The Use of Tableau to Increase the On-Task Behavior of Students with Language-Based Learning Disabilities in Inclusive Language Arts Settings: An Initial Study

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Dedication

This dissertation is dedicated to my mom, who supported me, encouraged me, and inspired me throughout my entire doctoral experience. Thank you for walking every step of this journey by my side. I love you.

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Abstract of Dissertation

The Use of Tableau to Increase the On-Task Behavior of Students with Language-Based Learning Disabilities in Inclusive Language Arts Settings: An Initial Study

Students with language-based learning disabilities (LD) increasingly are placed in inclusive classrooms to ensure they receive access to their grade level curriculum. However, inclusion alone is insufficient for addressing the specific learning challenges of students with language-based LD in general education settings (McLeskey & Waldron, 2011). A need exists for additional strategies to increase on-task behavior and provide greater learning opportunities for students with LD in inclusive classrooms.

The purpose of this study was to examine the use of a drama intervention, tableau, to increase the on-task behavior of students in inclusive fourth-grade language arts classrooms at two urban elementary charter schools in the Mid Atlantic region. All of the students in the fourth-grade language arts classrooms participated in the tableau intervention, which consisted of students making still images with their bodies to represent a scene or explore a particular moment in a story. Observational data were collected on three students identified with language-based LD. Changes in students' on-task behavior within and across baseline, withdrawal, and tableau phases were examined in an ABAB withdrawal design. Visual analysis was employed to determine if there was a functional relation between tableau and an increase in students' on-task behavior during small group language arts lessons. Descriptive data were collected via audio digital recordings of story recalls to assess the three students' understanding of character traits and sequence of events.

Results indicated that participants' on-task behavior increased following the introduction of tableau and decreased following the withdrawal of tableau and return to

conventional instructional strategies during small group language arts lessons. For all three participants, a functional relation was established between tableau and an increase in on-task behavior through a change in level and stability across phases. All three participants scored higher on the oral story recall assessment of character traits and sequence of events during the tableau intervention phases as compared to the baseline and withdrawal phases. These findings suggested the potential value of using drama interventions to increase the on-task behavior and provide greater learning opportunities for students with LD in inclusive language arts classrooms.

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Chapter I: Introduction

Overview

The Individuals with Disabilities Education Improvement Act (2004) defines a specific learning disability (LD) as: "a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations" (see definitions in Section 602 of the IDEIA legislation). Although there are multiple approaches to diagnosing and defining LD, common to all explanations is a description of a neurological impairment manifested by significant difficulties related to learning (National Center for Learning Disabilities [NCLD], 2013). Students with LD present with presumed dysfunction of the central nervous system that affects the brain's ability to store, process, and recall new information (Cortiella, 2011; NCLD, 2013). Although the origin of neurological causes remains unknown, genetic links to LD have been identified (Cortiella, 2011).

In an effort to strengthen the protection and support for students with disabilities, Congress passed the Education for All Handicapped Children Act in 1975, a federal law governing how states and public agencies should provide services to children with disabilities. Subsequently reauthorized as the Individuals with Disabilities Education Act (IDEA) in 1997 and as the Individuals with Disabilities Education Improvement Act (IDEIA) in 2004, the mandate continues to hold that every student has the right to a free and appropriate public education (FAPE) in the least restrictive environment (LRE). To qualify to receive special education services under one of 13 disability categories (e.g., autism, emotional/behavioral disorder, specific learning disability), a student must

present with a severe discrepancy between achievement and intellectual ability (i.e., the IQ-Achievement Discrepancy Model). Using the IQ-Achievement Discrepancy Model, a psychologist administers and compares scores from an individual IQ test of general intelligence (e.g., Wechsler Intelligence Scale for Children) with tests of academic achievement (e.g., Woodcock Johnson Achievement Test) to determine if a substantial difference exists between a student's IQ and academic performance. If the discrepancy between IQ and achievement reveals a difference of at least two standard deviations below the mean (i.e., 30 points), the student qualifies for special education services. Local education agencies (LEAs) can opt out of using the IQ-Achievement Discrepancy Model in favor of evaluation based on a student's response to a scientific, research-based intervention, frequently known as Response to Intervention (RTI; IDEIA, 2004). RTI is a multi-tiered instructional approach that involves universal screening of all children in the general education classroom. Struggling learners are provided interventions at varying levels of intensity and duration to support their learning needs. RTI also involves frequent progress monitoring to assess students' performances and improvement rates to guide educational decisions (Positive Behavioral Interventions and Supports [PBIS], 2014). Once a student meets the requirements for special education services based on the Discrepancy or RTI model, schools must develop and implement an individualized education plan (IEP) to address the student's specific learning needs (IDEIA, 2004).

As the largest of the 13 disability categories, students with LD account for 41% of all school-age children, ages 6-11**,** qualifying for special education services **(**IDEIA Part B Child Count, 2010). From 1976-2000, the number of students identified as having LD increased more than 300%, with over 50% deemed eligible to receive special education

services under IDEIA. Despite declining incidence rates, which fell 14% from 2000-2009, LD remains the largest and most heterogeneous special education disability category. Examples of LD include: (a) dyscalculia, which refers to difficulty understanding math concepts and solving arithmetic problems; (b) dysgraphia, or challenges forming and writing letters; (c) dyslexia, or challenges with letters within words or words within sentences when reading; (d) auditory and visual processing disorders, which are associated with problems understanding and using verbal and written language; and (e) non-verbal LD, or deficits in problem solving, understanding cause and effect relationships, and/or using and understanding gestures and facial expressions. Once students with LD are considered eligible for special education services, less than 3%, ages 14-21, lose this distinction (Cortiella, 2011).

Students with language-based learning challenges, who comprise 80% of the LD population receiving special education services to date (American Speech-Language-Hearing Association [ASHA], 2013; LD OnLine, 2008), are the focus of this work. Students with language-based LD may have problems with oral receptive (e.g., listening and reading) and oral expressive language (e.g., speaking and writing). During a given school day, these students may experience challenges recognizing words, expressing ideas clearly, learning new vocabulary, spelling, understanding questions and following directions, as well as decoding, reading, and comprehending text (ASHA, 2013; Lyon, Shaywitz, & Shaywitz, 2003). Students diagnosed with language-based LD frequently are excluded from meaningful learning opportunities because they lack the reading and writing skills needed for school success (McLeskey & Waldron, 2011). Given this marginalization, which can undermine the learning potential of students with LD and

cause detrimental effects to their self-esteem, motivation, and academic success, significant changes are needed in instructional delivery to ensure these students excel in school (Fuchs, Fuchs, Craddock, Hollenbeck, & Hamlett, 2008).

Developing appropriate strategies for students with language-based LD is especially important to their school success because these students increasingly are placed in inclusive settings (defined as general education classrooms with their peers without disabilities). In the year 2000, 62% of students with LD spent 40% of the school day in inclusive settings; by 2008, these students spent close to 80% of their time with their peers without disabilities (Cortiella, 2011; McLeskey, Landers, Hoppey, & Williamson, 2011). The IDEIA (2004) mandate that students should receive education in the LRE supports inclusion as a recommendation for students with disabilities at all grade levels. With strong instructional practices that enhance access and progress in the general education curriculum, students with LD have the opportunity to improve their academic, social, and communication skills in inclusive settings (Alquraini & Gut, 2012). Effective instructional practices for successful inclusion involve the use of curricular accommodations (e.g., frequent breaks, extended time) and modifications (e.g., counting aids, graphic organizers, color coding), contextualization of skill-based instruction, cooperative learning, peer supports, assistive technology, and collaboration among school stakeholders (Alquraini & Gut, 2012). Successful inclusive practices also utilize principles from the Universal Design for Learning (UDL), which emphasizes the need for flexible approaches for creating instructional goals, methods, materials, and assessments to address individual student needs (Center for Applied Special Technology [CAST], 2010). The extent to which these evidence-based instructional practices transfer to actual

inclusive settings varies significantly across teachers and schools (Volonino & Zigmond, 2007). Many general education teachers have little or no training in inclusive practices and professional development opportunities are limited (Volonino & Zigmond, 2007). Many schools lack collaboration between general and special educators; general educators may not receive the support to acquire the necessary skills to address the challenges of their students with identified disabilities (Alquraini & Gut, 2012). A critical need exists to develop effective ways to enhance learning opportunities for students with language-based LD in inclusive settings.

Statement of the Problem

Despite hopes of improving outcomes for students with disabilities through inclusion alone, students with language-based LD placed in general education settings often struggle to meet the academic demands of school, particularly in the areas of reading and language arts (Klem & Connell, 2004; McLeskey & Waldron, 2011; Newman & Davies, 2005). Classroom instruction rarely is designed to address these students' challenges, leading to low achievement and academic failure (Cortiella, 2011). Also, because general education classrooms include a significant amount of whole group instruction with limited supports, students with language-based LD have difficulties attending to tasks and responding to questions (Montague & Rinaldi, 2001).

Academic challenges for students with language-based LD are greater than ever in the current context of the Common Core State Standards (CCSS). A state-led effort coordinated by the National Governor's Association and the Council of Chief State School Officers, the CCSS are intended to prepare learners for college and the workforce (National Governors Association Center for Best Practices, 2013). Central to the CCSS,

which have been formally adopted by 43 states and the District of Columbia, is a focus on rigorous content and application of knowledge through higher-ordered thinking skills (National Governors Association Center for Best Practices, 2013). For example, the fourth-grade CCSS emphasize the need for students to be able to describe and understand character traits and to sequence the events in a story (i.e., *CCSS.ELA-Literacy.RL.4.3: 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*; Common Core State Standards Initiative, 2014). Such standards may prove especially demanding for students with language-based LD, who have been identified with challenges comprehending narrative text and communicating ideas and mental representations of characters, events, or situations (Anderson, 2012; Mariage, 2001; Snow, 1991). Although the CCSS are not designed as an instructional tool, the CCSS guidelines offer limited strategies for how best to support students with LD who are presented with increasingly complex texts and vocabulary (Haager & Vaughn, 2013). Without acknowledging the ways in which requiring reading of more difficult text could lead to greater problems for many students, the CCSS may be placing students with language-based LD in inclusive settings at a greater risk for school failure (Haager & Vaughn, 2013). As students with language-based LD are expected to master increasingly difficult language and literacy content in their inclusive classrooms, they may experience additional learning challenges and frustrations and may disengage during instructional activities (Haager & Vaughn, 2013).

Researchers (e.g., Bridgeland, Dilulio, & Morison, 2006; Kastner & Gottlieb, 1995; Vaughn, Elbaum, & Boardman, 2011**)** have suggested potentially low levels of behavioral engagement (e.g., time spent on work, intensity of concentration, time on-

task) of students with LD during instructional time impact their academic success and learning in inclusive settings. One feature of behavioral engagement, on-task behavior, is highly predictive of achievement of students with LD and is of particular interest to this study (Bouffard & Couture, 2003; Garcia & de Caso, 2004; Sideridis & Tsorbatzoudis, 2003). On-task behavior is defined as: (a) sitting or standing in a designated space; (b) keeping hands, feet, and objects to oneself; (c) participating in the class activity by raising one's hand and by asking and responding to questions; (d) interacting with peers and teachers; (e) listening to and following directions; and (f) looking at and using materials appropriately (Clare, Jenson, Kehle & Bray, 2000; Richards, Heatherfield, & Jenson, 2010; Riley, McKevitt, Shriver, & Allen, 2011). Enhancing the on-task behavior of students with LD provides an important way to prevent school failure and later dropout (Fredricks, Blumenfield, & Paris, 2004; Pyle & Wexler, 2012). Students with LD who display on-task behavior are more likely to earn higher grades and perform better on standardized tests (Klem & Connell, 2004; Newman & Davies, 2005). By contrast, students with LD who exhibit frequent off-task behavior are more disruptive in class, susceptible to frequent absenteeism, less motivated, and at risk for school dropout (Goodenow, 1993; Sideridis & Tsorbatzoudis, 2003; Willingham & Lewis, 2002).

Continued low levels of on-task behavior of students with LD in inclusive settings may lead to further academic challenges and emotional problems, including disruptive behavior, poor self-concept, low self-esteem, school failure, and most significantly, school dropout (Newman & Davies, 2005; Vaughn & Fuchs, 2003). Notably, students with LD who struggle with language and literacy in academic contexts are among those at greatest risk for school failure (Scott, 2004; Westby, 2006). Because engagement is a

malleable construct that may be influenced by contextual factors, classroom instruction should be designed to maximize students' on-task behavior (Fredricks et al., 2004). Given the widespread implementation of the rigorous CCSS and the increasing numbers of students with LD placed in inclusive settings, additional strategies are needed to support these students' on-task behavior and promote their academic success.

Recent understandings from the field of neuroscience (Hinton, Fischer, & Glennon, 2012; Rinne, Gregory, Yarmolinskaya, & Hardiman, 2011; Toshalis & Nakkula, 2012) emphasize the importance of developing student-centered approaches to instruction as a way to increase students' on-task behavior. New knowledge of brain development suggests that the brain's active engagement is a prerequisite for learning because brain changes that underlie learning occur when experiences are active rather than passive (Rinne et al., 2011; Toshalis & Nakkula, 2012). Students are more likely to exhibit on-task behavior when participating in activities that are relevant to their lives, interests, goals, and needs, as well as in activities that allow them to directly influence the learning processes and outcomes (Toshalis & Nakkula, 2012).

Through the support of the Dana Foundation, neuroscientists are finding evidence that arts integration provides a student-centered approach to teaching and learning that supports recent brain-based understandings of how students acquire knowledge (Asbury & Rich, 2008; Rudacliffe, 2010). Arts integration is defined as an "approach to teaching in which students construct and demonstrate understanding through an art form (e.g., drama) and engage in a creative process which connects an art form and another subject area and meets evolving objectives in both" (The Kennedy Center ArtsEdge, 2013).

Of particular importance to this study is dramatic arts integration, or learning

strategies that involve the use of drama as an art form. Dramatic arts integration often involves emotional arousal, which leads to increased on-task behavior, enhances the sustained attention necessary to complete a task, and promotes recall of academic content (Gazzaniga, 2008; Rinne et al., 2011; Talmi, Anderson, Riggs, Caplan, & Moscovitch, 2008). Dramatic arts integration also emphasizes rehearsal and repetition of information in multiple ways (Hardiman, 2003; Rinne et al., 2011; Rudacliffe, 2010). By providing the advantage of embedding knowledge into long-term memory and into multiple domains, dramatic arts integration enhances long-term retention of content (Rinne et al., 2011; Rudacliffe, 2010).

Given these findings from the field of neuroscience (Asbury & Rich, 2008; Hardiman, 2003; Rinne et al., 2011; Rudacliffe, 2010; Talmi et al., 2008; Toshalis & Nakkula, 2012), dramatic arts integration (i.e., drama) may offer an optimal instructional context for enhancing the on-task behavior and academic achievement of students with LD in inclusive settings. Research (Baum, Owen, & Oreck, 1997; Catterall, 2002; Ingram & Seashore, 2003) has highlighted the value of drama for increasing educational opportunities and for improving students' motivation to learn. Drama-based interventions also have been linked to improved literacy outcomes, including reading comprehension, communication skills, and perspective taking (Hoyt, 1992; Podlozny, 2000; Rose, Parks, Androes, & McMahon, 2010). Although two studies (Abedin, 2010; Durham, 2010) examined the value of the arts for students with LD and a third (Whittaker, 2005) explored the influence of Reader's Theater on the reading performance and on-task behavior of students with LD, only two studies to date (Anderson & Berry, in press; Anderson & Berry, 2014) have exclusively investigated the potential of specific

dramatic arts integration strategies for improving the on-task behavior of students with language-based LD.

Exploring the potential of a dramatic arts integration intervention for improving the on-task behavior of students with LD (a) addresses the Dana Foundation's call for student-centered approaches that align with neuroscience evidence of how students learn; and (b) offers an explanation for how and why the arts might provide a motivational entry point for enhancing learning opportunities (Abedin, 2010; Burnaford, Brown, Doherty, & McLaughlin, 2007; President's Committee on the Arts and Humanities [PCAH], 2011).

Purpose

Dramatic arts integration may enhance students' on-task behavior and lead to improved academic outcomes (Anderson & Berry, in press; Anderson & Berry, 2014; Catterall, 2002; Deasy, 2002; Parsdad & Spiegelman, 2012; Podlozny, 2000); yet, the potential value of specific drama interventions, notably tableau, for increasing students' on-task behavior has been scarcely researched or explored. Tableau is defined as a drama intervention in which students make still images with their bodies to represent a scene or to explore a particular moment in a story for deeper analysis (Farmer, 2011). During a tableau scene, students stand in small groups or in a circle and a theme is given. Based on the theme, students create still images in relation to one another to depict a group of characters from a painting or story. The scene then can be brought to life by having the students use gesture and spoken language to reveal more information about the characters (Farmer, 2011). Thought tracking often is used in a tableau scene to learn additional information about each of the characters. During thought tracking, specific characters in

a tableau scene are tapped on their shoulders and invited to speak a sentence or two about their thoughts or feelings (Farmer, 2011).

Tableau holds promise for improving the on-task behavior of students, specifically those with language-based LD, based on its use as a contextualized language-learning strategy and its generalizability across multiple content areas (see Anderson & Berry, 2014; Anderson & Berry, in press; Bosch & Anderson, in press, for supporting evidence of dramatic arts strategies as contextualized language opportunities for students with LD). Tableau supports students with LD through the contextualization of narrative language. Described as the degree to which language is tied to the immediate environment, contextualized language is a critical consideration for the development of more advanced language (Gillam, Gillam, & Reece, 2013; Paul, 2002). In conventional literacy lessons, which rely on decontextualized language (e.g., written text in which the author is absent), students with language-based LD often struggle to communicate abstract events or situations that are not available to their immediate environment (Mariage, 2001). As such, they typically disengage during decontextualized content instruction without the appropriate supports (Haager & Vaughn, 2013; Snow, 1991). Unlike common instructional language arts strategies that are embedded in decontextualized learning contexts (e.g., cooperative learning, self-monitoring, mnemonic devices, graphic organizers), tableau contextualizes narrative language by providing students access to language in their immediate environment (Mariage, 2001). In a tableau, students take on the roles of specific characters, which requires the use of shared knowledge, contextual clues, and high frequency vocabulary to create a scene (Clyde, 2003; Kelner & Flynn, 2006; Paul, 2002). The use of gestures and body

language reinforces students' understanding of the characters' intentions, thoughts, and actions and enables them to concretely communicate their mental representations of dramatic elements (e.g., the text, the character, the character's feelings; Brouillette, 2010). By creating a contextualized learning context that scaffolds student language, tableau serves as a useful intervention for increasing the on-task behavior of students with language-based LD in inclusive settings.

Tableau's generalizability across content areas provides further justification for its potential contribution to increasing the on-task behavior of students with LD. As a customized teaching approach that encourages students to choose their own characters, lines, and gestures, tableau is simple enough to generalize across disciplines and classes (Farmer, 2011). In a language arts setting, students can use tableau to compare characters from a painting to characters in a text. As part of a history lesson, students can employ tableau to depict different accounts of a historical event from the perspectives of different characters to understand the emotional impact of an event. Students also can create tableau scenes during math lessons to depict geometric shapes and angles or to illustrate a word problem and in science lessons to understand the concept of photosynthesis or the rock cycle. The use of tableau is especially timely given the interdisciplinary nature of the CCSS, which are designed to encourage cross-curricular integration of multiple subject areas (National Governors Association Center for Best Practices, 2010).

Tableau may provide the most significant contribution to increasing the on-task behavior of fourth graders because the process of creating a tableau supports the developmental characteristics of these students. Fourth-grade students often are characterized as impatient, easily discouraged, highly social, active, resilient, dramatic,

and verbal (Marotz & Allen, 2012). Fourth-grade students typically have short attention spans, feel a need to be part of a group, work well in groups, are strongly influenced by their peers, want to feel control over their choices, and are able to express a wide range of emotions (Marotz & Allen, 2012). As a highly social and physical group activity, tableau requires students to work in groups, to seek approval from their peers for their creative choices, to socialize, and to stay active. Because students have control over their own decisions in creating the tableau, they are likely to exhibit greater concentration and a deeper focus on the process of thinking and collaborative problem solving with their group (Cornett, 2007; Farmer 2011; Kelner & Flynn, 2006). As students attend to the task of creating a scene over which they have ownership, they may become more engaged, encouraged, and attentive. These students have an opportunity to dramatically express their emotions through body language, gesture, and verbal narrations as they assume the roles of different characters from the text. The process of creating a tableau inherently engages fourth-grade students by speaking to their developing social and behavioral attributes. Thus, the present study examined the use of tableau in the setting of fourth-grade classrooms.

The purpose of this initial study was to determine the extent to which the introduction of tableau increased the on-task behavior of students with language-based LD during small group language arts instruction. Specifically, the study employed an ABAB withdrawal design to examine fourth-grade students' on-task behavior during conventional language arts lessons and during lessons with tableau. On-task behavior data were collected using a whole interval time sampling procedure and were reported as the percentage of intervals on-task during small group language arts lessons.

Students with language-based LD often struggle to understand abstract (i.e., decontextualized) language reflected in stories and the CCSS emphasize comprehension of narrative story elements as an important skill for mastery in fourth grade. As a result, the study also included descriptive data related to students' understanding of narrative story elements, specifically character traits and sequence of events (Haager & Vaughn, 2013; National Governors Association Center for Best Practices, 2013). Audio digital recordings of oral story retellings were used to evaluate students' understanding of character traits and sequence of events to determine if performance differences existed across conventional and tableau lessons (see Figure 1 for Theory of Change).

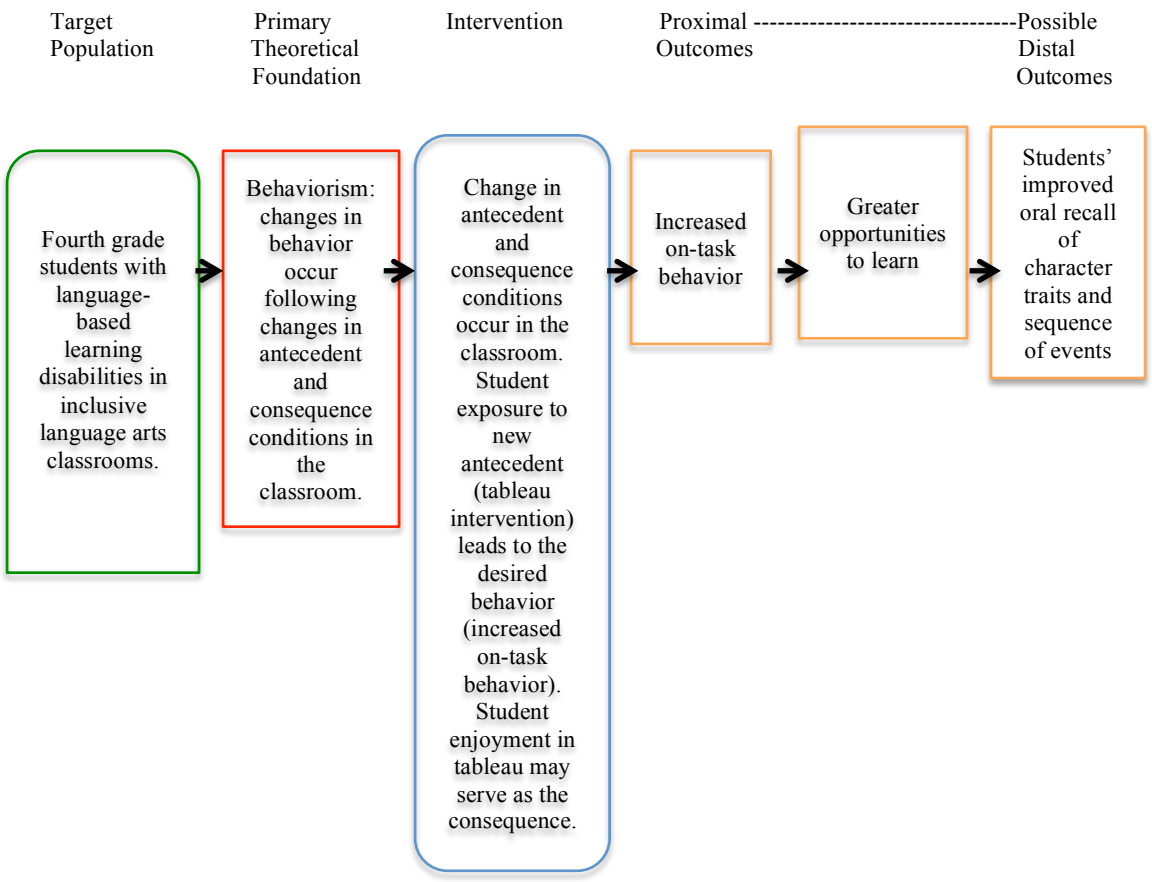

Figure 1. Theory of change: How tableau may increase students' on-task behavior.

Research Questions and Hypotheses

The study focused on the following major research question: What are the effects of tableau on the on-task behavior of fourth-grade students with language-based LD during small group language arts lessons?

More specifically, the study examined the following primary questions and hypotheses:

1. Does students' on-task behavior increase following introduction of tableau during small group language arts lessons?

Hypothesis: Students with language-based LD will show increased on-task behavior following the introduction of tableau as compared to the baseline and withdrawal phases.

2. Does students' on-task behavior decrease following the withdrawal of tableau and return to conventional instructional strategies during small group language arts lessons?

Hypothesis: Students with language-based LD will show decreased on-task behavior following the withdrawal of tableau as compared to the tableau phases.

Statement of Potential Significance

An ABAB withdrawal study that investigated the use of tableau to increase the on-task behavior of students with language-based LD contributed to various lines of research, including literature related to student engagement, arts education, and inclusive practices. First, several studies (e.g., Jordan & Stanovich, 2001; McWilliam & Bailey, 1995; Newman & Davies, 2005) have examined behavioral engagement levels across classroom settings for students with and without disabilities; however, a paucity of research has investigated the use of drama to improve specific behavioral engagement measures (e.g., on-task behavior) for these vulnerable populations. This study's findings added to the current literature on engagement by identifying factors that increase the on-task behavior of students with language-based LD. As on-task behavior varies across settings, the study's results informed professional development trainings and pre-service special education programs by highlighting effective approaches for increasing on-task behavior in inclusive settings for students with language-based LD.

Second, an ABAB withdrawal study addressed a gap in the arts literature by providing a more in-depth understanding of the impact of arts education, specifically drama, on increasing the on-task behavior of students with LD (Winner & Hetland, 2000). Most drama studies rely on a broad comparison of instructional outcomes across arts integrated and conventional contexts rather than examining specific drama strategies and how they might give rise to improved outcomes, notably on-task behavior, for students with disabilities (Catterall, 2002). Only three studies (Anderson & Berry, in press; Anderson & Berry, 2014; Whittaker, 2005) have exclusively targeted an LD population to determine the benefit of drama for increasing these students' on-task behavior.

Most significantly, because full inclusion alone generally fails to maximize learning outcomes for students with language-based LD, this study highlighted the potential of the arts for addressing the needs of populations at-risk for literacy failure in general education settings (Klem & Connell, 2004; McLeskey & Waldron, 2006). The use of drama-based interventions as mechanisms for improving on-task behavior has important implications for curricular development and for increasing the availability and use of dramatic arts integrated practices in inclusive elementary classrooms, particularly as schools aim to implement the CCSS.

Theoretical Foundations

Various theories and strands of literature contributed to an explanation of why tableau would increase on-task behavior and provide greater language learning opportunities, which would lead to a better understanding of narrative story elements for students with language-based LD. Features of Behaviorism (Cruickshank, Bentzen,

Ratzeberg, & Tannhuser, 1961; Skinner, 1974) established the primary theoretical foundation for the study. Additional literature related to Activity Theory and Social Interaction Theory, Total Physical Response, neuroscience, and drama and language learning research provided a more detailed explanation of the processes within tableau that would facilitate on-task behavior and provide greater language learning opportunities for students with LD. The specific processes embedded in these perspectives were the involvement with peers in a meaningful activity, physical movement, emotional expression, enactment, and meaning making through perspective taking and visual representation.

Behaviorism

The conceptual tenets of Behaviorism as applied to educational settings undergirded the theoretical foundations of the study. Behavior-learning theories emphasize changes in behavior as a result of adjustments to antecedent and consequence conditions (Cruickshank et al., 1961; Skinner, 1974). Behaviors occur in response to a stimulus in the environment; and the educational context may be modified to control or change behaviors. The introduction of a new stimulus into a classroom setting can produce desired behavior changes, such as increased on-task behavior (Cruickshank et al., 1961; Skinner, 1974). The presence of a reinforcer (e.g., teacher praise, student enjoyment in the intervention) immediately following the desired behavior (e.g., on-task behavior) increases the probability that changes in behavior (e.g., on-task behavior) will occur again in response to a stimulus.

In this study, tableau served as the new stimulus that was integrated into the classroom in an effort to increase students' on-task behavior. There was likelihood that

students would enjoy the tableau intervention; thus, student enjoyment acted as a potential reinforcer, which increased the probability that the presence of tableau would continue to increase students' on-task behavior.

Activity Theory and Social Interaction Theory

Pioneered by Russian psychologist Leont'ev, Activity Theory posits that learning is situated within an activity, or an activity system, and that students learn by directly participating in the activity. Students' on-task behavior and active engagement in activities serve as precursors to learning (Kaptelinin et al., 1995). In this view, the activities in which students are involved prove more important than the skills being taught; there is greater focus on the process than the product of learning. As a related theory, Vygotsky's Social Interaction Theory (1978) holds that students acquire, construct, and understand new language by socially interacting with their peers. Because changes in human behavior and language learning occur within activities that are mediated by relationships among participants, instructional strategies need to be structured to promote student involvement in meaningful activities and the development of peer relationships (Kaptelinin et al., 1995).

In this study, tableau involved students participating and personally engaging in a meaningful activity. Embedded in the tableau activity was the need for students to manipulate their bodies, pose, gesture, and coordinate their movements with their peers to represent characters and events from a text. Personally and physically engaging in the tableau required students to display on-task behaviors to synchronously and fluidly depict the scenes with their respective group members. Socially interacting with peers to create tableau scenes also provided greater language learning opportunities for students to

describe (i.e., oral expression) and understand (i.e., story comprehension) language related to narrative story elements.

Total Physical Response

As a language-teaching method, Total Physical Response (TPR) describes a process in which physical movement and whole-body actions are used to enhance the acquisition of language (Asher, 1966). In TPR, the teacher pairs actions with words (e.g., "Sit down," "Walk to the door," etc.) and demonstrates their meanings through gestures and dramatization (Asher, 1966). Students then carry out the teacher's instructions by responding to the language inputs through physical motions. Through TPR, students learn new words in a meaningful context because as they gesture and imitate the teacher, they develop a more concrete, social understanding of the words. By engaging their physical bodies and senses in the learning process, students also display increased on-task behavior because they become energized, engaged, emotionally connected, and personally invested in the learning task (Asher, 1966). A large number of scientific studies have tested and validated the effectiveness of TRP under a variety of conditions, from two weeks to a year, for subjects ranging from young children to adults and including students with visual (Conroy, 1999) and hearing (Marlatt, 1995) impairments (Asher, 1966; Davidheiser, 2002; Wolfe, 1982). Although the method was developed to teach non-native vocabulary to students learning a second language, TPR contributed to the present study because the general approach demonstrates how integrating dramatizations, physical movement, and gesture into classroom instruction facilitates on-task behavior, language expression, and language comprehension.

In this study, students were required to physically manipulate their bodies, gestures, and poses to assume the roles of characters from stories in tableau scenes. The kinesthetic and visual nature of the physical movement heightened students' on-task behavior by decreasing their distractibility and inattention (Asher, 1966). By activating their bodies, students also used their imagination to move beyond verbally describing characters to visually depicting their thoughts, feelings, and demeanor. As students displayed increased on-task behavior through physical movement, they subsequently connected with the characters and developed a better understanding of their perspectives. As a result, students were better able to orally express and comprehend narrative story elements like character traits and sequence of events.

Neuroscience Research

Recent developments from the field of neuroscience have shown that arts integration provides a valuable technique for improving on-task behavior through emotional arousal and for enhancing long-term retention of learned content through enactment (Groff, 2013; Rinne et al., 2012). Information that is more emotionally arousing or interesting activates the amygdala, and leads to changes in attention and focus (Gazzaniga, 2008; Talmi et al., 2008). Because the arts often involve emotional expression, integrating the arts into teaching practices likely increases on-task behavior (Rinne et al., 2012).

In this study, creating a tableau involved emotional expression. As students assumed the roles of characters in stories, they tapped into their own emotions and physically illustrated the characters' inner thoughts and feelings. Creating a tableau scene became an emotionally arousing task that engaged multiple senses, activated the

amygdala, and led to increased on-task behavior through emotional interest (Fredrickson & Branigan, 2005; Schmitz, De Rosa, & Anderson, 2009).

Additionally, neuroscience research describes how arts integration enhances long-term memory retention through the process of enactment. Enactment refers to the finding that physically acting out a concept or an idea leads to improved recall (Mohr, Engelkamp, & Zimmer, 1989; Rinne et al., 2012). When participants perform the actions rather than listen to the academic material, the information is encoded in the verbal and motor brain regions, which allows for greater retention and information recall (Ashbury & Rich, 2008; Groff, 2013; Mohr et al., 1989; Senkfor, Van Petten, & Kutas, 2008). Because dramatic arts integration consists of students performing actions (e.g., role playing, improvisation, pantomime, story dramatization, and/or Reader's Theater), students are likely to improve their ability to recall narrative stories as a result of enactment (Podlozny, 2000; Rinne et al., 2012).

In this study, the process of enactment was embedded in tableau. Performing the actions and gestures needed to develop a tableau sustained students' attention, which enhanced their ability to encode more information (such as content related to character traits and sequence of events) in the verbal and motor brain regions and allowed for greater comprehension, long term retention, and recall of narrative story elements (Mohr et al., 1989; Senkfor et al., 2008).

Drama and Language Learning

Literature related to drama and language learning provided additional theoretical support for how tableau may have improved students' understanding of character traits and sequence of events after students demonstrated increased on-task behavior.

Researchers (Crumpler, 2007; Edmiston, 1993; Wilhelm, 2007) have identified documented the benefits of drama (through perspective taking and visual representation) for deepening one's understanding of a text. Process drama techniques, in which students assume the roles of the characters, may help them to interact with the text and to develop new understandings of multiple perspectives (Crumpler, 2007; Edmiston, 1993).

In the present study, creating a tableau allowed students to assume characters' perspectives and to visually represent scenes, both of which deepened their knowledge and allowed them to make meaning of stories. By taking on the roles of specific characters and by using gesture and body language, students learned new ways of thinking, imagining, and understanding the characters' intentions, thoughts, and actions than otherwise possible in more conventional settings. Because students were provided the opportunity to interact more fully with new concepts and to integrate previously learned knowledge in the process of creating a tableau, there was a greater likelihood that domain-specific knowledge would be activated or formed (Wagner, 1998). Visually depicting scenes from stories also enabled students (1) to form mental images of the characters and events and (2) to express and comprehend more complex language related to narrative story elements (e.g., character traits and sequence of events).

Within an inclusive classroom setting, tableau served as a new environmental stimulus that provided an effective way to increase students' on-task behavior and provide greater learning opportunities, subsequently improving students' understanding of character traits and sequence of events. Student enjoyment in the tableau intervention acted as a likely reinforcer, which increased the probability that students would continue to demonstrate increased on-task behavior. The inherent processes within the context of

tableau, including of involvement with peers in a meaningful activity, physical movement, emotional expression, enactment, and meaning making through perspective taking and visual representation, facilitated improved behavioral and language learning outcomes.

Summary of Methods

This study was an ABAB withdrawal design, which explored the potential presence of a functional relation between tableau and an increase in the on-task behavior of three students with language-based LD. Specifically, the tableau intervention consisted of students making still images with their bodies to represent a scene or explore a particular story character during small group language arts lessons. During the first phase (A), the teacher delivered small group language arts lessons in her conventional manner. When data collected during the first phase were consistent and stable and a change was observed in the hypothesized direction, the second phase (B) began. In the second phase, the teacher integrated tableau into her small group language arts lessons. When data collected during the second phase were consistent and stable and a change was observed in the hypothesized direction, tableau was withdrawn (i.e., the teacher returned to her conventional instructional methods) and the third phase (A) began. After the data were consistent and stable in the third phase and a change was observed in the hypothesized direction, the fourth phase (B) began and tableau was reintroduced. This design provided an opportunity to demonstrate a functional relation between the target behavior (% of intervals engaged in on-task behavior) and the intervention condition (tableau) within the first participant and to replicate the established functional relation across two additional participants (Gast, 2010; see Figure 2 for relationship of major

research design components).

Participants were selected based on their special education identification status as students with language-based LD and their placement in fourth-grade inclusive classrooms at one of two elementary schools in a charter school network in the Mid Atlantic region. The primary dependent variable, on-task behavior, was measured through direct observation of each student's on-task behavior during small group language arts lessons. The independent variable was the implementation of tableau. Teachers were trained on how to use tableau before its implementation within their language arts classes. Throughout the study, the primary researcher provided participating teachers with ongoing feedback regarding their implementation of tableau. Additional descriptive data were collected through oral story retellings to assess students' understanding of narrative story elements, specifically character traits and sequence of events, across settings.

