong foundation for the interest in and necessity of this study. The information shared in this examination provides for future opportunity to utilize the findings of this investigation to substantiate the assertion for arts and academic achievement; specifically, regarding *creative dramatics* and vocabulary achievement.

Further, the generalizability and practical application of the *creative dramatics* treatment interventions, examined in this investigation, could potentially benefit students in terms of giving them a way to achieve their academic and personal potential. Specifically, students experienced learning through *creative dramatics* interventions cognitively and emotionally – as a way of knowing, being, thinking, doing, and learning. A resulting prospect would be an increase of instruction in *creative dramatics* and the arts for what the arts teach as well as for what the arts do; providing additional empirical evidence supporting the three world views for the arts presented in this study.
Consequently, this study created and demonstrated: (1) a practical way to view the importance of the study of the “arts for art’s sake” and viewed as a cognitive subject; whereas, students experienced learning concepts and skills of all four arts disciplines through creative dramatics treatment interventions; (2) how the “arts are essential and perennial” learnings – whereas; when taught on a daily basis and treated as basic education and as a cognitive subject – resulted in increased student vocabulary achievement; and (3) how learning with and through the arts allowed students a way of knowing, being, thinking, doing, and learning. As a result, this present study provided statistically significant evidence and empirical academic implications regarding the causal effects of creative dramatics on the vocabulary achievement of fourth grade students in a language arts classroom through the use of researched and sustained creative dramatics interventions.
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Appendix A

Elementary Education Endorsement Competencies - Grades K-8

1.0 Knowledge of Academic Content. Candidates understand and apply knowledge of the arts, English language arts, health-fitness, mathematics, science, and social studies.

1.A The Arts (dance, music, theater, visual arts).

1.A.1 Understand that dance, music, theatre, and visual arts shape and reflect culture and history.

1.A.2 Understand the value of and apply basic arts knowledge, elements, and skills used in dance, music, theatre, and visual arts, such as rhythm, beat, expression, character, energy, color, balance, and harmony.

1.A.3 Recognize a broad variety of visual and performing arts styles that differ across various artists, cultures, and times.

1.A.4 Understand and apply/demonstrate thinking skills using the artistic processes of creating, performing, and responding.

1.A.5 Understand that dance, music, theatre, and visual arts are used to communicate ideas and feelings for a variety of purposes and audiences.

1.A.6 Understand that aesthetic diversity is reflected in dance, music, theatre, and visual arts.

1.A.7 Understand that the arts (dance, music, theatre, and visual arts) make connections within and across the arts, to other disciplines, life, cultures, and work.

1.A.8 Understand the value of seeking and accessing dance, music, theatre, and visual arts specialists in the school, district, community, or region.

1.A.9 Understand how learning in and through the arts supports the development of 21st Century Skills such as creativity, communication, collaboration, critical thinking, and Habits of Mind such as persistence, observation, and reflection, and how these capacities support success in and out of school.

1.A.10 Understand how learning in and through the arts supports academic and social/emotional learning for all students, by providing multiple pathways to learning concepts and demonstrating understanding across all subject areas, and by helping students to make deeper and more personally meaningful connections to learning.

Source:
Appendix B

Terms and Definitions

Aesthetics. “1. The study of the rules and principles of art; 2. The study of the philosophies of art; 3. The branch of philosophy that deals with the study of aesthetic values, such as beauty and the sublime; 4. An outward appearance: the way something looks, especially when considered in terms of how pleasing it is; 5. An idea of what is beautiful or artistic or a set of criteria for defining what is beautiful or artistic; 6. Criteria or theories used to judge art, such as imitationalism, emotionalism, formalism, functionalism, and instrumentalism.” (OSPI, 2011e, p. 187)

Art. “Art is a quality of doing and of what is done” (Dewey, 1934, p. 214).

Arts disciplines. “The arts in Washington State have been defined by the Office of Superintendent of Public Instruction (OSPI) and the State Board of Education (SBE) as dance, music, theatre, and visual arts” (OSPI, 2011a, p. 2).

Arts integration. Arts integration, also referred to as interdisciplinary or integrated teaching, refers to – in this study – as one subject specifically focused on benefitting the other; whereas, creative dramatics is used to enhance vocabulary achievement. This was defined by Fogarty (1991), as a shared model; insomuch as, “The shared model views the curriculum through binoculars, bringing two distinct disciplines together into a single focused image. Using overlapping concepts as organizing elements, this model involves shared planning or teaching in two disciplines” (p. 62). Russell-Bowie (2009) referred to this type of model of integrating the arts as service connections, and wrote, “Service connections within subjects occur when concepts and outcomes are learned and reinforced in one subject by using material or resources from another subject with no specific outcomes from the servicing subject” (p. 5). Further, the outcomes of one subject are promoted at the expense of the other subject (Brophy & Alleman, 1991; Cawthon & Dawson, 2011).

BrainDance. The standing BrainDance, was developed by Anne Green Gilbert and is “comprised of eight fundamental movement patterns that we move through in the first year of life” (Gilbert, 2006). These eight movements are experienced by individuals in the following sequential order breath, tactile, core-distal, head-tail, upper-lower, body-side, cross-lateral, and vestibular” (pp. 36-8).

‘Bravo X strategy’. The ‘bravo X strategy’ is a creative dramatics strategy, created and adapted by the present study investigator, for the present study; whereas, the ‘bravo X strategy’ is jumping for joy from a core to a distal standing position and into a fully extended body ‘X’ position while saying (or singing) the word ‘bravo’ (Booth, 2007; Dalcroze 1930; Gilbert, 2006; Laban 1971; OSPI, 2011b). An additional adaptation of the investigator created ‘bravo X strategy’ is to sing an ‘a cappella’ octave (such as from middle C to C above middle C) while jumping from the core to the distal position and into a full body ‘X’ position.

Classroom drama. Classroom drama refers to acting out stories that are used in the regular academic curriculum, with classroom drama being used as a way of supporting the curriculum and as an integral part of the curriculum (Podlozny, 2001, p. 99).

Constructivism. “Constructivism is based on the premise that the learner constructs all knowledge from previously acquired knowledge, personally, socially, or in combination” (Ellis, 2001a, p. 130).

Control group. The control group is “a group in an education experiment that does not receive the experimental treatment or receives an alternative treatment” (Gall, et al., 2007, p. 381).

Creative drama. Davis and Behm (1978) defined creative drama as “an improvisational, non-exhibitionial, process-centered form of drama in which participants are guided by a leader to imagine, enact, and reflect upon human experiences” (p. 10). Similarly, Ross & Roe (1977)
wrote “Creative drama includes all forms of improvised drama, such as dramatic play, pantomime, puppet shows, and story dramatization” (p. 383).

**Creative dramatics.** Creative dramatics is “a dramatic enactment (led by the teacher) of a story, setting, and/or characters. This is an experiential, process-based activity, not a performance for an audience. The teacher may assume a role” (OSPI, 2011d, p. 133). Similarly, McCaslin (1990) wrote “Creative dramatics is defined as an improvisational, nonexhibitional, process-centered form of drama in which participants are guided by a leader to imagine, enact, and reflect upon human experiences” (p. 5).

**Creativity.** “The quality of using imagination rather than imitating something; the ability to produce something new or to generate unique approaches and solutions” (OSPI, 2011c, p. 135).

**Discovery learning.** Discovery learning is a theory of developmental sequences that advances from motor or sensory (enactive), or ‘hands-on’ representation to concrete images (iconic) and then to abstract representation (symbolic) (Bruner, 1966; Ellis, 2004, p. 99). This theory is also referred to as a Theory of Instruction (Bruner, 1966).

**Drama.** “Drama is a three dimensional study. It involves learners using resources with which they are already confident: talk, play, and action; resources they have been using for many years by the time they are six” (Herbert, 1982, p. 48).

**Dramatic play.** “Dramatic play is a child’s natural way of playing, of dramatizing and pretending” (Siks, 1958, p. 106). Siks further wrote, “Dramatic play” is a term which refers to creative playing centering around an idea, a situation, or a person, place, or thing. It generally utilizes the dramatic elements of characterization, action, and dialogue. It seldom has plot. It unfolds spontaneously. It is fragmentary and fun. (Siks, 1958, p. 106)

**Educate (v.) and Education (n.).** According to the Oxford English Dictionary Online (3rd ed.) and the Educare Institute (2003-2008), education is derived from the Latin roots, ‘educo’ and ‘educare’. ‘Educare’ means “to rear or to bring up” from the Latin root words, ‘e’ and ‘ducere’. “Together, ‘educere’ means to “pull out” or “to lead forth” or “to draw out” that which lies within” (Ellis, 2004, p. 12).

**Effort actions.** “Specific actions (as defined by Rudolf von Laban) that combine the efforts of time (quick/sustained), weight (powerful/delicate), and space (direct/indirect) into eight unique actions: dab, float, glide, slash, wring, punch, flick, and press” (OSPI, 2011b, p. 125).

**Essentialism.** “Essentialism is a philosophy of curriculum that means teaching and learning those things that are essential to success in life” (Ellis, 2004, p. 109).

**Experience.** “An experience has a beginning; a development, a climax, and a resolution that rounds it off, thus making it stand out” (Dewey, 1934, p. 35). “What makes an experience – an experience is dramatic structure” (Broudy, 1972, p. 34).

**Experimental groups/treatment.** Gall et al. (2007) refer to the experimental treatment as the “Treatment variable (or independent variable or experimental treatment). In experimental research, the variable to be manipulated in order to determine its effect on one or more dependent variables” (p. 657). There are two experimental groups in this study. Each of these two experimental groups received a different creative dramatics treatment, also referred to as the creative dramatics interventions.

**Imagination.** “Inviting students to use their imagination means inviting them to see things other than the way they are” (Eisner, 2002, p. 199).

**Improvisation.** “A spontaneous performance during which the actors establish a story (including objectives, setting, characters, and relationships) with minimal preparation” (OSPI, 2011d, p. 135).

**Integrated arts – dance, music, creative dramatics, and visual arts.** A succinct definition for integrated arts, for the purpose of this dissertation, is the natural tendency for one or more arts (dance, music, theatre, and visual arts) to embed itself with the other, as in dancing to
music, or acting and singing to music, or drawing to music, as in an interdisciplinary curriculum; however, specific to the arts disciplines (Cave, 2011; Gilbert, 2006).

**Interdisciplinary curriculum.** “An interdisciplinary curriculum is aimed at helping students to find connections between subjects and to use different ways of knowing” (Ellis & Fouts, 2001, p. 22). Further, Bresler (1995) defined interdisciplinary instruction as “maintaining traditional subject boundaries while aligning content and concepts from one discipline with those of another” (p. 31).

**Investigator.** “The investigator is defined as the person who designs the experiment and interprets the data” (Gall et al., 2007, p. 395).

**Language arts.** “All four of the major language arts – listening, speaking, reading, and writing – are involved in creative drama” (Ross & Roe, 1977, p. 383).

**Mirroring.** “A skill that involves one partner leading by performing a movement and the other partner imitating the leader’s movement simultaneously” (OSPI, 2011b, p. 127).

**Pantomime.** “The nonverbal gestural communication of an action, an emotion, an activity, or an idea” (OSPI, 2011b, p. 127). “The conveying of a story by using expressive body and facial movements, but without using speech, props, costumes or sounds (instrumental music can be used as background)” (OSPI, 2011d, p. 136).

**Participants.** “In studies of human beings, the term participant is generally preferable to the term subjects” (Rudestam & Newton, 2007, p. 89).

**Perennialism.** “Perennialism is a philosophy of curriculum that means teaching and learning those great and enduring values that all serious thinkers have concluded are the essence of the good life” (Ellis, 2004, p. 109).

**Play.**
Play is the source of development and creates the zone of proximal development. Action in the imaginative sphere, in an imaginary situation, the creation of voluntary intentions and the formation of real-life plans and volitional motive – all appear in play and make it the highest level of preschool development. (Vygotsky, 1966, p. 16)

**Problem-solving.** “Problem solving or heuristics is the test of didactics (the formal study of logically-organized subject matters), but it is not a substitute for them” (Broudy, 1974, p. 25).

**Process drama.** “Process drama is a dynamic method of teaching and learning according to which both the students and the teacher are working in and out of a role. Cecily O’Neill describes process drama being used to explore a problem, situation, theme, or series of related ideas or themes through the use of the artistic medium of unscripted drama.” (OSPI, 2011d, p. 136)

**Progressivism.** “A progressive curriculum emphasizes the quality of experience and processes of growth and development over content and skill mastery” (Ellis, 2004, p. 33).

**Readers’ theatre.** Readers’ theatre is defined as “an orchestrated reading that relies primarily on vocal characterization and does not include the elements of visual theatre, such as costuming, sets, or blocking in the presentation” (OSPI, 2011d, p. 137).

**Role-plays.** Role-plays are “acting things out or demonstrating comprehension using the body” (Himele & Himele, 2011, p. 71).

**Role-playing.** Refer to the definitions for classroom drama, creative drama, *creative dramatics*, drama, and dramatic play; which are five terms used synonymously to define the constructs of *creative dramatics* as the focus of this study investigation; and, used in conjunction together, provide a clear definition for a pathway for research replication; and incorporate the constructs of role-playing.

**Sketch.** “A drawing without much detail, usually completed in a short amount of time, and sometimes used as a rough draft for later work; a drawing that catches the general appearance or impression of an object or place; a drawing that blocks in a quick plan for a composition.” (OSPI, 2011e, p. 199)
**Socio-drama.** “Socio-drama is a form of creative dramatics which involves students working to find solutions to social problems through improvisations and performance” (Benoit, 2003, p. 43).

**Sociodramatic play.** “Sociodramatic play is one of the most fascinating phenomena of early childhood. It consists of complex behavior, characterized by joyful concentration, intensity and expressive fluency” (Smilansky & Shefatya, 1990, p. xi).

**Solfeggio, solfa, sol-fa.** “A system of syllables (do, re, mi, fa, so, la, ti, do) that is used to represent the tones of a musical scale and that is used to practice singing and train the ear (OSPI, 2011c, p. 142).

**Symbolic play.** “Symbolic play fosters tools such as analogizing, modeling, play-acting, and empathizing by involving a make-believe world where one thing stands for another” (Root-Bernstein & Root-Bernstein, 1999, p. 249).

**Syntegration.** “Syntegration is a created word which indicates that subjects are working together synergistically to explore a theme, concept or focus question while achieving their own subject-specific outcomes as well as generic outcomes (Russell-Bowie, 2009, p. 5).

**Treatment fidelity.** “Treatment fidelity is the extent to which the treatment conditions, as implemented, conform to the researcher’s specifications for the treatment” (Gall et al., 2007, p. 395).

**Vocabulary.** “Vocabulary refers to students’ knowledge of word meanings” (Stahl & Nagy, 2006, p. 3).
Appendix C

Teacher Training and Intervention Treatment Methods and ‘Bravo X Strategy’
For Dissertation Study Teachers for The Effects of Creative Dramatics on the Vocabulary Achievement of Fourth Grade Students in a Language Arts Classroom: An Empirical Study
by AnnRené Joseph

Teacher Training for Dissertation Study Treatment Interventions, Thursday, October 27, 2011

The study teachers were trained on a conference day afternoon; whereas, no students were at school for regular instruction. Teachers met with the investigator and an independent school district administrator to collaboratively create the randomly assigned classrooms for the study, experience collaborative training and paperwork overview of the study, and experience individual treatment intervention training, provided by the study investigator (refer to Appendices D and E and Figure 1). The collaborative and joint 15 minute training for this study, as well as the 30-minute individualized training for each teacher, as provided by the investigator, follows.

Group Vocabulary Creative Dramatics (CD) Training

The study teachers returned one hour following the randomization process for 20 minutes of debrief, questions, and group preparation for the study, including paperwork and logistical information that was common for all three teachers. This specific section deals with the logistics and details of this study schedule, including an overview, agreements, signed confidentiality agreements, continuing education paperwork and guidelines, daily logistics and processes dealing with the random assignment and student movement from classrooms, communication processes, and questions. It was necessary for the investigator to schedule the teacher training, in advance, with clearance from the school principal, and with agreement from the teachers to attend; as well as at a time that would be convenient with their schedules and abide by the teachers’ association guidelines. The meeting with all three study teachers, at the same time; and prior to individualized training, was critical and necessary to the treatment fidelity and study controls, as well as to ensure that the detailed information was given at the same time to all of the study teachers. Time was included for questions, and to attempt to control for any issues, as well as to provide a brief and replicable example of how to set the study parameters at one time and with all three study teachers in attendance. Moreover, the finalized study schedule was examined to ensure that it fit within the unique schedule of the study school; as well as with the study school district calendars, including required teacher in-service days during the study (which would require substitutes), and in keeping with this study teachers’ contractual guidelines. Changes were made, as needed, resulting in the final study schedule calendar (refer to Figure 1).

Specifically, this 20-minute group overview was scheduled to follow the random assignment process and prior to each individual teacher’s treatment training; with all incorporated in the same day and during a three-hour period of time. This was purposeful scheduling, and in efforts to avoid threats to the validity and reliability of the study, as well as the necessity of scheduling a meeting when all three of the study teachers could meet at the same time with the investigator, and as close to the study commencing as possible. The teacher training was able to occur, successfully, on a parent-teacher conference day; whereas, the teachers allowed for a one hour block of time for the randomization process (as a group), and a two hour block of time for the 20-minute group overview, as well as 30 minutes of individualized training for each teacher. Individual teacher training for this study treatments followed; wherein, each teacher received 30 minutes of individualized training regarding their specific treatment group. Finally, this informational session was scheduled, specifically, to occur just two days prior to the commencing of this study experiment, in efforts to control for internal and external threats. This specific time-frame was selected to give the teachers time to work with their students on the process of moving quickly and successfully from their regularly assigned classroom to their randomly assigned classroom. Further, the parent letter was re-scheduled to go home with students one day before the study commenced.