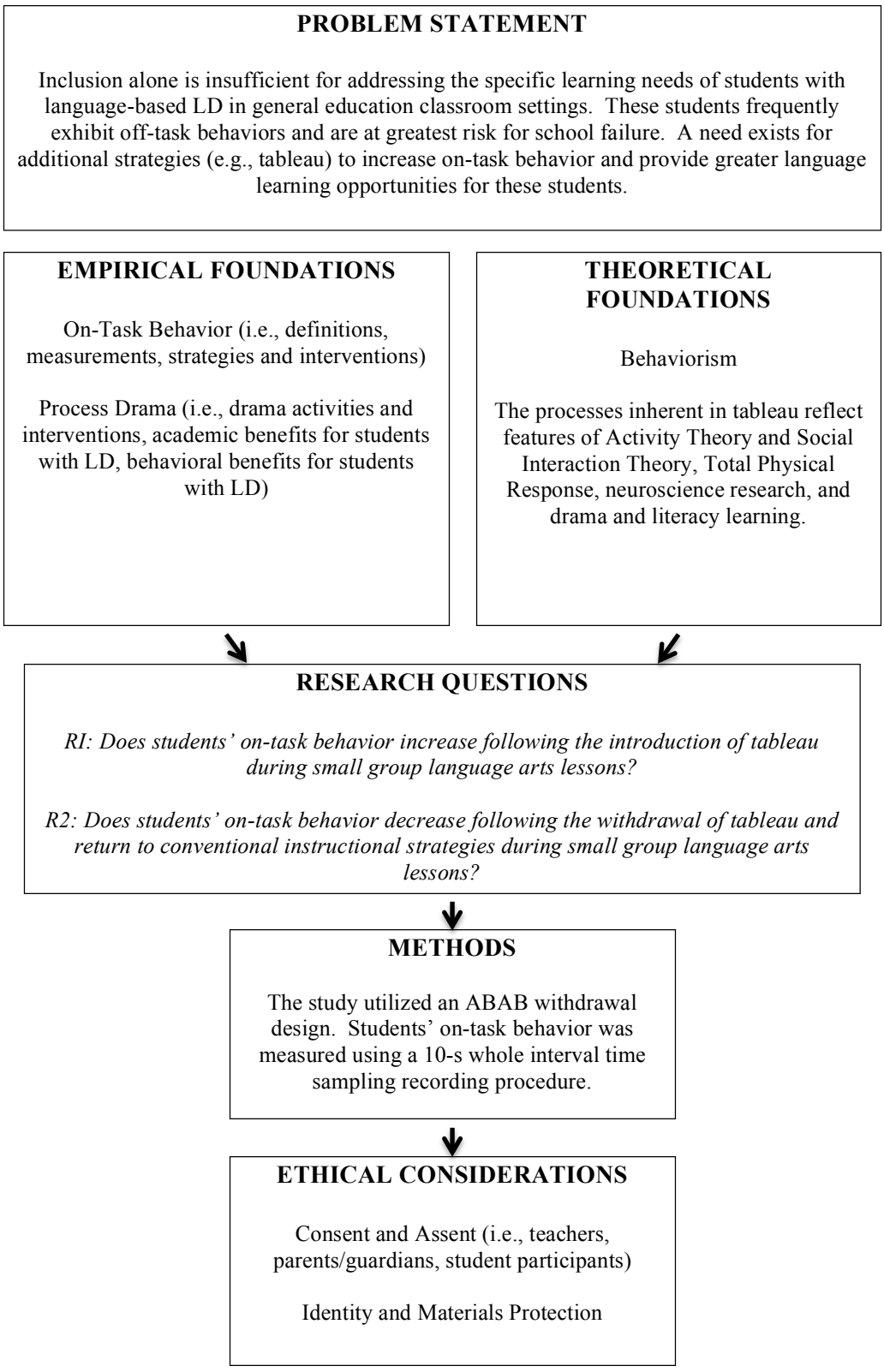

Figure 2. Relationship of major research design components.

Subjectivity Statement

My interest in the arts as an educational strategy for supporting behavioral and language learning outcomes for students with LD stems from my direct experiences as a high school student, as an art history major in college, and as a special educator in Washington, DC public and charter schools. My appreciation for the arts first emerged during high school in a seventh period art history classroom as my teacher, Dr. Buchanan* (*pseudonym), captured the complete attention of 20 seniors for an hour every afternoon. I can still imagine her today, the stem of her glasses dangling from the left corner of her mouth, arms gesturing wildly as she philosophized about the details of Hieronymus Bosch's *The Garden of Earthly Delights*. Dr. Buchanan had the unique ability to make the art come alive, as if each painting had been hand selected to represent a moment in our lives. By using art to connect to her students on a personal level, Dr. Buchanan deepened my understanding of each painting and inspired a new love for the arts that would extend far beyond her classroom. My passion for art strengthened in college, where I majored in art history and served as a docent for the University of Virginia art museum. As I led museum tours to local school groups, I witnessed firsthand the potential of the arts to motivate students. My genuine belief in the power of the arts to enrich learning translated into my work as a special educator. By infusing elements of dance, drama, music, and visual arts into lessons across an array of disciplines, I engaged my students in the learning process and encouraged them to develop a personal connection to their work. In my six-year tenure as a special educator, I discovered that the arts, drama in particular, was especially beneficial for improving the on-task behavior and language achievement of my students with LD. Based on these previous experiences

and my greater goal of improving educational outcomes for students with language-based LD in inclusive classrooms, the present study focused on the on-task behavior of students with LD during tableau drama activities and conventional language arts lessons.

Delimitations

This study was delimited to three students, two school sites (i.e., 2 of 6 elementary schools in a charter network), and a specific drama intervention chosen by the researcher. The sample consisted of three students with language-based LD receiving services under IDEIA in fourth-grade classrooms. As a result, the findings did not provide information on the potential benefit of tableau for other students in the selected classrooms, including those with other identified disabilities. The researcher's site selection of two urban elementary charter schools where teachers lack experience and training in arts integration techniques also delimited the study because findings were specific to the two schools and participating classrooms. Lastly, the narrow focus on tableau might have underestimated the potential benefit of drama and other art forms for increasing the on-task behavior of students with disabilities.

Limitations

A number of factors limited the scope of the initial study and should be noted when interpreting the findings. Although this research provided initial evidence supporting the value of tableau for increasing the on-task behavior of students with language-based LD during small group language arts instruction, limitations emerged during data collection and should be considered when interpreting the results of the current study.

Internal Validity

Most threats to internal validity (i.e., the extent to which the results of the study can be directly *attributed to the study*; Campbell & Stanley, 1963; Horner et al., 2005; Kratochwill et al., 2010) inherently were controlled for through the structure of the ABAB withdrawal design. Although testing was not a threat to the primary dependent variable (i.e., on-task behavior), concerns of testing emerged during the descriptive data collection of oral story retellings. During data collection, exposure to a test can influence scores on later exposures to that same test (Kratochwill et al., 2010). As a result, students' scores may be the result of their continued exposure to testing rather than to their participation in an intervention. During descriptive data collection of students' oral story retellings, students were exposed to the same oral story recalling procedure at the end of every lesson. Although the story selections differed for each lesson within and across phases, continuous exposure to the oral story retellings procedure could have affected students' scores on subsequent oral story recalls because students were more comfortable and accustomed to talking about stories. However, results from the Likert-scale assessments of the oral story recalls showed that students scored higher during tableau as compared to non-tableau phases, rather scoring higher on the assessment over time.

External Validity

Threats to external validity (i.e., the extent to which the findings of a given study can be *generalized to a larger population*) reflect additional limitations of this study (Kratochwill et al., 2010). Specific concerns of the restricted convenience sample, lack of maintenance data, and lack of generalization data emerged during the data collection

procedures. The current study was restricted to a convenience sample of two urban charter schools and three, fourth-grade students with language-based LD. Therefore, it is unclear how the study's results will generalize to other inclusive classrooms that are not in urban settings, are not in charter schools, or include other fourth graders with language-based LD.

A second threat to external validity reflects the lack of maintenance data collected at the end of the study. Although the intervention appeared successful for all three of the student participants, data only were collected for an eight week period, from April to June, and the school year ended before the primary researcher was able to collect maintenance data on the participating teachers and students. Therefore, the extent to which the findings showed maintenance effects with the same setting, participants, and materials is unknown. An opportunity to collect maintenance data through follow-up sessions would have provided additional information about the extent to which the teachers continued to implement the tableau intervention, as well as whether students' on-task behavior continued to increase during lessons that integrated the tableau intervention (Horner et al., 2005).

The lack of generalization data also may have threatened the external validity of the study. The primary researcher did not collect generalization data of students' on-task behavior across different settings, participants, and materials. Generalization data was not appropriate for this study because tableau was a context-specific intervention and students' on-task behavior only was addressed during small group language arts lessons. As a result, the effects of students' increased on-task behavior during the tableau intervention were limited to the two teachers' implementation of tableau and to the

setting of the inclusive fourth grade language arts classrooms. Collecting generalization data could have provided additional information about the extent to which students' increased on-task behavior during tableau transferred across other settings, participants, and materials.

Additional Limitations

The study also was limited because the primary researcher (a) did not conduct a functional behavioral assessment (FBA) to evaluate the function of off-task behavior for the three participating students; and (b) did not collect data on a specific reinforcer. Conducting an FBA prior to the study would have provided information about whether the components of tableau addressed the function of each participant's off-task behavior. However, because the study's results indicated that a functional relation existed between the introduction of tableau and an increase in students' on-task behavior for all three participants, the data suggests that tableau addressed the function of students' off-task behaviors.

Although students' enjoyment in the tableau intervention was the perceived reinforcer (i.e., pleasant consequence that reinforced the behavior) in the Antecedent-Behavior-Consequence model (related to the tenets Behaviorism that undergirded the theoretical foundations for the study), the primary researcher did not measure or collect specific data on any reinforcer. Measuring students' enjoyment in the tableau activity and teachers' responsiveness (i.e., rate of praise) to participants in each phase would have provided additional information on the specific reinforcer (e.g., student enjoyment, teacher praise) in this study.

Definitions of Key Terms

The following definitions clarify the meaning of terms as used in this study.

Arts integration: "an approach to teaching in which students construct and demonstrate understanding through an art form and engage in a creative process which connects an art form and another subject area and meets evolving objectives in both" (The Kennedy Center ArtsEdge, 2013).

Attention Deficit Hyperactivity Disorder: "having limited strength, vitality, or alertness, including a heightened alertness to environmental stimuli, that results in limited alertness with respect to the educational environment" (IDEIA, 2004).

Behavioral engagement: "time students spend on work, intensity of concentration and effort, tendency to stay on task, and propensity to initiate action when given the opportunity" (Klem & Connell, 2004, p. 262).

Classroom drama: an activity in which students invent and enact dramatic situations by "acting out" academically-related texts or situations for themselves, rather than for an outside audience, as part of the regular academic curriculum (Podlozny, 2000).

Dramatic arts integration: a learning strategy that uses drama as an art form; "an approach to teaching in which students construct and demonstrate understanding through drama and engage in a creative process which connects drama and another subject area and meets evolving objectives in both" (The Kennedy Center ArtsEdge, 2013).

Emotional and Behavioral Disorders: "a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child's educational performance: (a) an inability to learn that cannot be

explained by intellectual, sensory, or health factors; (b) an inability to build or maintain satisfactory interpersonal relationships with peers and teachers; (c) inappropriate types of behavior or feelings under normal circumstances; (d) a general pervasive mood of unhappiness or depression; (e) a tendency to develop physical symptoms or fears associated with personal or school factors" (IDEIA, 2004).

Engagement: "the intensity and emotional quality of children's initiation and carrying out of learning activities" (Skinner & Belmont, 1993, p. 572).

Improvisation: "the spontaneous performance of a scene or story" (Farmer, 2011, p. 95).

Inclusion: referred to by the Individuals with Disabilities Education Improvement Act (IDEIA) as mainstreaming or placement in the least restrictive environment; an approach to educating students with disabilities alongside their non-disabled peers to the greatest extent possible (IDEIA, 2004).

Language-Based Learning Disability: challenges in the area of language, including impaired comprehension, the use of written or spoken language, reading difficulties, verbal skill deficits, and dyslexia (ASHA, 2013; LD OnLine, 2008).

Mantle-of-the-expert: "the creation of a fictional world where students assume the roles of experts in a designated field" (Farmer, 2011, p. 25).

Narrative story elements: frequently known as story grammar elements, narrative story elements include the main characters, time, setting, major events, problems, goals and motivations, and ending/resolution of a story (Bednarczyk, 1991; Taylor, Alber, & Walker, 2002).

On-task behavior: in this study, on-task behavior refers to: (a) sitting or standing in a designated space; (b) keeping hands, feet, and objects to oneself; (c) participating in the class activity by raising one's hand, and by asking and responding to questions; (d) interacting with peers and teachers; (e) listening to and following directions; (f) looking at and using materials appropriately (Clare et al., 2000; Riley et al., 2011; Richards et al., 2010; see Appendix A for examples of on-task behavior).

Off-task behavior: in this study, off-task behavior refers to: (a) getting out of one's seat or designated space; (b) constant and noticeable fidgeting, playing with pencils/toys, hitting, biting, or throwing objects; (c) delaying starting assigned task, skipping class, and/or coming to class late; (d) looking around, staring into space, or looking out the window; (e) calling out or talking to someone when prohibited; (f) playing with materials, including pencils and paper (Statewide Parent Advocacy Network, 2005; see Appendix A for non-examples of off-task behavior).

Role-play: "the student takes on the role of a character to explore an alternative point of view" (Farmer, 2011, p. 17).

See-think-wonder: "a routine for exploring works of art and other interesting things"; involves the use of the following questions: What do you see? What do you think about that? What does it make you wonder? (Harvard Project Zero, 2013).

Self-contained classroom: a classroom specifically designated for students with disabilities who cannot successfully participate in their general education programs.

Special education resource room: "students with disabilities leave the general education class for a designated time period to receive specialized instruction in areas such as language, reading, and math" (Mastropieri & Scruggs, 2006).

Speech and Language Impairment: "a communication disorder, such as stuttering, impaired articulation, a language impairment, or a voice impairment, that adversely affects educational performance" (IDEIA, 2004).

Tableau: a drama intervention in which participants make still images with their bodies to represent a scene or explore a particular moment in a story for deeper analysis (Farmer, 2011).

Thought tracking: when specific characters in a tableau scene are tapped on their shoulders and prompted to speak about their thoughts or feelings (Farmer, 2011).

Withdrawal phase: an observation where the intervention is not present (Gast, 2010; Kennedy, 2005).

Chapter II: Literature Review

Introduction

Students with language-based learning disabilities (LD), who experience challenges in receptive and expressive language, increasingly are placed in general education settings (ASHA, 2013; LD OnLine, 2008). Inclusion alone has been insufficient for improving outcomes for students with disabilities (Klem & Connell, 2004; Newman & Davies, 2005). In general education settings, students with language-based LD often struggle to meet the academic demands of school, particularly in language arts (Klem & Connell, 2004; McLeskey & Waldron, 2011; Newman & Davies, 2005). Classroom instruction rarely is designed to address these students' challenges, leading to low achievement and academic failure (Cortiella, 2011). As students with language-based LD are expected to master increasingly difficult academic content in their inclusive classrooms, they may experience additional learning challenges and frustrations and may become less engaged in instructional activities (Haager & Vaughn, 2013). A critical need exists to develop effective ways to increase on-task behavior and enhance learning opportunities for students with language-based LD in inclusive settings. Dramatic arts integration may improve language outcomes and increase students' on-task behavior in inclusive settings (Anderson & Berry, in press; Anderson & Berry, 2014; Catterall, 2002; Deasy, 2002; Parsdad & Spiegelman, 2012; Podlozny, 2000); yet, the potential benefit of specific drama interventions, notably tableau, has been scarcely researched or explored.

The purpose of this study was to investigate the potential of a specific dramatic arts intervention (tableau) for increasing students' on-task behavior during small group

language arts lessons. The study examined students' on-task behavior during conventional lessons and during lessons with tableau using an ABAB withdrawal design.

Educational Context of Inclusion and Common Core State Standards

As a result of the least restrictive environment (LRE) clause in the Individuals with Disabilities Education Improvement Act (IDEIA; 2004), students with LD increasingly are being placed in inclusive classrooms. To date, over 60% of these students spend close to 80% of their time with their non-disabled peers (Cortiella, 2011; McLeskey et al., 2011). While inclusion is necessary for ensuring that students with LD have access to the general education curriculum and are provided an opportunity to learn with their typically developing classmates, controversy exists regarding the quality of inclusive programs for improving the achievement of these students (McLeskey &Waldron, 2011). Without appropriate accommodations, interventions, and supports, students with LD may become distracted, off task, and fall further behind their peers in inclusive settings.

With the majority of states adopting the Common Core State Standards (CCSS), "the strategies and skills that teachers currently have in their repertoire are going to be necessary but insufficient to ensure success [of students with LD] in this new instructional climate" (Haager & Vaughn, 2013, p. 14). Research-based practices that address the challenges of elementary aged students with language-based LD are "underspecified and underdeveloped" (Haager & Vaughn, 2013, p. 14). In many cases, the high stakes testing mandates set forth by IDEIA (2004) and the increased rigor of the CCSS and accompanying assessments create classrooms that narrowly focus on outcomes

rather than considering the most important educational opportunities for supporting students with LD (Haager & Vaughn, 2013).

Theoretical Foundations

Various theories and strands of literature contributed to an explanation of why tableau would increase on-task behavior and provide greater language learning opportunities, which would lead to a better understanding of narrative story elements for students with language-based LD. Features of Behaviorism (Cruickshank, Bentzen, Ratzeberg, & Tannhuser, 1961; Skinner, 1974) established the primary theoretical foundation for the study. Additional literature related to Activity Theory and Social Interaction Theory, Total Physical Response, neuroscience, and the drama and language learning research provided a more detailed explanation of the processes within tableau that may facilitate on-task behavior and provide greater language learning opportunities for students with LD. The specific processes embedded in these perspectives were involvement with peers in a meaningful activity, physical movement, emotional expression, enactment, and meaning making through perspective taking and visual representation, all of which reflected the importance of the tableau intervention and its role in facilitating behavioral changes and improved language outcomes.

Behaviorism

The conceptual tenets of Behaviorism as applied to educational settings undergirded the theoretical foundations of the study. Behavior-learning theories emphasize changes in behavior as a result of adjustments to antecedent and consequence conditions (Cruickshank, Bentzen, Ratzeberg, & Tannhuser, 1961; Skinner, 1974). Behaviors occur in response to an environmental stimulus; and the educational context

may be modified to control or change behaviors. The introduction of a new stimulus (e.g., a teaching strategy or intervention) into a classroom setting can produce desired behavior changes, such as increased on-task behavior (Cruickshank et al., 1961; Skinner, 1974). The presence of a reinforcer (e.g., teacher praise, student enjoyment in the intervention) immediately following the desired behavior (e.g., on-task behavior) increases the probability that changes in behavior (e.g., on-task behavior) will occur again in response to a stimulus.

Additional literature related to Activity Theory and Social Interaction Theory, Total Physical Response, neuroscience research, and drama and literacy learning research demonstrated how the new environmental stimulus (i.e., tableau) supported the desired behavior (i.e., increased on-task behavior) and subsequently increased understanding of character traits and sequence of events for students with language-based LD.

Activity Theory and Social Interaction Theory

Pioneered by Russian psychologist Leont'ev, Activity Theory posits that learning is situated within an activity, or an activity system, and that students learn by directly participating in the activity. Students' on-task behavior and active engagement in activities serve as precursors to learning (Kaptelinin et al., 1995). In this view, the activities in which students are involved prove more important than the skills being taught; there is greater focus on the process than the product of learning. As a related theory, Vygotsky's Social Interaction Theory (1978) holds that students acquire, construct, and understand new language by socially interacting with their peers. Because changes in human behavior and language learning occur within human activities that are mediated by relationships among participants, instructional strategies need to be

structured to promote student involvement in meaningful activities and the development of peer relationships (Kaptelinin et al., 1995).

Total Physical Response

As a language-teaching method, Total Physical Response (TPR) describes a process in which physical movement and whole-body actions are used to enhance the acquisition of language (Asher, 1966). In TPR, the teacher pairs actions with words (e.g., "Sit down," "Walk to the door," etc.) and demonstrates their meanings through gestures and dramatization (Asher, 1966). Students then carry out the teacher's instructions by responding to the language inputs through physical motions. Through TPR, students learn new words in a meaningful context because as they gesture and imitate the teacher, they develop a more concrete, social understanding of the words. By engaging their physical bodies and senses in the learning process, students also display increased on-task behavior because they become energized, engaged, emotionally connected, and personally invested in the learning task (Asher, 1966).

A large number of scientific studies have tested and validated the effectiveness of TRP under a variety of conditions, from two weeks to a year, for subjects ranging from young children to adults and including students with visual (Conroy, 1999) and hearing (Marlatt, 1995) impairments (Asher, 1966; Davidheiser, 2002; Wolfe, 1982). Although the method was developed to teach non-native vocabulary to students learning a second language, TPR contributed to the present study because the general approach demonstrates how integrating dramatizations, physical movement, and gesture into classroom instruction facilitates on-task behavior, language expression, and language comprehension.

Neuroscience Research

Recent developments from the field of neuroscience have shown that arts integration provides a valuable technique for improving on-task behavior through emotional arousal and for enhancing long-term retention of learned content through enactment (Groff, 2013; Rinne et al., 2012). Information that is more emotionally arousing or interesting activates the amygdala, and leads to changes in attention and focus (Gazzaniga, 2008; Talmi et al., 2008). Because the arts often involve emotional expression, integrating the arts into teaching practices likely increases on-task behavior (Rinne et al., 2012). When students participate in emotionally arousing tasks such as multisensory experiences provided by the arts, their on-task behavior increases because the activities are reinforced through visual sensory input (Groff, 2013; Rinne et al., 2012; Thorpe & Borden, 1985).

Additionally, neuroscience research describes how arts integration enhances long-term memory retention through the process of enactment. Enactment refers to the finding that physically acting out a concept or an idea leads to improved recall (Mohr, Engelkamp, & Zimmer, 1989; Rinne et al., 2012). When participants perform the actions rather than listen to the academic material, the information is encoded in the verbal and motor brain regions, which allows for greater processing (Ashbury & Rich, 2008; Groff, 2013; Mohr et al., 1989; Senkfor, Van Petten, & Kutas, 2008). Because dramatic arts integration consists of students performing actions (e.g., role playing, improvisation, pantomime, story dramatization, and/or Reader's Theater), students are likely to improve their ability to recall stories as a result of enactment (Podlozny, 2000; Rinne et al., 2012).

Drama and Language Learning

Lastly, literature related to drama and language learning provided theoretical support for how tableau may have supported students' understanding of character traits and sequence of events after students demonstrated increased on-task behavior. Researchers (Crumpler, 2007; Edmiston, 1993; Wilhelm, 2007) have identified documented the benefits of drama (through perspective taking and visual representation) for deepening one's understanding of a text. In drama, the skills needed to enact a story closely resemble the skills required in story comprehension (Adomat, 2012; Wagner, 1998). A child who uses drama to understand stories "must be able to express the important details of plot and character, word meanings, the sequence of the story, and relationships of cause and effect" (Adomat, 2012, p. 344). Students must be able to predict, analyze, sequence events, internalize character motives, and draw inferences to act out the story (Adomat, 2012).

Process drama techniques, in which students assume the roles of the characters, may help them to interact with the text and to develop new understandings of multiple perspectives (Crumpler, 2007; Edmiston, 1993). In a study examining the influence of drama activities on first-grade students' abilities to make meaning of themes and events from *Jack and the Beanstalk,* students were able "to discover new insights into the characters, the themes, and themselves" (Edmiston, 1993, p. 252) by taking on the perspectives of characters from the story. An additional study found that drama supported students with reading challenges by allowing them to deepen their knowledge of a story (Wilhelm, 2007). In the present study, engaging in drama activities allowed students to assume the roles of the characters and to develop more complex mental

representation of events and characters. Students improved their understanding of multiple perspectives by "personaliz[ing] their interpretations of texts while they react[ed] as characters to the implications and deeper meanings of stories" (Adomat, 2010, p. 344).

Implications for Present Study

By drawing primarily from Behaviorism, with additional contributions from Activity Theory and Social Interaction Theory, TPR, neuroscience research, and literature related to drama and language learning, the theoretical foundations of the present study were situated within a contextually based framework. In this view, changes in behavior were the result of systematic adjustments to the antecedent and consequence conditions within a classroom or environmental context. The stimulus for on-task behavior was the instructional method used by the teacher during small group language arts lessons. The presence of a reinforcer increased the probability that the changes in behavior would occur again in response to the stimulus. In this study, tableau served as the new stimulus that was integrated into the classroom in an effort to increase students' on-task behavior. There was likelihood that students would enjoy the tableau intervention; thus, student enjoyment acted as a potential reinforcer, which increased the probability that the presence of tableau would continue to increase students' on-task behavior.

Inherent in tableau were five processes (related to the theoretical foundations of Activity Theory and Social Interaction Theory, TPR, neuroscience research, and literature related to drama and language learning) that increased students' on-task behavior and subsequently supported students' understanding of character traits and

sequence of events. The specific processes embedded in these theoretical foundations were involvement with peers in a meaningful activity, physical movement, emotional expression, enactment, and meaning making through perspective taking and visual representation. First, tableau involved students participating and personally engaging in a meaningful activity. Embedded in the tableau activity was the need for students to manipulate their bodies, pose, gesture, and coordinate their movements with their peers to represent characters and events from a text. Personally and physically engaging in the tableaux required students to display on-task behaviors to synchronously and fluidly depict the scenes with their respective group members. Socially interacting with peers to create tableau scenes also provided greater language learning opportunities for students to describe (i.e., oral expression) and understand (i.e., story comprehension) language related to narrative story elements. Once students exhibited increased on-task behavior during the activity, they were able to construct ideas about details and character relationships, identify solutions to problems with the visual picture, and enhance their overall understanding of the skills being taught (e.g., character traits, sequence of events).

A second process inherent in tableau was movement. To develop a tableau scene, students were required to physically manipulate their bodies, gesture, and pose to assume the role of a character from a story. The kinesthetic and visual nature of the physical movement heightened students' on-task behavior by decreasing their distractibility and inattention (Asher, 1966). By activating their bodies, students also were able to use their imaginations to move beyond verbally describing characters to visually depicting their thoughts, feelings, and demeanor. As students displayed increased on-task behavior through physical movement, they subsequently connected with the characters and

developed a better understanding of their perspectives. As a result, students were better able to orally express and comprehend narrative story elements like character traits and sequence of events.

Third, tableau involved emotional expression, which activated the amygdala and led to changes in behavior and attention (Rinne et al., 2012). As students assumed the roles of characters in a story, they tapped into their own emotions and physically illustrated the characters' inner thoughts and feelings. Creating a tableau scene became an emotionally arousing task that engaged multiple senses, activated the amygdala, and led to increased on-task behavior through emotional interest (Fredrickson & Branigan, 2005; Schmitz, De Rosa, & Anderson, 2009).

Fourth, embedded in tableau was the process of enactment, or physically acting out a concept or idea. As students generated greater emotional interest and increased their on-task behavior during the creation of a tableau scene, they were able to improve their long-term memory retention as a result of enactment. Performing the actions and gestures needed to develop a tableau broadened the scope of students' attention and enhanced their ability to encode more information (such as content related to character traits and sequence of events) in the verbal and motor brain regions, which allowed for greater comprehension, long term retention, and recall of narrative story elements (Mohr et al., 1989; Senkfor et al., 2008).

Fifth, by creating tableau, students were able to assume character perspectives and to visually represent scenes, both of which deepened their knowledge and allowed them to make meaning of stories. By taking on the roles of specific characters and by using gesture and body language, students learned new ways of thinking, imagining, and

understanding the characters' intentions, thoughts, and actions than otherwise possible in more conventional settings. Because students were provided the opportunity to interact more fully with new concepts and to integrate previously learned knowledge in the process of creating tableaux, there was a greater likelihood that domain-specific knowledge would be activated or formed (Wagner, 1998). Visually depicting scenes from stories also enabled students (1) to form mental images of the characters and events and (2) to express and comprehend more complex language related to narrative story elements (e.g., character traits and sequence of events). As such, tableau scaffolded students' language use and provided a context for concretely communicating mental representations of dramatic elements (e.g., the event, the character, the character's feelings; Brouillette, 2010).

Within an inclusive classroom setting, tableau served as a new environmental stimulus that provided an effective way to increase students' on-task behavior and provide greater learning opportunities, subsequently improving students' understanding of character traits and sequence of events. Student enjoyment in the tableau intervention acted as a likely reinforcer, which increased the probability that students would continue to demonstrate increased on-task behavior. The inherent processes within the context of tableau, including involvement with peers in a meaningful activity, physical movement, emotional expression, enactment, and meaning making through perspective taking and visual representation, facilitated improved behavioral and language learning outcomes.

Topics and Purpose

The purpose of this review was to examine the scholarly literature related to on-task behavior, the use of drama for students with LD, and narrative story elements. The

first section of this chapter provided the educational context of inclusion and the CCSS. The second section of this chapter described the theoretical foundations for the study. The third section of this chapter encompasses the literature review, organized around three broad topic areas. Topic areas include: (a) on-task behavior (i.e., definitions, measures, and strategies for improvement); (b) drama (i.e., how drama has been used in language arts classrooms for disability populations and behavioral and academic benefits for students with language-based LD); and (c) narrative story elements, specifically related to character traits and sequence of events (i.e., levels of knowledge, interventions, and assessments for students with LD). The goal of each topic area was to inform the questions of interest and the methodology of choice in the present study. The final section of each broad topic area provided a summary of the research, addressed limitations within each topic, and discussed inferences from the literature review for the present study.

This review of the literature was guided by the following questions of interest:

- How has on-task behavior been defined and measured and what strategies have been implemented to increase the on-task behavior of students with LD, attention deficit hyperactivity disorder (ADHD), emotional and behavioral disorders (EBD), and/or specific language impairments (SLI) in empirical literature?
    - What are the implications of these definitions, measures, and strategies for the way on-task behavior is defined and measured for students with LD in the present study?

- How has drama been used in the language arts classroom for disability populations, and how has drama supported (both academically and behaviorally) K-5 students with LD?
    - What are the implications of classroom drama implementation and its benefits for K-5 students with LD for the development of the intervention in the present study?
- What previous research has been conducted related to narrative story elements, including character traits and sequence of events (i.e., levels of knowledge, interventions, and assessments) for K-5 students with LD?
    - What are the implications of these levels of knowledge, interventions, and assessments for the way character traits and sequence of events are assessed for K-5 students with LD in the present study?

Overview of the Literature Search

Several strategies were used to identify relevant literature for this review. Database searches were conducted to identify relevant theoretical and empirical literature. The following eight databases were searched using various search terms: Academic Search Complete, ArtsEdSearch, Education Abstracts, ERIC (EBSCO), Google Scholar, ProQuest, ProQuest Dissertations and Theses Online, and PsychINFO. Key search terms included different combinations of the following: on-task behav*, definitions, disability, learning disability, classroom, students with learning disabilities, story elements, story grammar, understanding characters, characters, character traits, sequence of events, events, sequencing, comprehension, narrative text comprehension, literacy, inclusion, drama, theater, arts integration, and the arts. Books, particularly those

consisting of chapters reviewing empirical or theoretical scholarship related to dramatic arts integration and students with language-based LD, also were included in the search. To narrow the scope of the search, two limitations were employed. First, articles must have been published in English-language peer-reviewed journals. Most of the relevant research was conducted in the United States, although several international studies were included. Second, studies and articles must have included populations of students with identified disabilities and must have been conducted in classroom settings.

Several more specific search criteria were utilized when searching for literature relevant to the three broad topic areas. Because the present study was framed within the educational context of inclusion, only literature written or studies conducted after 1975 (i.e., when the Education for All Handicapped Children Act was enacted and children with disabilities were required to be educated in the LRE were considered for review of the three broad topic areas. To be included in the review for the first topic area (on-task behavior), the literature could be empirical or theoretical but was limited to one facet of behavioral engagement: on-task behavior. The review excluded articles examining off-task behavior and other features of behavioral engagement (e.g., student effort). The review also excluded studies related to other dimensions of engagement, including cognitive (e.g., student investment in learning) and emotional/affective (e.g., student enjoyment) domains. Although the present study consisted of only fourth-grade students, the review was broadened to include students in grades K-5 to ensure that no relevant studies of elementary student populations were omitted. Studies involving students with attention deficit hyperactivity disorder (ADHD; i.e., those who have a heightened alertness to environmental stimuli), emotional and behavioral disorders (EBD; i.e., those

who present with inappropriate behaviors or feelings under normal circumstances), and speech and language impairment (SLI; i.e., those who have a language or communication disorder that adversely affects their educational performance) were included in the first topic area based on the likelihood of comorbidity in students identified with LD (Algozzine, Wang, & Violette, 2011; IDEIA, 2004; Smith & Adams, 2006); however, articles related to students with autism and/or intellectual disabilities (ID) were excluded. For the first major topic area, studies examining students with LD in non-inclusive special education classrooms were included because only nine studies addressed students in inclusive settings. The inclusion of studies conducted in non-inclusive special education classrooms also ensured that no relevant definitions of on-task behavior were overlooked.

For the second topic area (drama), books, empirical studies, and theoretical work related exclusively to drama (and not music, visual arts, or dance) were included because only drama strategies were considered for the intervention. The review focused specifically on the use of process drama, a method of teaching and learning that allows learners "to use imagined roles to explore issues, events, and relationships" (O'Neill & Lambert, 1983, p. 11). In contrast to culminating play productions, process drama involves examining ideas that emerge from classroom discussions, considering a situation from multiple perspectives, and taking on the roles of specific characters or actions (Schneider, Crumpler, & Rogers, 2006). Included literature also must have been conducted exclusively in K-5 language arts classroom settings (i.e., to ensure that no relevant studies of elementary student populations were omitted) because the population and setting for the present study consisted of fourth-grade students in language arts

classrooms. To more broadly understand how drama has been used in classroom settings for disability populations, studies conducted in inclusive and non-inclusive special education classrooms for students with LD, as well as ADHD, EBD, and SLI, were included only in the first section (i.e., how drama has been used in the classroom for disability populations) of the second topic area.

The search criteria for the third topic area (narrative story elements) included empirical studies and theoretical work. For the third topic area, literature was limited to studies examining the comprehension of narrative story elements; articles focusing on expository texts and the production of narrative writing were excluded. Characters and/or sequence of events must have been included as narrative story elements for the study to be considered in the review. Included literature also must have been conducted exclusively with students with LD in K-5 classroom settings (i.e., to ensure that no relevant studies of elementary student populations were omitted) because the population for the present study consisted of fourth-grade students with language-based LD in inclusive classrooms. For the third major topic area, studies conducted in non-inclusive special education classrooms were included because only five studies were found of students in inclusive settings. The inclusion of studies examining students with LD in non-inclusive special education classrooms also ensured that no relevant interventions and assessments were neglected.

Description and Critique of Scholarly Literature

On-Task Behavior

The first major topic area for the review highlighted literature related to on-task behavior. This section of the review included a description of how on-task behavior has

been defined and measured and strategies and interventions that have been developed to increase K-5 students' on-task behavior.

Studies targeting students with LD, ADHD, EBD, and/or SLI were included based on the prevalence of comorbidity in students with language-based LD (Algozzine et al., 2011; Smith & Adams, 2006). Because only nine studies examined the on-task behavior of students with LD in inclusive settings, studies conducted in non-inclusive special education classrooms were included in the section of the literature review. The search criteria were deliberately left broad to ensure that no relevant studies were overlooked.

Definitions of on-task behavior. The reviewed literature revealed that the term "on-task behavior" has no single definition; rather, on-task behavior commonly is presented as including three or four specific behaviors. In their recent literature review, Gill and Remedios (2013) examined 54 studies between 1990 and 2012 to determine how on-task behavior has been described in the field of education. From the 54 studies, 25 on-task behaviors were identified, which they grouped into four broad categories: task-related, teacher-related, social, and miscellaneous (Gill & Remedios, 2013). Task-related behaviors included physically orienting toward the teacher and/or academic task, concentrating on the task, appropriately using the materials, focusing eyes on one's work, working quietly, participating in the class activity, reading, writing, asking task-related questions, listening, and effectively transitioning to the next activity. Teacher-related on-task behaviors consisted of physically orienting toward the teacher and/or academic task, paying attention to the teacher, working with/responding to the teacher, appropriately seeking help, following directions, asking task-related questions, and following class rules. On-task behaviors allocated to the social domain were appropriately seeking help,

remaining in one's seat, following directions, working quietly, exhibiting behavior appropriate to the learning situation, following class rules, and waiting to receive attention. The final category, miscellaneous, described on-task behaviors as student interest in learning and the perception that the student was on-task (Gill & Remedios, 2013). Gill and Remedios (2013) also emphasized the importance of the classroom context in conceptualizing on-task behavior by identifying definitions relevant to (a) all learning contexts, (b) individual learning contexts, and (c) collaborative learning contexts. Physical orientation toward the teacher and/or learning task, concentrating on the task, listening, exhibiting behavior appropriate to the learning situation, and following class rules were identified as fixed features of on-task behavior that transfer and generalize across all learning contexts (Gill & Remedios, 2013). In individual and collaborative learning contexts, on-task behavior inherently was defined by the task itself and the specific learning environment (Gill & Remedios, 2013). For example, working quietly might be considered on-task behavior in an individual learning context whereas group participation in the class activity may describe on-task behavior in a collaborative learning context (see Table 1). The four categories of on-task behavior (i.e., task-related, teacher-related, social, and miscellaneous) outlined in Gill & Remedios' (2013) recent and robust literature review provided the organization for how on-task behavior has been defined in empirical and theoretical literature in the last three and a half decades (see Table 2). The articles in the review also were evaluated to determine if each study presented an operational definition of on-task behavior, which includes a general description of on-task behavior and a series of specific observable, measurable, and

repeatable examples and/or non-examples, or if the study blended the description and examples of on-task behavior in the definition without distinguishing between the two.