Therefore, this study randomization process was scheduled with the school principal and teachers to coincide with their conference week, and on October 27, 2011. This intentional and advanced scheduling with this study teachers allowed for all three of this study teachers to be in attendance for this initial training period, and for the investigator to be available for questions and clarification of this study,
During and following the randomization process, and prior to this study commencing on Tuesday, November 1, 2011.

Following the successful random assignment process, teachers were reminded that each of them would receive training by the investigator regarding the specific arts education treatment they were to teach their students (refer to Appendices D and E). Following, the 20 minutes of common planning and training for the teachers as a group, each teacher received 30 minutes of individualized training regarding their specific treatment group as shared in Chapter Three. Gaylor (2011) validated the need for and relevance of such individualized training. Her findings indicated that there is a positive correlation between formal training in drama in education, such as school-based professional development, and that such training showed an increase in the frequency of the implementation of the drama in education techniques (Gaylor, 2011).

Additionally, it was agreed upon, regarding the validity of the study treatments, that the teachers would inform the investigator if they were going to be absent on any day during the study, via email, in addition to the district required in-service days previously scheduled, as well as any other changes that would involve substitute teachers during this study, and with copies to their principal. This consideration was to be afforded to the investigator for planning for substitute teachers prior to the study treatments if and when study teachers were absent. The importance of regular attendance was stressed, as well, and it is an internal variable (when humans are involved) that is unpredictable, and impacts treatment fidelity.

**Classroom transition strategies.** The following three transition strategies were taught to all three teachers in this study as optional for them to use at the beginning of each class session as possible transition and classroom management activities. The investigator welcomed all three teachers to a 20-minute ‘welcome activity’, and debriefing of the successful randomization process by using the following three methods, developed specifically for this study, by the study investigator, and from the philosophical and methodological references presented in Chapter Two. The investigator asked the three study teachers to mimic and mirror her actions and behavior regarding the teaching and learning of the following three segue creative dramatics activities in the 15-20 minute common training and paperwork session with all three study teachers, and prior to the 30-minute individualized teacher training sessions.

1. **Phonetic and rhythmic singing, chanting, and body percussion.** The investigator initiated and modeled this method by singing “hello” to and clapping each teacher’s name in phonetic rhythms using the three musical tones of sol, mi, and la (three-tone chant used in traditional and familiar children’s nursery rhymes and folk songs); as well as writing these rhythms on the white board while singing and clapping them (Choksy, 1974; Kodály 1974; Orff, 1974/1980; Richards, 1967, 1971).

2. **‘Bravo X strategy’.** The ‘bravo X strategy’ is a creative dramatics strategy, created and adapted by the present study investigator, for the present study; whereas, the ‘bravo X strategy’ is jumping for joy from a core to a distal standing position and into a fully extended body ‘X’ position while saying (or singing) the word ‘bravo’ (Booth, 2007; Dalcroze 1930; Gilbert, 2006; Laban 1971; OSPI, 2011b). An additional adaptation of the investigator created ‘bravo X strategy’ is to sing an a cappella octave (such as from middle C to C above middle C) while jumping from the core to the distal position and into a full body ‘X’ position. The ‘bravo X strategy’ was taught to, demonstrated, modeled, and practiced with all three study teachers. The ‘bravo X strategy’ was used in a celebratory response to the study teachers experiencing a successful randomization process of the classrooms of students and teachers for the study, and for their courage in agreeing to participate in the present study with the investigator.

3. **Creative dramatics “warm-up”.** The investigator initiated and modeled this method by rolling her neck and shoulders in both clockwise and counterclockwise circles, and stretching the face and the body, and using metaphoric images; such as warming up muscles prior to an athletic activity and following sedentary activities, and in preparation for a physical work-out (Bartenieff, 1980; Nash, 1974).

The teachers were invited by the investigator to echo and copy and mirror these three activities, and to sing back to each other and to the investigator, using the rhythm and tone patterns modeled by the investigator. The investigator encouraged the teachers to practice with her. These three methods were learned quickly, provided immediate success and feedback for the teachers, and incorporated the ‘process’ constructs of creative dramatics in alignment with the Washington State K-12 Arts Learning Standards (OSPI, 2011a). These activities were provided to establish a positive relationship between the investigator
and the teachers, as well as a model for the teachers to use to establish relationship with the randomized classrooms and student participants. Additionally, these three creative dramatics movement activities, were provided as a means to effectively transition their students to the language arts lesson and classroom transition, by involving all learners in aural, visual, kinesthetic, and tactile activities, in anticipated efforts to maximize the daily 45-minute language arts block of instruction.

**Welcome activity and vocabulary creative dramatics (CD) training.** The three strategies experienced by this study’s teachers – introduced and taught by the investigator – were referred to as the ‘welcome activity’, at the beginning of the 15-minute joint training, and demonstrated by the investigator. These strategies were experienced during the initial five minutes of the “vocabulary CD training”. The three strategies demonstrated the artistic processes of creating, performing, and responding, inherent to learners, and inherent as the foundation of the creative dramatics treatments that were taught to and implemented by teachers with their students. The “vocabulary CD training” demonstrated by the investigator, provided for segue for the teachers from their parent-teacher conferences to a meeting with the investigator to learn about the upcoming research study. The teachers demonstrated their understanding through creating, performing, and responding to the “vocabulary CD training” with the investigator, in the same way their students would demonstrate the strategies learned in the daily creative dramatics treatments which the teachers would employ with their randomized classroom students. The “vocabulary CD training” strategies learned in the group training, as well as in the individual trainings for each teacher were optional for the teachers to employ, and would be in addition to their specific intervention strategies that would be employed during this study and learned in the following 90 minutes; whereas, the study investigator met with each study teacher, for 30 minutes of one-to-one training in the treatment interventions. Each teacher believed they would be learning an intervention strategy that involved creative dramatics techniques. The teachers were not aware of the individual creative dramatics interventions each would be doing, nor were they to share with each other regarding their treatment interventions.

*‘Bravo X strategy’ creation and adaptation as a “warm-up” for study groups.* The ‘bravo X strategy’ is a creative dramatics strategy, created and adapted by the present study investigator, for the present study; whereas, the ‘bravo X strategy’ is jumping for joy from a core to a distal standing position and into a fully extended body ‘X’ position while saying (or singing) the word ‘bravo’ (Booth, 2007; Dalcroze 1930; Gilbert, 2006; Laban 1971; OSPI, 2011b). An additional adaptation of the investigator created ‘bravo X strategy’ is to sing an ‘a cappella’ octave (such as from middle C to C above middle C) while jumping from the core to the distal position and into a full body ‘X’ position.

All three of the study teachers experienced and were taught the investigator created and an adapted version of an etymological comment regarding the origins of the use of the word “bravo” with theatre and drama (Booth, 2007). Booth wrote,

> When it was first called out in the English-speaking theatre, it was called out in recognition of great courage. If you saw a performer take a chance, even if it wasn’t completely pulled off, you hollered out “bravo” to recognize that fundamental act. (p. 13)

For the purposes of this present study, the investigator adapted and improvised Booth’s (2007) call out “bravo” and created a full-body extension “bravo”, referred to in this study as the ‘bravo X strategy.’ The adaptation of the verbal ‘bravo’ activity, into an aural, visual, and kinesthetic creative dramatics instructional method for segue and transition, as well as for use as a classroom management strategy, was designed by the study investigator to be employed as a part of the creative dramatics treatment intervention strategies at the beginning of each language arts class session.

The investigator adapted and created ‘bravo X strategy’ intervention treatment involved all four Washington State Arts Learning Standards (refer to Chapter Two). At the beginning of each language arts class session, and after the students had arrived at their desks, the students in both of the experimental treatment groups were to be instructed by their teachers to jump up and shout “bravo,” while at the same time making the shape of a full body ‘X’. Students were told to hold the full body ‘X’ pose until their teacher directed the next part of the lesson. This full body ‘X’ is described as an “extension reaching or stretching all parts of the body away from its point of origin or the body’s center”, as found in the Washington State K-12 Options for Implementing the Arts Standards through Dance by Grade Level (OSPI, 2011b, p. 125). The ‘bravo X strategy’ is considered a part of the treatment intervention for the Experimental Group I – (CDVW) and was employed with consistency and on a daily basis as a “warm-up” for the language arts class, and as a signal for creative dramatics instruction with that treatment group. As a result, the students in the Experimental Group I experienced the ‘bravo X strategy’ consistently and on a daily basis, as a part of their creative dramatics treatments (see Appendix T).
The students in the Experimental Group II were supposed to experience the ‘bravo X strategy’ prior to the daily warm-up of the ‘Standing BrainDance’; however, their teacher did not consistently allow for the ‘bravo X strategy’, so it was not reported as a part of the treatment for Experimental Group II due to treatment fidelity and teacher absences.

Control Group ‘warm-up. The Control Group students, in this study, could have experienced the ‘bravo X strategy’, as their classroom transition segue, following the movement from their regularly assigned classroom to their randomly assigned classroom. However, the Control Group students experienced the ‘bravo X strategy’ on an intermittent basis (perhaps once a week), due to the “silent reading” strategy that was daily employed by the Control Group teacher, as the “warm-up” strategy for her students. The silent reading “warm-up” immediately followed the classroom transition of students from their regularly assigned classrooms to the randomly assigned classrooms for the Control Group students. The ‘bravo X strategy’ was reported by the Control Group teacher as a part of her treatment in the teacher reflection (see Appendix T). The investigator personally observed the ‘bravo X strategy’ experienced by the Control Group students two times during the 17 days of treatment. However, since the ‘bravo X strategy’ was not experienced on a daily basis with the Control Group students, (and as originally developed by the study investigator to follow the classroom transition), it was not reported as a part of the treatment for the Control Group due to treatment fidelity and teacher absences.

Specific Treatments for Experimental Groups

Experimental group I. The Experimental Group I-Creative Dramatics and Vocabulary Words (CDVW) intervention involved 17 sessions during the daily reading language arts instruction block which integrated the use of creative dramatrics strategies as methods for teaching and learning the vocabulary words of the content (four stories), and which included 31 vocabulary words that would be covered during the five-week study (Houghton Mifflin Reading, 2005). Students in this study group experienced 15-20 minutes of creative dramatrics interventions on a daily basis during the 45 minutes of the language arts block. The Washington State K-12 Options for Implementing the Arts Standards through Theatre by Grade Level (OSPI, 2011d) define creative dramatrics as “a dramatic enactment (led by the teacher) of a story, setting, and/or characters. This is an experiential, process-based activity, not a performance for an audience. The teacher may assume a role” (p. 133).

Students in the CDVW group were taught the 31 vocabulary words with creative dramatrics improvised movements that allowed students to act out the specific vocabulary words and the vocabulary word definitions, by rhythmically singing, chanting, clapping, stomping, and snapping the syllables for the vocabulary words and their definitions (Bacon, 1977; Brewer & Campbell, 1991; Bruner, 1986a, 1986b; Campbell, 2000; Campbell et al., 1999; Choksy, 1974; Daleroze, 1930; Dansky, 1980; Davis & Behm, 1978; Duffelmeyer & Duffelmeyer, 1979; Dupont, 1992; Herbert, 1982; Himmele & Himmele, 2011; Kodály, 1974; Landis & Carder, 1972; McCaslin, 1980, 1990; Nash, 1974; OSPI, 2011a; OSPI, 2011b; OSPI, 2011c; OSPI, 2011d; OSPI, 2011e; Orff, 1974/1980; Pettrash, 2002; Piaget, 1962; Podlozny, 2000, 2001; Pusch, 1993; Ross & Roe, 1977; Siks, 1958; Silvern et al., 1986; Singer, 1973; Smilansky, 1968; Smilansky & Shefaty, 1990; Steiner, 1997; Vygotsky, 1962/1986; 1966; Wagner, 1998).

The lesson plans created for the CDVW group included the following creative dramatrics treatment intervention strategies: (1) the transition ‘bravo X strategy’; (2) using creative dramatrics to act out the vocabulary words and vocabulary word definitions for the unit of study (four stories); and (3) each student creating four summary story booklets with visual arts images summarizing the four stories, along with their narrative summaries that included the vocabulary words for each story (Bany-Winters, 2000; Bloom, 1985; Booth, 2007; Bresler, 1995, 2002; Bresler et al., 2007; Edwards, 1979; Eisner, 1984; Gardner, 1983, 1993, 1999a, 1999b; Heath & Heath, 2007; Himmele & Himmele, 2011; Houghton Mifflin Reading, 2005; Hunksin, 1972; Hunter, 1976; Ingram & Sikies, 2005; Moore & Caldwell, 1993; OSPI, 2011a, 2011b, 2011c, 2011d, 2011e; Pink, 2006; Steiner, 1997; Zull, 2002). Refer to Appendix O.

Experimental group II. The Experimental Group II – Creative Dramatics and Story Retelling (CDSR) intervention involved 17 sessions during the daily reading language arts instruction block which integrated the use of creative dramatrics strategies as methods for teaching and learning the vocabulary words of the content (four stories), and which included 31 vocabulary words that would be covered during the five-week study (Houghton Mifflin Reading, 2005). Students in this study group experienced 15-20 minutes of creative dramatrics interventions on a daily basis during the 45 minutes of the language arts block. The Washington State K-12 Options for Implementing the Arts Standards through Theatre by Grade Level (OSPI, 2011d) define creative dramatrics as “a dramatic enactment (led by the teacher) of a story,
Students in this study group were taught the 31 vocabulary words with **creative dramatics** improvised acting that allowed students to enact each of the four stories using **creative dramatics** strategies as earlier defined.

Students in the CDSR group enacted each of four stories, at least one time through, during the week that the story was taught. Students in this study group re-enacted each of the four stories as the story summary intervention. Each week, students were given individual story scene strips and their teacher assigned students to represent the characters by student volunteers or by a group location of students (such as a having a group of six students together for a scene needing six students). Students were instructed to retell (enact) the story, on one or two occasions during each week of this study, for each of the four stories included in the unit of instruction. The intent was for every student to have a weekly opportunity to enact a character in each of the four stories; as well as for the students to experience the enactment of each story, in its entirety, when each of the stories was summarized. The improvised **creative dramatics** actions and narrative of the students were to include the vocabulary words of the story, and the vocabulary words were included on the story scene strips. The story scene strips were prepared by the investigator and provided to the teacher prior to instruction commencing each day. Students were given five minutes to practice their story scene strips with their small groups. Following, all student groups sat at the front of the room and watched students enact the story scenes in order, for 10 minutes. It took approximately three days for the CDSR group to enact an entire story, or about one-third of the story per class session, utilizing this 15 minute strategy of five minutes in small group preparation, and 10 minutes of enacting the story for the class.

The lesson plans created for the CDSR group included the following **creative dramatics** treatment intervention strategies: (1) the transition and teacher led ‘warm-up’ that provided **creative dramatics** actions to the five minute standing BrainDance (Gilbert, 1979, 2006); (2) using **creative dramatics** to enact the stories for 10-15 minutes each day; (3) using **creative dramatics** to re-enact the stories for summarizing the four stories in the unit of study (Benoit, 2003; Booth, 2007; Broudy, 1972, 1980; Bruner, 1986b; Danko-McGhee & Slutsky, 2007; Davis & Behm, 1978; Dickinson, 2002; Dickinson & Neuman, 2006; Duffelmeyer & Duffelmeyer, 1979; Dupont, 1992; Durland, 1952; Edwards, 1972; Eisner, 1968, 1984; Herbert, 1982; Himmelbe & Himmele, 2011; McCaslin, 1990; McFadden, 2010; McMaster, 1998; Matassarin, 1983; Neuman & Dickinson, 2001; Niedermeyer & Oliver, 1972; OSPI, 2011a; OSPI, 2001d; Piaget, 1962, 1968, 1969; Pierini, 1971; Podlozny, 2000, 2001; Ross & Roe, 1977; Sik, 1958; Silvern et al., 1986; Singer, 1973; Smilansky, 1968; Smilansky & Shefatya, 1990; Steiner, 1997; Vygotsky, 1966). The lesson plans created for this study group included the transition ‘bravo X strategy’, the ‘warm-up’ standing BrainDance, and the **creative dramatics** and story retelling (enactment and re-enactment) and interventions and methodologies as treatments (Booth, 2007; Gilbert, 2006; Podlozny, 2000, 2001). Refer to Appendix P.

**Control group.** The Control Group (CG) intervention involved 17 sessions during the daily reading language arts instruction block which integrated the use of **Readers’ theatre** strategies included in the study district adopted language arts curriculum as a method for teaching and learning the vocabulary words of the content (four stories), and which included 31 vocabulary words that would be covered during the five-week study (Houghton Mifflin Reading, 2005, p. 181N). **“Readers’ theatre” is defined as “an orchestrated reading that relies primarily on vocal characterization and does not include the elements of visual theatre, such as costuming, sets, or blocking in the presentation”** (OSPI, 2011d, p. 137). Students in this study group were to experience 10-15 minutes of **Readers’ theatre** interventions on a daily basis during the 45 minutes of the language arts block.

Students in the CG were taught the 31 vocabulary words, according to this study district language arts adoption provided resources, which included the strategy of **Readers’ theatre** as a method of instruction. The **Readers’ theatre** intervention allowed students to stand up in front of the classroom, as selected by their teacher, to read the passages of the stories from their reading books, for each of the four stories covered during this study, per the Houghton Mifflin Reading (2005) recommendations (p. 181N).