Table 1

On-Task Behavior Categories and Learning Contexts

	Categories of on-task behavior				Applicability of behaviors to learning contexts		
Example behaviors	Task-related	Teacher-related	Social	Misc.	Necessary to all learning contexts	Individual learning contexts	Collaborative learning contexts
Physically oriented towards teacher/task	✓	✓			✓		
Paying attention to teacher		✓				✓	✓
Working with/responding to teacher		✓				✓	
Appropriately seeking help		✓	✓			✓	✓
Concentrating on task	✓				✓		
Appropriate use of task materials	✓					✓	✓
Remaining in seat			✓			✓	✓
Writing	✓					✓	✓
Following directions		✓	✓			✓	✓
Eyes focused on work	✓					✓	
Working quietly	✓		✓			✓	
Reading	✓					✓	
Absence of off-task behavior				✓			
Engagement	✓					✓	✓
Task-related talk	✓						✓

Participating in class activity	✓						✓
Asking task-related questions	✓	✓				✓	✓
Listening behavior	✓				✓		
Following class rules	✓	✓			✓		
Transition from one activity to another	✓					✓	✓
Waiting to receive attention			✓			✓	✓
Student perceived to be on-task				✓			
Shows an interest in learning				✓			
Activity that facilitates task completion	✓					✓	✓

Note. Misc. = Miscellaneous.

Table 2

On-Task Behavior Definitions by Category

Author(s)	Year	Definitions	Task-related	Teacher-related	Social	Misc.	Oper. Def.?
Alter	2012	Orienting eyes oriented toward the paper, working on the assigned problems, and looking at teacher during instruction	✓	✓			No
Amato-Zech, Hoff, & Doepke	2006	Actively or passively attending to instruction or assigned work and the absence of off-task behavior	✓				Yes
Bassette & Taber- Doughty	2013	Keeping eyes on one's book, reading aloud for observer to hear, and any correct verbalizations of target words	✓				Yes
Blood, Johnson, Ridenour, Simmons, & Crouch	2011	Following directions, attending to teacher or teacher requested tasks, appropriately manipulating materials, and quietly completing independent work	✓	✓	✓		Yes
DiGangi, Maag, & Rutherford	1991	Orienting eyes toward work, writing answers, checking problems, staying in seat, and staying quiet unless asking teacher a question directly related to task	✓		✓		Yes
Gulchak	2008	Keeping hands away from face, completing work assigned, and raising hand to ask questions	✓	✓	✓		No
Hallahan, Lloyd, Kosiewicz, Kauffman, & Graves	1979	Sitting in seat with eyes on work	✓		✓		No
Hallahan, Marshall, & Lloyd	1981	Focusing eyes directly on the eyes of teacher's aide or workbook page	✓	✓			No
Hallahan, Lloyd, Kneedler, & Marshall	1982	Looking at the assigned materials with pencil in writing or erasing position and counting on fingers	✓				No
Harris	1986	Orienting eyes to book, paper, or self-monitoring question card, writing words, or checking words	✓				No
Harris, Friedlander, Saddler, Frizzelle, & Graham	2005	Focusing eyes on spelling work, executing any step in spelling study procedure, and asking for help	✓	✓	✓		No

Haydon	2012	Sitting in seat, reading and writing answers on the worksheets, and verbally responding to teacher directions	✓	✓	✓	Yes
Jurbergs, Palcic, & Kelley	2007	Engaging in appropriate, assignment-related activities	✓			No
Lloyd, Hallahan, Kosiewicz, & Kneedler	1982	Sitting in seat and looking at assigned work	✓		✓	Yes
Maag, Reid, & Digangi	1993	Looking at independent practice mathematics sheets, holding or writing with a pencil, or making erasures	✓			Yes
Maag, Rutherford, & DiGangi	1992	Focusing eyes on materials or self-monitoring card, writing answers, checking problems, or receiving assistance from teacher	✓	✓		Yes
Mathes & Bender	1997	Looking at the appropriate lesson materials and/or teacher, demonstrating eye contact, and staying in seat	✓	✓	✓	No
Mautone, DuPaul, & Jitendra	2005	Actively attending to task	✓			No
Nahgahgwon, Umbreit, Liaupsin, & Turton	2010	Engaged in teacher-directed instructions and following teacher-led expectations for the instructional assignment		✓		Yes
Rafferty, Arroyo, Ginnane, Wilcyznski	2011	Writing on/looking at work, implementing the study procedure, raising hand to ask for directions, and waiting quietly to be addressed	✓	✓	✓	Yes
Rafferty & Raimondi	2009	Looking at and writing on self-monitoring sheet or math practice sheet, using manipulatives to count, and asking teacher for help	✓	✓		Yes
Schneider & Goldstein	2009	Looking at/doing work, completing activity, raising hand/waiting, looking at speaker, and following directions	✓	✓	✓	Yes
Thorpe & Borden	1985	Keeping eyes either on teacher as she spoke or on paper when writing	✓	✓		No
Whittaker	2005	Reading aloud, looking at reading material, requesting help, and looking at teacher	✓	✓		No

Wolfe, Herrron, & Goddard	2000	Orienting eyes to paper, holding pencil in hand, engaging in writing, or interacting with teacher	✓	✓	Yes

Note. Misc. = Miscellaneous; Oper. Def. = Operational Definition.

Task-related. In the theoretical and empirical literature, on-task behavior most commonly was defined in task-related terms, with 24 of the 25 articles (96%) matching the review's inclusion criteria belonging to this category. On-task behavior frequently was defined as focusing one's eyes on the task, academic work, or assignment materials. Several studies of second through fifth graders in special education resource classrooms included in their definitions a focus on engaging in assignment-related activities and appropriately interacting with the assigned work such as reading, writing, solving math problems, and using manipulatives (Amato-Zech, Hoff, & Doepke, 2006; Bassette & Taber-Doughty, 2013; Blood, Johnson, Ridenour, Simmons, & Crouch, 2011; Gulchak, 2008; Whittaker, 2005). Asking relevant questions, raising one's hand before responding, and receiving assistance from the teacher also were incorporated into task-related definitions of on-task behavior. Many other studies highlighted teacher-related features in their definitions.

Teacher-related. Fifteen of the 25 studies (60%) in the literature review of on-task behavior emphasized looking at the teacher, paying attention to the teacher, asking appropriate questions, and following the teacher's directions as important components of exhibiting on-task behavior. For example, several studies of second, third, and fourth graders with LD in inclusive (Maag, Rutherford, & DiGangi, 1992; Schneider & Goldstein, 2009) and special education resource classrooms (Thorpe & Borden, 1985; Wolfe, Heron, & Goddard, 2000) defined on-task behavior as maintaining eye contact

with the teacher as she presented the directions, following the directions, and asking for teacher assistance if needed. In studies with fourth and fifth graders with EBD in inclusive (Rafferty, Arroyo, Ginnane, & Wilczynski, 2011) and special education resource classrooms (Alter, 2012; Blood et al., 2011), students were considered on-task when they looked at the teacher, maintained eye contact with the teacher, and attended to teacher requested tasks throughout the entire lesson. For two additional studies of fifth graders with LD in inclusive (Haydon, 2012) and special education resource classrooms (Whittaker, 2005), verbally responding to teacher questions also was included in the definition of on-task behavior. In addition to defining on-task behavior in teacher-related terms, several studies focused on social aspects of the definition.

Social. Ten of the 25 studies (40%) defined on-task behavior in social terms. Several studies defined second through fifth graders with ADHD and EBD (Blood et al., 2011; DiGangi et al., 1991; Gulchak, 2008; Mathes & Bender, 1997; Rafferty et al. 2011), LD (Hallahan et al., 1979; Harris, 1986; Haydon, 2012; Lloyd, Hallahan, Kosiewicz, & Kneedler, 1982), and SLI (Schneider & Goldstein, 2009) as on-task when students remained in their seats or in the assigned work area, raised their hands to seek help, followed directions, and worked quietly until the assignment or activity was completed.

Operational definitions. Operational definitions, which consist of a general description of on-task behavior and a series of specific observable, measurable, and repeatable examples and/or non-examples, are an essential component of observational behavioral measurement (Reichow, Volkmar, & Cicchetti, 2008; Umbreit, Ferro, Liaupsin, 2007). Notably, only 13 of the 25 studies in the literature review included an

operational definition of on-task behavior (see Table 2). The remaining 12 studies defined on-task behavior as three or four specific behaviors without providing any examples or non-examples to further explicate how on-task behavior might present in the classroom.

For the 13 studies with operational definitions, common examples of on-task behavior included following directions, listening to teacher instructions, attending to teacher or teacher-requested tasks, looking at the assigned work, teacher, or peers, quietly completing independent practice activities, appropriately manipulating materials such as pens or pencils, counting on one's fingers, raising one's hand and waiting to receive help, remaining in one's assigned seat or area, and making eye contact (Bassette & Taber-Doughty, 2013; Maag et al., 1993; Nahgahgwon et al., 2010; Schneider & Goldstein, 2009). Common examples of off-task behavior were flipping pages of a textbook, leaving one's seat, leaving the classroom without permission, looking around the room, playing around, daydreaming, talking to peers, humming, singing, calling out answers, looking away from the assigned material or book, dancing, waving one's arms, using inappropriate language, threatening peers, yelling across the room, making animal noises, laughing, doodling/drawing, throwing paper, and playing with the materials (see Table 3; Amato-Zech et al., 2006; Bassette & Taber-Boughty, 2013; Blood et al., 2011; DiGangi et al., 1991; Haydon, 2012; Lloyd et al., 1982; Maag et al., 1992; Rafferty & Raimondi, 2011; Schneider & Goldstein, 2009; Wolfe et al., 2000).

Table 3

Studies with Operational Definitions

Author(s)	Year	Definition	Examples	Non-Examples
Amato-Zech, Hoffe, & Doepke	2006	Actively or passively attending to instruction or assigned work and the absence of off-task behavior		Randomly flipping pages in textbook, getting out of one's seat, talking to peers, humming, calling out answers, or looking away from assigned materials
Bassette & Taber-Doughty	2013	Keeping eyes on one's book, reading aloud for observer to hear, and any correct verbalizations of target words	Opening the book and looking at the pages	Looking away from book for over three sec, approaching teacher, talking, getting out of one's seat, or putting book down
Blood, Johnson, Ridenour, Simmons, & Crouch	2011	Following directions, attending to teacher or teacher requested tasks, appropriately manipulating materials, and quietly completing independent work		Getting out of one's seat without permission, dancing and waving one's arms around, waving pencil in the air, and/or attempting to disassemble pencil, talking without permission, blurting out, singing, or using inappropriate language
DiGangi, Maag, & Rutherford	1991	Orienting eyes toward work, writing answers, checking problems, staying in seat, and staying quiet unless asking teacher a question directly related to task		Talking to peers, making animal noises, laughing, or yelling across room, getting out of one's seat, doodling, throwing paper, or playing with pencils
Haydon	2012	Sitting in seat, reading and writing answers on worksheets, and verbally responding to teacher directions		Looking around room, looking at desk, staring at ceiling, or leaving classroom without permission
Lloyd, Hallahan, Kosiewicz, & Kneedler	1982	Sitting in seat and looking at assigned work		Looking away from assigned tasks, talking with another student, or working on material other than assigned

Maag, Reid, & Digangi	1993	Looking at independent practice mathematics sheets, holding or writing with a pencil, or making erasures	Manipulating a pen or pencil, raising one's hands, counting on one's fingers, and looking at assigned work, teacher, or peers	Talking to a peer, making animal noises, laughing, or yelling across room, being out of one's seat, doodling, throwing paper, or playing with paper clips or pens/pencils
Maag, Rutherford, & DiGangi	1992	Focusing eyes on materials or self-monitoring card, writing answers, checking problems, or receiving assistance from teacher		Talking to peer, making animal noises, laughing, yelling across room, being out of seat, doodling, throwing paper, or playing with paper clips or pens/pencils
Nahgahwon, Umbreit, Liaupsin, & Turton	2010	Engaged in teacher-directed instructions and following teacher-led expectations for the instructional assignment	Remaining in assigned seat or area and raising hand and waiting if need help	
Rafferty, Arroyo, Ginnane, Wilcyznski	2011	Writing on or looking at work, implementing any step of the study procedure, asking teacher for directions by raising hand, and waiting quietly to be addressed		Doodling/sketching on spelling practice list or self-monitoring card, looking at any surfaces or objects other than spelling practice list or self-monitoring card, talking to peers, asking for help from peers unless directed to do so, or inappropriately asking for help from teacher or adult
Rafferty & Raimondi	2011	Looking at and writing on self-monitoring sheet or math practice sheet, using manipulatives to count, and asking teacher for help		Drawing/scribbling on self-monitoring card or math practice sheet, looking at board, walls, ceiling, floor, or any other surface area other than self monitoring sheet or math worksheet, stacking, throwing, or creating toys, or talking to or asking a peer for help, unless instructed

Schneider & Goldstein	2009	Looking at/doing work, completing activity, raising hand/waiting, looking at speaker, and following directions	Looking at/writing on paper, answering teacher's questions, and listening to teacher read	Playing around, looking around room, looking away, not participating, talking without raising hand, talking not about assignment
Wolfe, Herron, & Goddard	2000	Orienting eyes to paper, holding pencil in hand, engaging in writing, or interacting with teacher		Daydreaming, looking out the window, doodling, or writing irrelevant responses

Measurements of on-task behavior. In addition to offering numerous definitions of on-task behavior, the reviewed literature presented several ways to measure on-task behavior. Twenty-four of the 25 studies included in the review measured the frequency of on-task behavior through whole interval, partial interval, or momentary time sampling procedures in a single-case design. The final study (Whittaker, 2005) used a whole interval time sampling procedure and evaluated students' on-task behavior using paired sample *t*-tests. After presenting how each study was measured, the quality of the 24 single-case design studies was evaluated according to the standards set forth by What Works Clearinghouse (WWC; Kratochwill et al., 2010). The quality of the final study (Whittaker, 2005) that did not employ a single-case design was assessed based on data collection and analysis.

Whole interval recording procedure. Several researchers employed whole interval recording procedures whereby the participants were considered on-task only when they exhibited the designated behavior(s) for the entire length of the interval. Using a multiple baseline design study with elementary school boys with ADHD, ages 8-11, in a special education resource classroom, Mathes and Bender (1997) recorded

students as on-task when they exhibited selected behaviors throughout a 10-s interval. In other studies, on-task behavior occasionally was measured using a 30-s interval recording method, which required students to exhibit on-task behaviors during entire 30-s intervals. This method was common for studies using ABAB withdrawal designs for first, second, and third graders with EBD in self-contained (Gulchak, 2008) and inclusive classrooms (Nahgahgwon et al., 2010). Six-s and 15-s whole interval recordings were employed for studies with multi-element designs. For example, to assess the effectiveness of school-home notes with and without response costs for increasing the on-task behavior of first, second, and third graders with ADHD in an inclusive classroom, Jurbergs, Palcic, and Kelley (2007) utilized a withdrawal design with alternating treatments and coded students' on-task behavior during whole 15-s intervals. Lastly, third and fourth students with LD in a special education resource classroom displayed increased attention during Reader's Theater lessons than narrative genre readings (Whittaker, 2005). Attention was measured as direct observations from video recordings of students' time on-task during language arts lessons. Students' on-task behavior was measured using a 1-min whole interval time sampling procedure, with on-task behavior defined as the student reading aloud, looking at reading material, requesting help from teacher, and looking at teacher. In Whittaker's study (2005), a 1-min whole interval time sampling procedure was used to measure students' on-task behavior across Reader's Theater and narrative genre lessons. Rather than employing a single-case design, paired sample *t*-tests were conducted to compare means of on-task behavior across lessons.

Partial interval recording procedure. Although less common, on-task behavior also was measured using a partial interval recording procedure, indicating that students

needed to demonstrate the on-task behavior at some point during the time-specified interval (i.e., rather than throughout the entire interval), which often over-estimates on-task behavior. Only one study included in this review used a partial interval recording procedure. Amato-Zech and colleagues (2006) used an ABAB reversal design with partial interval recording systems of 10 or 15-s for fifth graders with LD and SLI in a self-contained classroom to estimate on-task behavior during a self-monitoring intervention.

Momentary time sampling procedure. The majority of the literature reviewed (n = 17 studies) measured on-task behavior using momentary time sampling procedures, which consisted of recording on-task behavior at a particular moment, usually at the end of an interval. A major advantage of using a momentary time sampling procedure is that the researcher does not need to attend to the student's behavior at all times. Rather than documenting every behavioral occurrence, momentary time sampling provides an estimate of the student's behavior and is easy to implement in a classroom. Many researchers (n = 9) used momentary time sampling to investigate the effectiveness of a self-monitoring intervention for increasing the on-task behavior of second through fifth-grade students with LD and ADHD. The self-monitoring interventions consisted of the subjects wearing headphones that emitted a recorded tone. As the tone was heard, the subjects asked themselves variations of the following question: "Was I on-task at the exact moment I heard the tone?" Students recorded answers as "yes" and "no" on self-monitoring sheets. In their multiple baseline design study, Maag, Reid, and DiGangi (1993) used audiotapes containing variations on the number of tones emitted (e.g., tapes with 25, 20, 10, five, or three tones) to determine if fourth and fifth graders with LD in an

inclusive classroom increased their on-task behavior with self-monitoring, while another multiple baseline study (Harris, 1986) used 2-s intervals to assess the on-task behavior of fourth graders with LD in a special education resource classroom. In lieu of using tape recorders that emitted tones, a third study (Maag et al., 1992) involved teaching second and fourth graders with LD in inclusive classrooms to self-monitor their behavior by recording if they were on-task when the teacher's aide touched their shoulders. In this multiple baseline design, the students with LD placed in a general education classroom were randomly touched 10 times, from 30-90-s apart, during the 10-min recording session.

Studies with ABAB withdrawal and alternating treatment designs also used student self-monitoring and tape-recorded tones as a strategy for increasing on-task behavior. These studies varied in their momentary time sampling procedures, with intervals and timed tones ranging from 2-s to 10-min for second, third, and fourth graders with LD in self-contained classrooms (Hallahan, Lloyd, Kneedler, & Marshall, 1982; Hallahan, Marshall, & Lloyd, 1981; Wolfe et al., 2000).

Additional single-case designs (n = 8 studies) included momentary time sampling procedures to evaluate students' on-task behavior without self-monitoring techniques or taped recorded tones. In these studies, outside observers or teachers recorded students' on-task behavior during 4, 5, 10, 15, 20, or 30-s intervals. Bassette and Taber-Doughty (2013), for example, used a multiple probe design to record the on-task behavior of second and fifth-grade students with EBD in a special education resource classroom during 15-s intervals of a dog reading visiting program. Schneider and Goldstein (2009) used a multiple baseline design with a momentary time sampling procedure of 15-s

intervals to evaluate the effects of the Social Story intervention for third graders with SLI in an inclusive classroom. Several other researchers used momentary time sampling procedures to evaluate the usefulness of academic interventions and behavioral reinforcements (e.g., modifications to worksheets, problem-solving steps, multisensory activities) for improving on-task behavior of fourth and fifth graders with EBD in an alternative public school (Alter, 2012) and of third, fourth, and fifth graders with LD in inclusive (Haydon, 2012) and special education resource classrooms (Thorpe & Borden, 1985). In their controlled case study with an AB design, Mautone, DuPaul, and Jitendra (2005) used a momentary time sampling procedure to code active-engaged time when second and fourth graders with LD in an inclusive classroom were attending to task.

Quality of studies. In addition to determining how on-task behavior was measured, the review utilized criteria established by the WWC panel for single-case design (Kratochwill et al., 2010) to evaluate the 24 single-case design studies for design and evidence of an intervention effect. According to WWC, the quality of a single-case design study falls into one of three categories: meets evidence standards without reservations, meets evidence standards with reservations, or does not meet evidence standards. For a study to meet evidence standards without reservations (Kratochwill et al., 2010), the following design criteria must be present: (a) "the independent variable must be systematically manipulated, with the researcher determining when and how the independent variable conditions change" (p. 14); (b) "each outcome variable must be measured systemically over time by more than one assessor, and the study needs to collect inter-assessor agreement (IOA) in each phase and on at least 20% of the data points in each condition, and the inter-assessor agreement must meet minimal thresholds"

(p. 15); (c) "the study must include at least three attempts to demonstrate an intervention effect at three different points in time or with three different phase repetitions" (p. 15); and (d) "for a phase to qualify as an attempt to demonstrate an effect, the phase must have a minimum of three data points" (p. 15).

Table 4 presents the coding of quality of the 24 single-case design studies related to on-task behavior. Notably, only eight (Alter, 2012; Bassette & Taber-Doughty, 2013; Hallahan et al., 1979; Hallahan et al., 1982; Harris, 1986; Harris et al., 2005; Lloyd et al., 1982; Maag et al., 1993) of the 24 studies met the WWC standards without reservations, demonstrated an intervention effect of the independent variable on the dependent variable in the hypothesized direction, and can be considered high quality. Alter (2012) used a multiple baseline design to determine if teaching a multi-step problem-solving strategy increased the on-task behavior of four students with EBD. Results suggested increased percentages of on-task behavior from baseline to intervention phases for all four students in fourth and fifth grades. Baseline percentages of on-task behavior ranged from 67-76% and increased from 67-93% for the four students (Alter, 2012). A second study (Bassette & Taber-Doughty, 2013) used a multiple probe design to evaluate the effects of a dog reading visitation program on the on-task behavior of three, second and fifth-grade students with EBD. Results demonstrated that all three students showed increased percentages of on-task behavior during the dog visiting reading program, with percentages of on-task behavior ranging from 5-72% during baseline and from 92-97% during the intervention phase. The six remaining high quality studies (Hallahan et al., 1979; Hallahan et al., 1982; Harris, 1986; Harris et al., 2005; Lloyd et al., 1982; Maag et al., 1993) employed self-monitoring procedures to increase students' on-task behavior.

In all six studies, students demonstrated increased percentages of on-task behavior during the self-monitoring intervention phases as compared to baseline phases.

The 16 remaining studies did not meet the standards without reservations because they failed to meet at least one of the four design criteria. In 5 of the 16 studies (Amato-Zech et al., 2006; Digangi et al., 1991; Hallahan et al., 1981; Schneider & Goldstein, 2009; Thorpe & Borden, 1985), IOA only was collected on 17-18% of all sessions, thus failing to meet the requirement of IOA calculations for a minimum of 20% of sessions in each phase. In 4 of the 16 studies (Blood et al., 2011, Haydon, 2012; Mautone et al., 2005; Thorpe & Borden, 1985), only one or two attempts were made to demonstrate an intervention effect. These studies did not meet the criteria for showing at least three attempts to demonstrate an intervention effect. Notably, 13 of the 16 studies did not meet standards without reservations because they failed to include the minimum phases and data points. All 13 of these studies included less than five data points in at least one of the phases (i.e., 2-4 data points in at least one phase). Three of the 13 studies (Blood et al., 2011; Mautone et al. 2005; Thorpe & Borden, 1985) only included three phases when at least four phases were needed to meet evidence standards without reservations (see Table 4).

Table 4

Quality of Studies

Author(s)	Year	Study Design	Independent variable was manipulated	Inter-assessor agreement (IOA)	At least 3 attempts to demonstrate an intervention	Included minimum phases and data points	Meets Standards Without Reservations?
Alter	2012	Multiple baseline	✓	✓	✓	✓	Yes
Amato-Zech et al.	2006	ABAB reversal	✓	No	✓	✓	No
Bassette & Taber-Doughty	2013	Multiple probe	✓	✓	✓	✓	Yes
Blood et al.	2011	A-B-BC	✓	✓	No	No	No
Digangi et al.	1991	Multiple treatment	✓	No	✓	No	No
Gulchak	2008	ABAB reversal	✓	✓	✓	No	No
Hallahan et al.	1979	Multiple baseline and reversal (ABABCD)	✓	✓	✓	✓	Yes
Hallahan et al.	1981	ABAB reversal	✓	No	✓	No	No
Hallahan et al.	1982	Alternating treatments	✓	✓	✓	✓	Yes
Harris	1986	Multiple baseline	✓	✓	✓	✓	Yes
Harris et al.	2005	Multiple baseline	✓	✓	✓	✓	Yes
Haydon	2012	AB	✓	✓	No	✓	No
Jurbergs et al.	2007	Withdrawal alternating treatments	✓	✓	✓	No	No
Lloyd et al.	1982	Multi-element and reversal	✓	✓	✓	✓	Yes
Maag et al.	1993	Multiple baseline	✓	✓	✓	✓	Yes

Maag et al.	1992	Multiple treatment	✓	✓	✓	No	No
Mathes & Bender	1997	Multiple baseline	✓	✓	✓	No	No
Mautone et al.	2005	AB Case study	✓	✓	No	No	No
Nahgahgwon et al.	2010	Multiple baseline	✓	✓	✓	No	No
Rafferty et al.	2011	Multiple baseline	✓	✓	✓	No	No
Rafferty & Raimondi	2009	Multiple baseline	✓	✓	✓	No	No
Schneider & Goldstein	2009	Multiple baseline	✓	No	✓	✓	No
Thorpe & Borden	1985	ABA reversal	✓	No	No	No	No
Wolfe et al.	2000	ABABABC reversal	✓	✓	✓	No	No

The final study (Whittaker, 2005) only can be considered descriptive based on the use of paired sample *t*-tests to evaluate the means of on-task behavior of 24 students across contexts. This study focused primarily on student's reading fluency and on-task behavior served only as a secondary descriptive variable.

Strategies and interventions. Researchers have implemented several strategies and interventions to increase students' on-task behavior. Many researchers have utilized self-monitoring or self-management procedures to assess students' on-task behavior. Other common interventions for increasing on-task behavior included making academic modifications, developing behavioral reinforcements, and using sensory techniques. One study evaluated students' on-task behavior in response to a Reader's Theater program.

Self-monitoring and self-management procedures. Many researchers have utilized self-monitoring or self-management procedures to increase students' on-task behavior. In most of the reviewed studies (n = 9), self-monitoring procedures consisted of second through fifth graders with ADHD, EBD, and/or LD listening to an audiotape during the observation period, waiting for the sound of a tone or chime, and recording "yes" on a self-monitoring sheet if they identified their behavior as on-task and "no" if they identified their behavior as off-task (DiGangi et al., 1991; Hallahan et al., 1979; Hallahan, Kosiewics, & Kneedler, 1982; Harris, 1986; Harris et al., 2005; Lloyd et al. 1982; Maag et al., 1993; Rafferty & Raimondi, 2009; Mathes & Bender, 1997). Additional self-monitoring procedures included third and fifth graders with EBD in self-contained or special education resource classrooms tracking their own on-task behavior with a handheld camera (Gulchak, 2008) or using video modeling on an iPod touch (Blood et al., 2011).

Self-management procedures employed also involved teaching students mnemonic devices for monitoring their own behavior. One study (Amato-Zech et al., 2006) described using the SLANT strategy (i.e., Sit up, Look at the person talking, Activate your thinking, Note key information, and Track the talker) to encourage fifth graders with LD, EBD, and/or SLI in a self-contained classroom to manage their own behavior.

For all studies employing self-monitoring or self-management procedures (n = 14 studies), students showed increased on-task behavior (i.e., higher percentages of intervals on-task) during self-monitoring and self-management conditions as compared to baseline conditions. However, only 6 (Hallahan et al., 1979; Hallahan et al., 1982; Harris, 1986;

Harris et al., 2005; Lloyd et al., 1982; Maag et al., 1993) of the 12 studies demonstrated an intervention effect of the self-monitoring or self-management procedures on an increase in students' on-task behavior in the hypothesized direction.

Academic modifications. Researchers also developed academic modifications as a strategy for increasing students' on-task behavior. One researcher (Haydon, 2012) modified math worksheets for a fifth grader with LD in an inclusive classroom by reducing the level of difficulty of math computation and word problems and by interspersing hard and easy arithmetic problems. Other researchers used calculators, problem-solving steps, and math software (i.e., computer-assisted instruction) to increase the on-task behavior of second through fifth-grade students with LD, ADHD, and EBD in an alternative public school (Alter, 2012) and in an inclusive classroom (Mautone et al., 2005). For the three studies that employed academic modifications, students showed increased on-task behavior (i.e., higher percentages of intervals on-task) during the academic modification conditions as compared to the baseline conditions. However, only one study (Alter, 2012) demonstrated an intervention effect of academic modifications (i.e., calculators and problem-solving steps) on students' increased on-task behavior in the hypothesized direction.

Behavioral reinforcements. One study (Jurbergs et al., 2007) used behavioral reinforcements, specifically school-home notes, to increase the on-task behavior of elementary students, ages 6-8, with ADHD in an inclusive classroom. The school-home notes included target behaviors for the day as well as teacher ratings of students' behavior at the end of the morning and afternoon. Although the behavioral reinforcements increased students' on-task behavior, the study failed to demonstrate an intervention

effect of the use of school-home notes on students' increased on-task behavior because the study did not include the minimum number of phases and data points required by WWC.

Sensory techniques. Several studies employed sensory techniques to increase students' on-task behavior. In one study (Bassette & Taber-Doughty, 2013), researchers spearheaded a dog reading visiting program in which second and fifth graders with EBD in a special education resource classroom petted and read aloud to a therapy dog to manage their behavior. Researchers also implemented multisensory visual-auditory-kinesthetic-tactile (VAKT) instruction with 7-, 8-, and 9-year-olds with LD in a special education resource classroom (Thorpe & Borden, 1985) and developed Social Stories written and illustrated from the perspective of third graders with SLI in an inclusive classroom (Schneider & Goldstein, 2009).

For the three studies that utilized sensory techniques, students showed increased on-task behavior (i.e., higher percentages of intervals on-task) during the sensory conditions as compared to the baseline conditions. However, only one study (Bassette & Taber-Doughty, 2013) demonstrated an intervention effect of the sensory technique (i.e., the dog visiting program) on students' increased on-task behavior in the hypothesized direction.

Reader's Theater. A final study (Whittaker, 2005) explored the use of Reader's Theater as compared to narrative genre to assess the effects on reading performance, perspectives, and on-task behavior of second and third graders with LD in a special education resource classroom. The Reader's Theater program consisted of students using their own thoughts and actions to rehearse and perform three plays. Paired sample *t*-tests

were conducted to compare means of on-task behavior across lessons. Students' on-task behavior was statistically significantly higher during the Reader's Theater lessons than the narrative genre lessons (p =.005).

Summary of on-task behavior research. The first broad topic in this literature review included empirical studies related to students' on-task behavior. Twenty-five studies were reviewed, each of which defined, measured, and employed specific interventions for improving on-task behavior. Twenty-four of the studies defined on-task behavior in task-related terms, 15 focused on teacher-related features, and 10 emphasized social constructs. Thirteen of the 25 studies included an operational definition of on-task behavior while the remaining studies failed to distinguish or separate between definition and description of on-task behavior. Literature reviewed primarily measured on-task behavior as an estimate of frequency using momentary time sampling procedures. Fewer studies utilized whole and partial interval recording systems. Twenty-four of the 25 studies were single-case designs, while the final study used paired sample *t*-tests to evaluate students' on-task behavior across contexts. Notably, only 8 of the 25 single-case design studies were considered high quality according to standards set forth by WWC (i.e., study met evidence requirements without reservations). The majority of interventions developed for improving on-task behavior consisted of using self-monitoring and self-management procedures. Other studies used academic modifications, behavioral reinforcements, sensory techniques, and Reader's Theater to support students' increased on-task behavior.

Limitations of on-task behavior research. A major limitation of the studies reviewed in this first section of the literature review was the large number of studies that

failed to provide an operational definition of on-task behavior (i.e., a general description with observable, measurable, and repeatable examples and non-examples of the behavior), an essential component of observational behavioral measurement (Reichow, Volkmar, & Cicchetti, 2008). Thirteen of 25 studies in the review did not distinguish between definitions and descriptions of on-task behavior. These studies did not provide examples and/or non-examples of on-task behavior to elucidate how on-task behavior might present itself in the classroom. For the 13 studies that provided an operational definition, only 3 studies (Bassette & Taber-Doughty, 2013; Maag et al., 1993; Schneider & Goldstein, 2009) included a description, examples, and non-examples of on-task behavior. The remainder of the studies offered a description and either examples or non-examples of on-task behavior.

A second limitation reflects the limited number of high quality single-case design studies in the review. Only 8 of the 24 single-case design studies met the WWC standards without reservations for demonstrating an intervention effect of the independent variable on the dependent variable in the hypothesized direction. Thus, although all of the 24 studies showed that students increased their on-task behavior during the intervention conditions, only 8 can be considered high quality.

An additional limitation of the studies in this first section of the literature review reflects the limited scope of interventions used to increase primary students' on-task behavior. Overwhelmingly, the studies used self-monitoring or self-managing techniques to increase the on-task behavior of students in second through fifth grades. Although these self-monitoring and self-managing strategies proved beneficial, the interventions often were used for a number of different disability populations, including students with

LD, ADHD, EBD, and SLI. Implementing the same types (i.e., self-monitoring) of strategies for multiple disability populations prevents researchers from determining the supports and interventions best suited for specific disability groups.

Lastly, only 9 of the 25 studies (36%) were conducted in inclusive elementary classrooms.

Implications for present study. The findings and limitations based on a systematic review of on-task behavior literature informed (a) the definition and measurement system for on-task behavior; (b) the study design; (c), the selection of a drama intervention; and (d) the selection of an inclusive classroom for the present study. In accordance with the four categories of on-task behavior (i.e., task-related, teacher related, social, and miscellaneous) identified by Gill and Remedios's (2013) seminal literature review, the present study defined on-task behavior to include features of task-related, teacher related, and social domains. Including components from these three categories ensured that on-task behavior was broadly defined to capture the different ways students with LD may exhibit on-task behavior. On-task behavior also was defined to reflect the importance of the classroom context as outlined by Gill and Remedios. Because the specific context of the present study focused on using drama with students with LD in an inclusive setting, the definition of on-task behavior emphasized both features relevant to all learning contexts (e.g., looking at/using materials appropriately) and to the individual and collaborative learning contexts (e.g., participation in the class activity; Gill & Remedios, 2013). Most importantly, the present study included an operational definition that provided both a general description and observable, measurable, and repeatable examples and non-examples of on-task behavior because

including an operational definition of the dependent variable is an essential component of observational behavioral measurement (Reichow, Volkmar, & Cicchetti, 2008; see Table 5 for the components of the operational definition, examples, and non-examples of on-task behavior for the present study).

Table 5

Operational Definition, Examples, and Non-Examples for On-Task Behavior

Components of On-Task Behavior	Examples	Non-Examples
Sitting/standing in a designated space	Sitting at one's desk, standing at one's desk	Getting out of one's seat or designated space
Keeping hands, feet, and objects to oneself	Keeping one's feet on the floor and objects in the desk	Constant and noticeable fidgeting, playing with pencils/toys, hitting, biting, or throwing objects
Participating in the class activity	Working in small groups to complete an assigned activity	Delaying starting assigned task, skipping class, and/or coming to class late
Interacting with peers and teacher	Asking/answering the teacher's questions about lesson	Looking around, staring into space, or looking out the window
Listening to and following directions	Demonstrating eye contact with the teacher; raising hand following teacher instruction to ask a question	Calling out or talking to someone when prohibited
Looking at/using materials appropriately	Using a pencil and a piece of paper to write an answer	Playing with materials, including pencils and paper

As noted previously, most researchers have measured on-task behavior using interval recording procedures (i.e., momentary, partial interval, and whole interval time sampling). Although the majority of the studies reviewed used momentary time

sampling, the present study used a whole interval recording procedure. Whole interval recording served as the measurement because this procedure tends to produce a slight underestimate of the presence of the target behavior (Kennedy, 2005) and the goal of the study was to increase students' on-task behavior.

To ensure the present study was of the highest quality, the researcher designed the study to align with the criteria set forth by WWC for meeting standards without reservations (Kratochwill et al., 2010). The present study included specific design criteria to demonstrate an intervention effect of the independent variable on the dependent variable in the hypothesized direction. The present study's design criteria were as follows: (a) the independent variable (i.e., tableau) was systematically manipulated by the primary researcher; (b) IOA data were collected for 33% of the data points in each phase; (c) a functional relation was demonstrated and replicated through a change in level and stability across phases with at least three opportunities for a demonstrated effect within each of the three participants in the study; and (d) a minimum of five data points was collected in each phase.

The literature reviewed showed a significant limitation in the types of interventions that have been used to increase students' on-task behavior, with the majority of studies implementing self-monitoring and self-management techniques. Although such strategies were beneficial for increasing on-task behavior, only eight of the studies met the WWC standards without reservations and demonstrated an intervention effect. The lack of variation revealed a need for researchers to investigate the potential benefit of interventions other than self-monitoring and self-management procedures. The frequent application of one primary intervention for students with

different disabilities and unique challenges further emphasized the need to evaluate the effectiveness of additional techniques for improving on-task behavior, especially in inclusive settings. Rather than implementing self-monitoring or self-management techniques, one study (Whittaker, 2005) employed a unique strategy by examining the effects of a drama-related intervention (i.e., Reader's Theater) on students' on-task behavior. Although drama led to increased on-task behavior, the primary focus of the study related to the influence of Reader's Theater on students' reading fluency. On-task behavior was considered a descriptive, secondary variable. A deeper examination of the potential value of drama strategies was warranted to determine the added value of drama for targeted disability populations, such as students with LD. To further explore the possible benefit of drama, the present study examined the use of a drama intervention (i.e., tableau) to increase the on-task behavior of students with language-based LD.

Lastly, only 9 of the 25 studies in the first broad topic area review were conducted in inclusive classrooms. Based on the recommendation for students to be educated in inclusive settings, the increasing number of students with LD in inclusive classrooms (ASHA, 2013; LD OnLine, 2008), and the need to determine the best ways to support students' learning needs in general education settings, the present study was conducted in two inclusive classrooms.

Process Drama

The second topic area examined literature related to the use of process drama in language arts classrooms. This section of the review included: (a) a description of how process drama has been used (i.e., activities and interventions) in language arts

classrooms for K-5 students with disabilities and (b) an examination of the academic and behavioral benefits of process drama for K-5 students with LD.

Drama activities and interventions. The literature review revealed that the following drama activities and interventions have been implemented in language arts classrooms that include students with disabilities: tableau, improvisation, pantomime, role-play, story dramatization, and Reader's Theater.