The lesson plans created for the CG included the following: (1) five minutes of silent reading for the daily ‘warm-up’ following the classroom transition; (2) five to 10 minutes per day of **Readers’ theatre**; (3) five minutes at the end of each 45 minute language arts session to write an individual written reflection about what they learned during the language arts session, to teach the strategy of summarizing, required in the language arts adoption (Houghton Mifflin Reading, 2005, p. 224). This activity is referred to as an I
Learned Statement (Ellis, 2001b, p. 69-71). As the name references, an *I Learned Statement* is a student’s individual reflection about what he or she learned in the lesson. This activity was specifically assigned to the Control Group (CG), in an attempt to control for the John Henry effect, also referred to as compensatory rivalry by the control group (Gall et al., 2007, p. 387), and was an activity in isolation, used as a non-graded or non-commented upon summary strategy. The lesson plans created for the Control Group (CG) included the Readers’ theatre and the *I Learned Statement* as part of the district expected curriculum requirements, and not as *creative dramatics* treatments. The investigator purchased the individual reflection notebooks, one for each student in the Control Group, and wrote the student names on the outside cover (for ease and speed in passing out notebooks, collection of notebooks, and daily recording of student entries and participation). These reflection notebooks were collected every day at the end of the language arts block, and rolled out of the Control Group classroom by the study investigator. They were returned to the classroom at the end of the school day after students were dismissed. These reflection notebooks were collected and kept by the investigator on the 17th day of the study, and the day prior to the posttest.

**Treatment Methodologies, Methods, and Details**

**Experimental group I – creative dramatics and vocabulary words (CDVW).** Students arrived at their randomly assigned classroom desks and put their books and supplies on top of the desks. The teacher welcomed the students to her class by singing “Hello, boys and girls,” and the students sang “hello” back to their teacher, using the investigator trained singing and clapping of the teacher’s name in phonetic rhythms and using the three musical tones of sol, mi, and la (three-tone chant songs) used in traditional and familiar children’s nursery rhymes and folk songs (Choksy, 1974; Kodály 1974; Orff, 1974/1980; Richards, 1967, 1971).

*Warm-up with ‘bravo X strategy’, solfège and body percussion with creative dramatics improvisations.* Each day, and with consistency, the students performed the study investigator created full body X ‘bravo X strategy’ either following the “hello” welcome, or after acting out all of the vocabulary words and definitions (Booth, 2007; OSPI, 2011b). Students were encouraged by their teacher to use *creative dramatics* representations of the story vocabulary words, by utilizing their bodies, facial expressions, and voices, in rhythmic, syllabic, and phonetic structure; yet in improvised, created, and imaginary representations (Himmele & Himmele, 2011, p. 72). As referenced throughout this study, *creative dramatics* are defined as, “…a dramatic enactment (led by the teacher) of a story, setting, and/or characters. This is an experiential, process-based activity, not a performance for an audience. The teacher may assume a role” (OSPI, 2011d, p. 133). Further, “Creative dramatics is defined as an improvisational, nonexhibitional, process-centered form of drama in which participants are guided by a leader to imagine, enact, and reflect upon human experiences” (McCaslin, 1990, p. 5).

Durland (1952) provided the objectives of the teacher in the methodology of *creative dramatics* as, “to obtain creative freedom, dramatic appreciation of situations, resourcefulness and initiative in the group” (p. 35). Additionally, Siks (1958) described this rhythmic movement and pantomime as “basic in the art of drama” (p. 105). She further wrote, “Rhythmic movement is an inclusive term which refers to spatial movement, body movement, and pantomime (Siks, 1958, p. 105). Specifically, Siks (1958) provided examples regarding the definitions of spatial movements, body movements, and pantomime, which, aligned with the definition of pantomime (OSPI, 2011d, p. 136), and were the basis and foundation for the *creative dramatics* treatments in Experimental Group I and Experimental Group II. Siks (1958) wrote:

Spatial movement refers to rhythmic action which a child uses when he moves through space. Spatial movements basic to a child are walking, running, hopping, jumping, and leaping. Body movements are swinging, bending, stretching, pushing, and pulling, twisting, striking, dodging, shaking, and bouncing. Pantomime is a term used interchangeably with rhythmic movement meaning to communicate thought and feeling entirely with action. Pantomime refers to both body and spatial movements. Or it may include finer rhythmic movements expressed with arms and fingers. (pp. 105-6)

Clearly defined definitions for *classroom drama, creative drama, creative dramatics, drama, pantomime*, and *dramatic play, pantomime*, and other key terms and definitions, are referenced in Chapters One and Three, as well as Appendix B for consistency, and a clear pathway of investigation for replication (Conard, 1992; Kardash & Wright, 1987; Mages, 2008; Massey & Koziol, 1978; Podlozny, 2000, 2001; Silvern et al., 1986).
Introducing new vocabulary words – process for connections. Alber and Foil (2003) provided the following five-step process when introducing new vocabulary words and utilizing a creative dramatics component to the learning process. The investigator used the following guidelines of Alber and Foil (2003) and taught it to the Experimental Group I Teacher for the Creative Dramatics and Vocabulary Words intervention; however, with the addition and adaptation to the ‘three-tone’ chant; as well as the addition of body percussion for the phonetic syllables of the vocabulary words (Choksy, 1974; Kodály, 1974; Orff 1974/1980). The process follows, and is designed for students to link new vocabulary words to their prior knowledge, in efforts to influence higher levels of comprehension. Further, Alber and Foil (2003) encourage teachers to allow for time to discuss personal experiences. Although discussing personal experiences was not a part of the treatment of this study, (due to time constraints and consistent lesson design) it is an important aspect to keep in mind when using this process with creative dramatics interventions. The Alber and Foil (2003) introducing new vocabulary process follows:

**Introducing new vocabulary.**

1. Show students the word, pronounce it, and have students repeat it.
2. Explain the meaning of the word, and provide a variety of examples of the word used in context.
3. Make connections to students’ prior knowledge by eliciting student responses about their experiences related to the word.
4. Give students the opportunity to use the word in context, and provide specific feedback.
5. Demonstrate a physical action or dramatic movement that represents the meaning of the word, and have students imitate that action. (p. 23)

Further, the practice of linking vocabulary words to student-created physical actions was referenced as a successful strategy for students remembering and retaining vocabulary words, and recorded in Himmele and Himmele (2011, p. 72).

**Three-tone chant songs with solfège or solfeggio (a technique used to teach pitch).** Students were taught to sing the syllables of the vocabulary words and their definitions to the musical nursery rhyme tune and notes for *It’s Raining; it’s Pouring*, by singing the musical tones of sol, mi, and la, referred to in the Kodály Method of teaching singing and chanting as ‘three-tone chant songs’ (Choksy, 1974, p. 148; Kodály, 1974; Nash, 1974, p. 52; Richards, 1967, 1971, p. II-38). These ‘three-tone chant songs’ and melodies are children’s songs which are taught and known to most students, prior to their school experience, and regarding the tunes to nursery rhymes. These ‘three-tone chant songs’ are inherent to a student’s ability to produce, match, and echo the pitch of the teacher in repetitious, improvised, echoed, and copied tones and sounds; such as, for singing student names, vocabulary words, and vocabulary word definition phrases, as in this present study.

Figure C1, follows, and provides the musical notation sequence for the ‘three-tone chant song’ *It’s Raining; it’s Pouring*. This is a traditional folk song and provides an example of the tune used by the teacher and echoed by the students, using the ‘three-tone chant song’ and melody for the vocabulary words and definitions of the content (four stories) of this study. The use of the specific ‘three-tone chant song’ provided specific generalizability and reliability for this group treatment, due to the universal recognition of these sol-mi-la ‘three-tone chant’ children’s songs across cultures. Other familiar tunes with the same ‘three-tone chant songs’ melody that students might spontaneously reference; thus demonstrating a learning transfer from their personal experience were: *Bah, Bah, Black Sheep; Rain, Rain, Go Away; and A Tisket a Tasket*. Further, the students may reference the children’s teasing chant *Nemur, Nemur, Nemur.* Although the song rhythm patterns are slightly varied (depending upon the phonetic rhythm of the song), the ‘three-tone chant songs’ using the musical tones or pitches of sol, mi, and la are relatively the same, and are universal in nature.
Teaching a vocabulary word with singing, clapping, stomping, and creative dramatics actions.

An example of a vocabulary word from the first story of this study is *storyteller*. The definition of *storyteller* is *a person who tells stories*, found in this study district adopted language arts adoption Theme 2: *American Stories: Focus on Plays* (Houghton Mifflin Reading, 2005, pp. 165, 717). The teacher in Experimental Group I (CDVW) would sing and clap, chant, stomp, and snap the rhythm to the syllables of the vocabulary word *storyteller* and sing the definition of the word *storyteller* to the tune of *It’s Raining It’s Pouring*, and the students would act like they were reading or telling stories to a small group of students using creative dramatics. Further, the students were allowed to stand up and sing, chant, clap, move, and act out the definition for the vocabulary words when the words were re-read or used during each week of the study. The ‘three-tone chant songs’ melody includes the tones *sol, mi, la, sol, mi*, also referred to as *solfege* or *solfèggio* (a technique used to teach pitch), and used in the music educational philosophy and methodology of the Hungarian composer Zoltán Kodály (1974). This methodology is referred to as “the so-called universal chant of childhood, the descending minor third or sol-mi” (Landis & Carder, 1972, p. 48). Furthermore, Nash (1974) stated the following regarding the connection to the singing and speaking voice with children:

The singing voice. Singing is an extension of speech. The singing voice is capable of expressing more nuanced emotions than the speaking voice. It thus adds dimension to speech. The three-tone chant is universal to childhood; it is inherent at birth and, like rhythm, implies the need to be developed and expressed. (Nash, 1974, p. 47)

Additionally, Nash (1974) stated “singing aids the speaking voice by prolonging vowel duration, connecting the consonant with the vowel that follows, and by lending a tonal inflection and phrase-flow so vital to oral reading” (p. 47). The strategies shared by Nash (1974) provided the methodology and foundational basis for the use of these particular music education methods in conjunction with the creative dramatics methods, referenced earlier in this chapter, in developing the study treatment for Experimental Group I, for the students to learn the vocabulary words in each story. The students sang *a cappella* (performed without instrumental accompaniment). This was intentional, so as to stay within the vision of the study parameters; whereas, no additional supplies (such as a CD player, CD of music, art supplies, costumes, or props) were needed for student engagement, or for resources, or added teacher time.

The investigator practiced these procedures and methods with the Experimental Group I teacher, by having her sing her own name, the investigator’s name, some student names, and some vocabulary words from the first story with the ‘three-tone chant songs’, and by doing so *a cappella*, (without accompaniment). This practice and modeling was in preparation as to how the methods and treatment intervention would occur in the classroom, and in keeping with creative dramatics constructs. Further, the investigator spent a few minutes writing the rhythmic patterns of a few student names, and vocabulary words and definitions on the white board in the training room, using the methods for teaching *solfege* (Richards, II-30, III-33-34), and adapted from the methodology of Kodály (1974). This allowed the investigator time to work with the teacher for understanding of the cognitive, affective, and psychomotor skills that would be engaged in the students while experiencing the creative dramatics intervention treatments; as well as to elicit empathy from the teacher, as to how the students would respond during the initial introduction and modeling of the creative dramatics methods. Additionally, the creative dramatics
movements were practiced with the first story series of vocabulary words while singing, chanting, clapping, and stomping out the syllables of the vocabulary words. These actions and definitions were initially led by the Experimental Group I teacher, with her students, for the first two weeks of the study. Then, her students began to take the lead in coming up with motions for the vocabulary words, and would lead the creative dramatics actions for the words, and for the creative dramatics word definitions, accompanied by the a cappella singing of the ‘three-tone chant songs’ and melodies for each word. Students additionally practiced these strategies by singing and learning the names of their randomly assigned classmates, during this study class time, and by using the same rhythmic, syllabic, and phonetic structure practiced with the vocabulary words and definitions; thus exhibiting transfer and meaning of the concepts and skills used in this methodology.

Importantly, these treatment methods and strategies were taught to the Experimental I teacher in less than 30 minutes of individual instructional time allotted for the teaching of this treatment by the investigator. Following the treatment, the investigator reviewed with the Experimental 1 teacher, the resources and activities that were presented with all three teachers, and invited questions, concerns, and clarification from this teacher, as needed. Daily treatment for this study Experimental Group I included a total of 15-20 minutes of daily warm-up singing, using body percussion, and using creative dramatics movements for the individual vocabulary words and the definitions of each vocabulary word by story.

Additionally, week three in this study involved the strategy of summarizing in the district adopted language arts curriculum (Houghton Mifflin Reading, 2005). The Experimental Group I teacher provided one sheet of white construction paper (8 ½’ x 11’), folded in half, for her students to summarize the story learned that week. She asked them to make the front the title page, and create one page – each – for the beginning, middle, and ending of the story. The Experimental Group I teacher shared with the investigator that her students began to draw the scenes for the title, beginning, middle, and ending of the story, along with their writing. These drawings provided a summary of the story and included some of the creative dramatics movements and pantomimed improvisations, as well as the vocabulary words. The Experimental Group 1 teacher shared these booklets with the investigator, during her weekly meeting with the investigator. The following week was a three-day school week, due to the upcoming Thanksgiving holiday. It was mutually agreed upon by the Experimental Group I teacher and the study investigator, to add the story summary booklets as the summary strategy for the three stories that had already been taught, as well as to the fourth story, yet to be taught, and that this summary strategy would become a part of the treatment interventions for her class. This would allow the Experimental Group I teacher to review one story each day, during the language arts block, which would conveniently fit with the three-day school schedule.

**Summarizing strategy with visual arts booklets.** This story summary treatment was in keeping with the district required language arts adoption strategies, which included students learning the strategy of summarizing for week four, and this summary strategy was added to the daily 15-20 minutes of review of the vocabulary words used in each story with the creative dramatics and singing treatment methods already learned, and to the revised lesson plan for the group CDVW (see Appendix O). Students were to review the three stories that had been learned during the study. Additionally, this strategy was used on day three of the final four-day week during the fifth week of this study, to review the fourth story in this study, and one day prior to the posttest administration. Students sketched pictures, colored them, and wrote summary statements about each story. Additionally, students emphasized vocabulary words in their summary sketch booklets, meeting all of the investigator, district, and state requirements.

Interestingly, this additional summarizing strategy, initiated by the students, while not initially included in the lesson plans for this study Experimental Group I, demonstrated the philosophical underpinnings referenced earlier in Chapter Two of this study; whereas, Dewey (1934) espoused art is experience, through which humans see and make meaning. Additionally, the demonstrated skills of summarizing, questioning, clarifying, and predicting are contemporary applications of the constructivist theory of education (Vygotsky, 1978). Specifically; and whereas, the teacher’s role as the Zone of Proximal Development (ZPD), is necessary and reduced over time, and evidenced by the initiation, transfer, and understanding of the learning objectives through multiple types of demonstration (such as the story booklets) and the daily student creative dramatics and vocabulary word improvised performances and narrative (Booth, 2007; Campbell, et. al, 1999; Catterall, 2009; Cawthon & Dawson, 2011; Chappell & Cahnmann-Taylor, 2013; Dalcroze, 1930; Dickinson, 2002; Duffelmeyer & Duffelmeyer, 1979; Dunn, 1995; Edwards, 1979; Eisner & Day, 2004; Ericsson, 2008; Galda, 1982; Gilbert, 2000; Moore & Caldwell, 1993; Orff, 1974/1980; Reimer, 2003; Rice, 1972; Richards, 1971; Steiner, 1997; Vygotsky, 1978, Zull, 2002).
Experimental group II – creative dramatics and story retelling (CDSR). Students arrived at their randomly assigned classroom desks and put their books and supplies on top of the desks. The teacher welcomed the students to her class by leading them in the five-minute ‘standing BrainDance’ (Gilbert, 2006, pp. 36-8).

Warm-up with teaching the eight BrainDance movements with metaphor utilizing creative dramatics constructs. The investigator taught a five-minute daily warm-up to the Experimental Group II study teacher called the standing BrainDance (Gilbert, 2006). The training allowed for the investigator to model the eight movements associated with the standing BrainDance (Gilbert, 2006) with the Experimental Group II teacher. These eight movements provided an effective creative dramatics warm-up for this treatment group, by using imagination, imagery, and metaphors to represent action motions for the eight movements of breath, tactile, core-distal, head-tail, upper-lower, body-side, cross-lateral, and vestibular (Gilbert, 2006, pp. 39-44). A hand-out explaining the cognitive, affective, and psychomotor constructs to the eight movements of the BrainDance, how to teach the eight movements to the students, and helpful hints in teaching the movements, was given to Experimental Group II teacher (Gilbert, 2006, pp. 39-44). Additionally, the investigator explained how to use and teach the eight movements with her students in sequential order and with the use of metaphors and analogical reference that could utilize the vocabulary words of the stories. These eight movements provided a creative dramatics segue that prepared students for the creative dramatics intervention of story retelling, also referred to as story enactment and re-enactment, and was to occur with consistency and regularity during the first five minutes of the language arts block of instruction, and on a daily basis with the Experimental Group II students (Alber & Foil, 2003; Benoit, 2003; Blakeslee & Blakeslee, 2008; Campbell, et al., 1999; Catterall, 2009; Dansky, 1980; Dickinson, 2002; Duffelmeyer & Duffelmeyer, 1979; Dunn, 1995; Gardner, 1983, 1993, 1999a; Gilbert, 1979, 1992, 2000, 2006; Gray, 1987; Pellegrini, 1984; Pellegrini & Galda, 1982; Pierini, 1971; Push, 1993; Rice, 1972; Sik, 1958; Smilansky, 1968; Smilansky & Shefata, 1990; Vitz, 1983; Zull, 2002).