Tableau. Five empirical studies (Anderson, 2012; Anderson & Berry, in press; Anderson & Berry, 2014; de la Cruz, 1995; Snyder-Greco, 1982) used tableau to support students with LD in language arts classrooms. Anderson (2012) implemented tableau in an effort to improve the written language skills (i.e., linguistic productivity and specificity through literate language feature use) of 16 fourth graders with LD and behavioral challenges in an inclusive classroom. As part of the intervention, students used nonverbal gestures and body positions to observe and interpret story events and character motives from *Little Red Riding Hood*.

In later studies, tableau was utilized to improve narrative written productivity (i.e., number of complete and intelligible utterances and total number of words) and narrative cohesion (i.e., the use of temporal, causal, and sequential conjunctions) and to increase the on-task behavior of 14 third graders with co-morbid LD/ADHD in self-contained classrooms (Anderson & Berry, 2014). A related study consisted of teachers implementing tableau in an effort to increase the on-task behavior of 24 third graders with co-morbid LD/ADHD in two self-contained classrooms (Anderson and Berry, in press).

de la Cruz (1995) designed a study for 35 students with LD (ages 6-11), 14 of whom were assigned to a control group and 21 of whom participated in a 12-week creative drama program. de la Cruz (1995) worked with a drama specialist to develop a guide of drama lessons that targeted social skills for the 21 students from both self-contained and inclusive first, second, third, and fourth-grade classrooms. Activities in the drama guide consisted of students creating tableau scenes to illustrate appropriate behaviors during independent work time. Example tableau scenes included students posing as students raising their hands and sitting in their seats to complete class assignments.

Snyder-Greco (1982) developed a study to examine the effects of a creative drama program on the language functioning of 17 second and third grade students with language-based LD/SLI in self-contained classrooms. As part of the drama program, students were encouraged to use their thoughts and actions to develop frozen gesture tableaux of a scene or an object from a narrative story selection.

Additional theoretical literature cited tableau as an important drama intervention for addressing the diverse needs of disability populations. Cornett (2006) advocated implementing tableau activities where small groups of students use their bodies to create poses to synthesize information around topics, themes, scenes, or seminal events. Clyde (2003) discussed creating frozen tableau scenes from paintings or pictures to support elementary students' understanding of subtext (i.e., characters' thoughts behind their actions and emotions). Using tableau helped second graders understand subtext, make connections to text, better understand multiple perspectives, and determine characters' motives (Clyde, 2003).

Tableau also was described as an important scaffold for improving elementary students' story comprehension. Tableau creates a "mental movie" (Kelner & Flynn, 2006, p. 151), which allows students to visually imagine what the text describes. When students can visualize written words, they are better equipped to describe the images or events in a story, which in turn deepens their overall understanding of the text's meaning (Kelner & Flynn, 2006).

Improvisations. In addition to utilizing tableau, de la Cruz (1995) and Snyder-Greco (1982) integrated improvisation activities into their creative drama programs for second through fifth graders with SLI and LD in inclusive and self-contained classrooms. Improvisations consisted of students developing spontaneous dialogue and movement to act out a specific scene or subject. A third researcher (Jackson, 1992) also used improvisations to examine the effects of creative drama participation on the reading achievement and attitudes of fifth graders with behavioral disorders in a self-contained classroom. Seventeen students were assigned to a control group while 17 others participated in the eight-week creative drama intervention. In the final part of the intervention, students presented narrative improvisation plays in which they communicated (both verbally and non-verbally) using spontaneous movement and dialogue.

A fourth study (de la Cruz, Lian, & Morreau, 1998) investigated whether 21 students (from both self-contained and inclusive first, second, third, and fourth-grade classrooms) who participated in a creative drama program would improve their social skills, oral expressiveness, and receptive language skills more than the 14 classmates who were not involved in the program. With the assistance of a speech language pathologist,

the researchers implemented 12 sessions of process drama to students with SLI using improvisations based on different social situations.

Pantomime. Pantomime, described as using fluid gestures, movements, and facial expressions to tell a story, also has been used with students with disabilities in inclusive classrooms. Pantomime has been integrated into creative drama programs for students with LD and SLI (de la Cruz, 1995; de la Cruz et al., 1998; Snyder-Greco, 1982). In these studies, second and third graders with SLI (Snyder-Greco, 1982) and first through fourth graders with LD (de la Cruz, 1995; de la Cruz et al., 1998) used pantomime to depict sequential actions in the beginning, middle, and end of stories, as well as to dramatize the feelings and emotions of the characters through nonverbal body language. Pantomime also has been included in creative drama interventions to allow fifth graders with EBD in a special education resource classroom to demonstrate what they might do with a particular object (Jackson, 1992).

Role-play. Role-play was included in a drama intervention for fourth graders with LD and behavioral difficulties in an inclusive classroom to support their writing abilities (Anderson, 2012). Students assumed the role of the protagonist in *Little Red Riding Hood* to interpret the character's intentions and actions. After participating in role-play, students used their experiences as a platform for writing their own narratives based on the story.

Story dramatizations. Students with disabilities also participated in story dramatizations in which they acted out a section of a story or an entire text. One study (Dupont, 1992) examined the reading comprehension growth of 51 fifth graders with reading disabilities who were divided into three groups: students who embedded drama

into children's literature, students who read and discussed the same literature using traditional methods, and students who continued to receive the standard curriculum. The 17 students participating in the creative drama treatment dramatized events from a story in the correct sequence after reading the text both aloud orally and silently (Dupont, 1992).

Story dramatizations were added to a curriculum to transform a traditional reading program that used a round robin approach (Wolf, 1998). With the assistance of a visiting theater expert, 17 third and fourth-grade students identified as at-risk or LD developed story dramatizations based on excerpts from multicultural books in a special education resource classroom.

Similarly, other studies (de la Cruz, 1995; Snyder-Greco, 1982) integrated story dramatizations into their creative drama programs for first through fourth graders with LD and SLI in inclusive and self-contained classrooms. Students acted out stories using dolls and puppets, engaged in dramatic play to anticipate or predict characters' actions, and performed original vignettes that paralleled previously read story situations (de la Cruz, 1995; Snyder-Greco, 1982).

Reader's Theater. Reader's Theater commonly was described as an effective drama strategy for supporting students with disabilities. Reader's Theater serves as an instructional method to connect quality literature, oral reading, and drama (Garrett & O'Conner, 2010). In Reader's Theater, students use their own thoughts and actions to rehearse and perform a play, speech, poem, script, or related text. Researchers (Corcoran & Davis, 2005; Hubbard, 2009; Whittaker, 2005) have used Reader's Theater to improve the comprehension and fluency skills of students with LD. Readers' Theater was utilized

to assess the effectiveness of a fluency program for 12 students with LD in a combined second and third-grade self-contained classroom (Corcoran & Davis, 2005). Similarly, Reader's Theater was implemented to evaluate the extent to which participating in three plays increased the reading fluency rates of second and third graders with LD in a special education resource classroom (Hubbard, 2009).

An additional researcher (Whittaker, 2005) compared the use of Reader's Theater with readings from a narrative genre to determine which context led to greater reading fluency and attention for 24 third and fourth-grade students with LD in a language arts special education resource classroom.

The use of process drama activities, including tableau, improvisation, pantomime, role-play, story dramatization, and Reader's Theater, provided specific academic and behavioral benefits for disability populations, particularly for students with LD. This research is explored in the following section.

Academic benefits for students with LD. Students with LD who participated in the process drama activities described above improved their reading comprehension, reading fluency, oral language and expression skills, and written language abilities.

Reading comprehension. Fifth graders with LD in a special education resource classroom who participated in a creative drama program using children's literature showed significant increases on the Metropolitan Reading Achievement Test (MAT6) from pre-test to post-test, whereas the two groups of students who did not receive the drama intervention showed no gains (Dupont, 1992). The group receiving the drama program scored significantly higher on 4 out of 6 criterion referenced tests assessing students' reading comprehension (Dupont, 1992). These results indicate that the drama

program, which included story dramatization activities, improved the reading comprehension of students with LD.

Students with LD also improved their comprehension skills after exposure to a Reader's Theater program (Garrett & O'Conner, 2010). The Reader's Theater program was implemented in four different classrooms, including an inclusive kindergarten classroom of students with LD, a self-contained classroom of students with LD in third through fifth grades, a self-contained classroom of students with LD in fourth and fifth grades, and a self-contained classroom of eight students in first through third grades. Comprehension was evaluated using the school's benchmark assessments on a 1-4 scale (i.e., "1=recalled little or no information; 2=recalled some events, may have been out of order; 3=recalled character names and some key events in order; 4=recalled all character names and most of the events in order with details"; Garrett & O'Conner, 2010, p. 12). Results indicated that on average students gained .95 points on the rating scale, which was the equivalent of almost one comprehension level.

Fluency. Garrett and O'Conner (2010) also assessed students' fluency levels after their participation in the Reader's Theater program. Fluency was assessed according to the school's benchmark assessments on a 1-4 scale (i.e., "1=reading word by word; 2=some phrasing with word by word; 3=mostly phrased with some expression; 4=phrased consistently with expression"; Garrett & O'Conner, 2010, p. 12). Results suggested that students with LD in all four of the classroom contexts improved their fluency ratings by .9 points, or close to one level.

Similarly, Reader's Theater improved the fluency skills of second, third, and fourth graders with LD in self-contained classrooms (Corcoran & Davis, 2005; Hubbard,

2009; Whittaker, 2005). Pre and post oral fluency tests from the Houghton Mifflin reading program were administered and scored as the number of words read correctly per min. At the end of the Reader's Theater programs, students improved their overall fluency by four or more words per min (Corcoran & Davis, 2005; Hubbard, 2009; Whittaker, 2005).

Oral language and expression skills. Additional researchers showed that students exposed to process drama improved their oral language and expression skills. A year-long study of third and fourth graders with LD in a special education resource classroom revealed that students improved their oral language and expression skills as they engaged in lessons incorporating story dramatizations of multicultural books (Wolf, 1998). Analysis of participant observation field notes, audio recordings, and video recordings revealed that using drama allowed students to better relate to the text, express themselves orally, and engage in meaningful discussions related to the stories.

An additional study (Snyder-Greco, 1982) showed that students' involvement in creative drama improved their oral language skills. In an experimental, repeated measures design, second and third graders with LD/SLI in self-contained classrooms were assigned to either the experimental group or the control group. The experimental group participated in a creative drama program that integrated tableau, improvisation, pantomime, and story dramatization activities into the language arts classroom. Pre and post oral language samples from both groups were collected and transcribed, and *t*-tests were conducted to determine the effects of the drama program (Snyder-Greco, 1982). Results comparing the number of total words (NTW) used by students in both groups from pre to post language samples indicated that students who participated in the drama

activities showed statistically significant increases (p<.05) in their NTW spoken (Snyder-Greco, 1982).

Two companion studies (de la Cruz, 1995; de la Cruz et al., 1998) revealed that students with LD, ages 6-11, improved their oral expressive language skills through a creative drama program that integrated tableau, improvisation, pantomime, and story dramatization activities. Pre and post-tests were conducted using the Test of Language Development-2, which evaluates students' speaking and listening skills, and a self-development scale created by the researcher to assess social and language skills. Results from a 2-way analysis of variance (ANOVA) showed mean differences between the drama and control groups in oral expressive language scores, indicating statistically significant gains (p<.05) for the 21 students in the drama group (de la Cruz, 1995; de la Cruz et al., 1998).

Written language skills. Fourth graders with LD in an inclusive classroom who were involved in a process drama intervention using tableau and role-play improved their written language skills (Anderson, 2012). Paired sample *t*-tests were used to compare differences among students' written language specificity and productivity across conventional and drama-based writing activities. Written language specificity was calculated as the number of literate language features (i.e., adverbs, conjunctions, elaborated noun phrases, and mental and linguistic verbs) used and written language productivity was measured through the number of total words (NTW), number of different words (NDW), and total number of utterances (UTT). Significant increases in students' written language specificity and productivity were observed in the drama activities as compared to the more conventional language arts tasks (Anderson, 2012).

Students used twice as many literate language features (e.g., complex elaborated noun phrases, conjunctions, etc.) in the drama context than in the conventional writing assignments, indicating that students' writing was more descriptive and elaborative during the drama intervention.

Fourteen third graders with co-morbid LD/ADHD in a self-contained classroom showed increased narrative written productivity (i.e., number of complete and intelligible utterances and total number of words) and increased narrative cohesion in the tableau drama context than during the conventional language arts context (Anderson & Berry, 2014). In the drama context, students' mean total number of utterances in their written language samples was 6.7, as compared to 5.7 in the conventional context. Students' mean total of words per sample was 47 in the drama context, as compared to 44 in the conventional context. Also, students' use of cohesive elements (i.e., temporal, causal, referential, and spatial markers within students' writing samples) was higher in the tableau drama context than in the conventional language arts context. Student writing samples contained more elements of temporal cohesion (i.e., temporal order of events in the story, shifts in time, and connectives; e.g., "at first," "and then"), causal cohesion (i.e., connectives to story actions with characters' mental or physical states and to mark cause-effect relationships; e.g., "She had a big car," "so"), referential cohesion (i.e., reference to participants and characters through the use of pronouns), and spatial cohesion (i.e., information about the setting with clear shifts in the location of events) in the tableau drama context than in the conventional language arts context. Notably, total cohesion mean scores on students' writing samples also were higher in the drama (i.e., 12.8) than in the conventional context (i.e., 6.4; Anderson & Berry, 2014).

In addition to citing the academic gains, research emphasized the behavioral benefits of using drama for students with LD.

Behavioral benefits for students with LD. Students with LD who participated in process drama activities and interventions in the language arts setting showed improved attitude and interest levels, improved social skills, greater participation, and increased on-task behavior.

Improved attitude and interest levels. A study of 12 students with LD in a combined second and third-grade self-contained classroom revealed that students improved their attitudes during exposure to a Reader's Theater program (Corcoran & Davis, 2005). Before and after the Reader's Theater program was introduced, students completed the Elementary Reading Attitudes Survey, which provided estimates of their attitudes toward reading. The survey consisted of questions designed to evaluate students' comfort levels with reading in different contexts. Survey results suggested students' comfort levels increased from 81–95% as a result of Reader's Theater. Post survey findings also revealed that 68% of students felt comfortable reading aloud, as compared to 52% in the pre-survey. These results indicated that Reader's Theater improved students' confidence, attitudes, and interest in reading (Corcoran & Davis, 2005).

Similarly, data collected on third and fourth graders in a special education resource classroom showed improved attitudes about reading during Reader's Theater instruction as compared to readings in a narrative genre (Whittaker, 2005). The *Reading Survey-Motivation to Read Profile*, which was administered at beginning, middle, and end of study, included questions related to students' self-concept as a reader and the

value of reading. At the beginning and end of the Reader's Theater program, students participated in interviews, which were recorded as field notes, coded, and analyzed to provide additional information regarding students' attitudes about reading. Although the *Reading Survey* did not indicate that students' attitudes towards reading improved with Readers' Theater, interview findings showed increased interest in reading plays and less reluctance to read in general (Whittaker, 2005).

In their investigations of the effects of creative drama on the social and oral language skills of students with LD, ages 6-11, de la Cruz (1995) and de la Cruz et al. (1998) examined students' interest levels in the drama program. The researchers conducted audiotaped interviews with the students who received the drama program, and transcribed and coded students' responses. Results indicated that all of the students enjoyed their involvement in the drama program and felt that the experience was beneficial. The students also reported that they would like to participate in additional drama lessons (de la Cruz, 1995; de la Cruz et al., 1998).

Likewise, an additional researcher (Wolf, 1998) found students' interest levels in reading increased during involvement in a drama program with a visiting theater expert. Data were collected on 17 third and fourth graders with LD in a special education resource classroom who were exposed to multicultural books and accompanying theater activities during an entire school year. Triangulation and analysis of field notes from participant observations, audio recordings, and video recordings during reading lessons showed that students' participation in drama made the story language more accessible, which generated greater interest and involvement in reading (Wolf, 1998). As a result, students took a greater interest in stories that integrated drama activities than those who

did not. Based on increased interest, students were more likely to read for meaning when a selection included drama activities (Wolf, 1998).

Improved social skills. Two studies (de la Cruz, 1995; de la Cruz et al., 1998) found that first, second, third, and fourth graders with LD who participated in a creative drama program improved their social skills. Data analysis of coded, structured interviews revealed that students learned to cooperate with their peers by apologizing, staying focused, and taking turns (de la Cruz, 1995; de la Cruz et al., 1998). Students also reported that *the drama program helped them to get along well with their peers and to listen*. Results from the *Walker McConnell Scale of Social Competence and School Adjustment* (WMS; Walker & McConnell, 1988) and the *Scale of Specific Social and Oral Language Skills* (SLS; Stephens, 1992) suggested that students who engaged in the drama program had statistically significantly higher mean scores on both the WMS ($p<.01$) and the SLS ($p<.001$) than students who did not receive the drama intervention (de la Cruz, 1995; de la Cruz et al., 1998).

Greater participation. Fourth-grade students with LD also showed greater participation when involved in drama activities than in more decontextualized, conventional writing lessons (Anderson, 2012). Collected anecdotal evidence from interviews with the classroom special education teacher, occupational therapist, and speech and language pathologist suggested that students showed increased willingness to participate in written language activities when they were related to the drama lessons (Anderson, 2012).

Increased on-task behavior. Third and fourth grade students with LD in a special education resource classroom displayed increased on-task behavior during Reader's

Theater lessons than narrative genre readings (Whittaker, 2005). Students' on-task behavior was measured through direct observations from video recordings of students' time on-task during language arts lessons using a 1-min whole interval time sampling procedure. On-task behavior was defined as the student reading aloud, looking at reading material, requesting help from the teacher, and looking at the teacher. Paired sample *t*-tests were conducted to compare means of on-task behavior across lessons. Results indicated that students' on-task behavior was statistically significantly higher (p=.005) during the Reader's Theater lessons than the narrative genre lessons (Whittaker, 2005).

Third-grade students with co-morbid LD/ADHD in self-contained classrooms showed increased percentages of intervals on-task during drama lessons that integrated tableau than in the conventional language arts lessons (Anderson & Berry, in press; Anderson & Berry, 2014). Students' on-task behavior was measured using a 10-sec momentary interval time sampling procedure with on-task behavior defined as sitting or standing in a designated space, keeping hands, feet, and objects to oneself, participating in the class activity, interacting with peers and the teacher, listening to and following directions, and looking at and using materials appropriately. In both studies, students' on-task behavior ranged from 89%-93% in the drama context, compared to 74%-79% in the conventional language arts context.

Summary of process drama research. The second broad topic in this review included literature related to the use of process drama in language arts classrooms that included students with disabilities. Twelve empirical studies were reviewed and four theoretical articles and one book provided additional information on process drama. All 12 of the empirical studies described specific drama activities and interventions that were

implemented to support students with disabilities, and highlighted at least one of the following process drama interventions or techniques: tableau, improvisations, pantomime, role-play, story dramatizations, and Reader's Theater (see Table 6).

Table 6

Drama Strategies and Interventions Implemented in Empirical Studies

Author(s)	Year	Student Population	Drama strategies/interventions
Anderson	2012	4th graders with LD/behavior challenges	Role-play; Tableau
Anderson & Berry	In press	3rd graders with co-morbid LD/ADHD	Tableau
Anderson & Berry	2014	3rd graders with co-morbid LD/ADHD	Tableau
Corcoran & Davis	2005	2nd and 3rd graders with LD	Reader's Theater
de la Cruz	1995	1st-4th graders with LD	Improvisations; Pantomime; Story dramatizations; Tableau
de la Cruz et al.	1998	1st-4th graders with SLI	Improvisations; Pantomime; Story dramatizations; Tableau
Dupont	1992	5th graders with reading disabilities	Story dramatizations
Hubbard	2009	2nd and 3rd graders with LD	Reader's Theater
Jackson	1992	5th graders with EBD	Improvisations; Pantomime
Snyder-Greco	1982	2nd and 3rd grade students with SLI	Improvisations; Pantomime; Story dramatizations; Tableau
Whittaker	2005	3rd and 4th graders with LD	Reader's Theater
Wolf	1998	3rd and 4th grade students at risk and/or with LD	Story dramatizations

Literature reviewed also emphasized the academic and behavioral benefits of using drama in language arts classrooms for students with LD. Researchers revealed that

students with LD who participated in drama activities improved their reading comprehension, reading fluency, oral language and expression skills, and written language abilities, as well as showed improved attitude and interest levels, improved social skills, greater participation, and increased on-task behavior.

Limitations of process drama research. Six major limitations were found in the studies reviewed in the second broad topic area. First, the majority of the studies included in the review did not target one specific drama strategy. Rather, the studies examined the overall effects of an entire Reader's Theater program or a creative drama program that integrated several drama interventions or techniques (e.g., improvisations, story dramatizations, and tableau). As a result, one could not identify if a particular drama strategy was more useful than others for supporting students with LD.

Second, only three studies (Anderson & Berry, in press; Anderson & Berry, 2014; Whittaker, 2005) examined students' on-task behavior, but only as a secondary, descriptive variable. No drama studies to date have included on-task behavior as the primary dependent variable.

Third, only 1 of the 12 empirical studies (Anderson, 2012) was conducted exclusively in an inclusive language arts classroom. The remainder of the studies investigated students in self-contained classrooms, resource classrooms, or in a combination of inclusive and self-contained settings.

Fourth, only 12 empirical studies met the inclusion criteria for this section of the review. A significant gap exists in the literature base because the majority of articles related to drama and disability populations are thought pieces rather than experimental studies.

Most significantly, several large-scale studies and reform initiatives have been conducted in the arts, but the evaluation of the effectiveness of drama strategies for disability populations has not been carefully investigated. Reports from North Carolina, Oklahoma, and Arkansas's networks of A+ schools, the Chicago Arts Partnership in Education (CAPE), Arts Education in Maryland Schools Alliance (AEMS), Arts for Academic Achievement (AAA) in Minneapolis, and Schools, Parents, Educators, Children, Teachers Rediscover the Arts (SPECTRA+) have documented the benefits of arts integration curricula and programs that include drama, music, visual art, and dance for students of all ages (PCAH, 2011). Although seminal to the field of arts integration, these reports fail to provide specific details on the types of drama activities implemented or the specific impact of the drama interventions for students. Without detailing the nature or the quality of the drama instruction, one cannot determine how drama was implemented or integrated into the curriculum. Notably, these reports rarely included or targeted students with disabilities.

Lastly, students with LD struggle with comprehension of narrative story elements (e.g., character traits, setting, etc.; Gersten, Fuchs, Williams, & Baker, 2001; Nodine, Barenbaum, & Newcomer, 1985); yet, only two studies (Dupont, 1992; Garrett & O'Conner, 2010) evaluated students' story comprehension after exposure to drama programs. Dupont (1992) assessed students' comprehension using the MAT6 standardized test and criterion-referenced multiple-choice tests developed by the researcher and teachers. Although the study (Dupont, 1992) reported gains in story comprehension for students with reading disabilities after participation in drama, this study failed to describe the types of questions (e.g., character-related, vocabulary, etc.)

that students answered correctly. Similarly, Garrett and O'Conner (2010) assessed the comprehension of students with LD using a benchmark assessment, but they did not identify the specific gains (e.g., the majority of students recalled character names and some key events in order after participating in the Reader's Theater program). Furthermore, neither study described the use of tableau to increase students' story comprehension.

Implications for present study. The findings and limitations in the second broad topic area based on a systematic review of process drama (a) informed the selection of the intervention, (b) confirmed the selection of the primary dependent variable, type of classrooms, and students, and (c) determined the selection of the secondary descriptive variable for the present study. The reviewed literature highlighted the use of several drama strategies for supporting students with disabilities. Notably, 5 of the 12 studies described tableau as a useful strategy for teaching students with disabilities. Although researchers (Anderson & Berry, in press; Anderson & Berry, 2014; Anderson, 2012; de la Cruz, 1995; Snyder-Greco, 1982) largely have identified tableau as a valuable way to integrate drama into language arts lessons, the targeted use of tableau as a classroom intervention has not been explored. To address this need and to further investigate the potential benefits of tableau, the present study evaluated the use of tableau as a single drama intervention for increasing the on-task behavior of students with LD.

Only three studies (Anderson & Berry, in press; Anderson & Berry, 2014; Whittaker, 2005) examined the effects of a drama strategy on students' on-task behavior. However, the primary focus of all three studies related to more academic outcomes (i.e., reading fluency, written language productivity, and narrative cohesion); on-task behavior

only was considered a secondary descriptive variable. A deeper investigation of the use of drama to increase students' on-task behavior (as the primary dependent variable) is warranted. The present study examined the use of tableau to increase the on-task behavior of students with language-based LD.

Third, only 1 of the 12 empirical studies (Anderson, 2012) was conducted exclusively in an inclusive language arts classroom. Given the limited data that have been collected on the use of drama for disability populations in inclusive classrooms and the increasing number of students with LD in inclusive classrooms (ASHA, 2013; LD OnLine, 2008), a need exists to determine the best ways to support their learning needs in inclusive settings. For this reason, the present study was conducted in two inclusive classrooms.

Fourth, based on the dearth of empirical studies related to drama and students with LD, the present study examined the use of tableau to increase the on-task behavior of students with LD in inclusive classroom settings.

Lastly, few studies (Dupont, 1992; Garrett & O'Conner, 2010) have evaluated the story comprehension of students with LD after exposure to drama programs. Because students with LD experience documented challenges in comprehending story grammar elements (Gersten et al., 2001; Nodine et al., 1985), additional research is needed to determine the extent to which drama strategies and interventions support students' understanding of specific narrative story elements. A more detailed examination of how tableau supports students' comprehension of specific narrative story elements may elucidate the precise outcomes that drama facilitates for students with LD. Thus, the present study included an assessment of students' understanding of narrative story

elements as a secondary descriptive variable. Specifically, the assessment evaluated fourth-grade students' understanding of character traits and sequence of events during tableau and non-tableau lessons.

Narrative Story Elements

The third topic area for the literature review highlighted research related to narrative story elements. Narrative story elements, frequently known as story grammar, include the main characters, the main characters' traits, goals, and motivations, time, setting, major events, problems, and ending/resolution of a story (Bednarczyk, 1991; Taylor, Alber, & Walker, 2002). This section of the review included: (a) a description of knowledge of narrative story elements for K-5 students with LD; (b) strategies and interventions that have been developed to increase understanding of narrative story elements for K-5 students with LD; and (c) assessments that have been created to evaluate understanding of narrative story elements for K-5 students with LD. As the present study assessed students' understanding of character traits and sequence of events, included studies must have specifically targeted one or both of these narrative story elements.

Knowledge of narrative story elements. The literature review revealed that students with LD, particularly those in third and fourth grades, have less knowledge of narrative story elements than their typically developing peers. One seminal study (Wilkinson, Elkins, & Bain, 1995) comparing third graders with LD and typically achieving third graders' understanding of narrative story elements showed that students with LD have a less well-developed understanding of story grammar, which may explain their documented challenges with story comprehension.

As a way to identify the subgroups of students with LD who experienced the most challenges with identifying narrative story elements, Wilkinson et al. (1995) selected 20 good readers and 60 struggling readers from inclusive third-grade classrooms, which they divided into five homogenous subgroups based on the nature of their reading problems. All of the students listened to three stories, which they retold under free and probe-recall conditions. The probe-recall condition consisted of students answering five or six questions related to the following narrative story elements: internal response, attempt, direct consequence, and reaction. Higher-order probes also were developed to evaluate the extent to which students could recall the sequence of events in a story. On average, the good third-grade readers recalled 53% of each story, compared with 40% by the poor third-grade readers. Two subgroups, students who had difficulties with overall word knowledge and students with poor comprehension at the sentence level, showed reduced sensitivity to story structure and deficits in narrative story element knowledge in both free and probed recalls. These students recalled less of the stories overall, less information about each narrative story element, and showed patterns of category recall that differed from the good readers (Wilkinson et al., 1995).

Through literature reviews, non-empirical thought pieces, and texts, additional researchers have noted that fourth-grade students with LD generally struggle to recall narrative story elements because they tend to develop an understanding of narrative text structure at a much slower rate than their peers (Gersten et al., 2001; Nodine et al., 1985). Making inferences and providing information about story characters proves especially challenging for elementary students (e.g., fourth graders) with LD because knowledge of these elements requires higher-level comprehension skills (Curran, 1997). Students with

LD also have poorly developed story schemata that may interfere with their ability to foster connections within a text (Lerner, 1993).

Based on the documented difficulties of third and fourth-grade students with LD to understand narrative story elements, including those related to characters and events, a need exists to identify valuable strategies and interventions for supporting students in developing these skills. This research is explored in the following section.

Strategies and interventions. Eleven studies in the reviewed literature examined the effectiveness of specific instructional strategies and/or interventions for improving understanding of narrative story elements for K-5 students with LD. As previously noted, investigations of students with LD in non-inclusive settings were included in the review based on the limited number of studies conducted in inclusive classrooms and the likelihood that intervention procedures implemented in resource rooms would generalize easily across settings. The strategies and interventions for supporting students' knowledge of narrative story elements generally fell into two categories: strategy instruction of narrative story elements and strategy instruction of narrative story elements paired with metacognitive techniques.

Strategy instruction of narrative story elements. Seven of the 11 studies included interventions focused on the explicit teaching of narrative story elements. One study consisted of an intervention designed for third, fourth, and fifth graders with LD in a special education resource classroom in which narrative story elements were explicitly taught using a story map as a visual aid and an organizer for guided practice (Boulineau, Fore III, Hagan-Burke, and Burke, 2004). The graphic organizer highlighted the narrative story elements of setting/time, main characters, episodes (i.e., problem,

solution, and outcome events), reaction, and theme. Results from this ABC single-case design showed that all six students demonstrated lower levels of story grammar knowledge (i.e., mean percentage of correct answers) during baseline probes (range, 25-35%) as compared to intervention probes (range, 67-96%; Boulineau et al., 2004). However, this study included less than five data points in at least one of the phases for multiple participants and did not meet the single-case design standards set forth by WWC without reservations for demonstrating an intervention effect of the strategy instruction on students' comprehension of story grammar elements.

An additional researcher (Bednarczyk, 1991) developed comparable interventions for fifth graders with LD in an inclusive classroom. The students were taught to identify and record the characters, characters' feelings, time, place, problem, goal, events, and ending on story maps as they read a selection and completed reading comprehension questions. Results from this multiple baseline design study (which met WWC standards without reservations) demonstrated that students were able to recall more story grammar elements during the intervention phase as compared to baseline phase (Bednarczyk, 1991).

In their intervention, Newby, Caldwell, and Recht (1989) differentially designed the story mapping strategy instruction for seven children, ages 8-10, with dyslexia based on their specific dyslexia diagnosis. In a special education resource room, all of the students were taught that stories generally consist of the following components: main idea, character, setting, problem encountered by main character, events/attempts to solve the problem, and resolution (Newby et al., 1989). After orally reading the story, students with dysphonetic dyslexia (i.e., audio-linguistic dyslexia) drew pictographs on index

cards to represent the individual story components, while those with dyseidetic dyslexia (i.e., visual-spatial dyslexia) identified story elements in a prescribed order, beginning with the main character and the setting. Results from this multiple baseline design study showed that students did not show significantly higher percentages of ideas recalled from stories during story grammar instruction compared to baseline phases (Newby et al., 1989). This study included less than five data points in at least one of the phases for more than of the participants and the researchers did not collect IOA. Thus, the study did not meet the standards set forth by WWC without reservations for demonstrating an intervention effect of the story mapping procedure on students' comprehension of story grammar elements.

Other interventions employed the model-lead-test paradigm (Idol, 1987; Idol & Croll, 1987) and rule and activity-based instruction using the Direct Instruction Model (Rabren, Darch, & Eaves, 1999) to teach narrative story elements to third and fourth graders with LD in inclusive classrooms. In the model-lead-test paradigm, the teacher taught story structure as an organizational framework, using precise teacher presentation, feedback techniques, and multiple opportunities for practice. In the first phase of the intervention, the teacher demonstrated how to complete the story map on the overhead projector, identified one component of the story map (e.g., characters, setting, time, problem, goal, action, and outcome), solicited responses from the third and fourth-grade students with LD, and repeated the process until all story elements were addressed. Students then answered reading comprehension questions. In next phase, students completed the map independently, answered reading comprehension questions, and reviewed the answers with the teacher. In the final phase, students did not respond to the

group or receive teacher feedback, but completed the story map and answered the reading comprehension questions independently. Results from the multiple baseline designs showed increased comprehension of story elements during the model-lead-test intervention phase compared to the baseline phase (Idol, 1987; Idol & Croll, 1987). However, these studies included less than five data points in at least one of the phases for more than one of the participants and did not meet the standards set forth by WWC without reservations for demonstrating an intervention effect of the model-lead-test procedure on students' comprehension of story grammar elements.

A variation on the Direct Instruction Model, which emphasizes the importance of explicitly teaching a skillset through demonstrations, was utilized to develop a rule and activity-based intervention for teaching narrative story elements (Rabren et al., 1999). In this study, 40 fourth graders with LD special education resource classrooms were randomly assigned to either explicit rule-based or basal reader activity-based instruction. The explicit-rule based instruction included a rule statement, demonstration of examples, and multi-step procedure to help the students to identify and comprehend character motive. The activity-based instruction consisted of using basal-reader fables as story incentives to help students identify narrative story elements. Results suggested that students were better able to identify character motives with the rule-based instruction as compared to the basal-reader activity-based instruction (Rabren et al., 1999).

In a final study of third and fourth graders with LD in a self-contained classroom (Wade, Boon, & Spencer, 2010), story mapping strategy instruction was integrated with Kidspiration, an electronic graphic-organizing software. Results from the ABC single-case design demonstrated that all three participants had higher percentages of correct

story grammar elements during the story mapping strategy intervention phase than during baseline phase (Wade et al., 2010). However, this study included less than five data points in at least one of the phases for more than one of the participants and did not meet the standards set forth by WWC without reservations for demonstrating an intervention effect of the story mapping strategy instruction on students' comprehension of story grammar elements. Additional intervention studies in the review paired story mapping strategies with metacognitive techniques to promote students' understanding of narrative story elements.

Strategy instruction of narrative story elements paired with metacognitive techniques. Several interventions combined explicit teaching of narrative story elements with metacognitive techniques such as goal setting, self-instruction, self-questioning, and self-monitoring. In one study, researchers (Johnson, Graham, & Harris, 1997) randomly assigned fourth, fifth, and sixth graders with LD in a self-contained classroom to one of four intervention conditions (i.e., strategy instruction, strategy instruction with goal setting, strategy instruction with self-instruction, and strategy instruction with goal setting and self-instruction) to assess their recall of main idea, details, and narrative story elements. Students in all four conditions were introduced to a four-step narrative story strategy: (a) write and say story parts; (b) read and think; (c) remember and write; and (d) look back and check (Johnson et al., 1997). For students in the strategy instruction with goal setting group, the teacher described how to set and meet performance goals (e.g., using the four-step narrative story strategy) and the procedures for checking goal attainment. For students in the groups with self-instruction, the teacher explained how to develop self-instruction statements to guide the use of the four-step narrative story

strategy. Example statements included, "I need to look back" and "What do I need to do first?" (Johnson et al., 1997). Results indicated that strategy instruction supported the development of students' comprehension of story grammar elements; however, the addition of goal setting and self-instruction did not provide any additional benefits for students (Johnson et al., 1997).

Two intervention studies (Carnine & Kinder, 1985; Taylor et al., 2002) used modified self-questioning strategies with direct instruction of story mapping. Taylor et al. (2002) divided third, fourth, and fifth graders with LD from a special education resource classroom into one of two intervention groups: story mapping or self-questioning. After reading a story, students in the story-mapping group completed a story map, which included main characters, setting, problem, major events, and story outcomes. Students in the self-questioning group answered orally into a tape recorder a list of 10 questions about the narrative story elements (e.g., Who is the main character? How is the main character trying to solve the problem?) at two predetermined points during the reading selection and a third time after completing the story. Results from the alternating treatments design (which met WWC standards without reservations) showed that students answered higher percentages of comprehension questions correctly during the self-questioning conditions than the baseline and story mapping conditions (Taylor et al., 2002).

Similarly, Carnine and Kinder (1985) developed two types of training session conditions: the schema-based intervention and the generative-learning intervention in their study of 27 low performing fourth, fifth, and sixth graders with LD in a special education resource classroom. Students receiving the schema-based (i.e., story grammar)

intervention were taught how to ask questions about the narrative story elements such as character, character motivation, story events, and story resolution. Students in the generative-learning group were taught an embedded story structure routine in which they formed an image of the story after completing a passage, described the image, and summarized the story. Results indicated that students in both groups improved their comprehension skills; no significant differences were found between the two interventions (Carnine & Kinder, 1985).

An additional intervention study utilized self-questioning and self-monitoring mnemonic devices to help students with LD improve their understanding of narrative story elements. Researchers (Griffey, Zigmond, & Leinhardt, 1988) randomly assigned 27 third through fifth-grade students from a special education resource room to one of the three following groups: students who received narrative story element strategy training, students who received narrative story element strategy training with self-questioning, and students who received no strategy training or self-questioning. The teacher taught students in the strategy training intervention group a procedure called CAPS, or Character, Aim, Problem, Solution. Students learned to identify these narrative story elements and practiced retelling passages using the CAPS story grammar strategy. In addition to learning the CAPS procedure, students in the strategy training with self-questioning intervention group were provided instruction on how to ask themselves questions related to the characters, aim, problem, and solution in a story. Students in the third group responded to teacher-generated questions. Results from this random experimental design showed that students who received narrative story element strategy training with self-questioning correctly answered significantly more comprehension

questions than students in the group that received narrative story element strategy training and in the group that did not receive strategy training or self-questioning (Griffey et al., 1988).

In addition to developing strategies and interventions, researchers used various assessments to evaluate understanding of narrative story elements for students with LD. The following section explores this research.

Assessments. Eleven studies in the reviewed literature assessed students' understanding of narrative story elements. The assessments generally divided into four categories: curriculum-based passages with accompanying comprehension tests, teacher and researcher-created assessments, oral recalls, and multiple assessments.