Each day that the Experimental Group II teacher was teaching, the students performed the eight movements of the BrainDance, as the segue and ‘warm-up’ activity for the treatment of creative dramatics with story enactment. Students were encouraged by their teacher to use metaphoric creative dramatics representations of the eight BrainDance movements, by utilizing their bodies. Gilbert (2006) wrote, “The BrainDance helps students become focused, energized and ready to learn” (p. 36); thus, providing a quick and effective way to assist students into the transition for creative dramatics instruction and experiences for the story enactment treatment interventions in Experimental Group II. Gilbert (2006) developed the eight metaphoric movements based upon the Bartenieff Fundamentals (1980). Gilbert (2006) wrote, “The Bartenieff Fundamentals are, like many somatic practices, based on the developmental movement patterns that babies progress through in building the central nervous system and the brain” (p. 36). Bartenieff was a student of Laban, whose constructs are embedded in the study treatment methods (Bartenieff, 1980; Laban, 1971). The adaptation of the eight movement patterns into the form of the ‘standing BrainDance’ movements were derived by Gilbert (2006), to capture the eight movements that babies naturally make and evolve through from birth through 12 months, and practice from 12 months to 24 months, and in a developmental and sequential order, and in a standing position for use in school settings and environments, as well as and with multiple ages.

Story enactment and story re-enactment. Daily treatment for this study group included a total of five minutes of warm-up with the BrainDance (Gilbert, 1979, 2006), and 15-20 minutes of creative dramatics enactments of all of the story scenes. The story scene strips were created by the investigator and provided to the teacher, prior to the class enactments and re-enactments, and specifically aligned to each of the four stories. Additionally, week three in this study involved the strategy of summarizing in the district adopted language arts curriculum Theme 2: American Stories: Focus on Plays (Houghton Mifflin Reading, 2005), which supported the creative dramatics strategy of re-enactment in summarizing and characterizing the story.

Small groups of students were randomly assigned to the story scenes in efforts to allow for all students to play at least one story character in each class period where the enactments occurred (at least twice a week, and initially planned as a daily creative dramatics intervention [see Appendix P]). As referenced throughout this study, creative dramatics are defined as, “…a dramatic enactment (led by the teacher) of a story, setting, and/or characters. This is an experiential, process-based activity, not a performance for an audience. The teacher may assume a role” (OSPI, 2011d, p. 133). Additionally, “Creative dramatics is defined as an improvisational, nonexhibitional, process-centered form of drama in which participants are guided by a leader to imagine, enact, and reflect upon human experiences”
Further, Durland (1952) provided the objectives of the teacher in the methodology of creative dramatics as, “to obtain creative freedom, dramatic appreciation of situations, resourcefulness and initiative in the group” (p. 35). Students experienced these constructs of creative dramatics during the ‘standing BrainDance’ and during the story enactments, and re-enactments of the study treatments for Experimental Group II. Further, students utilized the investigator designed story scene strips which provided creative structure for students to enact, and re-enact each story, by scene, and with emphasis on the story vocabulary words (refer to Appendix Q). Students worked in their small scene groups for five minutes, followed by 10 minutes of watching their classmates enact the story scenes for the class as an informal audience, and an audience of storytellers.

**Summarizing strategy with story re-enactment.** The fourth week of the study was a three-day school week, due to the upcoming Thanksgiving holiday. The students were to summarize one story per day in a similar format, taking the entire class period to do so, and as a review of the vocabulary words, and practicing the creative dramatics technique of re-enactment (Podlozny, 2000). Story scene strips were, again, given to this study teacher each day, just prior to the lesson commencing, and one story per day. These story scene strips were cut up and numbered according to the scenes in the story, with the number of students in each scene (see Appendix Q). Additionally, this strategy of story re-enactment was also used on day three of the final four-day week, and during the fifth week of this study, to review and enact the fourth story in this study (for the first time), and re-enact the story and one day prior to the posttest administration. Therefore, one of each of the three stories previously covered, was re-enacted on each of three days, using the investigator designed story scene strips, with the vision of each of the three stories being re-enacted once through, and all students in the Experimental Group II (CDSR) class being able to act in at least one scene per story re-enactment, and to act as at least one different character on each of three days.

**Control group (CG) – readers’ theatre.** The Control Group teacher informed the investigator that she wanted to include a silent reading activity as a segue activity following the classroom transition and to calm the students prior to instruction, as that fit with her comfort level and classroom management strategies. This activity was added to her lesson plan, per her request, as she was the Control Group teacher.

**Warm-up with silent reading.** Students arrived at their randomly assigned classroom desks and put their books and supplies on top of the desks. Additionally, the Control Group teacher in this study asked her randomly assigned students to bring a student selected reading book (different from the language arts reading book) for a daily five minutes of free reading time activity at the beginning of each language arts block period, and immediately following the classroom transition from the regularly assigned classroom to the randomly assigned classroom.

**Readers’ theatre from the district language arts adoption.** The students in the Control Group read the same texts but did not enact the texts (Winner & Hetland, 2001). These students retold the four stories in the unit of study, using the district language arts adoption Readers’ theatre format. For the purposes of this study, Readers’ theatre is defined as “an orchestrated reading that relies primarily on vocal characterization and does not include the elements of visual theatre, such as costuming, sets, or block, in the presentation” (OSPI, 2011d, p. 137). The Readers’ theatre strategy was included and recommended in this study school district adopted language arts curriculum arts integration possibilities (Houghton Mifflin Reading, 2005, p. 181N). Students in the Control Group (CG) followed the lesson design of the required language arts unit by utilizing the Readers’ theatre as the strategy from the language arts unit (Houghton Mifflin Reading, 2005, p. 181N).

As a part of the lesson design for the students in the Control Group (CG) the students were asked to come to the front of their classroom and read the story by character and by story scene. Students were selected to read a specific story character by their teacher and they used their reading books to orally read their assigned parts to their classmates (Houghton Mifflin Reading, 2005, p. 181N). There were no costumes, actions, or creative dramatics strategies employed in this presentation by the students in the Control Group. Students experienced the Readers’ theatre strategy at least once a week and sometimes twice a week; although this strategy was initially designed as a daily activity (refer to Appendix N).

**Summarizing strategy with reflection journals.** An addition to the initial lesson design for the Control Group students was the inclusion of a personal reflection journal, as a part of this study school district adopted language arts curriculum for the summary process for each story. However, writing in their journals was an activity in isolation, meaning that it was simply an activity. The Control Group teacher did not respond to the journals, nor read them. This story summary treatment was referred to as daily I Learned Reflections, initially developed by Ellis (2001b) and adapted in the dissertations of Bond (2003), Evans (2009), Johnson (2004), and Shoop (2006). Important to mention is that the study teacher of the
Control Group did not comment or review the student journal entries. This non-response by the teacher was a replication of the use of I learned statements in Shoop (2006). The I Learned Reflections treatment, (Ellis, 2001b), was initially designed to be reviewed by a teacher, with written comments, as well as with verbal mention by the study teacher as to what the teacher learned by reading the daily reflections of her students. Instead of passing out a piece of paper each day that contained an I Learned template (Bond, 2003; Ellis, 2001b; Evans, 2009), students wrote ‘Today I learned...’ and then wrote their reflection. They also wrote their name and date on each entry page of their personal reflection journal.

The modification of the structure and procedure of the I Learned Reflections process (Ellis, 2001b), and used for the students in the Control Group journal entries follows: (a) individual student journals were passed out to all students by other students selected by the study teacher, as well as passed out by the teacher, to allow for five minutes at the end of each class session to be used for this summary activity. The journals had the student names on the outside for quick passing out, collection, and data input processes; (b) the students wrote and drew their reflections in their journals for two to three minutes; (c) the student journals were collected by other students, as well as the teacher at the end of the language arts block; (d) all student journals were put into a portable rolling cart; (e) the investigator took the student journals out of the classroom each day, immediately following the end of the language arts block; (f) the student journals were returned to the Control Group teacher at the end of the school day after students had been dismissed for the school day, and in preparation for the next school day. The reflection journals were taken out of the CG classroom over each weekend and prior to school vacation days to control for internal and external validity.

The addition of a modification to the I Learned Reflections process to the lesson design was assigned to this study Control Group classroom as an activity to reduce the risk of a John Henry effect by the Control Group teacher (Gall et al., 2007, p. 635), and was not a treatment intervention, but an activity in isolation. The use of I Learned reflection journals was the adaptation of the I Learned pages and treatment (Ellis, 2001b), by this present study investigator. The detail described for the learning activities experienced by the Control Group has been missing data in previous studies, and a recommended addition of previous researchers, as referenced throughout this dissertation, and in Chapter Two; thus, provided for reference concerning this study and possible generalizability and replication.

Pretest, Posttest, and Retention Test Protocols

Importantly, the investigator discussed with the study teachers the need for their students to practice passing from their regularly assigned classrooms to their randomly assigned classrooms prior to the first day of the study, and following the pretest administration. The pretest took place in the regularly assigned classrooms, as did the posttest and the retention test, for student comfort at their regularly assigned desks in their regularly assigned classroom and to ensure the entire period for test taking, if needed. The pretest, posttest, and retention test protocols were strictly monitored and the procedure was similar to a timed state assessment procedure, monitored by the investigator, and strictly followed by the study teachers and student participants. The investigator was on-site to deliver, monitor and observe, and collect the tests before, during, and immediately following the collection of all tests in a study classroom. No tests were given to the teacher ahead of time, nor left with the teacher following the test administration. The initial collaboratively created teacher and researcher criterion-referenced test of the unit of study, (four stories and 31 vocabulary words) and the dependent variable of the study, was modified by the investigator, prior to the study, for design, and with the deletion of the vocabulary words for story five. Whereas, the study teachers did not have access to the final copy of the test that was used for the final dependent variable for the study. Further, the three teachers were instructed to delete any draft copies of the dependent variable, nor did they have access to a copy of the dependent variable other than during the three test administrations. Tests were strictly counted, numbered, and collected. If students were absent, that was recorded, and a blank test for that student remained in the testing envelope and was returned with the completed tests during each test administration. No test results were shared with the teachers or with the students following the three test administrations so as to control for the validity and reliability of the test administrations and protocols. Teachers were also instructed to look at the tests only to see if they had been completed, and not in efforts to score them. Students were encouraged to complete the test, answer all of the questions, and to do their best (refer to Appendix F). The study administrator also provided sharpened pencils for the three test administrations to all three classrooms of students – in efforts to ensure maximum time for test answers, and limit noise and stress from lack of pencils or pencil sharpening.
Parent and Guardian Letters Regarding the Study

A discussion occurred as to the distribution of the parent and guardian letters regarding this study. Although the initial plan was to send these letters home during the parent-teacher conferences, it was decided to send the letters home the day prior to the study commencing (see Appendix J). Additionally, teachers were encouraged to explain to their students that the fourth grade students at the school had been selected to assist the school and school district with an evaluation of the reading language arts adoption. Specifically, the teachers were encouraged to share the parent and guardian letter with their students to allow the students to ask questions and to encourage their students to show the letter to their parents and guardians, as a special project for their grade level. No parent or guardian concerns were voiced prior to, during, or following the study.

Importantly, copies of the randomized class lists and the parent and guardian letter were given to the school principal and to the school secretary, for their reference and use, as well as to answer any parent or guardian concerns that may arise. Further, all aspects, processes, and resources regarding this dissertation study were reviewed, approved, and officially authorized by the study school district administration and the study school principal, prior to being introduced and disseminated to the study teachers and student participants.

Lesson Plans

The initial lesson plans for the Control Group (CG) were collaboratively created by the three study teachers for the five-story unit Theme 2: American Stories: Focus on Plays (Houghton Mifflin Reading, 2005), during their professional development learning community (PLC) time, and in preparation for this study; as well as prior to the study commencing (refer to Appendix M). It was explained to the teachers, by the investigator, to collaboratively create the lesson plans for the five-stories included in the Theme 2: American Stories: Focus on Plays (Houghton Mifflin Reading, 2005), and to include and create a lesson plan that they would hope to accomplish using the district resources, and as a team. The arts education strategies and treatments for each teacher would be added to their collaboratively created initial lesson plan design, which became the Control Group lesson plan for the four week unit of study. Interestingly, the Readers’ theatre strategy was not specified in the initial lesson plans collaboratively created by the teachers, nor were any other creative dramatics, interdisciplinary arts strategies, or arts integration strategies included, referenced, or specified; although these strategies were recommended as optional strategies for use, and detailed in the teacher’s edition of the district adopted language arts curriculum, Theme 2: American Stories: Focus on Plays (Houghton Mifflin Reading, 2005).

In order to ensure that the creative dramatics interventions for this study were conducted properly and consistently over the course of the 20-day study, scripted lesson plans were created for each teacher, by day and by week, for the 17 lessons that would include the creative dramatics treatment interventions, as well as for the three test administrations for the pretest, posttest, and retention test. The outlines of the lesson plans were provided for the three teachers – which included the two treatment groups and one control group (refer to Appendices N, O, P, and Q). The lesson plans were sent to the individual teachers (with a copy to their principal) early on the Monday morning of each week of the study, via email from the investigator.

The lesson plans for each individual study teacher were an enhancement of the initial lesson plan, which was collaboratively created by all three teachers and of which covered this study five-week time frame and vocabulary words of the content (four stories), and which became the lesson plan foundation for the Control Group. As referenced, each study teacher received an individual hard paper copy of the weekly lesson plan for their specific treatment group, from the investigator, as well as an individual email from the investigator with the weekly lesson plan. The email to each individual teacher with these weekly lesson plans was copied to their principal and to the investigator. The three study teachers did not see nor were they to share their individual weekly lesson plans with each other. The lesson plans were designed week by week, providing the details for each experimental treatment, and were scheduled to fit within this study school and district calendar (see Figure 1). Further, each teacher was provided with any resources needed for the lessons, if necessary; with all resources being prepared, supplied, and readied for implementation, by the investigator. Any resources required were presented to the teachers at the start of the specific language arts lesson, and just prior to the lesson beginning.

Further, group emails were sent to all three present study teachers with updates and information that pertained to all three of them, as needed, regarding teacher in-service, school vacations, and test administration instructions and reminders. Emails, if necessary, were brief; thus, allowing for continuous communications and to address any issues with the study teachers. Further, the three study teachers agreed
to follow the specifics of the lesson plans for the control and experimental groups; and, furthermore, would let the investigator know, as soon as possible, regarding any concerns they may have regarding the appropriate delivery of the treatment interventions they were taught and assigned.

Refer to Appendices M, N, O, P, and Q for copies of the initially designed and refined lesson plans (for the Control Teacher), and the treatment lesson plans for each treatment group – Experimental Group I (CDVW) and Experimental Group II (CDSR), as well as a sample of the investigator designed story scene strips used for the story enactments and re-enactments for Experimental Group II. Story scene strips were provided to the Control Group (CG) teacher, for the Reader’s theatre story scene review for week four of the study.

**Teacher daily lesson logs and reflection sheets.** Daily Teacher Daily Lesson Log and Reflection Sheets were provided to the study teachers, with the lesson plans for the week, and personally collected, at the end of each day, by the investigator, regarding teacher feedback. The Teacher Daily Lesson Log and Reflection Sheets were color coded, by week, and the same color as the weekly lesson plan, for coding and referral (refer to Appendix L). If the teachers were not able to give the Teacher Daily Lesson Log and Reflection Sheet to the investigator, due to teacher absence or meeting, the sheets were to be put in the investigator’s staff box prior to the next day’s lesson. If substitutes were employed, due to teacher absence or professional development, the investigator provided a Teacher Daily Lesson Log and Reflection Sheet to the substitute teacher, and requested optional feedback. Each of the six substitute teachers employed in this study voluntarily provided feedback to the study investigator. Although the qualitative feedback from the substitute teachers could not be used in the study, it provided insight to the investigator regarding the study and treatments from an objective viewpoint of a teacher not trained in the treatments. Each of the six substitutes followed the lesson design which included a portion of the study interventions that could easily be taught by a teacher not trained in the strategies. As reported in Chapter Three (see Figure 2), treatment intervention minutes were not counted on days when substitutes were employed.

As referenced, these Teacher Daily Lesson Logs and Reflection Sheets were color coded for each week of the study, and daily reviewed and sorted by the investigator for referral, and as part of the qualitative data collection that reinforced the quantitative data results. These reflections provided daily feedback to the study investigator, with regards to how the treatments were being employed and if they were being employed. The daily teacher reflections provided the study investigator daily accountability, and opportunity to monitor treatment fidelity in all three classrooms on each day of the study. The Teacher Daily Lesson Log and Reflection Sheet was an adaptation of the Daily Lesson Logs (Bond, 2003; Johnson, 2004; Evans, 2009) and were used for teachers to provide written feedback to the investigator (see Appendix L).

It is important to reference that the teachers were referred to as Group One, Group Two, and Group Three, to each other and to their students. All three of the study teachers believed that they were providing creative dramatics interventions, during the course of the study. Again, refer to Appendix T for the documentation of the Teacher Reflection – Self Report on Participation in Study and Treatment, which is a qualitative support document as to how the teachers in this study implemented the study treatments for the three groups.

**Treatment Intervention Terms for Study**

Refer to Appendix B for the terms and definitions used in the study intervention treatments. Additional terms not included in Appendix follow, for clarity, replication, and generalizability of the study treatments.

**Reflection journals.** Individual student journals were passed out and collected each day, during the last five minutes of the language arts block; whereas, students in the Control Group (CG) wrote what they learned in the class period. These journals were collected at the end of the class period, and delivered to the investigator, via a rolling cart. Students assisted in passing out and collecting the journals. Each student in the Control Group had a personalized journal with their name on it. The classroom teacher did not read or respond to the journal entries. This was an activity in isolation, and designed as such as to appear as a treatment for the Control Group and in efforts for the investigator to attempt to control for a John Henry effect with the Control Group teacher and student participants. These journals were delivered back to the classroom teacher at the end of each school day. Additionally, these journals were kept by the investigator at the completion of the study. These journals were an adaptation of the reflection I learned statements of Ellis (2001b, pp. 69-71; Shoop, 2006).

**Summary booklets.** Summary booklets with illustrations of the weekly stories of the study language arts stories were used in the Experimental Group I – CDVW, for summarizing the four stories of
this study, and included four pages, (an 8 ½’ x 11’ page of regular or construction paper folded in half), as an individual booklet for a summary of each of the four stories through narrative and sketch drawings (OSPI, 2011e, p. 199). For the first three stories, the summary booklets had four pages and covered the concepts of beginning, middle, and ending, for the summary focus: (1) cover page; (2) beginning of the story page; (3) middle of the story page; and (4) ending of the story page. For the fourth story, the summary booklets had four pages; whereas students were asked to write and draw a story summary that would show the who, what, where, when, why, and how of the story. The pages of the story were divided in half for two concept drawings per page: (1) cover page; (2) who and what on a page; (3) where and when on a page; and (4) why and how on a page (Chappell & Cahnmann-Taylor, 2013; Edwards, 1979; Moore & Caldwell, 1993).

Treatment Interventions and Teacher Training – Moving from Theory into Practice

The 15-20 minutes of collaborative teacher training, as well as the 30 minutes of individualized teacher training were designed to move this study from theory into practice. The investigator utilized the pedagogies of teaching and learning from the philosophers, theorists, and methodologies – from Plato to the present – into methods of educational practices that could be easily replicated and measured. The methodologies are further defined, and the methods were adapted from those methodologies, and designed for both of the creative dramatics treatment groups, and for the control group. The Washington State Arts Learning Standards (OSPI, 2011a; OSPI, 2011b; OSPI, 2011c; OSPI, 2011d; OSPI, 2011e), the Washington State Reading and Language Arts Standards (OSPI, 2004), and the Common Core State Standards (NGA_CBP & CCSSO, 2010), provided the definitions and foundation for clarification of what needed to be taught in conjunction with the study district and school language arts adoption (Houghton Mifflin Reading, 2005); and included state and national expectations and connections, including the evidence of 21st Century Skills (Partnership for 21st Century Skills, 2004).

Consequently, the study treatments were intentionally designed to assist students in meeting and exceeding expected language arts and vocabulary outcomes, through the use of interdisciplinary strategies involving creative dramatics constructs as a “process” for increasing vocabulary achievement through sustained creative dramatics engagement over 17 days of continuous treatment interventions. All of the treatment methods used in this present study were created, adapted, and employed, from a strong research base and literature review that has been presented throughout this investigation.
Appendix D

Random Assignment Agenda

October 27, 2011 – 1:40 p.m. to 2:40 p.m.
Research Study for AnnRené Joseph
November 1, 2011 through December 1, 2011

Gentle Reminder: All aspects of the study are confidential. Thank you for being a part of my dream being realized. As of this morning, all aspects of the study have been approved by the school district, Seattle Pacific University (SPU), and the Institutional Review Board (IRB). These are all significant steps to conducting a research study in a public school setting, and all are approved.

Welcome and Greetings – 1:40 p.m. Study School Site. Meeting room. Conference week.

1. Revised Schedule: November 1, 2011 through December 1, 2011 and January 3, 2012 for Retention Test
   - Study will last for 20 school days, and one day will be for the pre-test, and one day will be for the post-test. Researcher will be on site and in classrooms each day, and after school for questions.
   - Dependent variable: teacher-researcher developed criterion-referenced 31-question vocab. test
     i. Pre-Test – November 1, 2011
     ii. Post-Test – December 1, 2011
     iii. Retention Test – January 3, 2012

       1. Note: All three test administrations will be given in the “home” classroom for student comfort, treatment fidelity and for reporting purposes.
   - Brief review of how study interventions will be integrated with language arts unit
   - Teacher Intervention Training from 4:00 p.m. – 5:45 p.m., October 27, 2011
   - Finalize, revise, and agree to study schedule
   - Parent and Guardian Letters: Coordination on this piece and questions

2. Revised Lesson Plans indicating new schedule. Study will cover four stories in the language arts unit.

3. Clarifying questions from researcher to teachers regarding draft lesson plans.
4. Random assignment of students and teachers. Teachers will participate in this. Random Assignment process will be explained by AnnRené in the meeting. District observer will assist and monitor this process.
• Once the classes are configured, teachers will review for any issues. If there are multiple issues, we will need to redraw the names.

• Teachers will receive a copy of the randomly assigned classroom lists to keep confidential for next week. Teachers will use this list to practice going from home classrooms to randomly assigned study classroom with students. Researcher will be the hall monitor during student passing times to and from classrooms on all study days.

• Questions?

5. AnnRené will add the arts treatment to the lesson plans, following intervention trainings on 10-27-11.

6. Revised lesson plans with treatment interventions will be given to teachers for the first week of the study, just before the first language arts class begins. Will also send the lesson plans via email to each teacher, with a copy to your principal, on the first day of each week. All aspects are confidential. Any questions?

7. Teacher training in study intervention treatments will follow: 4:00 p.m.-4:15 p.m. group training and questions. Individual teacher training: 4:15-4:40; 4:45-5:10; 5:15-5:40 p.m., today. Teachers will schedule for a 30 time that corresponds with their conference schedule breaks, following the group training and prior to 6:00 p.m. All study details will be accomplished on one afternoon, with one hour for random assignment process; 15 minutes for group training; and 30 minutes for individual training. This schedule complies with contractual guidelines.

8. Thank you for your participation. Here’s to a successful study!
Appendix E

Random Assignment Process

**Five-step randomization process.** The present study investigator created the following five-step randomization process for this study: *The Effects of Creative Dramatics on the Vocabulary Achievement of Fourth Grade Students in a Language Arts Classroom: An Empirical Study* by AnnRené Joseph.

**Step one- creation of regularly assigned classroom bags.** Each classroom teacher received an alphabetical list of their current classroom students. The three classroom lists were created by the fourth grade teachers, and reviewed and approved by the school secretary prior to the randomization process commencing. A copy of the student list of each assigned classroom was given to the investigator for copying and use for this study random assignment process. These classroom lists were alphabetized by student last name, and included each student’s first name followed by each student’s last name and in alphabetical order, so that each name was on an individual line. First, each teacher was given their own individual student class list. Next, each teacher was instructed to cut up their individual student class list so that each student name became a separate name strip. Following, each teacher received an opaque paper bag and was asked to write their name (teacher name) on the bag. Next, each teacher was instructed to fold each student name strip so that the student name could not be seen, and to put all of their current classroom student name strips into the opaque paper bag that was labeled with the specific teacher’s name.

**Step two-investigator instructions to the teachers for a successful randomization process.** Each teacher was instructed, by the investigator, as to how the process of randomization would occur. First, each teacher was instructed as to how to put the name strips of each of their students into a second set of three different opaque paper bags, labeled with the numbers one, two, or three to represent the three randomly created experimental classrooms for this study. This second set of opaque paper bags were different types and colors from the first set of opaque paper bags marked with the teacher names, so as to eliminate any possibility of confusion during the transfer of names from the teacher names opaque paper bags to the randomly assigned experimental group opaque paper bags, labeled one, two, and three.

**Step three-creation of randomly assigned student classrooms.** Each present study teacher, without looking at the student names, selected one folded student name strip at a time, and proceeded to put that student name strip into each of the bags marked one, two, and three, respectively, and without unfolding or looking at the student name strip. This randomization process occurred systematically, with each teacher taking out a student name strip from their bag, and putting that same student name strip into each of the three experimental classroom bags (i.e. one teacher would put one student name strip into the bag labeled one, then put one student name strip into the bag labeled two, then put one student name strip into the bag labeled three). This process was followed by the second teacher, who would do the same with her student name strips. And, this process was followed by the third teacher, who would do the same). These study teachers determined who would go first in this randomization process by agreeing among themselves to start the process from left to right, and in the order the teachers were sitting. Each teacher followed and repeated this process, one at a time, until all of the student names in each of their teacher name classroom bags were put into the new bags labeled for the experimental groups one, two, and three. The investigator directed and monitored this process by calling each teacher by name, one at a time, to put their regularly assigned classroom student names into the randomly assigned classroom bags marked one, two, and three, and by further recording the process on a large white board. The study independent district observer watched the process to ensure that this randomization step was followed with precision.
Step four-random assignment of teachers and assignment of corresponding randomly assigned student classroom bags. The investigator had three wooden sticks; each marked with number one, two, or three on the bottom of the stick, and held in the investigator’s hand, so that the numbers were not visible to the teachers. Each of the three study teachers would be asked to select one wooden stick from the investigator. The investigator gave the independent observer a piece of paper with a number on it and the three teachers were asked to guess the number on the piece of paper. The teacher who guessed the number closest to the number on the paper being held by the independent district observer selected the first stick, and selected the bag of student names that matched the number on her stick. Next, the investigator gave the independent observer another number and the two remaining teachers were asked to guess the number. The teacher who guessed the number closest to the number on the paper being held by the district observer selected the second stick, and selected the bag of student names that matched the number on her stick. The teacher remaining selected the third stick, and selected the bag of student names that matched the number on her stick. The teachers were not aware of what their classroom group numbers stood for at this time, other than the numbers were indicative of which bag of student names they would have as students, and their randomized classrooms would be referred to as Group One, Group Two, and Group Three, with each other, with their students, and with the school administration, as well as with the investigator.

The teachers were aware of and reminded by the investigator that the treatment strategies for their specific group would be taught to them by the investigator during the following hour scheduled for teacher training for the study treatments. The teachers were not aware of what treatment intervention they would be assigned. The district observer was told that the numbers would correspond with the Experimental Group I, Experimental Group II, and Experimental Group III. The privy information as to what treatment intervention each classroom group would receive was only shared with the school principal, so as to keep the treatment fidelity of the study. (Importantly, Group One represented (Experimental Group I – Creative Dramatics and Vocabulary Words [CDVW]), Group Two represented (Experimental Group II – Creative Dramatics and Story Retelling [CDSR]), and Group Three represented the (Control Group [CG]).

Step five-alphabetizing student names for the randomly assigned classrooms. Each study teacher sorted the student names from the bag they selected into alphabetical order and pasted them onto a legal size sheet of paper. The teachers, if necessary, clarified with one another, whether the student was male or female. Additionally, each teacher counted how many males and females were in each randomized classroom and indicated these numbers at the bottom of their list by gender. It is important to note that the investigator-designed random assignment process resulted in an equal number of males and females being randomly assigned to each experimental group. Consequently, the teachers voiced their trust of the randomization process to the investigator, and to the independent district office observer.

Approval of randomized classroom lists by school administration. Following the successful five-step randomization process, the randomized class lists were given to the investigator, who, in turn, gave the lists to the school secretary and principal, for their final review regarding student exceptionality, individualized educational plans (IEPs), or 504 Plans. These specific student identifiers were of confidential nature and not privy information to the investigator. The three randomized class lists were approved without any changes, and then copied by the school secretary for the three study teachers (each teacher received a copy of all three randomly assigned classroom lists so that they were aware of which classroom their students would be going to during the study). An additional set of the three randomized class lists was made for the school secretary and principal, and one set was made for the study investigator. The strict controls for the copying and dissemination of the class lists were also a part of the treatment fidelity and the representative design process (Gall et al., 2007; Snow, 1974). Refer to Appendices D and E for the investigator created Random Assignment Agenda and Random Assignment Process.
Appendix F

Dependent Variable 31-Question Vocabulary Test

Teacher-Researcher Developed Criterion-Referenced 31-Question Vocabulary Test.

The dependent variable (DV) 31-question vocabulary test was a teacher-researcher developed criterion-referenced test, developed from the district adopted language arts curriculum. The specific unit of study (four stories) came from Theme2: American Stories: Focus on Plays (Houghton Mifflin Reading, 2005). The five-page teacher-researcher developed criterion-referenced test dependent variable follows. The original DV was created with one inch margins; therefore, some alignment in the formatting may be slightly altered for this publication.
Please write your first and last name and your teacher’s name. Please read the
directions very carefully and do your best work. Please write clearly.

Name:

Teacher:

Date: November 1, 2011

I. Vocabulary from the story *Tomás and the Library Lady*

Instructions: Please match the correct vocabulary word to the appropriate definition. Write the letter you select on the line.

1. Borrow_______  
   a. a person who tells stories

2. Check out _____  
   b. to get temporary use of

3. Eager_________  
   c. to lick or slurp

4. Glaring________  
   d. excited, enthusiastic

5. Lap__________  
   e. looking at angrily

6. Storyteller______  
   f. to withdraw an item, as a book in a library
II. Vocabulary from the story *Tanya’s Reunion*

Instructions: Please choose the correct definition for each word. Circle the letter you select for each answer.

1. arrangements  
   a. the ocean current  
   b. plans made before-hand or preparations  
   c. the picture frame of an expensive painting

2. gatherings  
   a. a coming together of people  
   b. one bird eating  
   c. tools used to clean a house

3. great-uncle  
   a. a stranger or non-relative  
   b. your dad’s father  
   c. a grandparent’s brother

4. homestead  
   a. a house with land and buildings belonging to it  
   b. a large building  
   c. a place where a businessman would work

5. persisted  
   a. give up really easy  
   b. lost something important  
   c. continued repeatedly

6. pitches in  
   a. complains everyday  
   b. helps others get a job done  
   c. does everything on their own

7. reunion  
   a. meeting of group members who have been apart  
   b. going to sleep early  
   c. being late to school

8. satisfaction  
   a. not pleased  
   b. very cold weather  
   c. contentment or happiness
### Vocabulary from the story *Boss of the Plains*

Instructions: Please match the vocabulary word with the correct definition. Write the letter you select next to the number.

| 1. _________ adventurers | a. people who are the first to settle in a region |
| 2. _________ determined | b. cowboys |
| 3. _________ frontier | c. travelers in search of unusual or exciting experiences |
| 4. _________ gear | d. equipment |
| 5. _________ opportunity | e. people who travel to a little-known area and make a home |
| 6. _________ pioneers | f. changed animal hide to leather by soaking it in chemicals |
| 7. _________ settlers | g. unexplored land |
| 8. _________ tanned | h. a good chance |
| 9. _________ wranglers | i. sticking to a purpose |
IV. Vocabulary from the story *A Very Important Day*

Instructions: Choose the best answer that can take place of the underlined word or phrase in each sentence. Circle the letter of the answer that you choose.

1. My uncle from Peru applied for United States citizenship last year, and I helped him learn “The Pledge of Allegiance.”
   a. marriage                            c. law
   b. loyalty                             d. employment

2. I personally learned that the citizens of this country have many basic rights.
   a. offspring                            c. members
   b. suburbs                            d. laws

3. When we arrived at the courthouse, we saw petitioners standing outside with signs.
   a. people asking for something in writing          c. people dressed up in costumes
   b. people who make laws      d. people singing songs

4. First, my uncle had to talk to an examiner.
   a. someone checking for safety                c. someone testing for knowledge
   b. someone reading a passage     d. someone checking for good health

5. My family watched as my uncle said the oath and became an American.
   a. poem                 c. word
   b. prayer                 d. pledge or promise

6. The judge shook my uncle’s hand and went back to his chamber, in the courthouse, to meet with lawyers.
   a. office                          c. automobile
   b. material                          d. home
7. Sharing important events with your relatives and friends can **enrich** your life.
   
   a. spoil 
   b. improve 
   c. cost 
   d. save 

8. We are very proud of my uncle for getting his United States **citizenship**.
   
   a. birth certificate and driver’s license 
   b. rights, duties, and privileges 
   c. trophy and plaque 
   d. own American flag 

The end. Please check to make sure that you have done your best work. Please put your name on your paper. Turn your paper into your teacher. Thank you.
Appendix G

Request to Conduct Research in a School District

Note to the reader: Due to the confidentiality agreements regarding the school district and research school site location and teachers, any reference to the district or school has been concealed from the request and approval documents, and only letters of application and documents of approval have been included. The original request to conduct research application packet included the dissertation proposal, and multiple district forms. The application submission followed a meeting of the investigator with a team of district administration. This meeting was followed by a meeting with the study school site principal and fourth grade staff. These meetings were necessary for agreements regarding the study parameters, agreements, and details.
Appendix G
Request to Conduct Research in a School District Approval Letter

October 11, 2011
AnnRené Joseph
15324 182nd Place, N.E.
Woodinville, WA 98072-9376

District Representative
Assistant Superintendent, Curriculum and Instruction
School District
School District Address

To whom it may concern:

Please accept my application to conduct research in your school district. I am a doctoral student at Seattle Pacific University and will be completing my dissertation research during the school year 2011-2012. As you know, it is my desire to conduct this research study at the fourth grade level in an elementary school in your school district.

Your efforts have been instrumental in assisting me in securing an elementary school in your school district for this research study. The research study schedule is set for November 1, 2011 through December 9, 2011. A retention posttest will also be given on or around January 6, 2012. All aspects of the study schedule have been discussed with the principal of the selected elementary school.