Curriculum-based passages with accompanying comprehension tests. Two studies (Boulineau et al., 2004; Idol, 1987) utilized variations of curriculum-based passages and comprehension tests. In one study of third, fourth, and fifth graders with LD in a special education resource classroom (Boulineau et al., 2004), passages were selected from a basal and primer reader series called FOCUS: Reading for Success. Passages were chosen based on the presence of an easily identifiable main character who experienced a problem or conflict. After reading each passage, assessments consisted of students completing a story map to demonstrate their understanding of setting/time, characters, problem, solution, outcome, reaction, and theme. The teacher pre-identified acceptable answers for each passage, with each probe having eight possible correct answers.

In a similar study of third and fourth graders with LD in a special education resource classroom (Idol, 1987), oral reading stories were selected from the *Macmillan*

Reading Program Series because they were widely validated and offered standard measures of reading and comprehension at different difficulty levels. Students' performances were calculated as the percent of correct, written responses to 10 comprehension questions from the story.

Teacher and researcher-created assessments. Rather than using curriculum-based assessments, several teachers and researchers developed their own reading comprehension evaluations for students with LD. Wilkinson et al. (1995) created five or six probe questions for each of three selected stories (i.e., *Epaminondas, The Tiger's Whisker,* and *The Fox and the Bear*) to assess third graders' comprehension of the following narrative story elements: internal response, attempt, direct consequence, reaction, and causal sequence of events. Students' knowledge was evaluated based on the number of correctly answered questions.

Rather than developing the assessments themselves, other researchers (Taylor et al., 2002) relied on teacher-selected stories and teacher-developed comprehension questions to determine third, fourth, and fifth-grade students' understanding of narrative story elements. The teacher-created comprehension tests consisted of 10 open-ended questions (i.e., five literal and five inferential) about the specific events in the story. Students were assessed in their special education resource classroom on the number of correctly answered questions.

Oral recalls. Students with LD also were evaluated using oral recalls of the story elements from a selected story. In one study (Bednarczyk, 1991), fifth-grade students in an inclusive classroom were asked to read and orally retell stories that were selected using specific criteria (e.g., leveled, easy to differentiate, validated, etc.) from basal

readers and from a variety of publishers. Story retellings were recorded, transcribed, and coded for the number of narrative story elements recalled correctly. In a second study of students with LD across four classrooms (i.e., self-contained and inclusive settings for students in grades K-5), comprehension of narrative story elements after exposure to a Reader's Theater program was evaluated using oral retellings (Garrett & O'Conner, 2010). Students were asked to orally retell stories presented in class and were scored on a 1-4 scale according to the school's benchmark assessments (i.e., "1=recalled little or no information; 2=recalled some events, may have been out of order; 3=recalled character names and some key events in order; 4=recalled all character names and most of the events in order with details"; Garrett & O'Conner, 2010, p. 12).

Multiple assessments. The final category of assessments consisted of using multiple ways to measure students' comprehension of narrative story elements. The majority of studies of multiple assessments utilized oral recalls in combination with curriculum-based comprehension tests, with two studies pairing oral recalls with researcher-created comprehension tests.

Oral recalls and curriculum-based comprehension tests. Three studies implemented a combination of oral recall and curriculum-based tests to assess students with LD. Two studies (Carnine & Kinder, 1985; Griffey et al., 1988) evaluated third, fourth, and fifth graders with LD using free oral retellings without probes and story comprehension pre and post-tests with multiple-choice questions about the main character, main character's aim, problem, and solution. The free retellings were tape recorded, transcribed, and scored for the number of story grammar elements mentioned. One additional study of students with LD, ages 8-10 (Newby et al., 1989), used narrative

stories from basal readers and measured students' knowledge as the percent correct of narrative story questions (e.g., focusing on character traits, sequence of events, etc.) and more general comprehension questions. Assessments also included oral story retells, which were audiotaped, transcribed, and evaluated for the number of narrative story elements recalled from the passage.

Oral recalls and researcher-created comprehension tests. Two final studies (Idol & Croll, 1987; Rabren et al., 1999) utilized researcher-developed tests with oral recalls to evaluate third and fourth graders with LD in special education resource classrooms. Students were assessed based on their performance on oral retells and on three researcher-created unit tests that included comprehension questions related to character motive and accompanying details (Rabren et al., 1999). In addition to using story recalls, students' performance was measured based on the percentage of correct responses from the 10 literal and inferential questions they designed (Idol & Croll, 1987).

Summary of narrative story elements research. The third broad topic in this literature review included empirical and theoretical studies related to understanding of narrative story elements for K-5 students with LD. Twenty-seven studies were reviewed, with five studies examining students' knowledge of narrative story elements, 11 evaluating the effectiveness of strategies and interventions for increasing their understanding of narrative story elements, and 11 describing assessments that were created to evaluate students' comprehension of narrative story elements. All five of the studies investigating students' knowledge of narrative story elements found that students with LD, specifically those in third and fourth grades, have a less well-developed understanding of story grammar features than their typical peers. The majority of

strategies and interventions for improving students' knowledge of narrative story elements consisted of explicit strategy instruction or story mapping paired with metacognitive techniques. Researchers employed a variety of assessments for evaluating students' comprehension of narrative story elements, including curriculum-based readers with comprehension tests, teacher and researcher-created assessments, oral recalls, and multiple assessments.

Limitations of narrative story elements research. Three major limitations were found in the studies reviewed in the third broad topic area. First, only two of the studies were conducted solely in inclusive special education classrooms. Thus, the literature reflects a narrow view of the knowledge, strategies and interventions, and assessments that characterize students with LD in inclusive settings.

Second, the strategies and interventions for supporting comprehension of narrative story elements for students with LD primarily consisted of direct strategy instruction and metacognitive techniques like self-monitoring and self-questioning, which are largely verbal in nature. Verbal techniques may not serve as the best approach for facilitating improved comprehension for students with language-based LD, who have documented difficulty accessing and understanding exclusively verbal, abstract, and decontextualized language (Paul, 2002). Only one article (Curran, 1997) cited the benefits of using drama as a replacement for verbal interventions for students with LD, but this article was theoretical rather than empirical. Only 6 of the 11 studies describing interventions (Bednarczyk, 1991; Carnine & Kinder, 1985; Griffey et al., 1988; Johnson et al., 1997; Rabren et al., 1999; Taylor et al. 2002) were high quality studies. The remaining studies were single-case designs that did not meet the WWC standards without

reservations for demonstrating an intervention effect of the independent variable on the dependent variable. The narrow scope of the strategies and interventions, the limited number of high quality studies, and the strong focus on verbal techniques undermines the potential value of high quality non-verbal strategies, such as dramatic arts integrated approaches, for supporting students with LD.

Third, and most significant, 9 of the 11 studies describing strategies and interventions grouped narrative story elements together rather than examining the value of one or two elements, such as character traits. Only two studies (Garrett & O'Conner, 2010; Rabren et al., 1999) targeted students' ability to recall character traits and motive, and only one study (Garrett & O'Conner, 2010) assessed students' understanding of sequence of events as a major dependent variable. Classifying several narrative story elements as one larger unit prevents researchers from determining students' exact knowledge of specific narrative story elements (e.g., main idea, character traits, sequence of events, etc.) and from identifying which strategies and interventions best support students' comprehension of a single narrative story element.

Implications for present study. The findings and limitations in the third broad topic area based on a systematic review of narrative story elements (a) confirmed the selection of the type of classroom and the intervention and (b) informed the selection of the secondary dependent variable and accompanying assessment for the present study. Given that only two of the studies in the third broad topic area review were conducted in special education classrooms, a need exists to determine the interventions and assessments that best support students with LD in inclusive settings. The present study was conducted in two, inclusive elementary classrooms.

In addition, the reviewed literature revealed a significant limitation in the types of interventions that have been used to increase knowledge of narrative story elements for students with LD. The majority of studies implemented strategy instruction with story maps or metacognitive techniques, which are largely verbal in nature and do not support the learning needs of students with LD. Given the documented challenges that students with LD experience in accessing and retaining abstract, complex, and unfamiliar language presented in decontextualized classroom contexts, researchers need to employ interventions that rely less on verbal abilities and more on kinesthetic and tactile domains to scaffold comprehension. Curran (1997) suggests that drama activities such as non-verbal enactment, pantomime, and gesture enhance students' understanding of story characters. The present study descriptively examined the potential value of a drama intervention (i.e., tableau) for helping students with LD understand character traits and sequence of events.

Reviewed literature highlighted the importance of one's ability to identify narrative story elements for increasing the overall comprehension of a story (Dimino, Taylor, & Gersten, 1995). As narrative story elements frame the basic structure of narrative texts, students who understand narrative story elements are better able to recall information from a selection because they can discern the material that is relevant (Englert & Mariage, 1991; Weaver & Dickinson, 1982; Williams, 1993). Because knowledge of narrative story elements proves essential for story comprehension and reviewed literature shows that third and fourth-grade students with LD have less knowledge of narrative story elements than their typical peers, the present study included fourth graders' understanding of narrative story elements as a secondary descriptive

variable. Specifically, the present study descriptively assessed students' knowledge of character traits and sequence of events to determine if comprehension differences existed across tableau and non-tableau phases.

The selection of the assessment for the secondary descriptive variable (i.e., understanding of character traits and sequence of events) was guided by the third broad topic area review. Because several researchers (Bednarczyk, 1991; Carnine & Kinder, 1985; Garrett & O'Conner, 2010; Griffey et al., 1988; Idol & Croll, 1987; Newby et al., 1989; Rabren et al., 1999) in the reviewed literature validated the use of oral retellings to assess students' understanding of narrative story elements, the present study used oral retellings to describe students' comprehension of character traits and sequence of events. The researcher selected Garrett and O'Conner's (2010) benchmark assessment to measure students' understanding of character traits and sequence of events. Oral retellings were evaluated based on an adapted, more numerical version of the benchmark assessment (i.e., "1=recalled little or no information; 2=recalled some events, may have been out of order; 3=recalled character names and some key events in order; 4=recalled all character names and most of the events in order with details"; Garrett & O'Conner, 2010, p. 12). An adapted version of Garrett and O'Conner's (2010) benchmark assessment was most appropriate for the present study based on the targeted focus on recall of character traits and sequence of events, its feasibility, and its use as a school district benchmark assessment in language arts classrooms that integrated drama techniques such as Reader's Theater (see Appendix B for adapted assessment).

Summary

The first section of this chapter provided the educational context of inclusion and the CCSS. The second section of this chapter described the theoretical foundations for the present study. The third section of this chapter encompassed the majority of the review, with literature related to three broad topic areas: on-task behavior, process drama, and narrative story elements. The final section of each broad topic area summarized the research, addressed limitations within each topic, and discussed implications from the literature review for the present study.

Chapter III: Methods

Overview

Students with language-based learning disabilities (LD) increasingly are placed in general education settings, where they struggle to meet the academic demands of school, particularly in language arts (Klem & Connell, 2004; Newman & Davies, 2005). A primary explanation for the low academic achievement of students with LD in inclusive settings may relate to low levels of on-task behavior and oral language challenges during instructional time because of disengagement in literacy activities (Bridgeland et al., 2006; Kastner & Gottlieb, 1995). Recent studies (e.g., Catterall, 2002; Deasy, 2002; Parsdad & Spiegelman, 2012; Podlozny, 2000) have revealed that arts integration enhances students' on-task behavior and verbal skills; yet, the possible benefit of specific drama strategies has been under-researched. In an effort to address this need, this study investigated the potential of a specific dramatic arts intervention (tableau) for increasing students' on-task behavior during small group language arts lessons.

The purpose of the present study was to examine the effectiveness of tableau for increasing the on-task behavior of three, fourth grade students with language-based LD in inclusive language arts classrooms. All students in the selected fourth-grade classrooms participated in the tableau intervention; however, the researcher only collected observational data for the three students who were chosen for the study. Changes in the three students' on-task behavior within and across baseline, withdrawal, and tableau phases were examined using an ABAB withdrawal design. For the purposes of this research, the teachers implemented tableau during their small group language arts lessons during the intervention phases (i.e., the second and fourth phases) only. The researcher

measured the three students' on-task behavior using a 10-s whole interval time sampling recording procedure (see Appendix C). For the interval to be scored as an occurrence of on-task behavior, the students had to remained on-task throughout the entire interval. The researcher used the Gymboss Interval Timer (see Figure 3), a small device that can be worn on the waist and programmed to vibrate at pre-set intervals, to prompt the recording of students' on-task behavior at the end of each 10-s interval. The researcher programmed the Gymboss Interval Timer to vibrate every 10-s, with a steady vibration lasting 5-s to allow for recording time. During a fixed length 20-min small group language arts session, the researcher recorded whether the student was on-task throughout the entire interval for every 10-s interval (total number of intervals per session = 80). At the end of each session, the researcher calculated the number and percentage of intervals in which the student was recorded as on-task.

To collect additional descriptive data, the primary researcher used an audio digital recorder (see Figure 3) to capture participants' oral retellings of the story (that was taught in the previous lesson) at the end of every session in each phase. Two secondary data coders (blind to the phases) scored the oral retellings by listening to the audio digital recording and evaluating students' understanding of character traits and sequence of events in a story using an adapted version of Garrett and O'Conner's (2010) Likert-scale benchmark assessment (see Appendix B). Oral retelling assessments were used to determine if performance differences existed among participants across conventional and tableau contexts.

Figure 3. Gymboss interval timer and audio digital recorder.

Research Questions and Hypotheses

The study focused on the following major research question: What are the effects of tableau on the on-task behavior of fourth-grade students with language-based learning disabilities during small group language arts lessons?

More specifically, the study examined the following primary questions and hypotheses:

1. Does students' on-task behavior increase following the introduction of tableau during small group language arts lessons?

   Hypothesis: Students with language-based learning disabilities will show increased on-task behavior following the introduction of tableau as compared to the baseline and withdrawal phases.

2. Does students' on-task behavior decrease following the withdrawal of tableau and return to conventional instructional strategies during small group language arts lessons?

Hypothesis: Students with language-based learning disabilities will show decreased on-task behavior following the withdrawal of tableau as compared to the tableau phases.

Research Design

An ABAB withdrawal design (Sideman, 1960) was employed to evaluate the potential of a functional relation between tableau and the increased on-task behavior of fourth-grade students with language-based LD. The experimental research design consisted of comparing baseline and withdrawal lessons and tableau lessons across four phases (see Figure 4 for overall research study plan from recruitment to data analysis).

To meet the evidence standards of single-case design set forth by What Works Clearinghouse (WWC; Kratochwill et al., 2010), a minimum of five data points was collected within each phase for all three students. The primary dependent variable was on-task behavior. Data were graphed and inspected after each session. Phase changes (e.g., introduction of tableau, withdrawal of tableau) were implemented only after a minimum of five data points were collected and when students' on-task behavior within a phase was consistent and stable in the hypothesized direction based on visual inspection of the data (Horner et al., 2005; Kratochwill et al., 2010). In accordance with WWC (Kratochwill et al., 2010), data were visually analyzed to determine if a relation existed between students' increased on-task behavior and tableau by examining the level, trend, and stability of the data within and across phases.

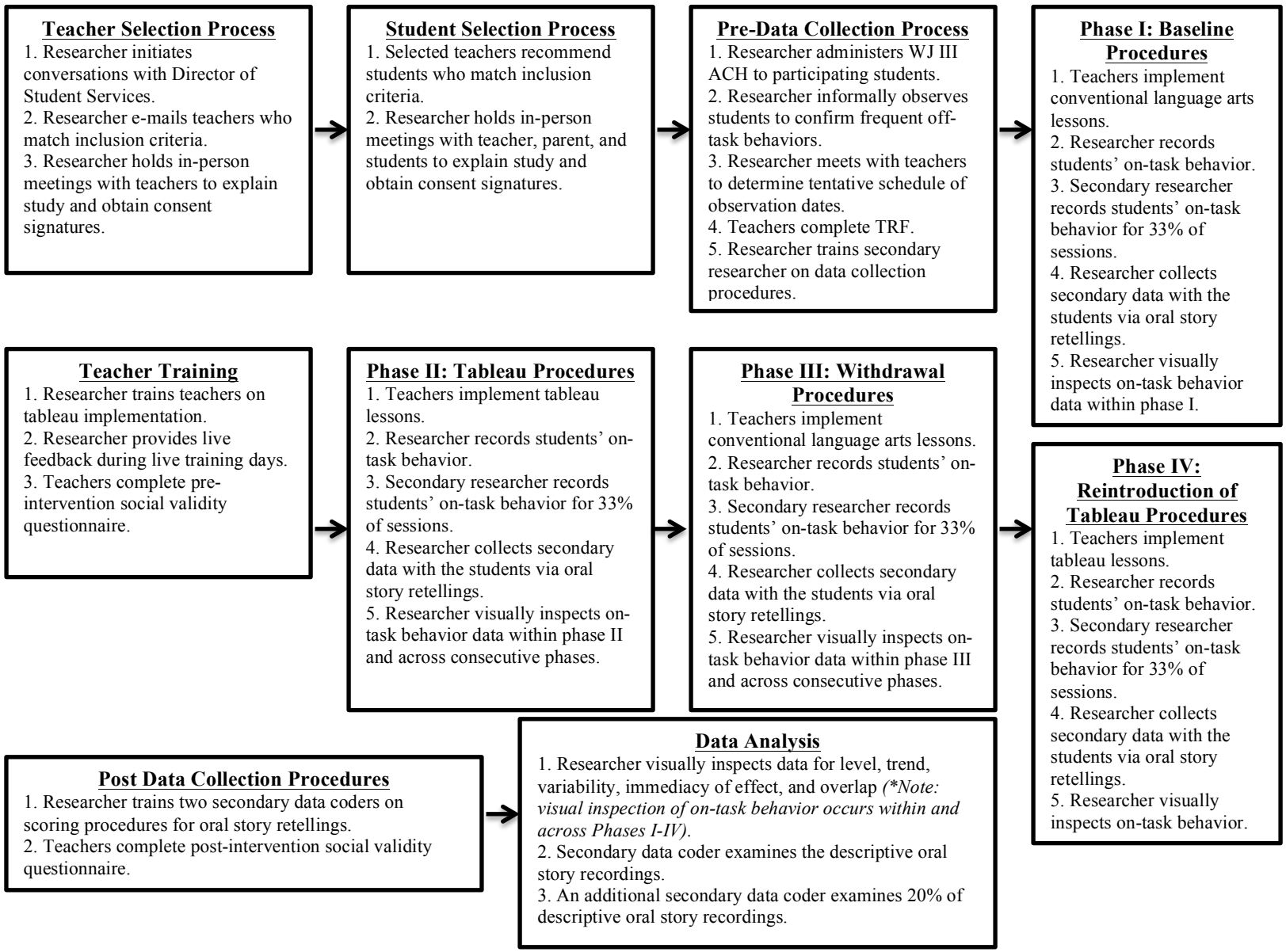

Figure 4. Overall research study plan from recruitment to data analysis.

An ABAB withdrawal design provided an appropriate methodology for the study because the experimental control inherent in the design offered an opportunity to establish a functional relation between the independent variable (e.g., tableau) and changes in the dependent variable (e.g., on-task behavior; Kazdin, 2011). The ABAB withdrawal design and the inclusion of sufficient phases provided an opportunity for one demonstration and two replications of a functional relation (required to establish a functional relation) within the first participant and opportunities to replicate the established functional relation across two additional participants. The study was conducted using a sample size of three students, which was consistent with single-case methodology and met the standards for single-case design in special education (Horner et al., 2005; Kratochwill et al., 2010).

Participant Inclusion Criteria

Students

Three students participated in this study. To be included in this study, students must (a) have been in the fourth grade; (b) have been diagnosed language-based LD as described in the students' Individualized Education Plans (IEPs); (c) have specific language and/or literacy goals in their IEPs; (d) have language and literacy service provision in inclusive classroom settings; (e) have an IQ of 85 or above; and (f) have exhibited frequent off-task behavior per teacher report and confirmation through observational data collected before the start of the study.

Teachers

Two teachers from two different schools, Palisades Elementary School* (*pseudonym) and Southeastern Elementary School*, in an urban elementary charter

school network (i.e., City Schools*) in the Mid Atlantic United States were recruited as participants for this study. To be included in the study, the teachers must: (a) teach fourth-grade language arts in an inclusive classroom; (b) have had at least one of their students meet the criteria for student participation; and (c) have had limited training and experiences using the arts, specifically drama, as an instructional strategy.

Setting

The study was conducted at two urban, elementary charter schools in the Mid Atlantic United States serving students from pre-kindergarten through eighth grade. Palisades Elementary School and Southeastern Elementary School (i.e., two of six schools in the City Schools elementary charter network), were selected as the two school sites based on the presence of the three student participants, diverse student populations, high percentages of students with special needs, inclusive models, and limited foci on the arts in traditional grade-level classrooms, as well as the primary researcher's professional association with City Schools' Director of Student Services.

Teacher and Student Selection Process

The school sites were selected based on convenient accessibility and proximity (i.e., convenience sampling). The primary researcher initiated a conversation via e-mail with the Director of Student Services for City Schools to recruit teachers for the study. The Director of Student Services for City Schools provided the primary researcher with a list of all of the teachers from the six schools in the City Schools network who met the following criteria: (a) they were fourth-grade language arts teachers in inclusive classrooms; (b) at least one of their students met the criteria for student participation; and (c) they had limited training and experiences using the arts, specifically drama, as an

instructional strategy. Only three teachers in the entire City Schools charter network, which included six school sites, had students in their classes who met the inclusion criteria for participation in the study. The first teacher on the list had two students in her class who met the inclusion criteria for participation in the study. The primary researcher e-mailed the first teacher on the list and set up an in-person meeting in the teacher's classroom to determine her potential interest in the study. At the meeting, the primary researcher described the details and requirements of the study and reviewed the consent form with the teacher. The primary researcher explained that to minimize any risk of breach of confidentiality, teacher and student participants' names would not be recorded in relation to the data collection or analysis. The selected schools, teachers, and students, as well as any personal and demographic information, including names, ages, ethnicity, gender, location of the school, position/job, and grade/year level, only would be identified indirectly through the use of a unique alphanumeric code that linked to a key stored in a separate and secure location in the primary researcher's locked office. The primary researcher indicated that the teacher could choose to withdraw from the study at any time, even after she signed the consent form. The primary researcher also verified with the school principal that the teacher worked with students in fourth grade in an inclusive classroom setting. Once the teacher agreed to participate in the study, she signed the Teacher Consent Form (see Appendix D; see Figure 5 for teacher participant selection process and the Human Participants and Ethical Precautions section for Institutional Review Board procedures and confidentiality). To confirm the teacher's limited knowledge of the arts and familiarity with arts-based strategies, the teacher completed a background questionnaire before the study (see Appendix E). The primary

researcher confirmed with the teacher that two students within this class met the student inclusion criteria for the study. The primary researcher completed the same process with the second teacher, who confirmed that one of her students met the inclusion criteria, agreed to participate in the study, signed the Teacher Consent Form, and completed the background questionnaire. Two weeks after beginning data collection with the third participant, the second teacher decided that she no longer wanted to take part in the study. The primary researcher was able to find another teacher and student who met the inclusion criteria for participation in the study during the same week. The replacement teacher signed the Teacher Consent Form and completed the background questionnaire (see Figure 5 for flow chart of teacher participation selection process).

Once the teachers were selected according to the process described in Figure 5, the primary researcher initiated conversations via e-mail and in person with the two participating teachers to recruit students for the study. The first teacher verified with the primary researcher that the two recommended students in her class: (a) had been identified under IDEIA as having a specific language-based learning disability; (b) had specific language and/or literacy goals in his/her IEP; (c) received special education services in an inclusive fourth-grade classroom; and (d) had an IQ of 85 or above as indicated by the students' most current cognitive assessment records, such as the *Wechsler Intelligence Scale for Children-Fourth Edition* (WISC-IV; Wechsler, 2003) by completing the inclusion criteria Teacher Verification Checklist (see Appendix F). The primary researcher verified that the two students frequently exhibited off-task behavior during language arts lessons by informally observing them in the classroom during language arts instruction. Both of the recommended students in the first teacher's

classroom met the inclusion criteria and immediately were selected for the study, after which the process for informed parent/guardian consent and student assent began. The primary researcher used the same student selection process with the second teacher and third student in her classroom. The third student met the inclusion criteria and immediately was selected for the study, after which the process for informed parent/guardian consent and student assent began (see Figure 6 for flow chart of student participant selection process and Figure 8 for parent/legal guardian consent and student participant assent process).

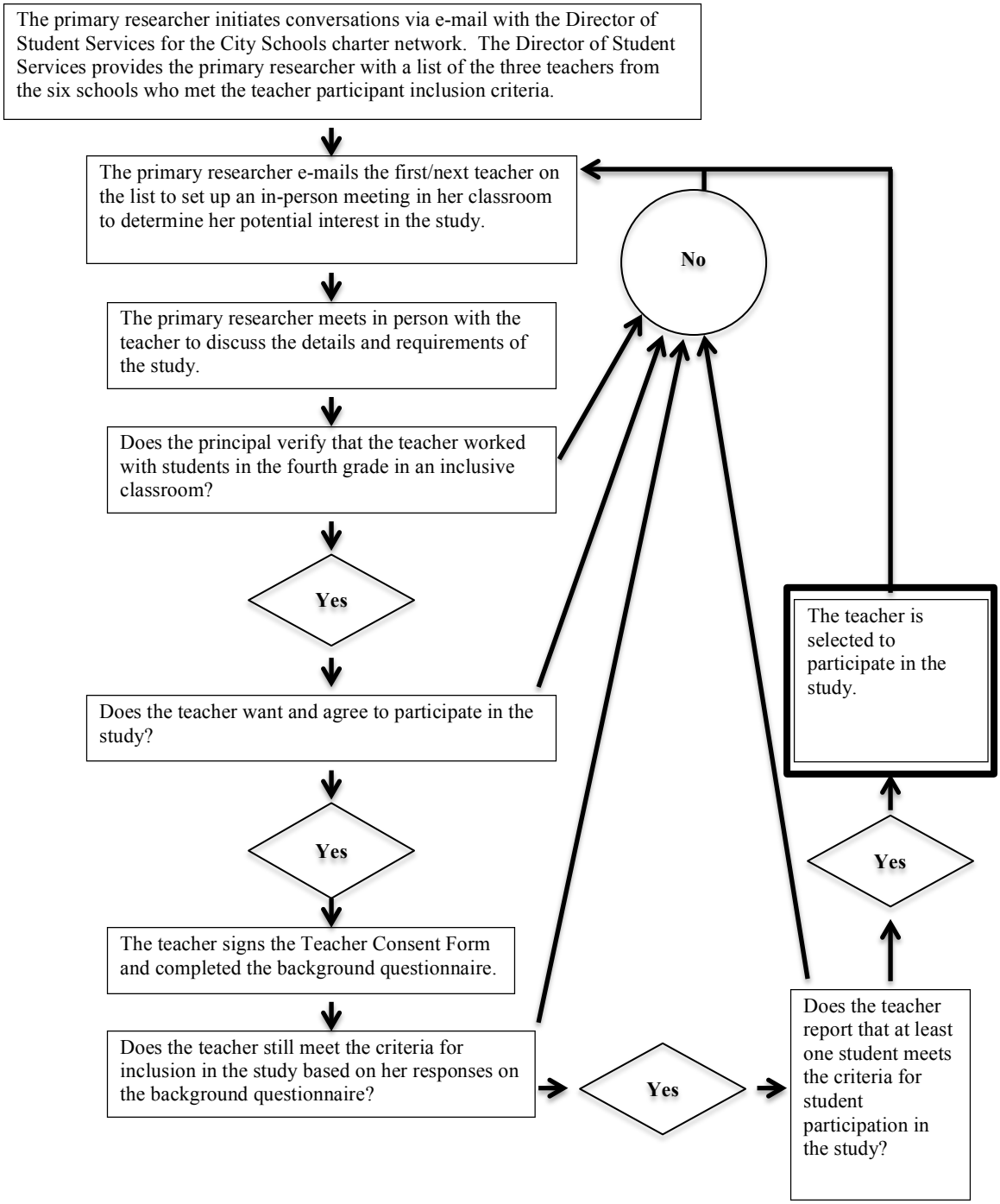

Figure 5. Flow chart of teacher participant selection process.

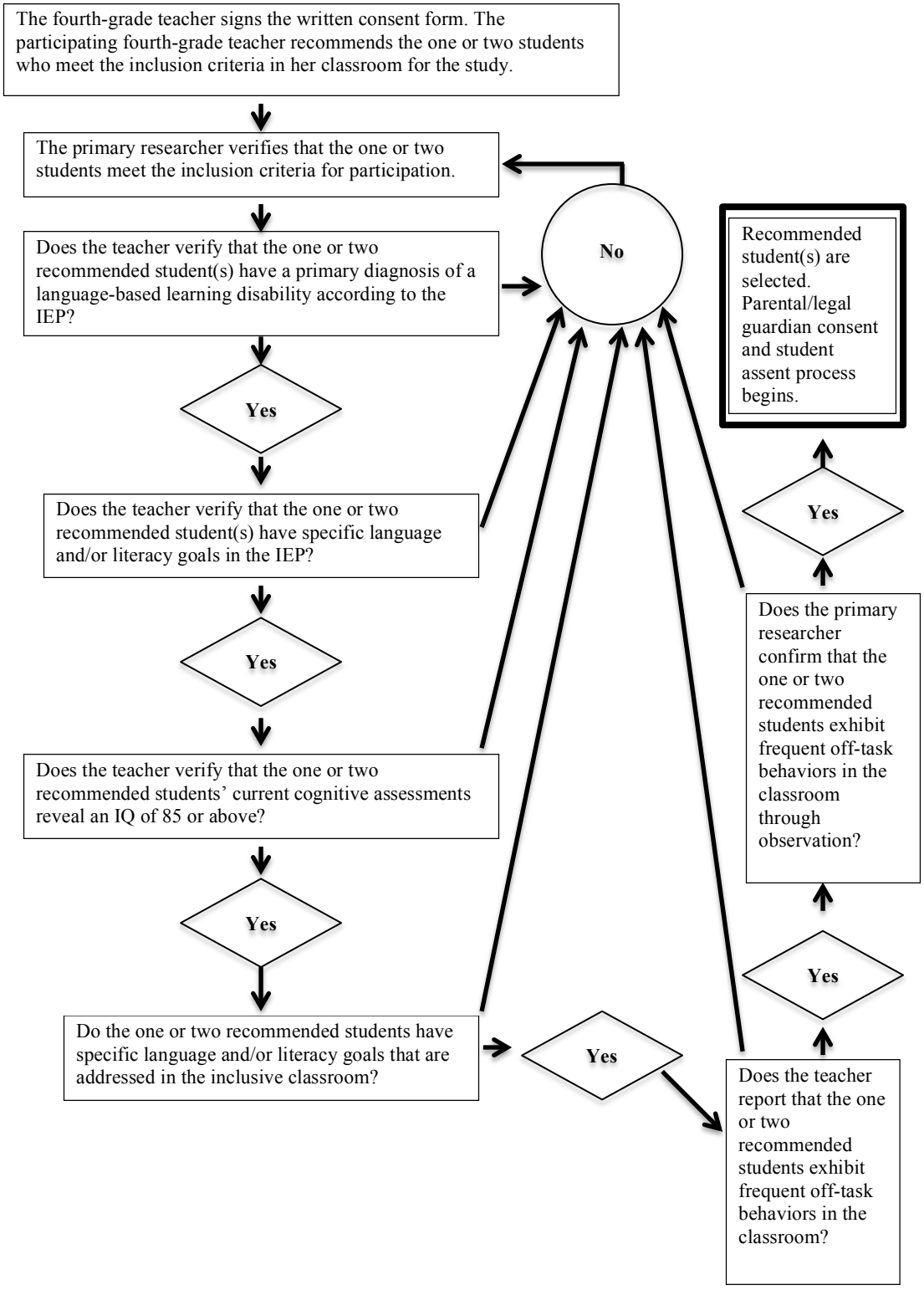

Figure 6. Flow chart of student participant selection process.

Intervention

Tableau was the independent variable of the study. Tableau is defined as a drama intervention in which students make still images with their bodies to represent a scene or to explore a particular moment in a story for deeper analysis (Farmer, 2011; Kelner & Flynn, 2006). During a tableau scene, students stand in small groups or in a circle and a theme is given. Based on the theme, students create still images in relation to one another to depict a group of characters from a painting or story. The scene then can be brought to life by having the students use gesture and spoken language to reveal more information about their characters. Once students become familiar with tableau, they can expand on their scenes by discussing "what they can see happening, what they would like to know more about, and what they think could happen next" (Farmer, 2011, p. 68). Each group shares their visual representations with the class as a way to retell the story (Farmer, 2011).

For this study, the tableau intervention consisted of a specific protocol developed by the arts integration consulting firm Focus 5 whereby the teachers implemented four sequential activities: the Actor's Toolbox, Concentration Circle, Cooperation Challenge, and Tableau Challenge (Focus 5 Inc., 2013). The Actor's Toolbox is a short movement routine that is paired with concentration music. By completing the short movement routine at the beginning of each tableau lesson, students signed a physical contract to demonstrate their agreement to control their bodies, voices, and minds, as well as to concentrate and cooperate. After completing the Actor's Toolbox, students participated in the Concentration Circle, which prepared them to focus for the upcoming Tableau Challenge. In the Concentration Circle, students were required to stand in a circle and

maintain concentration with their eyes locked on a focal point while being presented with different distractions (e.g., adult distraction, peer distraction, visual distraction, visual and sound distraction). Next, the students participated in the Cooperation Challenge to develop their cooperation skills before creating their tableau scenes. During the Cooperation Challenge, students were provided with inclusive challenges (i.e., all students can make it into a group) followed by exclusive challenges (i.e., not everyone can make it into a group). Examples of inclusive challenges were: "By the time I count to three you are in a group of all girls or all boys" and "By the time I count to five, you are in a group that has at least two people." Examples of exclusive challenges were: "By the time I count to seven, you are in a group that has an equal number of boys and girls" and "By the time I count to six, you are in a group that has only one girl and one boy." After students completed one or more of the Cooperation Challenges, they were prepared for the Tableau Challenge. The Tableau Challenge consisted of four parts: think, share, plan, and create. First, students were given a challenge (e.g., create a tableau to illustrate how a character was feeling at the end of the chapter) and asked to think silently and cross their arms once they had an idea for a tableau. Second, students shared their ideas one at a time when they uncrossed their arms. Third, students worked together to plan their tableau scene. As part of the planning process, students were required to answer the following questions: (1) What should we make?; (2) What parts will we need to make that?; and (3) What part will you play? Lastly, students created their tableau scene, which required them to remain frozen and to illustrate multiple levels (e.g., standing, kneeling, lying down). One student was selected by the teacher as the narrator to describe the tableau. At the end of the Tableau Challenge, the teacher graded the

students on their tableau scene using a 5-point rubric. Students earned one point for the each of the following: planning, the tableau, the narrator, the correct answer, and listening skills. Students also completed a self-reflection rubric after each tableau lesson to assess their own performance (Focus 5 Inc., 2013).

Teacher Training

The two teachers were trained individually on tableau after the end of the first phase (baseline) of data collection in their classrooms and before implementing the tableau intervention. Each teacher met one-on-one with the primary researcher for a 3-hr training after school to learn how to implement tableau. During the training, each teacher learned (a) why tableau serves as a useful teaching intervention; (b) how to create a tableau (i.e. including how to administer the Actor's Toolbox, Concentration Circle, Cooperation Challenge, and the Tableau Challenge); (c) types and variations on tableau; (d) how tableau can be applied to lessons across disciplines, including history, science, math, and literacy; (e) how to integrate tableau into language arts lessons; and (f) the potential academic and behavioral benefits of tableau for students (see Appendix G for training materials). Additionally, each teacher watched several exemplar videos of teachers effectively implementing tableau. The videos included examples of the teachers demonstrating all of the items listed on the researcher's procedural fidelity checklist (e.g., beginning lesson with Actor's Toolbox, administering the Concentration Circle and the Cooperation Challenge, administering students' self-reflection rubrics based on group work, etc.; see Appendix G) to ensure each participating teacher understood every feature of the tableau implementation process. The days following each teacher's training, the primary researcher modeled how to integrate tableau into small group language arts

lessons with the students in her classroom. Throughout the teacher training process, the primary researcher emphasized the importance of implementing the four sequential tableau intervention activities (i.e., the Actor's Toolbox, Concentration Circle, Cooperation Challenge, and Tableau Challenge; Focus 5 Inc., 2013) and of including instruction related to character traits and sequence of events for maintaining 100% procedural fidelity. Although the intervention followed a specific protocol, the teachers had flexibility in choosing the story selection as well as which parts of the lesson included tableau. Once the primary researcher observed a teacher's accurate implementation of tableau, as measured by a minimum of 90% correct on the researcher's procedural fidelity checklist (see Appendix H), the teacher was deemed ready to implement the tableau intervention independently and data collection for the second phase began on the following day.

For Ms. Newton* (*pseudonym; Teacher 1; teaches at Palisades Elementary School), the primary researcher modeled the tableau intervention with three small groups for two days, for a total of six tableau sessions. On the third day, Ms. Newton practiced implementing tableau in her classroom with three small groups while the primary researcher provided live feedback. When Ms. Newton started working with the third small group, she was implementing tableau with 100% fidelity. Because the primary researcher observed Ms. Newton's accurate implementation of tableau, as measured by a minimum of 90% correct on the researcher's procedural fidelity checklist (see Appendix H) after three consecutive live training days, independent implementation of tableau and data collection for the second phase began on the following day.