It is important to me for this research to serve the school district where it is conducted. With this goal in mind, and with your assistance as to how this could occur, I have designed a study that is built around a pilot utilizing your school district’s Houghton Mifflin Reading and Language Arts Adoption and instruction schedule. The focus of my study will be on the effect of creative dramatics on the student vocabulary achievement in Theme Two of this adoption series.

Enclosed with this letter are responses to the Application to Conduct Research or Experimental Studies in your school district. For your reference, I have also included a copy of my dissertation mini-proposal outline, which was shared and left with you at our initial meeting regarding this project, on July 12, 2011. The proposal includes a description of the problem statement for the research, the research design and methods, a timeline of the project development and completion, and a portion of the references being used to support the theory and practices that will be used in the study.

I look forward to your reply and official approval of this research proposal and study. If you have any questions, please feel free to contact me. Thank you for this opportunity.

Sincerely yours,
AnnRené Joseph

(Note: The Request to Conduct Research in a School District Approval Letter was rewritten for inclusion in the dissertation with deletions to any reference to the school district or staff per confidentiality agreements).
Approval of Supervisor or Study Advisor (if appropriate):
I have reviewed this research request, the description of the research study, and the attached instruments, and give my approval to this study.

Name
Arthur K. Ellis, Ed.D.

Position/Department
Director of the Center for Global Curriculum Studies; Professor of Education
laellis@spu.edu
206-281-2362 - Phone

Seattle Pacific University
School/Institution

Arthur K. Ellis / October 13, 2011
Signature/Date

Approval of School District:
I have reviewed this research request, the description of the research study, and the attached instruments, and give my approval to this study.

✓ Approved
✓ Not approved, reason:

Superintendent or Designee / Date
10/4/11
Appendix H

Seattle Pacific University Institutional Review Board (I.R.B.) Request and Approval

Note to the reader: Due to the confidentiality agreements regarding the school district and research school site location and teachers, any reference to the district or school has been concealed from the request and approval documents. Therefore, only letters of application and documents of approval have been included in this appendix. Additionally, these documents are not electronic; therefore, margins are original.
October 26, 2011

Dear Ms. Joseph:

Re: IRB Approval

Your research project “The effects of the Use of Creative Dramatics to Strengthen Vocabulary Development of 4th Grade Students in a Language Arts Classroom” has been approved under exempt IRB review. Your study has been assigned number 111206004. This study number must appear on any participant recruitment material and your informed consent document.

Federal guidelines for “exempt” research no longer require an annual IRB renewal. This means that your data collection timeline is now open-ended without a requirement to extend the approval. Please contact me when you have completed collecting data for your study so that I can close your file.

If there are any changes in the protocol, and/or participant recruitment strategies you are required to submit a memo to me outlining the proposed changes. Use the study number 111206004 in any further communication regarding this study.

Please feel free to contact me if you have any further questions.

Best wishes on your project.

John B. Bond, Ed.D.

Associate Professor of Educational Leadership

C: Dr. Arthur Ellis
SEATTLE PACIFIC UNIVERSITY
IRB APPLICATION FOR HUMAN SUBJECTS REVIEW

Title of project: The Effects of the Use of Creative Dramatics to Strengthen Vocabulary Development of 4th Grade Students in a Language Arts Classroom
Expected Start Date for Data Collection: November 1, 2011
Expected End Date for Data Collection: December 9, 2011

Name of Principal Investigator: AnnRené Joseph
Phone #: 206-819-8216 (Cell) e-mail annrenejoseph@comcast.net (personal)
Name of Co-Investigator(s): Arthur K. Ellis
Phone #: 206.281.2362 e-mail aellis@spu.edu

Faculty Sponsor Name: Arthur K. Ellis
Research Coordinator: 

Date: Submitted 10-12-11
Date received: 

Directions: Submit two typed hard copies of the IRB application and research protocol / other material that will be given to participants to your Research Coordinator. It is estimated that the initial review process or any review of revisions will be completed within two weeks. Research that has more than minimal risk or includes vulnerable participants may be passed on to be reviewed by the entire Institutional Review Board (IRB) or a subset of members. If your study is passed on for further review, you will be notified. Please expect additional delays for expedited or full IRB review. The IRB meets once each month between October and May so plan accordingly.

---

1 The IRB generally approves studies for only one year duration unless the PI notes that the study is longitudinal and requires multiple years for completion. If your study is not longitudinal and you expect data collection to be less than one year but wish to continue collecting data beyond one year you must contact your IRB representative six weeks before the expiration date of your IRB application to petition for an extension of your study. If your study is approved from more than one year, you must provide a report regarding the progress of your study
2 List SPU e-mails if SPU community member
3 List all participating researchers. If PI is a student, the faculty / staff sponsor must be listed as a Co-investigator.
List either e-mail or phone number for co-investigators
IRB application 09/09
<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
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</thead>
<tbody>
<tr>
<td>July 12, 2011</td>
<td>Research Study Mini-Proposal Presentation to Study School District</td>
<td>School District Central Office Administration – Assistant Superintendent of Elementary Schools and Curriculum and Instruction and Director of Arts and Curriculum Integration, Present Study Investigator</td>
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<tr>
<td>September 20, 2011</td>
<td>Acceptance by Elementary School</td>
<td>Elementary School Principal, Present Study Investigator</td>
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<td>September 28, 2011</td>
<td>Meet with Fourth Grade Teachers During the school day during PLC time.</td>
<td>Elementary School Principal, Present Study Investigator</td>
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<td>October 12, 2011</td>
<td>Submission of Institutional Review Board (IRB) Proposal to Seattle Pacific University Education Faculty Advisor</td>
<td>Present Study Investigator, Seattle Pacific University Education Faculty Advisor</td>
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<td>October 13, 2011</td>
<td>Submission of School District Application to Conduct Research</td>
<td>Present Study District Assistant Superintendent of Curriculum and Instruction and Present Study Investigator</td>
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<td>October 14, 2011</td>
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<td>Present Study District Assistant Superintendent of Curriculum and Instruction and Present Study Investigator</td>
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<td>October 14-17, 2011</td>
<td>Creation and Approval of Principal Letter to Fourth Grade Parents/Guardians for Student Participation in Research Study</td>
<td>Present Study Investigator, Seattle Pacific University Education Faculty Advisor</td>
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<td>October 19, 2011</td>
<td>Draft Vocabulary Test and Lesson Plans Received</td>
<td>Fourth Grade Teachers</td>
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<td>October 21, 2011</td>
<td>Revised Vocabulary Test</td>
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<td>October 31, 2011</td>
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<td>November 2 – November 30, 2011</td>
<td>17 days of creative dramatics study treatments</td>
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<td>December 1, 2011</td>
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<td>January 3, 2012</td>
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<td>January 3, 2012</td>
<td>End of Study Paperwork; Clock Hours; Confidentiality Statements</td>
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Appendix J

Parent and Guardian Notification Letter for Student Participants

October ___, 2011

Dear Parents and Guardians of Fourth Graders:

An ongoing part of maintaining the high standards of the _____ School District is the regular review and study of district curriculum. Occasionally, schools are asked to participate in pilot studies of existing curriculum. _________Elementary and our fourth grade teachers and students have been asked to participate in such a study beginning November 1, 2011. The study will take a closer look at an already adopted Language Arts curriculum by Houghton Mifflin,

The Houghton Mifflin Reading Language Arts curriculum is highly regarded, as it integrates and makes connections to other basic education subjects, through the stories and lessons of each of the six themes throughout the school year. The American Stories theme, on which the study will be conducted, includes learning connections to the arts, math, science, and social studies.

The fourth graders will be mixed into three instructional groups for daily lessons of 45 minutes each afternoon. All of the 4th grade teachers will be participating. The American Stories theme and pilot study for this unit will be November 1, 2011 through December 9, 2011.

We, at _________, are striving to improve an already strong Language Arts Program, with a specific focus on improving student vocabulary. We are hoping to provide our teachers, and our curriculum and instructional leaders with valuable insights regarding how this curriculum compares with other parts of our Language Arts Program. This pilot study will provide us with strategies that will enhance the excellent instructional practices that teachers are already using. We hope to make the curriculum even more meaningful and transferable to students through what we will learn by our participation in this pilot study.

We want to assure you that all the students will benefit from this exciting experience while providing teachers, administrators, and curriculum and instructional leaders with valuable information about the Houghton Mifflin Reading and Language Arts curriculum.

If you have any questions or would like additional information, please feel invited to contact me at ______________________.

Sincerely,

____________________________
Principal
Appendix K

Reliability Analyses of Dependent Variable Instrument
Correlation. The commonly accepted minimally acceptable level is .70. Cronbach's Alpha is a well-known statistic of internal consistency reliability. It can be interpreted as a correlation coefficient - in particular, the average inter-item correlation consistency reliability is the idea that the items that make up a test or scale are working together to sort examinees into a consistent rank order.

<table>
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Cronbach's Alpha statistics

Analysis or Posttest Reliability
Ann Reene Joseph Dissertation
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</table>

Analysis of Posttest Reliability
Amrane Joseph Dissertation

360
Items would increase the alpha coefficient and thus the reliability of this scale. The second statistic is the alpha if item removed. The removal of two correlations which suggests that they should be removed (or omitted from the analysis). The item correlation is the item-total correlation. Several items have negative item-total correlations, a negative correlation is evidence of the item being unimportant. Several items have negative item-total correlations. A positive correlation means that the item is negatively scored, and the item is removed by default. The item-total correlation is the correlation between score on the item and the total test score. A positive correlation means that students who score high on the test are also getting the item correct. A negative correlation is evidence of the item being unimportant. Several items have negative item-total correlations. A positive correlation means that the item is negatively scored, and the item is removed by default.

<table>
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<tr>
<th>Item</th>
<th>Item Correlation</th>
<th>Item Deleted</th>
<th>Total Correlation</th>
<th>Item Deleted</th>
<th>Scale Mean</th>
<th>Scale Variance</th>
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This table offers two useful statistics: the item-total correlation and the alpha level of the scale if the item were to be removed. The item-total correlation is the correlation between score on the item and the total test score. A positive correlation means that students who score high on the test are also getting the item correct. A negative correlation is evidence of the item being unimportant. Several items have negative item-total correlations. A positive correlation means that the item is negatively scored, and the item is removed by default.
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Analysis of Posttest Reliability

Annette Joseph Dissertation
### Analysis of Posttest Reliability

**Ann Renee Joseph Dissertation**

<table>
<thead>
<tr>
<th>Scale Statistics</th>
<th>N of Items</th>
<th>V. of Items</th>
<th>S.D. of Items</th>
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<td>Part 2</td>
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<tr>
<td>Part 1</td>
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The items are: A16, A17, A18, A19, A20, A21, A22, A23, A24, A25, A26.
The Spearman-Brown coefficient, a type of reliability statistic, is used to estimate the reliability of a test when only a portion of the test is available. The formula for the Spearman-Brown coefficient is given by:

\[ \text{Spearman-Brown coefficient} = \frac{N \times \text{Correlation Between Forms}}{N + \text{Total N of Items}} \]

where:
- \( N \) is the number of items
- \( \text{Correlation Between Forms} \) is the correlation coefficient between two sets of scores
- \( \text{Total N of Items} \) is the total number of items

The Cattell-Spilhal-Reed coefficient is another reliability statistic that is used to estimate the reliability of a test. The formula for the Cattell-Spilhal-Reed coefficient is given by:

\[ \text{Cattell-Spilhal-Reed coefficient} = \frac{\text{Unreliability of the Used Part}}{\text{Unreliability of the Total Test}} \]

where:
- \( \text{Unreliability of the Used Part} \) is the unreliability of the used part of the test
- \( \text{Unreliability of the Total Test} \) is the unreliability of the total test

The values for these coefficients are as follows:

<table>
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<th>Coefficient</th>
<th>Value</th>
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<tr>
<td>Spearman-Brown</td>
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</table>

The table above shows the values for the Cattell-Spilhal-Reed and Spearman-Brown coefficients for a test with 30 items, where the unreliability of the used part is 0.16 and the unreliability of the total test is 0.30.
Retention test reliability

Reliability Statistics

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<th>Cronbach’s Alpha</th>
<th>N of Items</th>
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<tbody>
<tr>
<td>.774</td>
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</table>

The commonly accepted minimum threshold for Cronbach’s alpha is 0.70 (DeVellis, 2003; Nunnally and Bernstein, 1994). This value of 0.774 is evidence of good reliability of the results from this particular assessment.

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<tr>
<td>Spearman-Brown Coefficient</td>
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<td>Guttman Split-Half Coefficient</td>
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^a The items are: Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12, Q13, Q14, Q15, Q16.

^b The items are: Q16, Q17, Q18, Q19, Q20, Q21, Q22, Q23, Q24, Q25, Q26, Q27, Q28, Q29, Q30, Q31.

These statistics of 0.635 to 0.777 offer evidence of acceptable reliability for the results of this assessment.
### Item-Total Statistics

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<th>Scale Variance if Item Deleted</th>
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### Case Processing Summary

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<sup>a</sup> Listwise deletion based on all variables in the procedure.
### Teacher Daily Lesson Log and Reflection Sheet

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<th>Group Two</th>
<th>Group Three</th>
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</thead>
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<td><strong>Attendance</strong>&lt;br&gt;List any students absent for more than 15 minutes of the class period.</td>
<td>Names of students who are absent for the entire period.</td>
<td></td>
</tr>
<tr>
<td><strong>Lesson Description</strong>&lt;br&gt;(Objectives and/or sequence of events and/or main focus for the day)</td>
<td>What happened?</td>
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<td><strong>Duration of Lesson</strong>&lt;br&gt;Lesson began at: ________________<strong>&lt;br&gt;Lesson ended at:</strong>_________________&lt;br&gt;Any interruptions? If so, what?</td>
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<tr>
<td><strong>Study Treatment</strong>&lt;br&gt;Total minutes of study treatment intervention strategies:</td>
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<td><strong>Notes or Insights for Today</strong>&lt;br&gt;1. What went well?&lt;br&gt;2. What did not go well?&lt;br&gt;3. Interruptions?</td>
<td>Comments</td>
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<td><strong>Additional comments and/or questions from today:</strong></td>
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What was the overall student participation of the class on this particular lesson?<br>1 2 3 4 5<br>Low Medium High

Teacher signature/initial

Document was adapted and redesigned for the present study from a form created by Bond (2003, p. 123).

## Appendix M
### Initial Lesson Plan from November 1, 2011 – December 1, 2011

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<td>Story: Tomas and the Library Lady</td>
<td>Pre-Vocab. Test</td>
<td>Review Vocabulary</td>
<td>Buddy reading</td>
<td>Spelling Test</td>
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<tr>
<td>Comprehension Skill: Sequence of Events</td>
<td>New Spelling Words</td>
<td>Buddy read story/selection</td>
<td>worksheet. (Comprehension, vocabulary, strategies, grammar)</td>
<td>Story/Selection Test</td>
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<td>Write sentences Share.</td>
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<td>Story: Tanya’s Reunion</td>
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<td>Comprehension Skill: Making Inferences</td>
<td>Listen to Story</td>
<td>Buddy read story/selection</td>
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<td>Comprehension Strategy: Evaluate</td>
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<td>Buddy Reading Worksheet</td>
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<td>Practice Book Page</td>
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<td>Nov. 14</td>
<td>Review Vocabulary. Buddy read story/selection SPARKLE with spelling words if time</td>
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<td>Nov. 16</td>
<td>Buddy reading worksheet. (Comprehension, vocabulary, strategies, grammar) Review together.</td>
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<td>Nov. 18</td>
<td>Spelling Test Story/Selection Test</td>
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**Focus on school wide comprehension strategy: Summarizing**

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<th>Date</th>
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<tr>
<td>Nov. 21</td>
<td>Read.Listen to Story Discuss Summarizing and Story Structure (Start filling out Graphic Organizer)</td>
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<td>Nov. 22</td>
<td>Finish Graphic Organizer and use to write summary.</td>
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<td>Nov. 23</td>
<td>Summarize story independently. (leveled reader, monitoring progress story, or “focus on” story)</td>
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<td>NO SCHOOL</td>
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<td>Nov. 25</td>
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<td><strong>Story:</strong> A Very Important Day</td>
<td><strong>New Spelling Words</strong></td>
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<td><strong>Comprehension Skill:</strong> Categorize and Classify</td>
<td><strong>Story Vocab.</strong></td>
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<td><strong>Comprehension Strategy:</strong> Question</td>
<td><strong>Define</strong></td>
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<td><strong>Write sentences</strong></td>
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**Retention Test**
## Appendix N
Revised Lesson Plan for Control Group (CG): Readers’ Theatre and Reflection Notebooks

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<td>Pre-Vocab. Test</td>
<td>5 Minutes Silent Reading</td>
<td>5 Minutes Silent Reading</td>
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<td>Comprehension Skill: Sequence of Events</td>
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<td>Write sentences Share.</td>
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<td><strong>Story:</strong> Tanya’s Reunion</td>
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<td>5 Minutes Silent Reading</td>
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<td>Readers’ Theatre Story #2: 5-10 minutes</td>
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| Nov. 14  | 5 Minutes Silent Reading Bravo X Strategy  
New Spelling Words  
Story Vocab.  
Define Write sentences Share.  
5 Minutes “I Learned” Journal |
| Nov. 15  | 5 Minutes Silent Reading Bravo X Strategy  
Review Vocabulary  
Listen to Story (Pause for strategies)  
Practice Book Page  
5 Minutes “I Learned” Journal |
| Nov. 16  | 5 Minutes Silent Reading Bravo X Strategy  
Review Vocabulary  
Buddy read story/selection  
SPARKLE with spelling words if time  
Readers’ Theatre Story #3: 5-10 minutes  
5 Minutes “I Learned” Journal |
| Nov. 17  | 5 Minutes Silent Reading Bravo X Strategy  
Buddy reading worksheet. (Comprehension, vocabulary, strategies, grammar)  
Review together.  
Readers’ Theatre Story #3: 5-10 minutes  
5 Minutes “I Learned” Journal |
| Nov. 18  | 5 Minutes Silent Reading Bravo X Strategy  
Spelling Test  
Story/Selection Test  
5 Minutes “I Learned” Journal |
| Nov. 21  | Focus on school wide comprehension strategy: Summarizing  
Read/Listen to Story  
Discuss Summarizing and Story Structure (Start filling out Graphic Organizer)  
Readers’ Theatre Story #1: 5-10 minutes  
5 Minutes “I Learned” Journal |
| Nov. 22  | 5 Minutes Silent Reading Bravo X Strategy  
Finish Graphic Organizer and use to write summary.  
Readers’ Theatre Story #2: 5-10 minutes  
5 Minutes “I Learned” Journal |
| Nov. 23  | 5 Minutes Silent Reading Bravo X Strategy  
Summarize story independently. (leveled reader, monitoring progress story, or “focus on” story)  
Readers’ Theatre Story #3: 5-10 minutes  
5 Minutes “I Learned” Journal |
| Nov. 24  | NO SCHOOL  
5 Minutes “I Learned” Journal |
| Nov. 25  | NO SCHOOL  
5 Minutes “I Learned” Journal |
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<th>Date</th>
<th>5 Minutes Silent Reading Bravo X Strategy</th>
<th>5 Minutes Silent Reading Bravo X Strategy</th>
<th>5 Minutes Silent Reading Bravo X Strategy</th>
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<td>Write sentences Share.</td>
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<td>Readers’ Theatre Story #4:</td>
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<td>5-10 minutes</td>
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## Appendix O
Revised Lesson Plan for Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW)

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<td><strong>Story:</strong> Tomas and the Library Lady</td>
<td>Pre-Vocab. Test</td>
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<td>Warm Up: 10-20 Minutes</td>
<td>Warm Up: 10-20 Minutes</td>
<td>Warm Up: 10-20 Minutes</td>
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<td><strong>Comprehension Skill:</strong> Sequence of Events Comprehension</td>
<td>New Spelling Words</td>
<td>10-20 Minutes</td>
<td>Acting Out and Singing</td>
<td>Acting Out and Singing</td>
<td>Acting Out and Singing</td>
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<td><strong>Strategy:</strong> Predict/Infer</td>
<td>Story Vocab. Define</td>
<td>Vocabulary Words and Definitions</td>
<td>Vocabulary Words and Definitions</td>
<td>Vocabulary Words and Definitions</td>
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<td><strong>Story:</strong> Tanya’s Reunion</td>
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<td>Warm Up: 10-20 Minutes</td>
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<td>Acting Out and Singing</td>
<td>Acting Out and Singing</td>
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<td><strong>Strategy:</strong> Evaluate</td>
<td>Vocabulary Words and Definitions</td>
<td>Vocabulary Words and Definitions</td>
<td>Vocabulary Words and Definitions</td>
<td>Vocabulary Words and Definitions</td>
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<td>Bravo X Strategy</td>
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<td>New Spelling Words</td>
<td>Review Vocabulary</td>
<td>Review Vocabulary</td>
<td>Spelling Test</td>
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<tr>
<td></td>
<td>Story Vocab. Define</td>
<td>Listen to Story (Pause for strategies)</td>
<td>Buddy read story/selection</td>
<td>Story/Selection Test</td>
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<td></td>
<td>Write sentences Share.</td>
<td>Practice Book Page</td>
<td>Buddy Reading Worksheet</td>
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| Nov. 14    | **Warm Up:** 10-20 Minutes Acting Out and Singing Vocabulary Words and Definitions Bravo X Strategy  
|            | New Spelling Words Story Vocab. Define Write sentences Share.             |
| Nov. 15    | **Warm Up:** 10-20 Minutes Acting Out and Singing Vocabulary Words and Definitions Bravo X Strategy  
|            | Review Vocabulary. Listen to Story (Pause for strategies) Practice Book Page |
| Nov. 16    | **Warm Up:** 10-20 Minutes Acting Out and Singing Vocabulary Words and Definitions Bravo X Strategy  
|            | Review Vocabulary Buddy read story/selection SPARKLE with spelling words if time |
| Nov. 17    | Buddy reading worksheet. (Comprehension, vocabulary, strategies, grammar)  
|            | Review together.                                                         |
| Nov. 18    | **Warm Up:** 10-20 Minutes Acting Out and Singing Vocabulary Words and Definitions Bravo X Strategy  
|            | Spelling Test Story/Selection Test                                       |
| Nov. 21    | **Focus on school wide comprehension strategy:** Summarizing              
|            | Warm Up: 10-20 Minutes Acting Out and Singing Vocabulary Words and Definitions Bravo X Strategy  
|            | Read/Listen to Story Discuss Summarizing and Story Structure (Start filling out Graphic Organizer)  
|            | Draw Story Summary: Story #1 5-10 minutes                                |
| Nov. 22    | **Summarizing**                                                          
|            | Warm Up: 10-20 Minutes Acting Out and Singing Vocabulary Words and Definitions Bravo X Strategy  
|            | Finish Graphic Organizer and use to write summary.                       |
| Nov. 23    | **Summarizing**                                                          
|            | Warm Up: 10-20 Minutes Acting Out and Singing Vocabulary Words and Definitions Bravo X Strategy  
|            | Draw Story Summary: Story #2 5-10 minutes                                |
| Nov. 24    | **Summarizing**                                                          
|            | Warm Up: 10-20 Minutes Acting Out and Singing Vocabulary Words and Definitions Bravo X Strategy  
|            | Draw Story Summary: Story #3 5-10 minutes                                |
| Nov. 25    | **Summarizing**                                                          
|            | Warm Up: 10-20 Minutes Acting Out and Singing Vocabulary Words and Definitions Bravo X Strategy  
<p>|            | Spelling Test Story/Selection Test                                       |</p>
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<td>Bravo X Strategy</td>
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<td>Listen to Story.</td>
<td>Buddy read story/selection</td>
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<td>Define</td>
<td>(Pause for strategies)</td>
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<td>Write sentences</td>
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<td>Worksheet</td>
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<td></td>
<td>Share.</td>
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<td>Draw Story Summary: Story #4</td>
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### Appendix P

**Revised Lesson Plan for Experimental Group II – Creative Dramatics and Story Retelling (CDSR)**

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<td><strong>Story:</strong> Tomas and the Library Lady Comprehension Skill: Sequence of Events Comprehension Strategy: Predict/Infer</td>
<td>Pre-Vocab. Test New Spelling Words Story Vocab. Define Write sentences Share.</td>
<td><strong>Pretest</strong></td>
<td><strong>Warm Up:</strong> 5 Minutes Standing BrainDance Bravo X Strategy Review Vocabulary Buddy read story/selection SPARKLE with spelling words if time</td>
<td><strong>Warm Up:</strong> 5 Minutes Standing BrainDance Bravo X Strategy</td>
<td><strong>Warm Up:</strong> 5 Minutes Standing BrainDance Bravo X Strategy</td>
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<td></td>
<td>10-15 Minutes: Enact Story #1 with story scene strips</td>
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| | | | | | **Nov. 4**
| | | | | NO SCHOOL |

**Oct. 31**

- Pretest
- Warm Up: 5 Minutes Standing BrainDance Bravo X Strategy
- Review Vocabulary
- 10-15 Minutes: Enact Story #1 with story scene strips

**Nov. 1**

- Warm Up: 5 Minutes Standing BrainDance Bravo X Strategy
- Review Vocabulary
- 10-15 Minutes: Enact Story #2 with story scene strips

**Nov. 2**

- Warm Up: 5 Minutes Standing BrainDance Bravo X Strategy
- Review Vocabulary
- 10-15 Minutes: Enact Story #2 with story scene strips

**Nov. 3**

- Warm Up: 5 Minutes Standing BrainDance Bravo X Strategy
- Review Vocabulary
- 10-15 Minutes: Enact Story #2 with story scene strips

**Nov. 7**

- Pretest
- Warm Up: 5 Minutes Standing BrainDance Bravo X Strategy
- New Spelling Words
- Story Vocab. Define
- Write sentences Share.
- 10-15 Minutes: Enact Story #2 with story scene strips

**Nov. 8**

- Nov. 9

- Nov. 8

- Nov. 10

- Nov. 11
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<tr>
<th>Date</th>
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<tr>
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<td>Comprehension Skill: Making Generalizations</td>
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<td>Comprehension Strategy: Summarize</td>
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<td><strong>Warm Up:</strong> 5 Minutes Standing BrainDance Bravo X Strategy</td>
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<td>Nov. 14</td>
<td>New Spelling Words Story Vocab. Define Write sentences Share.</td>
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<td>10-15 Minutes: Enact Story #3 with story scene strips</td>
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<td>Nov. 15</td>
<td><strong>Warm Up:</strong> 5 Minutes Standing BrainDance Bravo X Strategy</td>
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<tr>
<td></td>
<td>Review Vocabulary. Listen to Story (Pause for strategies) Practice Book Page</td>
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<tr>
<td></td>
<td>10-15 Minutes: Enact Story #3 with story scene strips</td>
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<td>Nov. 16</td>
<td><strong>Warm Up:</strong> 5 Minutes Standing BrainDance Bravo X Strategy</td>
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<tr>
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<td>Review Vocabulary Buddy read story/selection SPARKLE with spelling words if time</td>
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<td>10-15 Minutes: Enact Story #3 with story scene strips</td>
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<tr>
<td>Nov. 17</td>
<td><strong>Warm Up:</strong> 5 Minutes Standing BrainDance Bravo X Strategy</td>
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<tr>
<td></td>
<td>Buddy reading worksheet. (Comprehension, vocabulary, strategies, grammar) Review together.</td>
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<tr>
<td></td>
<td>10-15 Minutes: Enact Story #3 with story scene strips</td>
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<tr>
<td>Nov. 18</td>
<td><strong>Warm Up:</strong> 5 Minutes Standing BrainDance Bravo X Strategy</td>
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<tr>
<td></td>
<td>Spelling Test Story/Selection Test</td>
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<tr>
<td></td>
<td>10-15 Minutes: Enact Story #3 with story scene strips</td>
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**Focus on school wide comprehension strategy: Summarizing**

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<thead>
<tr>
<th>Date</th>
<th>Warm Up: 5 Minutes Standing BrainDance Bravo X Strategy</th>
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<tbody>
<tr>
<td>Nov. 14</td>
<td>Read/Listen to Story Discuss Summarizing and Story Structure (Start filling out Graphic Organizer)</td>
</tr>
<tr>
<td></td>
<td>10-15 Minutes: Re-enact Story #1 with story scene strips</td>
</tr>
<tr>
<td>Nov. 21</td>
<td><strong>Warm Up:</strong> 5 Minutes Standing BrainDance Bravo X Strategy</td>
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<tr>
<td></td>
<td>Finish Graphic Organizer and use to write summary.</td>
</tr>
<tr>
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<td>10-15 Minutes: Re-enact Story #2 with story scene strips</td>
</tr>
<tr>
<td>Nov. 22</td>
<td><strong>Warm Up:</strong> 5 Minutes Standing BrainDance Bravo X Strategy</td>
</tr>
<tr>
<td></td>
<td>Summarize story independently. (leveled reader, monitoring progress story, or “focus on” story)</td>
</tr>
<tr>
<td></td>
<td>10-15 Minutes: Re-enact Story #3 with story scene strips</td>
</tr>
<tr>
<td>Nov. 23</td>
<td><strong>Warm Up:</strong> 5 Minutes Standing BrainDance Bravo X Strategy</td>
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<td>NO SCHOOL</td>
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<td>Nov. 24</td>
<td><strong>Warm Up:</strong> 5 Minutes Standing BrainDance Bravo X Strategy</td>
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<tr>
<td>Nov. 25</td>
<td><strong>Warm Up:</strong> 5 Minutes Standing BrainDance Bravo X Strategy</td>
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<tr>
<td>Nov. 28</td>
<td>Story Vocabulary. Listen to Story (Pause for strategies) Practice Book Page</td>
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<td>Nov. 29</td>
<td>10-15 Minutes: Enact Story #4 with story scene strips</td>
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<td>Nov. 30</td>
<td>10-15 Minutes: Re-enact Story #4 with story scene strips</td>
</tr>
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<td>Posttest</td>
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<td>Dec. 2</td>
<td>Posttest</td>
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Appendix Q

Sample of Investigator Designed Story Scene Strips
for Creative Dramatics Enactments and Re-enactments

Week Two of Study: Story Two.

Source for story:

- 16 Scenes
- 12 Actors
- Vocabulary Words: arrangements, gatherings, great-uncle, homestead, persisted, pitches in, reunion, satisfaction

1. **Scene one:** Tanya’s House – Northern U.S. State – Kitchen
   Characters: Tanya, Grandma, Ted, Jim, Mama, Papa

2. **Scene two:** Tanya and Grandma on two different buses, going from their home to the farm in Virginia.
   Characters: Tanya and Grandma

3. **Scene three:** Tanya and Grandma meet Great Uncle John in his car, at the farm.
   Characters: Tanya and Grandma and Great Uncle John

4. **Scene four:** Grandma and Tanya walk to the farm.
   Characters: Tanya and Grandma

5. **Scene five:** At the farmhouse – on the back porch.
   Characters: Tanya, Grandma, Great Aunt Kay, Great Uncle John, Cousin Celeste, Baby Adam, 7 year old Keisha (7 characters)

6. **Scene six:** Tanya in bed. Grandma in Tanya’s room.
   Characters: Tanya and Grandma

7. **Scene seven:** Tanya waking up (almost a week later – Saturday and on baking day).
   Characters: Tanya and four or five students who make the scene sounds.
   Rooster crows (student can make this sound)
   Baby Adam is crying (student can make this sound)
   Rain on the roof (students can make a rain sound with their mouths or with body percussion)
   Rain on face from open window (student can pantomime rain on the face)

8. **Scene eight:** Tanya goes from bedroom, downstairs and into the parlor with all of the reunion items that are arriving from different members of the family, and going into the kitchen for breakfast with Uncle John.
   Characters: Tanya and Uncle John
9. **Scene nine:** Tanya in the living/family room with Uncle John, Cousin Celeste and her children, Baby Adam, and Keisha, playing checkers and dominoes while it is raining outside.
   Characters: Tanya, Uncle John, Cousin Celeste, Baby Adam, and Keisha

10. **Scene ten:** Kitchen – Tanya, Grandma, Aunt Kay, and cousin Celeste making plans for the reunion and opening up boxes with family things for the reunion.
   Characters: Tanya, Grandma, Aunt Kay, and Cousin Celeste

11. **Scene eleven:** Back Porch Swing – Tanya and Grandma talking about the past and memories of the farm and family.
   Characters: Tanya and Grandma

12. **Scene twelve:** Kitchen – Grandma, Tanya, Aunt Kay, and Baby Adam
    Characters: Tanya, Grandma, Aunt Kay, and Baby Adam and Delivery Man
    (Delivery man rings the doorbell- student makes doorbell sound [sol mi tones] and says, “Delivery Man!”)

13. **Scene thirteen:** Kitchen – Tanya (answering phone), Aunt Kay, Cousin Celeste, Baby Adam and Keisha (getting diapers) and Grandma meets the delivery man and brings in more boxes.
    Characters: Tanya, Aunt Kay, Cousin Celeste, Baby Adam, Keisha, Grandma and Delivery Man

14. **Scene fourteen:** Keisha and Tanya put on boots and march out to the barn to meet Uncle John and watch him milk the cows.
    Characters: Keisha, Tanya, Uncle John

15. **Scene fifteen:** Keisha and Tanya go to the orchard (students pretend to be in a race) and they pick up apples. Tanya finds a piece of the fence with the carved initials of her Grandma and Grandpa. She puts it in the basket.

   These following initials were drawn out on a piece of paper and given to for Scene 15.
   
<table>
<thead>
<tr>
<th>R. B.</th>
<th>I. F.</th>
</tr>
</thead>
</table>

16. **Scene sixteen:** Grandma, Tanya and Keisha on the back porch. End of story.
    Characters: Grandma, Tanya, and Keisha

**Scene notes:** The goal was for students to act as one character in each story and in at least one story scene strip per week. The reality is that each student could be two or more characters, and in two or more scenes, depending upon how many characters were in each scene. The initial treatment intervention plan was for each student to enact at least four times (once per story), and then to re-enact at least four times (once for each of the four stories during the review of each story) for a total of eight times to act out some part of different scenes in four stories.

**Segue:** Narrator read about going back to the farm, dinner, and sleeping bags on the porch.
**Character(s):** Narrator announced where the scene was taking place.
**Scene actor:** Scene actor walks across the front of the room with the scene number and announces each scene, such as: “Scene One!” This action is repeated prior to students in each scene enacting story scene strip. Story scene cards were made by the investigator for each story for the Scene Actor. Students knew which scene they were in and when it was their turn to enact their scene by matching their story scene strip to the Scene Actor when he/she walked across the front of the classroom and announced the scene.