For Ms. Mills* (*pseudonym; Teacher 2; teaches at Southeastern Elementary School), the primary researcher modeled the tableau intervention with three small groups for three days, for a total of nine tableau sessions. On the fourth day, Ms. Mills practiced implementing tableau in her classroom with three small groups while the primary researcher provided live feedback. When Ms. Mills was working with the small groups, her implementation of tableau did not reach minimum levels of fidelity (i.e., 90% or higher). She indicated that she would like the primary researcher to model the intervention again before she practiced implementing tableau with live feedback. The primary researcher modeled tableau on the fifth day with three small groups (i.e., for a total of twelve modeled sessions altogether across four days and three small groups of students). On the sixth day, Ms. Mills practiced implementing tableau in her classroom with three small groups while the primary researcher provided live feedback. When Ms. Mills started working with the second small group, she was implementing tableau at fidelity. After Ms. Mills' fidelity of implementation of tableau reached and exceeded the 90% criterion on the researcher's procedural fidelity checklist (see Appendix H), independent implementation of tableau and data collection for the second phase began.

Procedural Fidelity

Throughout the study, the primary researcher provided the teachers with ongoing feedback regarding their procedural fidelity during baseline, withdrawal, and tableau phases of the study. During all phases of the study (i.e., 100% of the sessions), the teachers completed a self-monitoring checklist (see Appendix I) to confirm that they were not using drama strategies during baseline and withdrawal phases and to monitor their implementation and delivery of tableau during tableau phases (Gast, 2010). Self-

monitoring checklists were 100% correct implementation (M = 100%) for Ms. Newton and for Ms. Mills across all baseline, withdrawal, and tableau phases.

To assess procedural fidelity, the primary researcher completed the procedural fidelity checklist (see Appendix H) for 100% of teacher lessons for all four phases for each participant (Kennedy, 2005). Procedural fidelity was 100% for Ms. Newton (M = 100%) across all baseline, withdrawal, and tableau phases. Procedural fidelity ranged between 93.3% and 100% (M = 98.4%) for Ms. Mills, with 100% fidelity during Phases I and III (i.e., baseline and withdrawal lessons), 96% fidelity during Phase II (i.e., first tableau phase), and 97.3% fidelity during Phase IV (i.e., reintroduction of tableau phase) for participant three. Procedural fidelity values less than 100% only occurred during the tableau lessons when Ms. Mills did not informally assess student groups on the Tableau Challenge or did not administer self-reflections to students.

During the tableau phases (i.e., the second and fourth phases), the primary researcher also provided additional feedback to the teachers about their implementation of tableau via e-mail using a prescribed format. The format consisted of the primary researcher sending an e-mail to the teacher after school on the same day the teacher implemented tableau into a small group language arts lesson. In the e-mail, the primary researcher specifically identified three strengths of the lesson and one area for improvement (see Appendix J for sample teacher feedback e-mail).

Measures

On-Task Behavior

Students' on-task behavior served as the primary dependent variable for this study. Students' on-task behavior was operationally defined as: (a) sitting or standing in

a designated space; (b) keeping hands and feet to oneself; (c) participating in the class activity; (d) interacting with peers and the teacher; (e) listening to and following directions; and (f) looking at or using materials in an appropriate manner (McBride & Schwartz, 2003). Examples of on-task behavior included: (a) sitting or standing at one's desk; (b) keeping one's feet on the floor and objects in the desk; (c) working in small groups to complete an assigned activity; (d) asking or answering the teacher's questions about a lesson; (e) demonstrating eye contact with the teacher and raising one's hand following teacher instruction to ask a question; and (f) using a pencil and a piece of paper to write an answer. Non-examples of on-task behavior included: (a) getting out of one's seat or designated space; (b) constant and noticeable fidgeting, playing with pencils/toys, hitting, biting, or throwing objects; (c) delaying starting assigned task, skipping class, and/or coming to class late; (d) looking around, staring into space, or looking out the window; (e) calling out or talking to someone when prohibited; and (f) playing with materials, including pencils and paper (see Appendix A). On-task behavior data were collected using a whole interval time sampling procedure and were reported as the percentage of intervals on-task during small group language arts lessons.

Whole interval recording was selected as the measurement for the study because the procedure tends to produce a slight underestimate of the presence of the target behavior (Kennedy, 2005). This method was selected because the goal of the study was to yield an increase in students' on-task behavior. An interval system also was chosen over a duration or frequency system based on previous on-task behavior literature, which utilized only interval systems to measure students' on-task behavior. In the present

study, introduction and withdrawal of tableau were based on visual analysis of the level, trend, and stability of on-task behavior data within each phase.

Oral Story Retellings

The primary researcher collected descriptive data to determine if differences existed in students' understanding of narrative story elements across baseline, withdrawal, and tableau lessons. Data collection consisted of the primary researcher using an audio digital recorder to capture participants' free oral retellings of the story from the previous lesson. At the end of every session in each phase, the primary researcher directed each student to a quiet area directly outside the classroom to administer an oral retelling procedure of the story from the previous lesson (see Appendix B). The oral retelling consisted of the primary researcher asking the student, "Please tell me about [name the story], the story you just talked about in class." The student's response was recorded using an audio digital recorder. If the student did not mention any characters or events in his/her initial response, the primary researcher prompted, "Can you tell me anything you remember about the characters or events in [name the story]?" If the student stopped talking and made eye contact with the primary researcher, the primary researcher provided a follow-up prompt, "Is there anything else you want to tell me about [name the story]?" When the student stopped talking and made eye contact again, the audio digital recording concluded. Each audio digital recording procedure lasted less than 5-min.

The third independent observer (blind to the phases) scored the oral retellings by: (a) listening to the audio digital recording with a printed copy of the story selection and a transcription of the students' oral responses; (b) evaluating students' understanding based

on the number and type of narrative story elements included (i.e., character traits and sequence of events); and (c) recording students' scores on the assessment form that was adapted from a Likert-scale benchmark assessment from Garrett and O'Conner (2010; see Appendix B). Students' scores were calculated as follows: a score of 1 if they recalled no character traits or events; a score of 2 if they recalled any character names, described one character's feelings, traits, and/or motives, and recalled at least one story event (may be out of order); a score of 3 if they recalled all the main characters' names, described the feelings, traits, and/or motives of two characters, and recalled two key events in order; and a score of 4 if they recalled all of the main characters' names, described the feelings, traits, and/or motives of more than two characters, and recalled three or more key events in order with details. The mean, range, and standard deviations of scores were calculated within each phase for each participant to describe students' oral recall of character traits and sequence of events across baseline, withdrawal, and tableau phases. The oral recall measure was selected because (a) the assessment was feasible and easy to administer; (b) the assessment previously had been used to in study with a drama intervention; (c) the assessment targeted students' understanding of character traits and sequence of events; and (d) students with language-based LD have identified challenges comprehending narrative text and communicating ideas and mental representations of characters, events, and situations (Mariage, 2001; Snow, 1991).

The assessment was adapted to provide the students with prompting related to character traits and sequence of events based on pilot data collected by the primary researcher. Specifically, the primary researcher adjusted the oral story retelling procedure to include a prompt if the student did not mention anything about the

characters or events in the story (i.e., "Can you tell me anything you remember about the characters or events in [name the story]?") and a follow-up prompt (i.e., "Is there anything else you want to tell me about [name the story]?"; see Appendix B).

Data Collection Procedures

Initial Observations

Before data collection, the researcher administered the *Woodcock-Johnson III Tests of Achievement* (WJ III ACH; Woodcock, McGrew, & Mather, 2001; 2007) to the participating students to assess their reading and oral language skills. The following WJ III ACH norm-referenced tests were administered: (a) Letter-Word Identification; (b) Reading Fluency; (c) Story Recall; (d) Understanding Directions; (e) Passage Comprehension; (f) Word Attack; (g) Picture Vocabulary; and (h) Oral Comprehension. The tests evaluated students' knowledge related to six clusters: Oral Language, Oral Expression, Listening Comprehension, Broad Reading, Brief Reading, and Basic Reading Skills (see Table 7 for WJ III ACH clusters and related subtests). The six clusters and eight WJ III ACH tests that were administered to participants showed strong median reliabilities that met the basic standards for assessment (Woodcock et al., 2001; 2007). Cluster reliabilities ranged from .85 to .92 and test reliabilities ranged from .81 to .94, respectively. The reliabilities of the Letter-Word Identification, Understanding Directions, Passage Comprehension, Word Attack, Picture Vocabulary, and Oral Comprehension tests were calculated using the split-half procedure. The reliabilities of the speed tests (e.g., Reading Fluency) and tests with multiple-point scored items (e.g., Story Recall) were calculated using Rasch analysis procedures (Woodcock et al., 2001; 2007). All six clusters had a mean (*M*) of 100 and a standard deviation (*SD*) of 15. After

administering the WJ III ACH, the researcher calculated students' subtest and cluster scores (i.e., Oral Language, Oral Expression, Listening Comprehension, Broad Reading, Brief Reading, and Basic Reading Skills; see Tables 9 and 10 in Chapter IV for results).

Table 7

WJ III ACH Clusters and Related Norm-Referenced Subtests

Clusters	Norm-Referenced Subtests that Comprise Cluster
Oral Language	Story Recall Understanding Directions
Oral Expression	Story Recall Picture Vocabulary
Listening Comprehension	Understanding Directions Oral Comprehension
Broad Reading	Letter-Word Identification Reading Fluency Passage Comprehension
Brief Reading	Letter-Word Identification Passage Comprehension
Basic Reading Skills	Letter-Word Identification Word Attack

The researcher also informally observed the students in their language arts classes to verify the teachers' recommendations and confirm that the students exhibited frequent off-task behavior. Lastly, the researcher met with each teacher to determine a tentative schedule of dates for observing each student and to ensure that the small group language arts lessons observed were designed to teach specific standards and objectives related to character traits and sequencing of events. During this initial meeting, each teacher completed the Teacher's Report Form (TRF; Achenbach, 1991) to document their

perceptions of students' behavior before the study. The TRF was scored according to three broad-band scales: Internalizing, Externalizing, and Total Problems, and Eight Syndrome Scales: Anxious/Depressed, Withdrawal/Depressed, Somatic Complaints, Social Problems, Thought Problems, Attention Problems, Rule-Breaking Behavior, and Aggressive Behavior (Achenbach, 1991). Individual problem behavior items were scored as follows: not true, somewhat or sometimes true, or very true or often true (Achenbach, 1991). All behavior items used a timeframe of the last two months. Scores for the three broad-band scales and eight syndrome scales were calculated as total raw and norm-referenced scores for the student's age and gender, with higher scores indicating higher levels of maladaptive behavior on the Internalizing, Externalizing, Total Problems, and Syndrome Scales. Internal coefficients estimates (as measured by Cronbach's alpha) for the TRF indicated moderate to strong internal consistency, ranging from 0.72 to 0.95 (Achenbach, 1991). The *T* scores, percentiles, and ranges (i.e., normal, borderline, clinical) for the three broadband scales and eight syndrome scales were calculated before the study. Internalizing, Externalizing, and Total Problem *T* scores below 60 ($<84^{th}$ percentile) fall in the normal range. The borderline range spans *T* scores of 60 to 63 (84^{th} to 90^{th} percentile) and *T* scores above 63 ($>90^{th}$ percentile) are in the clinical range. For the eight syndrome scales, *T* scores below 65 ($<93^{th}$ percentile) are in the normal range. The borderline range spans *T* scores of 65 to 69 (93^{th} to 97^{th} percentile) and *T* scores above 69 ($> 97^{th}$ percentile) are in the clinical range.

Interobserver Agreement

Before collecting the first phase of data, a master's-level graduate student was trained on data collection procedures and served as the second independent observer to

collect data to calculate interobserver agreement (IOA; Gast, 2010; Kennedy, 2005). The second independent observer received training on the general scope of the study, the whole interval time sampling procedures, including how to use the Gymboss Interval Timer, and the operational definition, examples, and non-examples of on-task behavior. After the second independent observer read the training materials, the primary researcher discussed any questions the second independent observer had regarding the whole interval time sampling data collection procedures, the on-task behavior data sheet, the operational definition, examples, and non-examples of on-task behavior, or the direct observation process. Following the whole interval time sampling data collection procedures, the primary researcher and the second independent observer practiced taking data together using the Gymboss Interval Timer and the on-task behavior data sheets (see Appendix C) while watching video clips of students engaged in on-task and off-task example behaviors during conventional lessons and during lessons that included tableau. The primary researcher and second independent observer watched a video clip, completed their on-task behavior data sheets, compared their on-task behavior data sheets, calculated IOA, and reviewed their scoring choices and the rationale behind those scoring choices (while watching the video clip again and with their on-task behavior data sheets in front of them). IOA was calculated using the point-by-point method as the Total Number of Agreements/(Number of Agreements + Number of Disagreements) x 100 (Kazdin, 2011). The primary researcher and second independent observer took notes to document and review any discrepancies, inconsistencies, and/or questions. The primary researcher and second independent observer completed three on-task behavior data sheets together.

After the primary researcher and the second independent observer completed three on-task recording forms together, the primary researcher and second independent observer watched video clips independently. Following the whole interval time sampling data collection procedures, the primary researcher and the second independent observer practiced taking data independently using the Gymboss Interval Timer and the on-task behavior data sheets (see Appendix C). After watching the first video clip and completing the on-task behavior data sheets separately, the primary researcher and second independent observer compared their on-task behavior data sheets, calculated IOA, and reviewed their scoring choices and the rationale behind those scoring choices (while watching the video clip again and with their on-task behavior data sheets in front of them). The primary researcher and second independent observer took notes to document and review any discrepancies, inconsistencies, and/or questions. The primary researcher and second independent observer completed three on-task behavior data sheets independently, following the same process for each video clip. The process continued until a minimum of 90% IOA was achieved on the independent coding of three consecutive video sessions.

Then the primary researcher and second independent observer visited a fourth-grade classroom and independently recorded (i.e., sitting in different places in the same classroom) students' on-task behavior during small group conventional language arts lessons and small group language arts lessons that used tableau. Following the whole interval time sampling data collection procedures, the primary researcher and the second independent observer watched a lesson, completed the on-task behavior data sheets separately, compared their on-task behavior data sheets, calculated IOA, and reviewed

their scoring choices and the rationale behind those scoring choices (with their on-task behavior data sheets in front of them). The primary researcher and second independent observer took notes to document and review any discrepancies, inconsistencies, and/or questions. The primary researcher and second independent observer continued to score students' on-task behavior during live small group conventional language arts lessons and small group language arts lessons that used tableau for three live classroom sessions. All practice sessions were discussed and the primary researcher took notes to document and review any discrepancies, inconsistencies, and/or questions. After a minimum of 90% IOA was achieved on the independent coding of three consecutive live sessions in non-study classrooms, the data collectors were classified as reliable and ready to collect on-task behavior for this study.

Consistent with the WWC standards of single-case design (Kratochwill et al., 2010), IOA data were collected during 33% of the lessons within each of the four phases (i.e., every third lesson) for students' on-task behavior. Observers maintained an overall IOA of at least 90% on each IOA session. Average percentages of IOA across participants ranged from 97.2% to 99.1%. The percentage of IOA for coding on-task behavior for Kathleen* (*pseudonym; Student 1) ranged from 97.5% to 100% (*M* =99.6%) for all four phases. The percentage of IOA for coding on-task behavior ranged from 97.5% to 100% (*M* = 99.1%) for Dan* (*pseudonym; Student 2) and from 95% to 100% (*M* =97.2%) for Kavon* (*pseudonym; Student 3) for all four phases. If IOA had dropped below 90%, the primary researcher and second independent observer would have met to review their discrepancies, and re-training on and refinement of the observational code would have occurred as needed (Kennedy, 2005).

At the end of data collection, two secondary data coders (two different master's-level graduate students) were trained on scoring procedures for the audio digital recordings of oral story retellings to collect scorer reliability data (Gast, 2010; Kennedy, 2005). The primary researcher and the two secondary data coders practiced scoring the oral retellings together using a printed copy of story selections, sample audio digital recordings of oral retellings (i.e., from the pilot data), and the oral retelling assessment form (see Appendix B). The two secondary data coders then practiced scoring the audio digital recordings until a minimum of 90% agreement was achieved on the independent scoring of three consecutive assessment forms. The primary researcher calculated scorer reliability/fidelity on the oral story retelling assessments using the point-by-point method to compare each item level score from the assessment form as the Total Number of Agreements/ (Number of Agreements + Number of Disagreements) x 100 (Kazdin, 2011). The first secondary data coder examined 100% of the oral story retellings. To assess the reliability/fidelity of scoring, the other secondary data coder examined 20% of the oral story retellings. The two secondary data coders maintained an overall agreement of at least 90% during each fidelity scoring session. If reliability had dropped below 90%, the two secondary data coders would have met to review their discrepancies before scoring additional recordings (Kennedy, 2005; see Figure 7 for secondary observer IOA procedure).

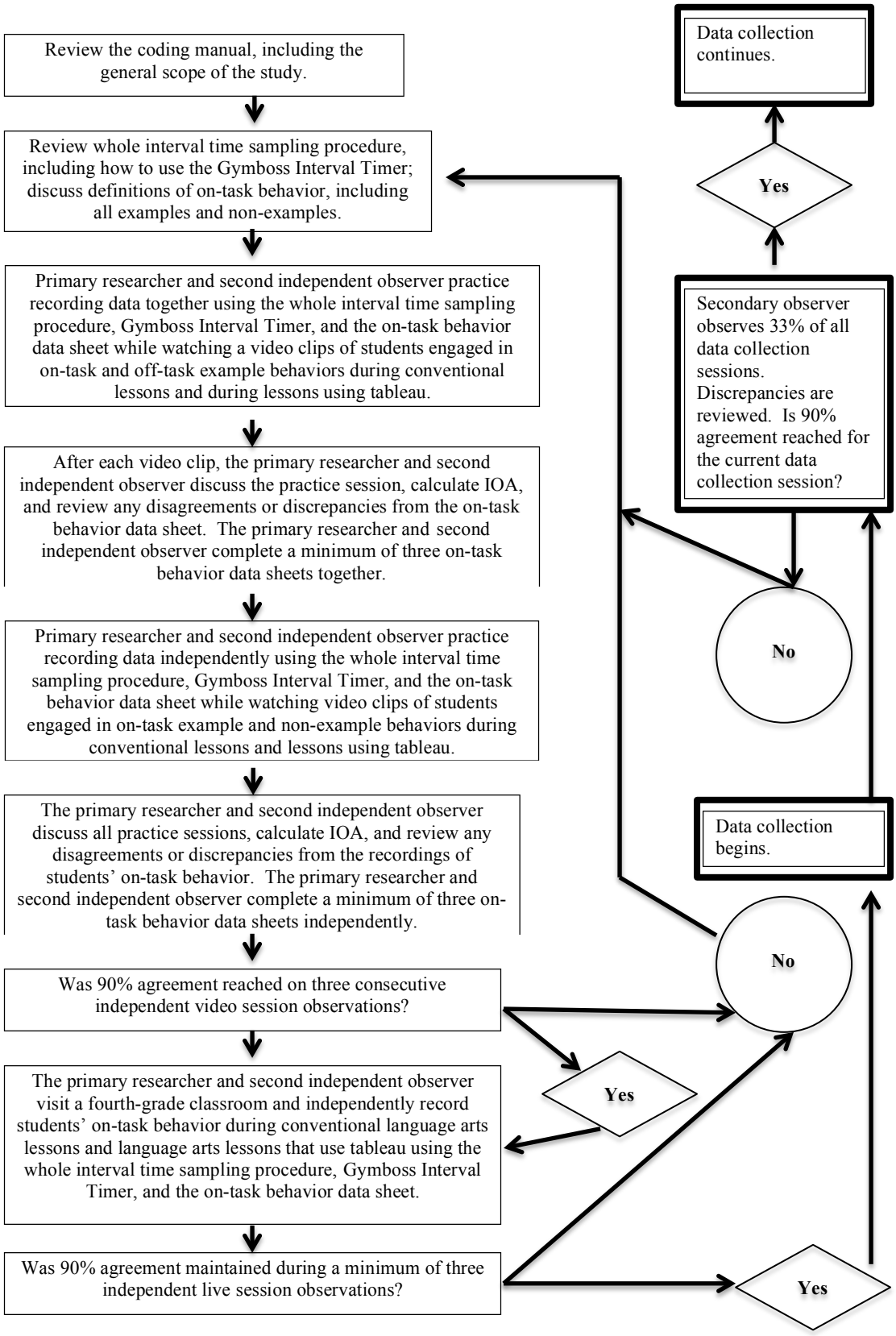

Figure 7. Secondary observer interobserver agreement (IOA) procedure.

Phase I: Baseline Procedures

Once student participants were selected and the second independent observer was trained, the first phase of the study began. During the first phase, the teachers implemented conventional language arts lessons. In Ms. Newton's class at Palisades Elementary School, the conventional language arts lessons consisted of the students reading a chapter from *Money Hungry*, the book chosen as the focus of the charter network's capstone project, or reading aloud a selection from a short story (e.g., *Alex's Lemonade Stand, Great Americans*). After reading a portion of a text, students then worked in small groups of 4-5 students to complete graphic organizers related to narrative story elements. Graphic organizers required students to identify cause and effect relationships, to provide character traits with supporting examples from the text, and to distinguish between the main idea and supporting details in a story. Ms. Newton pulled small groups of 4-5 students to the carpet near the front of the room to work with her on decoding, comprehension skills, and test preparation strategies while the remainder of the groups completed their graphic organizers.

In Ms. Mills' class at Southeastern Elementary School, students worked independently to complete seatwork during the conventional lessons. Students read *Money Hungry* and selections from social studies stories (e.g., *American Indians in the Environment, The Lure of Spices*), completed worksheets of comprehension questions, and wrote summaries of the selected stories. Ms. Mills did not work with small groups; instead, she circulated the room and assisted students who needed help with comprehension skills, spelling, and writing organization. Both teachers praised the

students and redirected them when needed, but neither teacher implemented any formal classroom management strategies to increase students' on-task behavior.

The researcher measured students' on-task behavior using a 10-s whole interval time sampling recording procedure (see Appendix C). For the interval to be scored as an occurrence of on-task behavior, the students were required to remain on-task throughout the entire 10-s interval. Students were observed during a fixed length 20-min small group language arts lesson, allowing for a total of 80 intervals in each observation session. A minimum of five data points was collected for each of the three participants in the first phase. Once data were consistent and stable in the first phase based on visual inspection of the data, the second phase began and tableau was introduced.

Phase II: Tableau Procedures

After the end of the first phase, each teacher participated in a training led by the primary researcher to learn how to implement tableau in the classroom. Each teacher received training on tableau only after the completion of the first phase of the study in her classroom. After the teachers completed the tableau training and reached criterion levels of implementation fidelity, the second phase of the study began. During the second phase, the teachers implemented tableau in their classrooms every school day. The researcher measured students' on-task behavior using the same 10-s whole interval time sampling recording procedure as in the first phase, with a minimum of five data points per participant. Students' on-task behavior during the second phase was examined within the phase and also compared to students' on-task behavior during the first phase. Once a minimum of five data points was collected and data were consistent and stable within the phase and an increase in level, trend, and/or stability was observed from the first to the

second phase, tableau was withdrawn and the teacher returned to conventional instructional strategies (Phase III).

Phase III: Withdrawal Procedures

During the third phase, tableau was withdrawn and teachers returned to implementing conventional small group language arts lessons. The researcher measured students' on-task behavior using the 10-s whole interval time sampling recording procedure for a minimum of five data points per participant. Students' on-task behavior during the third phase was inspected within the phase and also compared to students' on-task behavior during the second phase. Once a minimum of five data points was collected and data were consistent and stable within the phase and a decrease in level, trend, and/or stability was observed from the second to the third phase, the fourth phase began and tableau was reintroduced (Phase IV).

Phase IV: Reintroduction of Tableau Procedures

During the fourth phase, the teachers reintroduced tableau into small group language arts lessons. The researcher measured students' on-task behavior using the 10-s whole interval time sampling recording procedure for a minimum of five data points per participant. Students' on-task behavior during the fourth phase was inspected within the phase and also compared to students' on-task behavior during the third phase. Once a minimum of five data points was collected and data were consistent and stable within the phase and an increase in level, trend, and/or stability was observed from the third to the fourth phase, data collection ceased.

The first two phases allowed for an opportunity to demonstrate a functional relation between tableau and an increase in students' on-task behavior. The final two

phases provided an opportunity for two replications of the demonstrated functional relation. A functional relation was established based on visual analyses of the data and after a functional relation was demonstrated and replicated, twice, within the first participant. Additional participants provided an opportunity to replicate the established functional relation.

Data Analysis

Visual Analysis

Visual analysis of the primary dependent variable (i.e., on-task behavior of each student) was used to evaluate students' on-task behavior within and across phases and to determine whether there was a functional relation between the implementation of tableau and an increase in students' on-task behavior. First, students' on-task behavior was evaluated within each phase. During each phase, observational data were displayed on a line graph as they were collected. Data were visually inspected for level, trend, and variability of students' on-task behavior to describe patterns that occurred within each phase of the study (Kennedy, 2005). Level, which describes the average performance during a phase of study, was calculated as the mean. Trend, or the best-fitting straight line for the dependent variable within a phase, was analyzed according to slope and magnitude. The trend was described as increasing (i.e., the data points increased in value within a phase), flat (i.e., the data points did not change within a phase), or decreasing (i.e., the data points decreased in value within a phase). Variability refers to the degree to which the data points deviate from the overall trend, or "the degree to which the data points are dispersed relative to the best-fit straight line" (Kennedy, 2005, p. 201). Variability was qualitatively estimated as high (i.e., the data points were far from the

best-fit line), medium, or low (i.e., the data points were close to the best-fit line; Kennedy, 2005).

In addition to evaluating students' on-task behavior within each phase, the researcher compared students' on-task behavior across consecutive phases. Phase changes only occurred when data were consistent and stable within a phase. In the first phase, data were collected on students' on-task behavior during conventional small group lessons. Once data were consistent and stable in the first phase, the second phase began and tableau was introduced. Students' on-task behavior during the first phase was compared with students' on-task behavior during the second phase. Once data were consistent and stable and an increase in level, trend, and/or stability was observed in the second phase, a phase change occurred. In the third phase, tableau was withdrawn and instructional methods returned to those of the first phase. Students' on-task behavior during the third phase was compared to students' on-task behavior during the second phase through visual analysis of changes in level, trend, and variability. Once data were consistent and stable in the third phase and a decrease in level, trend, and/or stability was observed, tableau was reinstated in the fourth phase of the study. Students' on-task behavior in the fourth phase was compared to students' on-task behavior during the third phase. Once data were consistent and stable and an increase in level, trend, and/or stability was observed, data collection ceased.

To compare data across phases, data were visually inspected to describe immediacy of effect and overlap. Immediacy of effect was defined as "how quickly a change in the data pattern is produced after the phase change" (Kennedy, 2005, p. 203). Immediacy of effect was described as rapid or low based on the change in level and trend

between the last three data points in one phase and the first three data points in the next phase. Overlap, or the degree to which data from one phase overlap with data from adjacent phases, was calculated as a percentage of non-overlapping data (PND; Kennedy, 2005; Kratochwill et al., 2010).

Descriptive Data: Oral Story Retelling Results

Descriptive data provided additional information regarding students' understanding of character traits and sequence of events. Students' oral story retellings were audio-recorded and assessed for understanding of character traits and sequence of events. The secondary data coder, who was blind to the phases of the study, received a printed copy of each story selection, the audio digital recordings of the oral retelling, the transcriptions of the students' oral responses, and the assessment forms before scoring. The secondary data coder assessed students' understanding of character traits and sequence of events using an adapted version of Garrett and O'Conner's 1-4 Likert scale. Students' scores earned a score of 1 if they recalled no character traits or events; a score of 2 if they recalled any character names, described one character's feelings, traits, and/or motives, and recalled at least one story event (may be out of order); a score of 3 if they recalled all the main characters' names, described the feelings, traits, and/or motives of two characters, and recalled two key events in order; and a score of 4 if they recalled all of the main characters' names, described the feelings, traits, and/or motives of more than two characters, and recalled three or more key events in order with details (see Appendix B). To ensure reliability of scoring, another secondary data coder scored 20% of the audio digital recordings of oral story retellings. The primary researcher compared scores from the two data coders to determine agreement. The mean, range, and standard

deviations of scores were calculated within each phase for each participant (see Table 15 in Chapter IV for results).

Social Validity

To assess the social validity of the intervention (tableau), teachers completed a social validity questionnaire (see Appendix K) at the end of their tableau training to record their anticipated feelings about implementing tableau. To assess the feasibility of the tableau procedures given available resources, teachers completed a second social validity questionnaire about the use and perceived effectiveness of tableau (see Appendix L) after the completion of the fourth phase (Horner et al., 2005). The two questionnaires included specific information about the intervention, including time involved, willingness to implement strategies, level of disruption to classroom structure and routines, interest level of the students, effectiveness of the intervention for improving students' on-task behavior, and general feelings about the intervention process. The questionnaire consisted of a 5-point Likert scale with five questions. Descriptors provided a guide for the extremes of the scale: Strongly Agree (1), Agree (2), Neutral (3), Disagree (4), Strongly Disagree (5). The mean and standard deviation for each teacher and across the two teachers were calculated before tableau was implemented and at the end of the study.

Human Participants and Ethical Precautions

The study was designed to minimize the potential risk to participants and, through its findings, to provide teachers with additional strategies for increasing students' on-task behavior. The primary researcher followed standard protocol for human subjects review and obtained all necessary permission and Institutional Review Board (IRB) approval from The George Washington University (GWU) and the charter school network to

safeguard participants' rights and confidentiality. The principal investigator, primary researcher, second independent observer, and two secondary data coders hold current certifications in the ethnical conduct of research through the Collaborative Institutional Training Initiative. Both the GWU IRB and the approval of the charter school network's Director of Student Support Services were needed before the study was conducted.

Consent and Assent

Before the start of the study, written consent was obtained from the participating teachers (see Appendix D). Once a student participant met the criteria for selection (see Figure 6 for student participant selection process), the teacher and primary researcher called the parent/legal guardian of the selected student to briefly explain the study and determine if the parent/legal guardian was interested in having his/her child participate. If the parent/legal guardian expressed interest in having his/her child participate, the teacher and primary researcher scheduled an in-person meeting with the parent/legal guardian and the student to discuss the study. At the meeting, the primary researcher verbally explained every part of the study with the teacher, parent/legal guardian, and child, including the proposed benefits and minimal risks involved and the results that may be published after the completion of the study. The primary researcher addressed any questions or concerns the parent/legal guardian and child had about participating in the study. If the parent/legal guardian and child remained interested at the end of the meeting, the primary researcher presented the parent/legal guardian with a cover letter and consent form describing the study (see Appendix M). The primary researcher verbally explained the cover letter and consent form to the parent/legal guardian and provided an opportunity for the parent/legal guardian to ask any questions about the

study. Once the primary researcher obtained written consent from the parent/legal guardian, she verbally explained the written student assent form to the student (see Appendix N), and provided an opportunity for the student to ask any questions about the study. The primary researcher explained to the teacher, parent/legal guardian, and the student that they were free to withdraw from the study for any reason and at any time, including after they had signed the consent forms and/or verbally assented and started to participate in the study, with no negative consequences. If the parent/legal guardian and/or the student were no longer interested in participating in the study, the primary researcher moved to the next student nominee and the student participant selection process began again. The student selection process was the same for the two participating classrooms (see Figure 8 for consent and assent process).

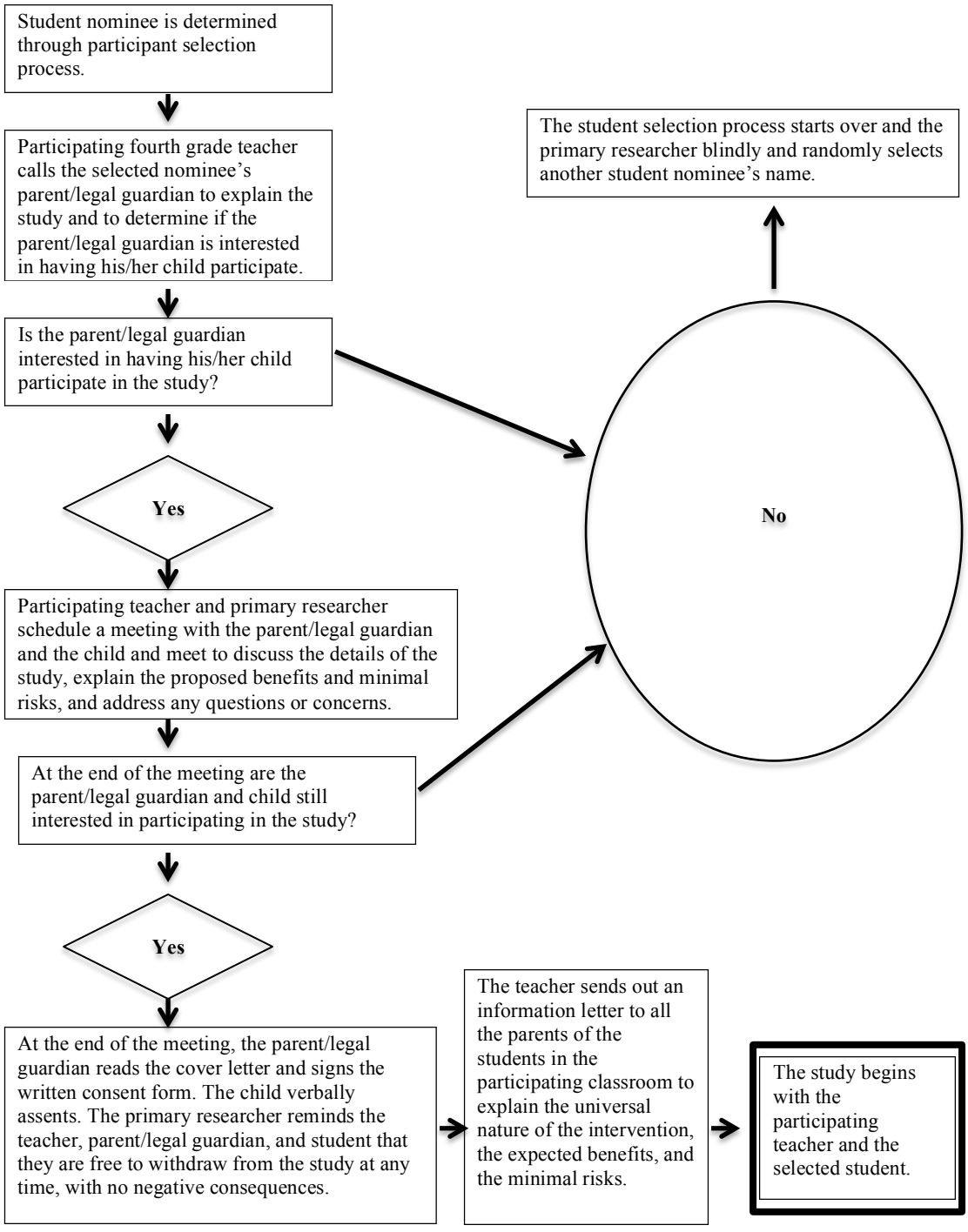

Figure 8. Parent/legal guardian consent and student participant assent process.

Identity and Materials Protection

There were minimal risks to participants in the study; however, there was a small chance that someone outside of the research team could have found out that a participant took part in the study or somehow link a participant's name with the information collected about him/her. To minimize any risk of breach of confidentiality, two sets of data were collected during the study: identified data and de-identified data. Participants' names were not recorded in relation to the data collection or analysis. The selected schools, teachers, and students, as well as any personal and demographic information, including names, ages, ethnicity, gender, location of the school, position/job, and grade/year level, only were identified indirectly through the use of a unique alphanumeric code that linked to a key stored in a separate and secure location in the primary researcher's locked office. The key was stored on the primary researcher's computer, which was stored in a locked drawer in the locked office with a password known only to the primary researcher. The computer was password-protected throughout the study. The primary researcher's computer also had a firewall software system installed to ensure participants' identity and the de-identified data were not compromised.

Along with the consent and assent forms, the on-task behavior recording forms, oral retelling assessment forms, oral retelling procedure forms, audio digital recordings of students' oral story recalls, inclusion criteria teacher verification checklists, teacher pre-study questionnaires, researcher's procedural fidelity checklist, self-monitoring checklist of procedural fidelity, social validity questionnaires, and completed TRFs were placed in a three-ring binder and double-locked in a personal filing cabinet in the primary researcher's locked office. Only the primary researcher had a key and access to the filing

cabinet. Data collected from the students and teachers were stored on a personal computer, which was stored in a locked drawer in the locked office with a password known only to the primary researcher.

As soon as the study was completed, the primary researcher removed all indirectly identified data from her personal computer by erasing all of the files. The primary researcher also shredded all of the forms with any indirectly identified data that were collected in the three-ring binder and placed in the double-locked filing cabinet. The de-identified data on the computer, audio digital recordings, and the forms with de-identified data in the three-ring binder will continue to be stored for one year after the completion of data collection to allow the primary researcher to write articles based on the study's findings. The de-identified data will continue to be stored on the primary researcher's password-protected personal computer, which will be stored in a locked drawer in a double-locked filing cabinet in the primary researcher's locked office. After a year, all of the de-identified data will be destroyed. The primary researcher will erase any remaining files on her computer, will destroy the audio digital recordings, and will shred any remaining forms in the three-ring binder. If any codes were written in the completed dissertation or in any published articles or presentations, the primary researcher used pseudonyms. The primary researcher did not write anything that will allow someone to identify any of the participants or the school sites.

Chapter IV: Results

Overview

This chapter presents the results of the research study. Visual analysis of the primary dependent variable was used to evaluate the presence of a functional relation between tableau and an increase in students' on-task behavior. Data were visually inspected within each phase for the level, trend, and variability of on-task behavior. To compare data across phases, data also were visually inspected to describe immediacy of effect and overlap.

Descriptive data of students' understanding of character traits and sequence of events were examined using an adapted version of Garrett and O'Conner's (2010) Likert-scale benchmark assessment and the mean, range, and standard deviations of scores were calculated within each phase for each participant. The teachers' pre-intervention social validity questionnaire provided information about their anticipated feelings about implementing tableau at the beginning of the study. At the end of the study, the teachers' post-intervention social validity questionnaire assessed teachers' perceptions of the feasibility of the tableau procedures given available resources. The mean and standard deviation for each teacher and across the two teachers were calculated before tableau was implemented and at the end of the study.