**Process for use of Story Scene Strips for Creative Dramatics Intervention Treatment for Experimental Group II Teacher: Creative Dramatics and Story Retelling (CDSR):**

- Teacher received the directions and story scene strips for the story in two-three complete pages printed in Times New Roman Font Size 12.
- Teacher received a set of story scene strips cut and ready to pass out to the student groups and attached to the directions. The cut up story scene strips were printed in Times New Roman Font Size 14 or 16. Story scene strips were printed on different colored paper for the scene strips to match the lesson plan instructions for the teacher for each story. These resources were provided for the teacher in a weekly lesson plan envelope. This allowed for ease of story resources by color organization.
- Teacher received a set of scene cards numbered Scene 1, Scene 2, etc. through Scene 16, on the same colored paper as the story scene strips. Numbers were used for scenes instead of words. These scene cards were given to the Scene Actor.
- Teacher received prop initials for Story Two on a card for Scene 15.
- Teacher assigned students to each scene starting with scene one, etc., and in order. Teacher knew how many students were needed for a scene from the instructions.
- The story enactments were designed so that at least half of the story could be enacted in a 15 minute creative dramatics (CD) intervention segment. The goal was to enact an entire story enactment per week, during the 15 daily minutes of creative dramatics treatments.
- Students had previously read or listened to the story, per the district language arts adoption resources, and prior to preparing for story enactments or re-enactments.
- Five minute CD segment: Students were to practice the story scene strip the teacher gave them for five minutes with the assigned small group. All students in a classroom were working on story scenes (from the scene strips) at the same time. Students then came to the front of the room and sat down to prepare to listen to and watch classmates enact the story. Students used story vocabulary words in their scenes, as referenced in their book.
- Ten minute CD segment: Students were to enact as many story scenes as possible, and in order of story scenes, before the end of the language arts period and up until the end of the language arts period.
- During the story re-enactments and review week, the goal was for students to re-enact each story for a daily 15 minute CD intervention segment which was a summarizing strategy for the language arts unit. Story scene strips were passed out, and students reviewed the scenes for five minutes, and then re-enacted the stories for 10 minutes.
- An extra set of cut-up story scene strips for the students was created by the investigator, and presented to the teacher prior to each language arts class commencing, for ease of teaching and maximum use of the creative dramatics treatment intervention time.
- Each lesson was designed to maximize instruction time and student participation time, and in efforts to encourage students to maximize learning and enacting time.
- Story scene strips were prepared by the study investigator for the story re-enactments and for the story summary days, and presented to the CDSR teacher prior to the language arts class session as one set of story scene strips per each of the four stories. CDSR teacher could make extra sets, as well, for use on each day of the week per each of four stories.
Appendix R
Confidentiality Statements for Study Teachers: Pre-study and Post-study
Dates: October 27, 2011 and January 3, 2012

I, ________________________________ agree to keep all aspects of the research study conducted by AnnRené Joseph, doctoral student at Seattle Pacific University, confidential.

The research study for her dissertation was conducted at my school and with my students, from November 1, 2011 through December 1, 2011, and on January 3, 2012. Additionally, activities for the student assignment occurred on October 27, 2011.

I have been given a DVD of 604 photos that show my students participating in the study, as feedback for me to see what happened. This DVD and all photos are also confidential and are not to be shared with others, other than my students, if desired, for educational purposes. No photos are to appear and/or be posted on the internet and/or in any other submission. Photos and documents shared with me during the study are also confidential.

I agree to delete documents from the study and that I will not forward and/or use any portion of this study for monetary gain and/or presentation.

No part of the study, which includes lesson plans, processes, DVD photos, strategies, emails, etc., may be shared without the written permission of the researcher, AnnRené Joseph. Ms. Joseph plans to publish the research.

As agreed, the name of the school, district, teachers, students, and anything that would identify participants in the study will remain confidential in the dissertation and study documents.

Signed

Teacher Name – Printed

Teacher Name – Signature

Date

The following confidential statement was attached and shared in meetings, with weekly lesson plans, in emails, and with all documents and aspects of the study investigation.

Please note: The contents of this email submission are confidential and are meant to be seen by those copied in this email. The recipients agree to keep all communications regarding the Seattle Pacific University Research Pilot confidential to ensure the credibility and viability of the study. Thank you.
Appendix S

Seattle Pacific University Continuing Education Letter and Credits Form
February 1, 2012

Ann Rene Joseph
15324 182nd Pl NE
Woodinville, WA 98072-9376

Dear Ann Rene,

Welcome and congratulations on becoming a Seattle Pacific University Center for Professional Education Adjunct Faculty member. You are part of a group of over 600 distinguished men and women working to educate people in the classrooms and work places throughout the state of Washington and beyond. Seattle Pacific University is accredited by the Northwest Commission on Colleges and Universities (NWCCU) and the School of Education is accredited by the National Council for Accreditation of Teacher Education (NCATE) at both basic (undergraduate) and advanced (graduate) levels.

You may access the Adjunct Faculty Handbook on-line at www.spu.edu/spiral by selecting Adjunct Faculty. This is an important resource for your work with the School of Education and contains information on the procedures, benefits and expectations of our adjunct faculty.

If you have ideas for new courses that will serve educators in your area, please let us know. With your help, we’ll accomplish our mission of creating educators who demonstrate leadership, service, competence, and character. You may access the course form needed to propose a class on our website or request that a Word version be emailed to you.

If you have any questions or need further information, please feel free to contact me in the Center for Professional Education at 206-281-2028 or at mmort@spu.edu.

Sincerely,

Marilyn Mortenson
Operations Manager, Center for Professional Education
Seattle Pacific University
1. **Course Title:** Doctoral Dissertation Study – Arts and Academic Achievement

2. **Please check one:**
   - [X] Proposal (first time review with SOE)
   - [ ] Repeat (previously SOE approved)

3. **Course Prerequisites:** None

4. **Course Syllabus:**
   - [X] Attached (required for approval as per format on page 4)
   - [ ] On file within current academic quarter

5. **Credits:**
   - Contact hours: 1
   - No. of Credits: 0
   - Projected Credit Enrollment: 0

6. **Dates/Times:**
   - Beginning Date: Nov. 1, 2011
   - Ending Date: Dec. 1, 2011
   - Closing Date: WI Qtr. 2012

   If additional space is needed, write remaining dates and times under #16 on the next page.

<table>
<thead>
<tr>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thu</th>
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<th>Sat</th>
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</tr>
</tbody>
</table>

7. **Location:** School/Place
   - School: Elementary
   - 4th Grade Classrooms (3 classrooms)

---

Updated 11/17/2012 10:35:00 AM
## Appendix T

**Teacher Reflection: Self Report on Participation in Study and Treatment**
(Administered on 1-3-12, following the retention test administration, and after school)

Experimental Group I Teacher – Creative Dramatics and Vocabulary Words (CDVW)  
3:30 – 3:50 p.m.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Experimental Group I-Creative Dramatics and Vocabulary Words</th>
</tr>
</thead>
</table>
| **Study treatment used. Please describe.** | • 1 minute warm-up- body and voice (singing).  
• Sing vocabulary words and definitions  
• Act out vocabulary words  
• Summary booklets (drawing story summaries for four stories) |
| **How minutes per day (study time period) did you allow for the treatment?** | 10 – 20 minutes |
| **What worked well?** | Encouraging participation. Students began to feel more comfortable. Allowing students to lead activities. |
| **Suggestions for study replication?** | NA |
| **Questions?** | Interested in results ☺ |
| **Would you participate in the study again?** | Yes! Would do it again. |
| **Write up what happened in the 55 minute period for the study.** | **Warm-Up:**  
1 minute of movements (stretching), singing notes (tones of Sol, Mi, and La taught by researcher) (referred to this as “runs”), jumping (BRAVO – full extension), etc. Students began to lead towards end of study.  
**Vocabulary:**  
• Sing words and definitions – teacher led – students repeat (S, M, L).  
• Students began to figure out “song” with new words on their own.  
• Students came up with class action or movement for each word.  
• Every day review in this way.  
**Summary Booklets:**  
• Something from beginning, middle, and end of (each) story. (Picture and sentence or two).  
• Use as many vocab (words) as possible |
**Teacher Reflection: Self Report on Participation in Study and Treatment**  
(Administered on 1-3-12, following the retention test administration, and after school)

**Experimental Group II Teacher - Creative Dramatics and Story Retelling (CDSR)**  
3:30 – 3:50 p.m.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Experimental Group II-Creative Dramatics and Story Retelling</th>
</tr>
</thead>
</table>
| Study treatment used. Please describe. | • We used creative dramatics to retell the story focusing on vocabulary words.  
• We also acted out vocabulary words. |
| How minutes per day (study time period) did you allow for the treatment? | 40 minutes.  
• Told the students 1 thing I learned (from the day before)  
• 1 minute warm-up (set timer) My students named the movements in the warm-up.  
• 5 minute brain dance (used metaphors – like a tree, like a snake, smart lesson)  
• 15 minutes of treatment |
| What worked well? | The students really loved the process. We trusted each other. |
| Suggestions for study replication? | • More time for the study. 😊  
• More time to plan.  
• Start in the summer. |
| Questions? | NA |
| Would you participate in the study again? | Yes! Need more time to plan and really explore how to fit all in. |
| Write up what happened in the 55 minute period for the study. | • During our retelling of the story the students followed along in their text books and listened for vocabulary words.  
• We also had props (made from kids)  
• Put up the vocabulary on the document camera.  
• Also, we reviewed Creative Dramatics every-day.  
I made Smart lesson (design) – Specific, Measurable, Achievable, Relevant, Time-Based |
Teacher Reflection: Self Report on Participation in Study and Treatment  
(Administered on 1-3-12, following the retention test administration, and after school)

Control Group Teacher – School District Reading Adoption with Readers’ Theatre (CG)  
3:30 – 3:50 p.m.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Control</th>
</tr>
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</table>
| Study treatment used. Please describe. | - Silent Reading first 5 minutes  
- Journals  
- Warm-up Activity (1 minute) – included: Bravo, singing for warm-up  
- 5 minutes for reflecting-End of class |
| How minutes per day (study time period) did you allow for the treatment? | 15 minutes. 10 minutes once/twice a week-Reader’s Theatre story retelling. Last 5 minutes reflection journals. |
| What worked well? | - Having a successful, trustworthy and collaborative team. |
| Suggestions for study replication? | - I would extend the time block for the study. |
| Questions? | NA |
| Would you participate in the study again? | I appreciate utilizing the study in my teaching. Unfortunately due to the time constraints and pacing schedule...It would be difficult to participate in another study. |
| Write up what happened in the 55 minute period for the study. | NA- See above for explanation in minutes per day for treatment. |

Note: The three confidential teacher reflections regarding the study were voluntarily submitted to the investigator by all three study teachers, and in their own words. They were submitted to the investigator in long-hand. The investigator typed them onto the form for inclusion in the appendices, with the permission of all three teachers, and as anonymous inclusions.
Appendix U

Teacher Survey of Professional Information
Administered on 12-1-11, following the posttest administration, and after school – 3:30 – 3:50 p.m.

<table>
<thead>
<tr>
<th>Questions</th>
<th>Creative Dramatics and Vocabulary Words (CDVW)</th>
<th>Creative Dramatics and Story Retelling (CDSR)</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Name</td>
<td></td>
<td></td>
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<tr>
<td>2. Age (optional)</td>
<td>24</td>
<td>27</td>
<td>NA</td>
</tr>
<tr>
<td>3. Teaching Experience</td>
<td>3 yrs. – substitute teaching</td>
<td>3</td>
<td>6 (3 years subbing)</td>
</tr>
<tr>
<td>4. How many years (months) at this school</td>
<td>1 full year (long term sub)</td>
<td>2</td>
<td>First year at this building – 2 months</td>
</tr>
<tr>
<td>5. Other teaching jobs/experience</td>
<td>2 mo. Kind. &amp; 3 mo. 1st</td>
<td>1 year tutoring at Sylvan</td>
<td>Enhancement teacher for 3rd grade</td>
</tr>
<tr>
<td>6. Current teaching position</td>
<td>fourth grade long term-3.5 M</td>
<td>fourth grade teacher</td>
<td>fourth grade teacher</td>
</tr>
<tr>
<td>7. Degrees</td>
<td>BA</td>
<td>MA</td>
<td>AA, BA, MA</td>
</tr>
<tr>
<td>8. Major Endorsements</td>
<td>Elem. Ed and Reading Minor</td>
<td>Family Studies, K-8 Endorsement</td>
<td>Elementary Education, Reading and Social Studies</td>
</tr>
<tr>
<td>9. College(s)/university where you earned your degree(s)</td>
<td>CWU</td>
<td>CWU-BA; City Univ. M.Ed</td>
<td>Highline Community College PLU</td>
</tr>
<tr>
<td>10. What other grades have you taught</td>
<td>K-12 subbing</td>
<td>1st-2nd pull out specialist; 3rd grade and fourth grade</td>
<td>3rd</td>
</tr>
<tr>
<td>11. Arts education experience/training</td>
<td>College-Beginning Drawing and Elementary Art for teaching</td>
<td>Arts Impact-Summer Classes Art Institute: With an Art Mentor</td>
<td>During BA</td>
</tr>
<tr>
<td>12. Other endorsements</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>13. Nationality (optional)</td>
<td>Caucasian</td>
<td>½ Japanese; ½ Caucasian</td>
<td>Love watching movies, reading books, spending time with loved ones and decorating my home. Have worked with children since high school: Daycare, Boys and Girls Club</td>
</tr>
<tr>
<td>14. Hobbies</td>
<td>Drawing-Graphite and Colored Pencils Painting HS Volleyball coach (3 years)</td>
<td>Reading Spend time with family Traveling My daughter</td>
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</table>

Note: Confidential and anonymous teacher professional information was copied as submitted to the investigator, and with permission of the study teachers.
<table>
<thead>
<tr>
<th>Group</th>
<th>Treatment</th>
<th>Warm-up</th>
<th>Treatment</th>
<th>Summary</th>
<th>Students</th>
<th>N =</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>Creative Dramatics and Vocabulary</td>
<td>'Bravo X'</td>
<td>'Bravo X'</td>
<td>Story summary</td>
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<td>Group I</td>
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Summary of Study Details: The Effects of the Use of Creative Dramatics to Strengthen Vocabulary Achievement of Fourth Grade Students in a Language Arts Classroom for 17 Days of Treatment, \( N = 83 \)
Appendix W

Study Histograms Pretest, Posttest, Retention Test

Descriptive Statistics and Histograms by Treatment Conditions Listwise $N = 68$

The descriptive data from the study are further illustrated in histograms for listwise $N = 68$, for students who were present for all three test administrations. Further, these histograms are presented by pretest, posttest, and retention test descriptive data, and by classroom condition and represented in Figures W1-W12. Additionally, Figures W1-W3 show the histograms of the three classroom conditions by pretest, posttest, and retention test listwise $N = 68$, for the 31-question vocabulary test DV. Figures W4-W12 show the three pretest, the three posttest, and three retention test histograms by individual classroom condition for listwise $N = 68$.

![Figure W1](image-url)  
*Figure W1*. Pretest Descriptive Histograms Comparison Between Groups Listwise $N = 68$
Figure W2. Posttest Descriptive Histograms Comparison Between Groups Listwise $N = 68$
Figure W3. Retention Test Descriptive Histograms Comparison Between Groups Listwise $N = 68$

Histograms for Descriptive Statistics: Pretest, Posttest, and Retention Test by Treatment

Condition Comparisons Listwise $N = 68$

Nine descriptive histograms follow, illustrating the listwise $N = 68$ for the nine test scores compiled for this study – three for each classroom condition and by pretest, posttest, and retention test raw scores for each test administration, on the 31-question vocabulary test DV. These descriptive histograms further illustrate the growth of the students by creative dramatics treatment condition that were present for all three test administrations, as well as the resulting skewness and kurtosis represented by the growth in achievement scores over time. Refer to Figure W4, Figure W5, and Figure W6 for pretest scores, means, and standard deviations by treatment condition. Refer to Figure W7, Figure W8, and Figure W9 for posttest scores, means, and standard
deviations by treatment condition. Refer to Figure W10, Figure W11, and Figure W12 for retention test scores, means, and standard deviations by treatment condition.

**Pretest**

*Condition = 1.00. Creative Dramatics and Vocabulary Words (CDVW)*

![Histogram](image)

**Mean = 20.42**  
**Std. Dev. = 5.17**  
**N = 26**

*Figure W4.* Pretest scores and means for Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) Listwise (*n* = 26)
Figure W5. Pretest scores and means for Experimental Group II – Creative Dramatics and Story Retelling (CDSR) Listwise ($n = 21$)
Figure W6. Pretest scores and means for Control Group (CG) Listwise ($n = 21$)
Figure W7. Posttest scores and means for Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) Listwise (n = 26)
Figure W8. Posttest scores and means for Experimental Group II – Creative Dramatics and Story Retelling (CDSR) Listwise ($n = 21$)
Figure W9. Posttest scores and means for Control Group (CG) Listwise (n = 21)
Figure W10. Retention test scores and means for Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) Listwise (n = 26)
Figure W11. Retention test scores and means for Experimental Group II – Creative Dramatics and Story Retelling (CDSR) Listwise ($n = 21$)
Figure W12. Retention scores and means for Control Group (CG) Listwise ($n = 21$)
Certificate of Registration

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Maureen Pallante

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May 6, 2014
Application received: 09May14
Fee received: 09May14
Deposit received: 07May14

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The Effects of Creative Dramatics on Vocabulary Achievement of Fourth Grade Students in a Language Arts Classroom: An Empirical Study

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Domiciled in:
Nature of authorship: entire text
YEAR OF CREATION: 2013

PUBLICATION:
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Nation: USA

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FAX number: 734.997.4133
Email address: disscords@umi.com