Research Questions

The study focused on the following major research question: What are the effects of tableau on the on-task behavior of fourth-grade students with language-based learning disabilities during small group language arts lessons?

More specifically, the study examined the following primary questions:

1. Does students' on-task behavior increase following the introduction of tableau during small group language arts lessons?
2. Does students' on-task behavior decrease following the withdrawal of tableau and return to conventional instructional strategies during small group language arts lessons?

Participants

Students

Three students participated in this study. The students were between the ages of 10 and 11-years-old at the beginning of the study and were enrolled in inclusive fourth-grade classrooms in charter schools in the Mid Atlantic United States. Kathleen* (*pseudonym; Student 1) and Dan* (Student 2) were enrolled in Ms. Newton's* (Teacher 1) classroom of 26 students at Palisades Elementary School*, and Kavon* (Student 3) was enrolled in Ms. Mills'* (Teacher 2) classroom of 26 students at Southeastern Elementary School*. Kathleen was a Hispanic female and Dan and Kavon were African American males. All three students had a diagnosis of learning disability (LD), with *Wechsler Intelligence Scale for Children-Fourth Edition* (WISC-IV) full-scale IQ scores from within the last three years ranging from 85 to 91 (see Table 8 for student participant characteristics).

Table 8

Student Participant Characteristics

Student	Age (years, months)	Teacher/ School	Number of Students in Classroom	Gender	Ethnicity	Diagnosis	WISC-IV Full Scale IQ Score
Kathleen	11.4	Ms. Newton/ Palisades	26	Female	Hispanic	LD	85
Dan	10.10	Ms. Newton/ Palisades	26	Male	African American	LD	91
Kavon	11.1	Ms. Mills/ Southeastern	26	Male	African American	LD	87

Note. LD = Learning Disability; WISC-IV = *Wechsler Intelligence Scale for Children-Fourth Edition*.

Woodcock-Johnson III Tests of Achievement scores. To assess students' reading and oral language skills, the researcher administered the Woodcock-Johnson III Tests of Achievement (WJ III ACH; Woodcock et al., 2001; 2007) to each student at the beginning of the study.

Kathleen. Kathleen's cluster performance on the WJ III ACH was more than one *SD* below the mean on Oral Language and Oral Expression. Her performance was two *SDs* below the mean on Listening Comprehension, more than two *SDs* below the mean on Basic Reading Skills, and more than three *SDs* below the mean on Broad Reading and Brief Reading (see Table 9 for participant WJ III ACH cluster scores). Kathleen's individual test performance fell within one *SD* of the mean on Story Recall and Picture Vocabulary. Her performance was more than one *SD* below the mean on Understanding Directions, Word Attack, and Oral Comprehension, more than two *SDs* below the mean on Letter-Word Identification and Passage Comprehension, and more than three *SDs* below the mean on Reading Fluency (see Table 10 for participant WJ III ACH individual

test scores). Kathleen's oral language and comprehension skills were low, and her oral expression skills were low average for her grade level. Based on her performance on the WJ III ACH, her Broad Reading, Basic Reading, and Brief Reading cluster scores were very low for her grade level. Kathleen's Broad Reading and Brief Reading cluster scores were consistent with her LD diagnosis and her individual test scores showed specific weaknesses in the areas of Letter-Word Identification, Reading Fluency, and Passage Comprehension.

Dan. Dan's cluster performance on the WJ III ACH fell within one *SD* of the mean on Oral Language and Oral Expression. His performance was more than one *SD* below the mean on Listening Comprehension, two *SDs* below the mean on Basic Reading Skills, and more than two *SDs* below the mean on Broad Reading and Brief Reading (see Table 9). Dan's individual test performance fell within one *SD* of the mean on Story Recall, Picture Vocabulary, and Oral Comprehension. His performance was more than one *SD* below the mean on Word Attack, two *SDs* below the mean on Letter-Word Identification and Reading Fluency, and more than two *SD*s below the mean on Understanding Directions and Passage Comprehension (see Table 10). Dan's oral expression skills were average and his language and listening comprehension skills were low average for his grade level. Based on his scores on the WJ III ACH, his Basic Reading skills were low and his Broad Reading and Brief Reading skills were very low for his grade level. Dan's Broad Reading cluster scores were consistent with his LD diagnosis and his individual test scores showed specific weaknesses in the areas of Understanding Directions and Passage Comprehension.

Kavon. Kavon's cluster performance on the WJ III ACH fell within one *SD* of the mean on Oral Language and Listening Comprehension. His performance was more than one *SD* below the mean on Oral Expression, more than two *SDs* below the mean on Brief Reading and Basic Reading Skills, and more than three *SDs* below the mean on Broad Reading (see Table 9). Kavon's individual test performance fell within one *SD* of the mean for Oral Comprehension and Picture Vocabulary. His performance was more than one *SD* below the mean for Story Recall, Understanding Directions, and Word Attack and more than two *SDs* below the mean for Letter-Word Identification, Reading Fluency, and Passage Comprehension (see Table 10). Kavon's oral language and oral expression skills were low average and his listening skills were average for his grade level. Based on his performance on the WJ III ACH, his Broad Reading, Basic Reading Skills, and Brief Reading were very low for his grade level. Kavon's Broad Reading and Brief Reading cluster scores were consistent with his LD diagnosis and his individual test scores showed specific weaknesses in the areas of Letter-Word Identification, Reading Fluency, and Passage Comprehension.

Table 9

Participant WJ III ACH Cluster Scores

Cluster Scores	Oral Language			Oral Expression			Listening Comprehension			Broad Reading			Brief Reading			Basic Reading		
	SS	GE	PR	SS	GE	PR	SS	GE	PR	SS	GE	PR	SS	GE	PR	SS	GE	PR
Kathleen	76	1.9	L	84	2.2	LA	70	1.7	L	48	1.5	VL	54	1.5	VL	60	1.6	VL
Dan	89	3.3	LA	96	4.1	A	83	2.8	LA	61	2.0	VL	65	2.0	VL	70	2.1	L
Kavon	87	3.1	LA	82	2.0	LA	93	3.9	A	52	1.6	VL	56	1.6	VL	61	1.7	VL

Note. SS = Standard Score; GE = Grade Equivalent; PR = Performance Range; VL = Very Low; L = Low; LA = Low Average; A = Average.

Table 10

Participant WJ III ACH Individual Test Scores

Individual Test Scores	Letter-Word ID			Reading Fluency			Story Recall			Understanding Directions			Passage Comp.			Word Attack			Picture Vocab.			Oral Comp.		
	SS	GE	PR	SS	GE	PR	SS	GE	PR	SS	GE	PR	SS	GE	PR	SS	GE	PR	SS	GE	PR	SS	GE	PR
Kathleen	57	1.6	VL	54	K.7	VL	88	2.9	LA	71	1.2	L	63	1.5	VL	75	1.7	L	85	2.0	LA	80	2.1	LA
Dan	70	2.2	L	70	2.0	L	93	3.6	A	67	K.9	VL	69	1.7	VL	77	1.9	L	97	4.2	A	99	4.7	A
Kavon	61	1.7	VL	67	1.8	VL	81	1.9	LA	78	1.8	L	60	1.4	VL	71	1.6	L	85	2.0	LA	105	6.0	A

Note. Letter-Word ID = Letter-Word Identification; Passage Comp. = Passage Comprehension; Picture Vocab. = Picture Vocabulary; Oral Comp. = Oral Comprehension; SS = Standard Score; GE = Grade Equivalent; PR = Performance Range; VL = Very Low; L = Low; LA = Low Average; A = Average.

Teacher's Report Form scores. Prior to the start of the study, the teachers completed the Teacher's Report Form (TRF; Achenbach, 1991) to document their perceptions of students' behavior.

Internalizing behavior *T* scores for students ranged from 53 to 64 (*M* =57.67), Externalizing behavior *T* scores ranged from 48 to 63 (*M* =55.33), and Total Problems *T* scores ranged from 56 to 64 (*M* = 59.67). Notably, Kathleen's Internalizing *T* score fell in the clinical range. Kavon's Externalizing *T* score fell within the borderline range, and his Total Problems *T* score fell in the clinical range (see Table 11 for pre-study Internalizing, Externalizing and Total Problem scores). These results indicated that the teachers perceived Kathleen and Kavon as exhibiting problem behaviors. The inclusion of these students in this study provided an opportunity to address their behavioral challenges through the implementation of tableau.

The three students scored within the normal range for seven of the eight syndrome scales, with *T* scores ranging from 55 to 61 (*M* =58.33) for Anxious/Depressed, from 54 to 62 (*M* =57.33) for Withdrawn/Depressed, and 50 (*M* =50) for Somatic Complaints. Student *T* scores ranged from 54 to 60 (*M* =57.67) for Social Problems, and from 50 to 57 (*M* =52.33) for Thought Problems. Student *T* scores ranged from 59 to 65 (*M* =61) for Attention Problems, with Kavon scoring in the borderline range (*T* = 65), from 53 to 64 (*M* =57.33) for Rule Breaking Behavior, and from 50 to 63 (*M* =55.33) for Aggressive Behavior. Students scored highest (i.e., highest maladaptive behaviors) on the Attention Problems scale and lowest (i.e., lowest maladaptive behaviors) on the Somatic Complaints (see Table 12 for pre-study syndrome scale scores).

Informal observations of students' off-task behavior. Throughout data collection, the primary researcher informally observed students across all phases of the study to determine which off-task behaviors presented most frequently during the lessons and if differences existed across participants. Observations revealed that each student frequently exhibited the same off-task behavior, yet all three students demonstrated different off-task behaviors. Kathleen's off-task behaviors primarily consisted of looking around, staring into space, and looking out the window. Dan's most frequent off-task behaviors were calling out and talking to a classmate during instructional time, whereas Kavon was recorded as off-task for constant and noticeable fidgeting and playing with pencils and toys. Although the primary researcher did not record the frequency of every off-task behavior (which was not feasible given the limited 5-s interval recording time), the informal observations highlight the heterogeneity of the student participants in this study. The WJ III ACH and TRF scores further emphasize the diversity of the three student participants, all of whom were diagnosed with language-based LD.

Table 11

Pre-Study TRF Internalizing, Externalizing, and Total Problems Student Scores

Student Scores									
	Internalizing			Externalizing			Total Problems		
	T score	%	Range	*T* score	%	Range	*T* score	%	Range
Kathleen	64	92	Clinical	55	69	Normal	59	82	Normal
Dan	53	57	Normal	48	<50	Normal	56	72	Normal
Kavon	56	71	Normal	63	90	Borderline	64	92	Clinical

Note. Mean of *T-score* = 50; Standard Deviation of *T-score* = 10.

Table 12

Pre-Study TRF Student Scores for Eight Syndrome Scales

Student Scores	Anxious/ Depressed			Withdrawn/ Depressed			Somatic Complaints			Social Problems			Thought Problems			Attention Problems			Rule Breaking Behavior			Aggressive Behavior		
	T	%	R	*T*	%	R	*T*	%	R	*T*	%	R	*T*	%	R	*T*	%	R	*T*	%	R	*T*	%	R
Kathleen	61	85	N	62	88	N	50	50	N	54	67	N	50	50	N	59	82	N	55	69	N	53	60	N
Dan	55	69	N	56	62	N	50	50	N	59	82	N	57	78	N	59	82	N	53	66	N	50	50	N
Kavon	59	82	N	54	67	N	50	50	N	60	84	N	50	50	N	65	93	B	64	91	N	63	89	N

Note. T = T-score; Mean of *T-score* = 50; Standard Deviation of *T-score* = 10; R = Range; N = Normal; B = Borderline.

Teachers

Ms. Newton was a Caucasian female between the ages of 30-35 who had been teaching for five years at the time of the study. She had a master's degree in elementary education, grades K-6. At the time of the study, she had been teaching fourth and fifth-grade English Language Arts (ELA) at Palisades Elementary School for almost two years. Ms. Newton indicated that she had very little training and experience in arts integration and was unfamiliar with the tableau intervention. She explained that occasionally she used Reader's Theater during her ELA lessons to help students visualize language arts concepts.

Ms. Mills was an African American female between the ages of 35-40 who had been teaching for 16 years at the time of the study. She held a bachelor's degree and had taken several masters' level courses in elementary education. At the time of the study, she had been teaching fourth and fifth-grade ELA at Southeastern Elementary School for almost three years. Ms. Mills indicated that she had very little training and experience in arts integration and was unfamiliar with the tableau intervention. She explained that occasionally she used Reader's Theater and role-play during her small group ELA lessons to help students understand events from a story selection (see Table 13 for teacher participant characteristics).

Table 13

Teacher Participant Characteristics

Teacher	Age Range (years)	Number of Students in Study	Gender	Ethnicity	Highest Degree Obtained	Years Teaching	Experiences with the Arts
Ms. Newton	30-35	2	Female	Caucasian	Master's	5	Reader's Theater
Ms. Mills	35-45	1	Female	African American	Bachelor's + master's coursework	16	Reader's Theater; role-play

Setting

The study was conducted in two, fourth-grade inclusive language arts classrooms at two urban, elementary charter schools in the Mid Atlantic United States serving students from pre-kindergarten through eighth grade. Palisades Elementary School and Southeastern Elementary School were two of six schools in the City Schools elementary charter network.

City Schools Charter Network Culture

City Schools aims to empower students for lifelong success through a three-pronged initiative that emphasizes the importance of character, excellence, and service. City Schools seeks to foster a community of lifelong learners, to graduate students who are prepared for high school and later college, and to prepare alumni to serve and lead others in the 21st century. City Schools' model also focuses on providing a disciplined environment that encourages students to strive for excellence in their education and through their service to the community. Comprised of double blocks of language arts and mathematics, the City Schools curriculum is designed to develop scholars who are

academically competitive for exemplar high school programs. Students also participate in ongoing study of core character values, which are demonstrated through leadership and service to the classrooms and the community.

Palisades Elementary School

Palisades Elementary School is comprised of African American (50.9%), Hispanic (47.4%), and Caucasian (0.9%) students. As a Title I school, 80% of the students are eligible for and receive free and reduced meals. The student/teacher ratio at Palisades is 16:5, which is the second best among the six schools in the City Schools network. Notably, in 2014, Palisades ranked first among the six schools in the City Schools network for statewide academic performance and ranked better than 73% of elementary schools in the state. On the 2014 statewide standardized test, 55% of fourth grade students scored proficient in reading and 63% of fourth-grade students scored proficient in math.

Ms. Newton's classroom. Ms. Newton's classroom at Palisades Elementary School had a total of 26 students, including 22 African American students and 4 Hispanic students. Six of the 26 students were special education students, with four identified as having language-based LD and two identified as having speech and language impairment (SLI. Ms. Newton had a student-teacher intern in her classroom every afternoon to assist with instructional and administrative tasks. In addition, the intermediate-grade special education resource teacher and English Language Learner (ELL) teacher provided extra support during small group language arts lessons during the afternoons. Kathleen and Dan participated in small group language arts instruction from Ms. Newton every day. At the beginning of data collection, Kathleen and Dan also met with the special education

resource teacher in small groups 2-3 times per week. Beginning the fourth week of data collection, Kathleen and Dan only met with the special education resource teacher once a week because she was required to administer summative assessments to all students with identified disabilities in the intermediate grades.

Southeastern Elementary School

Southeastern Elementary School is comprised only of African American (100%) students and has the largest student body size of the six elementary schools in the City Schools network. As a Title I school, 85% of the students are eligible for and receive free and reduced meals. The student/teacher ratio at Southeastern is 17:4, which is the second to the worst among the six schools in the City Schools network. In 2014, Southeastern ranked last among the six schools in the City Schools network for statewide academic performance and ranked worse than 76% of elementary schools in the state. On the 2014 statewide standardized test, 38% of fourth grade students scored proficient in reading and 46% of fourth-grade students scored proficient in math.

Ms. Mills' classroom. Ms. Mills' classroom consisted of 26 African American students. Eight of the 26 students were special education students, with five identified as having language-based LD, two as having SLI, and one as having emotional and behavioral disorders (EBD). Ms. Mills did not have a student-teacher intern or a teaching aide. A parent volunteer assisted Ms. Mills with behavior management and administrative tasks in the classroom, but her support was intermittent and she did not have any training in education. The parent volunteer had little interaction with Kavon and only spoke to him for occasional redirections.

Primary Data: On-Task Behavior Results

Kathleen

Kathleen was on-task for 60% or less of intervals prior to participating in the tableau intervention. Kathleen's on-task behavior increased following the introduction of tableau, decreased following the withdrawal of tableau and return to conventional instructional strategies, and increased again following the reintroduction of tableau during small group language arts lessons. A functional relation was demonstrated and replicated through a change in level in the hypothesized direction and a change in stability across phases. The percentage of intervals of on-task behavior within and across phases is presented in Figure 9.

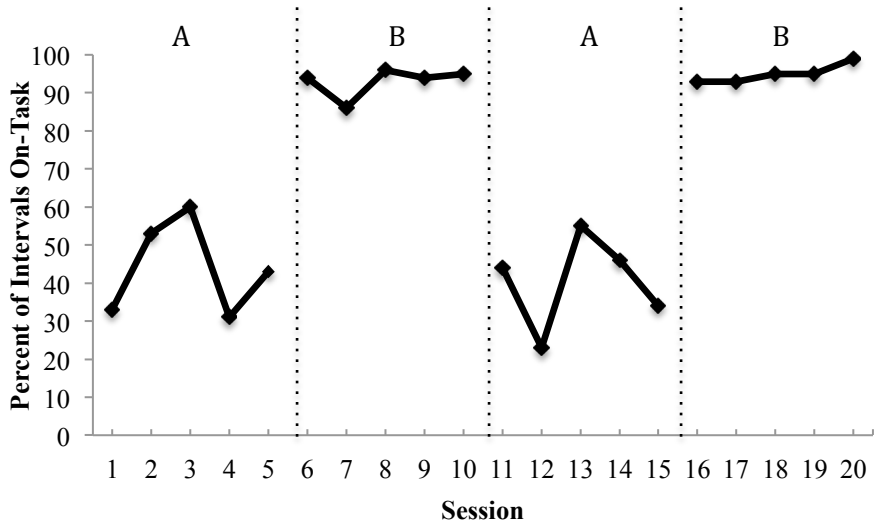

Figure 9. Kathleen's percent of intervals on-task within and across phases.

Baseline phase. During baseline, Kathleen's on-task behavior ranged from 31% to 60% (M = 44%; SD = 12.5%) of observed intervals. Visual inspection of the data

noted an initial increasing trend followed by a sharp decrease of the percent of intervals Kathleen was on-task during each baseline session. In the final three baseline sessions, Kathleen's on-task behavior ranged from 31% to 60% (*M* = 44.7%) of observed intervals. After five sessions and on-task behavior during 60% or less of observed intervals across all sessions, a phase change was introduced to begin the tableau intervention.

Tableau intervention phase. The percentage of intervals of on-task behavior increased with the introduction of tableau, as observed by an immediate change in level from the baseline phase to the tableau intervention phase and an increase in the stability of the on-task behavior. During the tableau intervention phase, Kathleen's on-task behavior ranged from 86% to 96% (*M* = 93%; *SD* = 4%) of observed intervals. In the final three baseline sessions, Kathleen's on-task behavior ranged from 31% to 60% (*M* = 44.7%) of observed intervals. During the first three sessions of the tableau intervention phase, Kathleen's on-task behavior ranged from 86% to 94% (*M* = 92%) of observed intervals. Thus, a clear change in level was observed in the hypothesized direction. There were no overlapping data points (PND = 100%) between the baseline and tableau intervention phases for Kathleen. After the data were consistent, stable, and in the hypothesized direction, tableau was withdrawn and a phase change was introduced to return to conventional instructional strategies.

Withdrawal phase. When tableau was withdrawn, there was an immediate decrease in level from the tableau intervention phase to the withdrawal phase and an increase in variability of the percentage of on-task behavior. Kathleen's on-task behavior during the withdrawal phase ranged from 23% to 55% (*M* = 40.4%; *SD* = 12.3%) of observed intervals. In the final three tableau intervention sessions, Kathleen's on-task

behavior ranged from 94% to 96% (*M* = 95%) of observed intervals. During the first three sessions of the withdrawal phase, Kathleen's on-task behavior ranged from 23% to 45% (*M* = 40.7%) of observed intervals. There were no overlapping data points (PND = 100%) between the tableau intervention and withdrawal phases. After a minimum of five sessions and after observing a decrease in on-task behavior, a phase change was made to re-introduce the tableau intervention.

Re-introduction of tableau intervention phase. An immediate increase in level and stability of on-task behavior was observed with the re-introduction of the tableau intervention. Kathleen's on-task behavior during the re-introduction of the tableau intervention phase ranged from 93% to 99% (*M* = 95%; *SD* = 2.5%) of observed intervals. There was an immediate and slight increasing trend of on-task behavior in the re-introduction of tableau intervention phase. The latency of the effect was immediate, with on-task behavior ranging from 34% to 55% (*M* = 45%) of observed intervals across the last three sessions of the withdrawal phase, and increasing to a range of 93% to 95% (*M* = 93.7%) of observed intervals across the first three sessions of the re-introduction of the tableau intervention phase. There were no overlapping data points (PND = 100%) between the withdrawal and re-introduction of tableau intervention phases for Kathleen. Data collection ceased after a minimum of five sessions, and after data were observed to be consistent and stable in the hypothesized direction.

Dan

Dan was on-task for 51% or less of intervals prior to participating in the tableau intervention. Dan's on-task behavior increased following the introduction of tableau, decreased following the withdrawal of tableau and return to conventional instructional

strategies, and increased again following the reintroduction of tableau during small group language arts lessons. A functional relation was established through a change in level in the hypothesized direction and a change in stability across phases. The percentage of intervals of on-task behavior within and across phases is presented in Figure 10.

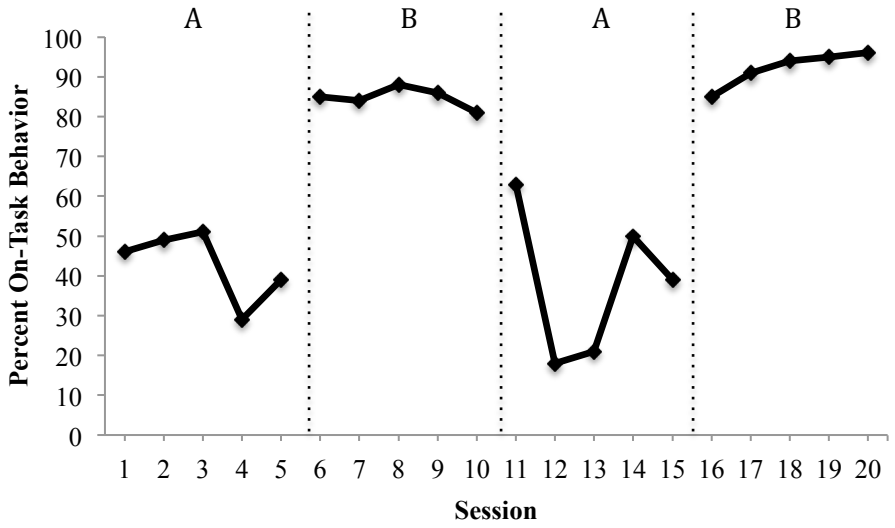

Figure 10. Dan's percent of intervals on-task within and across phases.

Baseline phase. During baseline, Dan's on-task behavior ranged from 29% to 51% (M = 42.8%; SD = 9%) of observed intervals. Visual inspection of the data noted an initial slight increasing trend followed by a sharp decrease and then an increase of the percent of intervals Dan was on-task during each baseline session. In the final three baseline sessions, Dan's on-task behavior ranged from 29% to 51% (M = 39.7%) of observed intervals. After five sessions and on-task behavior during 51% or less of observed intervals across all sessions, a phase change was introduced to begin the tableau intervention.

Tableau intervention phase. The percentage of intervals of on-task behavior increased with the introduction of tableau, as observed by an immediate change in level from the baseline phase to the tableau intervention phase and an increase in the stability of the on-task behavior. During the tableau intervention phase, Dan's on-task behavior ranged from 81% to 88% (*M* = 84.8%; *SD* = 2.6%) of observed intervals. In the final three baseline sessions, Dan's on-task behavior ranged from 29% to 51% (*M* = 39.7%) of observed intervals. During the first three sessions of the tableau intervention phase, Dan's on-task behavior ranged from 84% to 88% (*M* = 85.7%) of observed intervals. Thus, a clear change in level was observed in the hypothesized direction. There were no overlapping data points (PND = 100%) between the baseline and tableau intervention phases for Dan. After the data were consistent, stable, and in the hypothesized direction, tableau was withdrawn, and a phase change was introduced to return to conventional instructional strategies.

Withdrawal phase. When tableau was withdrawn, there was an immediate decrease in level from the tableau intervention phase to the withdrawal phase and an increase in variability of the percentage of on-task behavior. Dan's on-task behavior during the withdrawal phase ranged from 18% to 63% (*M* = 38.2%; *SD* = 19.1%) of observed intervals. In the final three tableau intervention sessions, Dan's on-task behavior ranged from 81% to 88% (*M* = 85%) of observed intervals. During the first three sessions of the withdrawal phase, Dan's on-task behavior ranged from 18% to 63% (*M* = 34%) of observed intervals. There were no overlapping data points (PND = 100%) between the tableau intervention and withdrawal phases. After a minimum of five

sessions and after observing a decrease in on-task behavior, a phase change was made to re-introduce the tableau intervention.

Re-introduction of tableau intervention phase. An immediate increase in level and stability of on-task behavior was observed with the re-introduction of the tableau intervention. Dan's on-task behavior during the re-introduction of the tableau intervention phase ranged from 85% to 96% (*M* = 92.2%; *SD* = 4.4%) of observed intervals. There was an immediate and increasing trend of on-task behavior in the re-introduction of tableau intervention phase. The latency of the effect was immediate, with on-task behavior ranging from 21% to 50% (*M* = 36.7%) of observed intervals across the last three sessions of the withdrawal phase, and increasing to a range of 85% to 94% (*M* = 90%) of observed intervals across the first three sessions of the re-introduction of the tableau intervention phase. There were no overlapping data points (PND = 100%) between the withdrawal and re-introduction of tableau intervention phases for Dan. Data collection ceased after a minimum of five sessions, and after data were observed to be consistent and stable in the hypothesized direction.

Kavon

Kavon was on-task for 38% or less of intervals prior to participating in the tableau intervention. Kavon's on-task behavior increased following the introduction of tableau, decreased following the withdrawal of tableau and return to conventional instructional strategies, and increased again following the reintroduction of tableau during small group language arts lessons. A functional relation was established through a change in level in the hypothesized direction and a change in stability across phases. The percentage of intervals of on-task behavior within and across phases is presented in Figure 11.

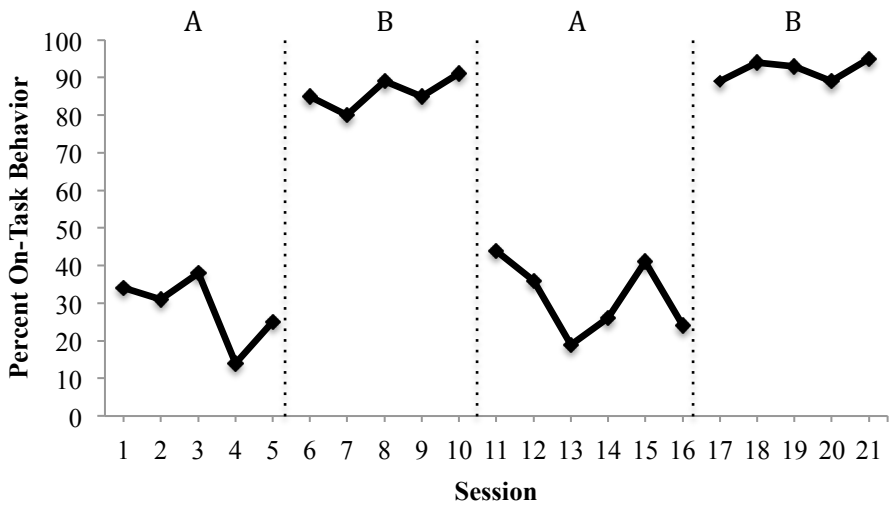

Figure 11. Kavon's percent of intervals on-task within and across phases.

Baseline phase. During baseline, Kavon's on-task behavior ranged from 14% to 38% (M = 28.4%; SD = 9.3%) of observed intervals. Visual inspection of the data noted an initial slight increasing trend followed by a sharp decrease followed by an increase of the percent of intervals Kavon was on-task during each baseline session. In the final three baseline sessions, Kavon's on-task behavior ranged from 14% to 38% (M = 25.7%) of observed intervals. After five sessions and overall low (<50%) percentage of intervals engaged in on-task behavior, a phase change was introduced to begin the tableau intervention.

Tableau intervention phase. The percentage of intervals of on-task behavior increased with the introduction of tableau, as observed by an immediate change in level from the first baseline phase to the tableau intervention phase and an increase in the stability of the on-task behavior. During the tableau intervention phase, Kavon's on-task

behavior ranged from 80% to 91% (*M* = 86%; *SD* = 4.2%) of observed intervals. There was an immediate and increasing trend of on-task behavior throughout the intervention phase. In the final three baseline sessions, Kavon's on-task behavior ranged from 14% to 38% (*M* = 25.7%) of observed intervals. During the first three sessions of the tableau intervention phase, Kavon's on-task behavior ranged from 80% to 89% (*M* = 84.7%) of observed intervals. Thus, a clear change in level was observed in the hypothesized direction. There were no overlapping data points (PND = 100%) between the baseline and tableau intervention phases for Kavon. After the data were consistent, stable, and in the hypothesized direction, tableau was withdrawn, and a phase change was introduced to return to conventional instructional strategies.

Withdrawal phase. When tableau was withdrawn, there was an immediate decrease in level from the tableau intervention phase to the withdrawal phase and an increase in variability of the percentage of on-task behavior. Kavon's on-task behavior during the withdrawal phase ranged from 19% to 44% (*M* = 31.7%; *SD* = 10.1%) of observed intervals. In the final three tableau intervention sessions, Kavon's on-task behavior ranged from 85% to 91% (*M* = 88.3%) of observed intervals. During the first three sessions of the withdrawal phase, Kavon's on-task behavior ranged from 19% to 44% (*M* = 33%) of observed intervals. There were no overlapping data points (PND = 100%) between the tableau intervention and withdrawal phases. After six sessions and after observing a decrease in on-task behavior, a phase change was made to re-introduce the tableau intervention.

Re-introduction of tableau intervention phase. An immediate increase in level and stability of on-task behavior was observed with the re-introduction of the tableau

intervention. Kavon's on-task behavior during the re-introduction of the tableau intervention phase ranged from 89% to 95% (M = 92%; SD = 2.8%) of observed intervals. The latency of the effect was immediate, with on-task behavior ranging from 24% to 41% (M = 30.3%) of observed intervals across the last three sessions of the withdrawal phase, and increasing to a range of 89% to 94% (M = 92%) of observed intervals across the first three sessions of the re-introduction of the tableau intervention phase. There were no overlapping data points (PND = 100%) between the withdrawal and re-introduction of tableau intervention phases for Kavon. Data collection ceased after a minimum of five sessions, and after data were observed to be consistent and stable in the hypothesized direction (see Table 14 for the average percentage of intervals of on-task behavior within each phase for all three participants).

Table 14

Percentage of Intervals of On-Task Behavior Within Each Phase for Participants

Participant	Baseline Phase	Tableau Intervention Phase	Withdrawal Phase	Re-Introduction of Tableau Intervention Phase
Kathleen				
M	44	93	40.4	95
Range	31–60	86–96	23–55	93–99
SD	12.5	4	12.3	2.5
Dan				
M	42.8	88.4	38.2	92.2
Range	29–51	81–88	18–63	85–96
SD	9	2.6	19.1	4.4
Kavon				
M	28.4	86	31.7	92
Range	14–38	80–91	19–44	89–95
SD	9.3	4.2	10.1	2.8

Note. M = Mean % of intervals on-task; SD = Standard Deviation of % of intervals of on-task behavior.

Descriptive Data: Oral Story Retelling Results

Descriptive data provided additional information regarding students' understanding of character traits and sequence of events during conventional language arts lessons and during lessons with tableau. Audio digital recordings of oral story retellings were used to assess students' understanding of character traits and sequence of events. Data collection consisted of the primary researcher using an audio digital recorder to capture participants' free oral retellings of the story from the previous lesson. At the end of every session in the each phase, the primary researcher directed each student to a quiet area directly outside the classroom to administer an oral retelling procedure of the story from the previous lesson (see Appendix B). The oral retelling consisted of the primary researcher asking the student, "Please tell me about [name the story], the story you just talked about in class." The student's response was recorded using an audio digital recorder. If the student did not mention any characters or events in his/her initial response, the primary researcher prompted, "Can you tell me anything you remember about the characters or events in [name the story]?" If the student stopped talking and made eye contact with the primary researcher, the primary researcher provided a follow-up prompt, "Is there anything else you want to tell me about [name the story]?" When the student stopped talking and made eye contact again, the audio digital recording concluded. Each audio digital recording procedure lasted less than 5-min. Two secondary data coders (i.e., one primary coder for 100% of the retellings; one reliability coder for 20% of the retellings), who were blind to the phases of the study, examined students' understanding of character traits and sequence of events using the adapted Likert-scale from Garrett and O'Conner's (2010) benchmark assessment. The

mean, range, and standard deviations of scores were calculated within each phase for each participant.

Kathleen

On average, Kathleen scored higher on the Likert-scale assessment during the tableau intervention phases than in the baseline and withdrawal phases. Kathleen's average score on the Likert-scale was 1.6 (*SD* = 0.55; range, 1-2) during the baseline phase, 2.2 (*SD* = 0.45; range, 2-3) during the tableau intervention phase, 1.8 (*SD* = 0.84; range, 1-3) during the withdrawal phase, and 2.6 (*SD* = 0.55; range, 2-3) in the final tableau phase.

Dan

Like Kathleen, Dan scored higher on average on the Likert-scale assessment during the tableau intervention phases than in the baseline and withdrawal phases. Dan's average score on the Likert-scale was 2.6 (*SD* = 0.55; range, 2-3) during the baseline phase, 2.6 (*SD* = 0.55; range, 2-3) during the tableau intervention phase, 1.8 (*SD* = 1.10; range, 1-3) during the withdrawal phase, and 3.2 (*SD* = 0.45; range, 3-4) in the final tableau phase.

Kavon

Kavon also scored higher on average on the Likert-scale assessment during the tableau intervention phases than in the baseline and withdrawal phases. Kavon's average score on the Likert-scale was 2 (*SD* = 0; range, 2-2) during the baseline phase, 2.6 (*SD* = 0.89; range, 2-4) during the tableau intervention phase, 1.67 (*SD* = 0.52; range, 1-2) during the withdrawal phase, and 2.8 (*SD* = 0.84; range, 2-4) in the final tableau phase (see Table 15 for results for all three participants).

Table 15

Oral Story Retelling Results Within Each Phase for Participants

Participant	Baseline Phase	Tableau Phase	Withdrawal Phase	Re-Introduction of Tableau Phase
Kathleen				
M	1.6	2.2	1.8	2.6
Range	1–2	2–3	1–3	2–3
SD	0.55	0.45	0.84	0.55
Dan				
M	2.6	2.6	1.8	3.2
Range	2–3	2–3	1–3	3–4
SD	0.55	0.55	1.10	0.45
Kavon				
M	2.0	2.6	1.67	2.8
Range	2–2	2–4	1–2	2–4
SD	0	0.89	0.52	0.84

Note. *M* = Mean; *SD* = Standard Deviation.

Social Validity

Social validity questionnaires (see Appendices K and L) were administered to the two teachers to determine the feasibility of the tableau intervention. The pre and post-intervention questionnaires consisted of a 5-point Likert scale with five questions. Descriptors provided a guide for the extremes of the scale: Strongly Agree (1), Agree (2), Neutral (3), Disagree (4), Strongly Disagree (5). Results from the pre-intervention social validity questionnaire indicated that both Ms. Newton and Ms. Mills strongly agreed on the following five questions: (a) the tableau intervention would not take more than 15 min to implement; (b) they would be able to implement tableau correctly; (c) tableau would not disrupt their classroom routines; (d) students would be highly interested in tableau; and (e) students would increase their on-task behavior. Results from the post-intervention social validity questionnaire showed that Ms. Newton recorded the same responses as in the pre-intervention questionnaire by strongly agreeing with all five

questions. In her post-intervention questionnaire, Ms. Mills strongly agreed that students were highly interested in tableau and increased their on-task behavior. She agreed (rather than strongly agreed) that the tableau intervention did not take more than 15 min to implement, that she was able to implement tableau correctly, and that tableau did not disrupt her classroom routines (see Table 16 for the results of pre and post-intervention questionnaires).

Table 16

Results from Pre and Post-Intervention Social Validity Questionnaires

Questionnaire Items	Pre-Intervention	Post-Intervention
Tableau will not take more than 15 min.		
M	1	1.5
Range	1–1	1–2
SD	0	.71
I will be able to implement tableau correctly.		
M	1	1.5
Range	1–1	1–2
SD	0	.71
Tableau will not disrupt my classroom routines.		
M	1	1.5
Range	1–1	1–2
SD	0	.71
Students will be highly interested in tableau		
M	1	1
Range	1–1	1–1
SD	0	0
Students will increase their on-task behavior.		
M	1	1
Range	1–1	1–1
SD	0	0

Note. M = Mean; *SD* = Standard Deviation. Scoring: 1 = Strongly Agree; 2 = Agree; 3 = Neutral; 4 = Disagree; 5 = Strongly Disagree.

Summary of Results

This chapter provided the results of the study. All three participants' on-task behavior increased following the introduction of tableau during small group language arts lessons and decreased following the withdrawal of tableau and return to conventional instructional strategies during small group language arts lessons. For all three participants, a functional relation was established through a change in level in the hypothesized direction and a change in stability across phases.

All three participants scored higher on average on the Likert-scale assessment of character traits and sequence of events during the tableau intervention phases than in the baseline and withdrawal phases. Results from the pre-intervention social validity questionnaire indicated that both teachers experienced overwhelmingly positive feelings about implementing tableau at the beginning of the study. Results from the post-intervention social validity questionnaire indicated that the teachers agreed or strongly agreed that the tableau procedures were acceptable and feasible given available resources.

Chapter V: Discussion

Overview

Despite hopes of improving outcomes for students with disabilities through inclusion alone, students with language-based learning disabilities (LD) placed in general education settings often have difficulty meeting the academic demands of school, particularly in language arts (Klem & Connell, 2004; McLeskey & Waldron, 2011; Newman & Davies, 2005). Students with LD also exhibit low levels of on-task behavior in inclusive language arts settings, which may lead to further academic challenges and emotional problems, including disruptive behavior, poor self-concept, low self-esteem, school failure, and most significantly, school dropout (Newman & Davies, 2005; Vaughn & Fuchs, 2003). Dramatic arts integration may enhance students' on-task behavior (Anderson & Berry, in press; Anderson & Berry, 2014) and lead to improved language outcomes (Anderson, 2012; Catterall, 2002; Deasy, 2002; Parsdad & Spiegelman, 2012; Podlozny, 2000); yet, the potential value of specific drama interventions, notably tableau, for increasing students' on-task behavior has been scarcely researched or explored.

The purpose of this study was to determine the extent to which the introduction of tableau, a drama intervention, increased the on-task behavior of students with language-based LD in inclusive classroom settings during small group language arts instruction. Specifically, the study employed an ABAB withdrawal design to examine the on-task behavior of three, fourth-grade students during conventional lessons and during lessons with tableau. On-task behavior data were collected using a 10-s whole interval time sampling procedure and were reported as the percentage of intervals on-task during small group language arts lessons. Data were visually inspected within each phase for the

level, trend, and variability of on-task behavior. To compare data across phases, data also were visually inspected to describe immediacy of effect and overlap.

The study also included descriptive data to assess students' comprehension of narrative story elements. Oral story retellings were examined for students' understanding of character traits and sequence of events to determine whether performance differences existed across baseline, withdrawal, and tableau lessons. Students' understanding of character traits and sequence of events was examined using an adapted version of Garrett and O'Conner's (2010) Likert-scale benchmark assessment, with mean, range, and standard deviation of scores calculated within each phase for each participant.

Social validity questionnaires were used (a) to assess teachers' anticipated feelings about implementing tableau at the beginning of the study and (b) to determine their perceptions of the feasibility of the tableau procedures given available resources at the end of the study. Means and standard deviations within and between the two teachers were calculated before tableau was implemented and at the end of the study.

This chapter includes an interpretation of the results, which consists of: (a) a summary of the on-task behavior results from this study; (b) a comparison of these primary results to previous studies; (c) a summary of the oral story retelling results from this study; (d) a comparison of these descriptive results to previous studies; and (e) a discussion of the study's limitations. Broad implications from the current study's findings follow. Lastly, future recommendations for policy, practice, and research are provided for further exploration of this topic.

Interpretation of Results

Primary Data: On-Task Behavior Results

This study examined the extent to which the introduction of tableau increased the on-task behavior of three students with language-based LD in inclusive fourth-grade classroom settings. The two research questions examined (a) if students' on-task behavior increased following introduction of tableau during small group language arts lessons; and (b) if students' on-task behavior decreased following the withdrawal of tableau and return to baseline instructional strategies during small group language arts lessons. For the two research questions, it was hypothesized that students with language-based LD would demonstrate increased on-task behavior following the introduction of tableau as compared to the baseline and withdrawal phases. In addition, it was hypothesized that students with language-based LD would demonstrate decreased on-task behavior following the withdrawal of tableau as compared to the tableau phases. Visual inspection of the data indicated that the hypotheses were supported in the research.

Findings showed that all three participants' on-task behavior increased following the introduction of tableau during small group language arts lessons and decreased following the withdrawal of tableau and return to conventional instructional strategies during small group language arts lessons. Notably, for all three participants, a functional relation was established through three demonstrations of change in level and change in stability in the hypothesized directions. These results suggest the value of using drama interventions to increase the on-task behavior of elementary students with LD in inclusive language arts classrooms.

Similarities and differences to previous literature. Results from previous studies were both similar to and different from this study's primary findings related to definitions, measurement, and interventions.

Definitions. Like the current research, previous studies defined on-task behavior in task, teacher, and social terms. Twenty-four of the 25 earlier studies defined on-task behavior in task-related terms (e.g., Amato-Zech et al., 2006; Bassette & Taber-Doughty, 2013; Blood et al., 2011; Gulchak, 2008; Whittaker, 2005), 15 focused on teacher-related features (e.g., Maag et al., 1992; Schneider & Goldstein, 2009; Thorpe & Borden, 1985; Wolfe et al., 2000) and 10 emphasized social constructs (e.g., Hallahan et al., 1979; Harris, 1986; Haydon, 2012; Lloyd et al., 1982). In addition, this study included an operational definition of on-task behavior that provided both a general description and observable, measurable, and repeatable examples and non-examples of on-task behavior. Notably, only 13 of the 25 prior studies (e.g., Amato-Zech et al., 2006; Bassette & Taber-Boughty, 2013; Blood et al., 2011; DiGangi et al., 1991) included an operational definition of on-task behavior, which is an essential component of observational behavioral measurement (Reichow, Volkmar, & Cicchetti, 2008; Umbreit, Ferro, Liaupsin, 2007). By including an operational definition and by presenting on-task behavior in task, teacher, and social terms, this study extended previous research and ensured that no relevant behaviors were overlooked. Given that students with LD comprise the most heterogeneous disability category, multi-component operational definitions may be needed to adequately consider the many ways on-task behavior might present in students with LD in inclusive classrooms (Cortiella, 2011).

Measurement. On-task behavior also was measured in a variety of ways in previous literature. Earlier studies primarily measured on-task behavior as a frequency through whole interval, partial interval, or momentary time sampling procedures. Five of the 25 previous studies (Gulchak, 2008; Jurbergs et al., 2007; Mathes & Bender, 1997; Nahgahgwon et al., 2010; Whittaker, 2005) used a whole interval time sampling procedure to measure students' on-task behavior. Because this method tends to underestimate on-task behavior and the goal of this research was to show an intervention effect on students' increased on-task behavior, the current study also employed a whole interval time sampling procedure.

Like this study, 24 of the 25 prior studies employed single-case designs. Notably, only 8 of the 24 single case studies (Alter, 2012; Bassette & Taber-Doughty, 2013; Hallahan et al., 1979; Hallahan et al., 1982; Harris, 1986; Harris et al., 2005; Lloyd et al., 1982; Maag et al., 1993) were similar to this study in terms of quality. The eight earlier studies met the What Works Clearninghouse (WWC; 2010) standards without reservations, demonstrated an intervention effect of the independent variable on the dependent variable in the hypothesized direction, and were considered high quality. Two of these high quality studies (Alter, 2012; Bassette & Taber-Doughty, 2013) indicated that students increased their percentages of on-task behavior from baseline to intervention phases after exposure to a multi-step problem-solving strategy (Alter, 2012) and a dog reading visiting program (Bassette & Taber-Doughty, 2013). The six remaining high quality studies (Hallahan et al., 1979; Hallahan et al., 1982; Harris, 1986; Harris et al., 2005; Lloyd et al., 1982; Maag et al., 1993) revealed that students showed increased

percentages of on-task behavior during the self-monitoring intervention phases as compared to non-intervention phases.

The current study, which demonstrated an intervention effect of tableau on students' increased on-task behavior, also met the standards set forth by WWC without reservations and was considered high quality. Results for all three participants indicated that students demonstrated increased percentages of intervals on-task in the tableau (range, 84.8-93%) and re-introduction of tableau phases (range, 92-95%) as compared to baseline (range, 28.4-44%) and withdrawal phases (range, 31.7-40.4%). Notably, all three students exhibited various off-task behaviors and presented with different learning profiles. Kathleen's* (*pseudonym; Student 1) off-task behaviors primarily consisted of looking around, staring into space, and looking out the window. Dan's* (Student 2) most frequent off-task behaviors were calling out and talking to a classmate during instructional time, whereas Kavon* (Student 3) was recorded as off-task for constant and noticeable fidgeting and playing with pencils and toys. Students' Woodcock-Johnson III Tests of Achievement (WJ III ACH) scores revealed that (a) Kathleen showed specific weaknesses in the areas of Letter-Word Identification, Reading Fluency, and Passage Comprehension; (b) Dan showed specific weaknesses in the areas of Understanding Directions and Passage Comprehension; and (c) Kavon showed specific weaknesses in the areas of Letter-Word Identification, Reading Fluency, and Passage Comprehension. In addition, Teacher's Report Form (TRF) scores showed that the teachers perceived the students as exhibiting very different behavioral challenges, with Kathleen's Internalizing Behaviors *T* score falling in the clinical range, Kavon's Externalizing Behaviors *T* score falling within the borderline range, and Kavon's Total Problems *T* score falling in the

clinical range. These findings suggest that the tableau intervention and the specific processes embedded in tableau (i.e., meaningful participation in an activity mediated by peers, the use of movement, emotional arousal, enactment, and meaning making through visual representation and perspective taking) support diverse students with language-based LD, who have a variety of individual needs, behaviors, and learning styles.

Interventions. Unlike the present study, the majority of interventions described in previous on-task behavior literature consisted of using self-monitoring and self-management procedures to increase students' on-task behavior (e.g., DiGangi et al., 1991; Hallahan et al., 1979; Harris, 1986; Harris et al., 2005; Lloyd et al. 1982). Other studies (e.g., Alter, 2012; Bassette & Taber-Doughty, 2013; Haydon, 2012; Jurbergs et al., 2007) used academic modifications, behavioral reinforcements, and sensory techniques to increase students' on-task behavior. Although all of the interventions in the earlier studies indicated that students increased their on-task behavior during intervention phases (as compared to non-intervention phases), only eight demonstrated an intervention effect of the independent variable (i.e., intervention) on students' on-task behavior and were considered high quality according to the standards set forth by the WWC. The current study was the first high quality single-case design study to date to use drama as an intervention and to demonstrate an intervention effect of tableau on students' increased on-task behavior. Although these findings are significant for highlighting the potential benefit of drama, future research is needed to better understand how and in what ways tableau can support students with LD in inclusive classrooms.

In addition, only one of the earlier on-task behavior studies (Whittaker, 2005) utilized a drama intervention for improving students' on-task behavior. Descriptive

results from Whittaker's study (2005) suggested that the on-task behavior of second and third graders with LD in a special education resource classroom was statistically significantly higher during the Reader's Theater lessons than the narrative genre lessons (p=.005). Findings from the current study also revealed that students increased their on-task behavior during the drama intervention as compared to non-intervention phases; yet, the results from this research were established through causal inference and were not descriptive.

Like this research, results from earlier process drama studies (Anderson & Berry, in press; Anderson & Berry, 2014; Whittaker, 2005) emphasized the value of drama interventions for increasing students' on-task behavior. However, unlike previous research (Anderson, 2012; Corcoran & Davis, 2005; de la Cruz, 1995; de la Cruz et al., 1998; Whittaker, 2005; Wolf, 1998), the current study (a) did not consider the potential benefits of drama interventions like improvisations, pantomime, role-play, story dramatizations, and Reader's Theater; and (b) did not measure whether students with disabilities who participated in drama interventions in language arts settings showed improved attitude and interest levels, better social skills, and greater participation. Although all of the earlier process drama studies (including the current one) revealed that participation in drama interventions had positive academic and behavioral benefits for students with LD, the current research is the only drama study to date to include on-task behavior as the primary dependent variable and to utilize a single case design to establish a functional relation between tableau and an increase in students' on-task behavior. Albeit promising, future studies should extend this research with different settings, participants, and materials to determine generalizability of findings. Also, future studies

could extend previous research on the added value of drama for improving students' academic (e.g., understanding of narrative story elements) and behavioral outcomes (e.g., increased on-task behavior); and to ensure students with LD succeed in inclusive classrooms.

Descriptive Data: Oral Story Retelling Results

Descriptive data were collected on students' understanding of character traits and sequence of events via oral story retellings. Results indicated that all three participants scored higher on the adapted version of Garrett and O'Conner's (2010) Likert-scale benchmark assessment during the tableau intervention phases than in the baseline and withdrawal phases (see Table 15 for results for all participants). Although these findings are promising, additional data related to students' comprehension of narrative story elements need to be collected to develop a better understanding of the specific relationship between tableau, increased on-task behavior, and increased comprehension of narrative story elements.

Similarities and differences to previous literature. Results from previous studies were both similar to and different from this study's descriptive findings related to students' knowledge of narrative story elements, interventions, and assessments.

Students' knowledge of narrative story elements. Like previous research (Gersten et al., 2001; Nodine et al., 1985; Wilkinson et al., 1995), this study found that fourth-grade students with LD have less knowledge and poorer comprehension of narrative story elements than their typically developing peers. Specifically, students performed below grade level on WJ III ACH tests related to story comprehension. Kathleen, Dan, and Kavon's Listening Comprehension cluster scores ranged from 70 to

93, with a grade equivalent (GE) ranging from 1.7 to 3.9. Students also performed below grade level of the WJ III ACH individual test scores for Story Recall and Passage Comprehension. Students' Story Recall scores ranged from 81 to 93 (GE = 1.9-3.6) and Passage Comprehension scores ranged from 60 to 69 (GE = 1.4-1.7). The documented difficulties of elementary students with LD to comprehend narrative story elements, both in this study and in prior research, suggest a need to support students with LD in developing these skills.

Interventions. Findings from this research indicated that participants, on average, had higher scores on the oral story retelling measure during the tableau intervention phases compared to the baseline and withdrawal phases. These findings were similar to the results of previous drama intervention studies that examined students' understanding of narrative story elements (Dupont, 1992; Garrett & O'Conner, 2010), suggesting that students with LD who participated in drama interventions showed academic gains in story comprehension. However, the present study was the first to date to describe how tableau may support students' understanding of character traits and sequence of events via oral story retellings. Previous studies that implemented tableau showed academic benefits for students with disabilities in reading fluency, oral language and expression skills, and written language abilities, but did not explore the potential value of tableau for supporting students' story comprehension. These findings suggest that tableau may be a beneficial strategy for improving a variety of academic language skills (e.g., story comprehension, reading fluency, oral language and expression).

The present study differed from the majority of the intervention literature related to narrative story elements. Earlier studies primarily described strategy instruction of

narrative story elements and strategy instruction of narrative story elements paired with metacognitive techniques as interventions for enhancing students' story comprehension. Seven of the 11 previous studies (Bednarczyk, 1991; Boulineau et al., 2004; Idol, 1987; Idol & Croll, 1987; Newby et al., 1991; Rabren et al., 1999; Wade et al., 2010) consisted of interventions focused on the explicit teaching of narrative story elements for students with LD. Although these studies suggested that strategy instruction improved students' understanding of narrative story elements, only 2 of the 7 single-case designs (Bednarcczyk, 1991; Rabren et al., 1999) were considered high quality studies according to standards set forth by WWC. The four remaining studies (Carnine & Kinder, 1985; Griffey et al., 1988; Johnson et al., 1997; Taylor et al., 2002) combined explicit teaching of narrative story elements with metacognitive techniques such as goal setting, self-instruction, self-questioning, and self-monitoring. All four of these studies were high quality and showed that strategy instruction interventions paired with metacognitive techniques improved students' understanding of narrative story elements. These findings indicate that both drama and explicit teaching of narrative story elements with metacognitive strategies may be effective interventions for improving the story comprehension of students with LD.

Assessments. This research employed an oral recall assessment to determine students' understanding of character traits and sequence of events. Students' understanding of character traits and sequence of events was coded and quantified using a Likert-scale. Two of the 12 prior studies (Bednarczyk, 1991; Garrett & O'Conner, 2010) also utilized oral recalls. Five additional studies (Carnine & Kinder, 1985; Griffey et al., 1988; Idol & Croll, 1987; Newby et al., 1989; Rabren et al., 1999) evaluated students'

understanding of narrative story elements using oral story recalls in combination with another assessment. Like other studies, students' oral story retellings were audio-recorded, transcribed, and scored for the number of story grammar elements mentioned, with specific criteria and Likert-scales used to evaluate students' comprehension. However, unlike previous research, this study did not use curriculum-based passages with comprehension tests or teacher and researcher-created assessments (Boulineau et al., 2004; Idol, 1987; Taylor et al., 2002; Wilkinson, 1995). The current study employed an oral recall assessment because this type of evaluation was more feasible for everyday implementation (e.g., less time consuming, and more adaptable to teacher lesson plans). Findings from this study suggest that future research could continue to examine feasible measurement systems for students' understanding of narrative story elements using oral story recall assessments.

Limitations

Although this research provided initial evidence supporting the benefit of tableau for increasing the on-task behavior of students with language-based LD during small group language arts instruction, limitations emerged during data collection and should be considered when interpreting the results of the current study.

Internal validity. Most threats to internal validity (i.e., the extent to which the results of the study can be directly *attributed to the study*; Campbell & Stanley, 1963; Horner et al., 2005; Kratochwill et al., 2010) inherently were controlled for through the structure of the ABAB withdrawal design. Although testing was not a threat to the primary dependent variable (i.e., on-task behavior), concerns of testing emerged during the descriptive data collection of the oral story retellings. During data collection,

exposure to a test can influence scores on later exposures to that same test (Kratochwill et al., 2010). As a result, students' scores may be the result of their continued exposure to testing rather than to their participation in an intervention. During descriptive data collection of students' oral story retellings, students were exposed to the same oral story recalling procedure at the end of every lesson. Although the story selections differed for each lesson within and across phases, continuous exposure to the oral story retellings procedure could have affected students' scores on subsequent oral story recalls because students were more comfortable and accustomed to talking about stories. However, results from the Likert-scale assessments of the oral story recalls showed that students scored higher during tableau as compared to non-tableau phases, rather scoring higher on the assessment over time. Therefore, it is unlikely that this limitation affected the study's results.

External validity. Threats to external validity (i.e., the extent to which the findings of a given study can be *generalized to a larger population*) reflect additional limitations of this study (Kratochwill et al., 2010). Specific concerns of the restricted convenience sample, lack of maintenance data, and lack of generalization data emerged during the data collection procedures. The current study was restricted to a convenience sample of two urban charter schools and three, fourth-grade students with language-based LD. Therefore, it is unclear how the study's results will generalize to other inclusive classrooms that are not in urban settings, are not in charter schools, or include other fourth graders with language-based LD.

A second threat to external validity reflects the lack of maintenance data collected at the end of the study. Although the intervention appeared successful for all three of the

student participants, data only were collected for eight weeks, from April to June, and the school year ended before the primary researcher was able to collect maintenance data on the participating teachers and students. Although the inability to collect maintenance data did not affect the researcher's ability to answer the research questions, the extent to which the findings showed maintenance effects in natural conditions with the same setting, participants, and materials is unknown. An opportunity to collect maintenance data through follow-up sessions would have provided additional information about the extent to which the teachers continued to implement the tableau intervention, as well as whether students' on-task behavior continued to increase during lessons that integrated the tableau intervention (Horner et al., 2005).

The lack of generalization data also may have threatened the external validity of the study. The primary researcher did not collect generalization data of students' on-task behavior across different settings, participants, and materials. Generalization data was not appropriate for this study because tableau was a context-specific intervention and students' on-task behavior only was addressed during small group language arts lessons. As a result, the effects of students' increased on-task behavior during the tableau intervention were limited to the two teachers' implementation of tableau and to the context of the inclusive fourth grade language arts classroom. Collecting generalization data could have provided additional information about the extent to which students' increased on-task behavior during tableau transferred across specific settings, participants, and materials.

Additional limitations. The study also was limited because the primary researcher (a) did not conduct a functional behavioral assessment (FBA) to evaluate the

function of off-task behavior for the three participating students; and (b) did not collect data on a specific reinforcer. Conducting an FBA prior to the study would have provided information about whether the components of tableau addressed the function of each participant's off-task behavior. However, because the study's results indicated that a functional relation existed between the introduction of tableau and an increase in students' on-task behavior for all three participants, the data suggests that tableau addressed the function of students' off-task behaviors.

Although students' enjoyment in the tableau intervention was the perceived reinforcer (i.e., pleasant consequence that reinforced the desired behavior) in the Antecedent-Behavior-Consequence model (related to the tenets Behaviorism that undergirded the theoretical foundations for the study), the primary researcher did not formally measure or collect data on any reinforcer. Measuring students' enjoyment in the tableau activity and teachers' responsiveness (i.e., rate of praise) to participants in each phase would have provided additional information on the specific reinforcer in this study.

Implications

The findings of this study have implications for 21st century skill learning through the Common Core State Standards (CCSS), communities of practice, teacher training, and arts integration intervention research.

21st Century Skill Learning through the CCSS

The findings from this study have implications for students' acquisition of 21st century skills as highlighted in the CCSS. The CCSS emphasize the importance of providing teaching and learning opportunities that facilitate students' understanding of 21st century skills that enhance college and career readiness (National Governors

Association Center for Best Practices, 2013). Participating in the tableau intervention encouraged students to think creatively, to innovate, to problem solve, to collaborate, and to make connections between oral and written literacy learning (i.e., the text of a story and the visual representation of the text), all of which are 21st century skills described in the CCSS. Given that 21st century skill learning is embedded into arts integration interventions such as tableau, this study has implications for the value of arts integration for providing students with disabilities with greater access to challenging academic content, such as that required by the CCSS.

Communities of Practice

A second implication relates to the importance of developing communities of practice to support the implementation of arts integration in schools. The current study consisted of a convenience sample with open access to a charter school network based on the primary researcher's affiliation with the Director of Student Services. As a result, principals and participating teachers fully supported the research and the use of arts integration in the classrooms. Effective replication of this research and implementation of arts integration interventions in other school systems and with other students will require commitment and interest from affected stakeholders, including principals, teachers, related service providers, and parents. This study holds important implications for creating communities of practice to build capacity in schools for promoting the implementation of arts integration interventions for students with disabilities.

Teacher Training

The third implication pertains to general and special education teacher training related to arts integration. Throughout the current study, both Ms. Newton*

(*pseudonym; Teacher 1) and Ms. Mills* (Teacher 2) required continual training and guidance to implement tableau with perfect fidelity. Ms. Mills, for example, participated in nine training and modeling sessions with live feedback before she was able to employ the tableau intervention correctly. Evidence from this study demonstrates that presenting teachers with training materials and an introduction to the drama intervention proved insufficient. This finding highlights the critical need to provide teachers with ongoing support and feedback to ensure implementation fidelity of arts integration practices such as tableau.

Arts Integration Intervention Research

A final implication relates to arts integration intervention research for students with disabilities. Findings from this study on the benefit of tableau for increasing students' on-task behavior and for providing greater language learning opportunities extend existing research documenting the value of drama for improving language and behavioral outcomes for students with LD. However, previous drama intervention research studies are limited in number and quality. Notably, this study was the only high quality single case design to examine the potential presence of an intervention effect of tableau on students' increased on-task behavior. This finding has implications for future arts integration intervention research, underscoring the need to conduct rigorous, high quality studies that explore the specific language and behavior-related benefits for students with disabilities when exposed to arts integration interventions.

Future Directions

Future directions are presented as policy, practice, and research recommendations for consideration (see Table 17 for summary of recommendations).

Table 17

Summary of Recommendations

Type of Recommendation	Recommendations
Policy	Additional content in general and special education teacher preparation programs.
	The development of arts integration communities of practice.
	The use of arts integration strategies in Tier-3 of the Response-to Intervention (RTI) model.
Practice	Increased focus on arts integration as a curricular framework.
	Ongoing professional development and training opportunities.
	Coaching and mentoring from arts integration experts.
	The use of tableau across content areas and with other disability populations.
Research	High quality arts integration intervention research.
	Cross-disciplinary research.
	Theoretical research.

Policy Recommendations

Future policy recommendations are aimed at increasing infrastructural support at the local and state level for the implementation of arts integration practices. Recommendations include: (a) additional content in general and special education teacher preparation programs; (b) the development of arts integration communities of practice; and (c) the use of arts integration strategies in Tier-2 and Tier-3 of the Response-to Intervention (RTI) model.

Additional content in general and special education teacher preparation programs. Evidence from the current study and from existing drama literature (e.g., Anderson, 2012; Anderson & Berry, 2014; Corcoran & Davis, 2008; Garrett &

O'Conner, 2010) emphasized the value of arts integration for improving outcomes for students with LD. Given that arts integration provides teachers with an important way to reach and teach struggling learners, future policy should consider the importance of including content related to arts integration in general and special education teacher preparation programs. In the instructional climate of inclusion and the CCSS, general and special educators are faced with the increasingly demanding challenges of (a) teaching more difficult, interdisciplinary content that promotes higher order thinking skills; and (b) addressing the needs of more numerous and diverse students with and without disabilities. The current strategies and skills of teachers are insufficient for ensuring the success of these students, and teachers rarely are provided adequate curricular supports (Haager & Vaughn, 2013). The additional course content will equip novice general and special educators with strategies for teaching challenged learners, as well as deepen their understanding of how students with disabilities learn. Furthermore, the course content will support the pedagogical development of teachers who must refine and deepen their skills to succeed in the changing educational landscape. One strategy for including arts integration content into a course is to embed these topics into a class related to Universal Design for Learning (UDL). The UDL focus provides an opportunity to demonstrate how offering multiple means of representation, action and expression, and engagement can support the different ways students learn. The inclusion of arts integration strategies in the UDL course can equip educators with skills for presenting content, allow students to show their knowledge, and stimulate student interest in a variety of ways (CAST, 2010). An additional approach is to include arts integration topics in an overview course that describes various exceptionalities, such as LD, attention

deficit hyperactivity disorder (ADHD), and emotional and behavioral disorders (EBD). The course could include an introduction to neuroscience to provide helpful background information for students to understand which areas of the brain are impacted by a particular disability. Novice educators also can learn how teaching through various art forms provides an effective approach for addressing the unique needs of students with disabilities in inclusive classrooms while also emphasizing their strengths and interests.

Development of arts integration communities of practice. A second policy recommendation reflects the need to develop arts integration communities of practice to build school capacity for implementing arts integration interventions and strategies. One way to foster arts integration communities of practice is to create working groups made up of diverse stakeholders (e.g., school administrators, parents, teachers, personnel from arts organizations, staff from state departments of education) from state and local education agencies. The working groups could explore areas in which state and local capacity could be improved in implementing arts integration interventions. The working groups also could determine the first steps they should take to increase affected stakeholder awareness and interest in arts integration, to promote consensus building, to identify similar initiatives currently underway, and to enhance training and professional development opportunities for implementers of arts integration.

Arts integration strategies in Tier-2 and Tier-3 of the RTI model. Findings from previous research (e.g., Anderson, 2012; de la Cruz et al., 1998; Dupont, 1992; Hubbard, 2009) and from this study revealed the value of arts integration for supporting the needs of students with LD in inclusive classrooms. Given that students with disabilities experience learning challenges and require additional supports to access their

grade level curriculum, future policy could consider integrating tableau into the RTI framework. A multi-tiered approach to early identification and support, RTI is designed to provide struggling students with interventions at increasing levels of intensity to improve their learning (PBIS, 2014). For students with LD, high quality classroom instruction (i.e., Tier-1) proves insufficient for making adequate progress in inclusive classrooms. To better scaffold grade level curricular content for students with LD, tableau could be included into the RTI framework as a Tier-2 targeted intervention in small group settings that supplement high quality classroom instruction. Tableau also could be utilized as a Tier-3 individualized, intensive intervention to target specific skill deficits such as challenges related to non-verbal learning, oral language expression, vocabulary development, and story comprehension.

Practice Recommendations

Future practice recommendations are intended to prepare and support teachers in their implementation of arts integration practices. Recommendations include: (a) increased focus on arts integration as a curricular framework; (b) ongoing professional development and training opportunities; (c) coaching and mentoring from arts integration experts; and (d) the use of tableau across content areas and with other disability populations.

Increased focus on arts integration as a curricular framework. Considering the benefit of arts integration for increasing students' on-task behavior and providing greater learning opportunities, one recommendation reflects the use of arts integration as a curricular framework for increasing students' access to difficult academic content. For example, arts integration can be utilized as a curricular framework through which to teach

the CCSS; teaching through the arts addresses the CCSS expectations for interdisciplinary teaching and student acquisition of 21st century skills such as creativity, collaboration, problem solving, and the connection between oral and written literacy (Anderson & Loughlin, 2014). Arts integration also could be considered as a curricular framework through which to teach science, technology, engineering, and mathematics (STEM) content. By presenting STEM content through the arts, students are provided an additional lens through which to interpret the STEM elements. Combining arts integration and STEM efforts also might enhance cross-disciplinary opportunities and the acquisition of higher ordered thinking skills for students with disabilities. More broadly, arts integration could be viewed as a larger curricular framework that offers access to inclusion by scaffolding challenging academic content and providing students with disabilities access to their grade level curriculum.

Ongoing professional development and training opportunities. This study emphasized the importance of arts integration for supporting students with LD who presented with different behaviors and diverse learning profiles. In an effort to best address the needs of these students in inclusive settings, future practice should include ongoing arts integration professional development and training opportunities for general and special education teachers. Professional development and training opportunities are necessary given that many general and special education teachers (a) have little or no training in inclusive practices; (b) have not acquired the necessary skills to address the diverse challenges of their students with identified disabilities like LD; and (c) currently receive limited current professional development opportunities that provide hands-on training and collaboration (Alquraini & Gut, 2012; Volonino & Zigmond, 2007).

Professional development on arts integration (e.g., tableau) also is timely considering the widespread implementation of the CCSS, which set the expectation for teachers to integrate multiple content areas into a lesson and to ensure mastery of rigorous standards for students who often have not learned more basic skills (National Governors Association Center for Best Practices, 2013). Professional development and training sessions should consider using a train-the-trainer (TTT) model, which enables teachers with experience using arts integration strategies to train teachers who lack knowledge in this area (Suhrheinrich, 2011). A TTT model could help teachers to collectively determine how tableau and other arts integration interventions can be tailored to different content areas to best support the specific needs of the students in their classrooms. In addition to promoting ongoing instructional collaboration across grade levels and subjects, a TTT model of professional development may foster a cadre of skilled instructors, who can build capacity for the implementation of arts integration practices in their individual schools, in their districts, and eventually, in their states. Ongoing professional development and training opportunities (that emphasize how to nest arts integration interventions in the CCSS) provide a feasible way to support the curricular growth and development of general and special education teachers, who are faced with the challenge of meeting the needs of increasing numbers of diverse students with LD in the demanding era of inclusion and the CCSS.

Coaching and mentoring from arts integration experts. Evidence from this research suggests that there a critical need to provide teachers with ongoing support and feedback to ensure implementation fidelity of arts integration practices like tableau. An additional practice recommendation is to provide general and special education teachers

with coaching and mentoring from outside arts integration experts. Although coaching and mentoring experiences may prove costly and time consuming, these supports are essential for ensuring that teachers are equipped with the skills necessary to succeed in their inclusive classrooms. As budgetary constraints limit the number of specials teachers (e.g., art drama, dance, etc.), general and special educators teachers are expected to develop creative approaches that expose students to the arts (Fuchs et al., 2008; McLeskey & Waldron, 2011). In addition, because the Individuals with Disabilities Education Improvement Act (IDEIA; 2004) supports inclusion as a recommendation for students with disabilities at all grade levels, increasing numbers of diverse students with disabilities are being placed in inclusive classrooms. The strategies and supports that general and special education teachers currently receive are insufficient for ensuring their success in the new instructional climate of inclusion and the CCSS. Coaching and mentoring opportunities with arts integration experts provide valuable ways for teachers to learn and implement new techniques with fidelity, to receive ongoing feedback, and to enhance their teaching craft. One way that schools can effectively employ arts integration coaches and mentors is by using them to create cross-disciplinary arts integration teams (CDAITs) of teachers, parents, and related service providers. Arts integration experts can spearhead CDAITs using the TTT model to promote shared ownership of arts integration implementation in schools and in their surrounding communities. Embedded in the CDAITs will be a need for (a) a continual, reciprocal feedback loop to ensure accountability for and implementation fidelity of arts integration practices; (b) documentation of teacher outcomes based on mentorship; and (c) training refinement driven by teacher outcomes data.

The use of tableau with other disability populations and across content areas. The results from this study revealed the value of tableau for improving outcomes for students with LD who had diverse academic and behavioral needs. A final practice recommendation is to explore the use of tableau with other disability populations and across additional content areas. Tableau may be implemented to help students with EBD enhance their social skills and practice managing their challenging behaviors. Tableau also could be integrated into lessons for students with autism spectrum disorder (ASD) to develop social cognition and communication skills. For students with speech and language impairment (SLI), tableau may serve as an effective strategy for increasing students' understanding of content-related vocabulary. In addition, tableau could be integrated across content areas to promote cross-disciplinary teaching and learning required by the CCSS. In literacy and social studies lessons, tableau could be used to depict a sequence of a historical process (e.g., how a bill becomes a law) or to juxtapose seminal historical periods (e.g., pre-industrial society vs. the industrial revolution). In science and math lessons, tableau could serve as a strategy to scaffold learning of more abstract concepts. For example, students could create tableau scenes to illustrate the differences between a solid, liquid, and gas or to demonstrate their understanding of acute and obtuse angles. Teachers may choose to implement tableau using the 4-step protocol outlined in this study (i.e., Actor's Toolbox, Concentration Circle, Cooperation Challenge, Tableau Challenge) or they may decide to use an alternative procedure (e.g., Tableau Challenge only). Ultimately, teachers can benefit from using tableau because they can adapt and alter the intervention to best support their content area focus and the specific needs of their students.

Research Recommendations

Future research recommendations are designed to better understand how and in what ways arts integration can support the diverse needs of students with LD. Recommendations include: (a) high quality arts integration intervention research; (b) cross-curricular research; and (c) theoretical research.

High quality arts integration intervention research. The current research is consistent with results from earlier studies (Anderson & Berry, in press; Anderson & Berry, 2014; Whittaker, 2005) that suggested the value of drama interventions for improving the on-task behavior of students with language-based LD. However, earlier studies only examined on-task behavior as a secondary descriptive variable; this research is the only high-quality single-case design to date to use drama as an intervention and to demonstrate an intervention effect of tableau on the on-task behavior of students with LD. Although results from this study are promising, this research should be replicated to better understand the added value of arts integration interventions for teachers and students.

Low levels of on-task behavior of students with LD in inclusive settings may lead to further academic challenges and emotional problems (Newman & Davies, 2005; Vaughn & Fuchs, 2003). Thus, one recommendation is for future research to examine the potential of high quality arts integration interventions for improving (a) behavior outcomes and (b) language outcomes for students with LD.

Arts integration intervention research for improving behavior outcomes. Future research should continue to employ high-quality single-case designs to further examine the potential for drama interventions to improve the behavioral outcomes of students with

LD in inclusive classrooms. Future researchers may consider a variety of designs for replication. For example, an initial follow-up study could replicate the current research across different settings, participants, and materials to determine generalizability of findings and the specific ways tableau can support students with LD in inclusive classrooms. The initial follow-up study should collect maintenance data and include an FBA prior to data collection to learn the function of students' off-task behavior. Researchers also should collect formal data on potential reinforcers of students' on-task behavior, such as student interest levels and teacher praise, to better understand the relationship between antecedents, behaviors, and consequences in the study.

An additional follow-up study could explore the potential of a functional relation between tableau and a feature of behavioral engagement other than on-task behavior, such as attention, persistence, concentration, asking questions, or contributing to class discussions (Fredricks et al., 2004). A multi-element design that examines the specific components of tableau also serves as an important future study for understanding which features of tableau best support the behavior of students with LD. Another potential study may examine the possible functional relation between a drama intervention other than tableau and students' increased on-task behavior. Previous studies (Anderson, 2012; Corcoran & Davis, 2005; de la Cruz, 1995; de la Cruz et al., 1998; Dupont, 1992; Hubbard, 2009; Jackson, 1992; Snyder-Greco, 1982; Whittaker, 2005; Wolf, 1998) have highlighted the value of improvisation, pantomime, role-play, story dramatization, and Reader's Theater for improving students' behavior. Future research should consider the benefit of these drama interventions.

Arts integration intervention research for improving language outcomes.

Although previous research and current study emphasized the benefit of drama for enhancing language outcomes, future studies are needed to determine how and in what ways drama interventions enhances language skills. Future investigations are especially important considering findings from previous research and the current study that students with LD continue to experience difficulty comprehending narrative story elements. (Anderson, 2012; Mariage, 2001). To best support the language learning needs of students with LD in inclusive classrooms, future research should examine the potential relation between tableau and language outcomes (e.g., story comprehension, oral expression). A possible follow-up study could employ a multiple baseline single-case design to explore the potential of a functional relation between tableau and oral recall of character traits and sequence of events for elementary-aged students with LD. Another potential follow-up study may include a randomized control trial with pre, post, and delayed post-tests (e.g., oral story retelling assessments) to compare the long-term retention of literacy content across matched units that integrate tableau and conventional language arts units for elementary-aged students with LD (see Hardimann, Rinne, & Yarmolinskaya, 2014 for a model of the research design).

Mixed methods and qualitative studies also are needed to deepen the scope of research and determine the learning characteristics and social behaviors of students with LD during tableau and non-tableau lessons. For example, a future case study may triangulate data from formal observations of tableau lessons, student documents (e.g., grades and assignments), and semi-structured interviews with students and teachers to

determine how and why tableau might facilitate improved language outcomes for students with LD.

Cross-curricular research. An additional recommendation is for future research to explore the use of tableau as an ongoing, cross-curricular intervention (rather than a strategy primarily implemented in language arts classrooms) for promoting desired behaviors, scaffolding more difficult language content for struggling learners, and teaching 21st century skills outlined in the CCSS. A possible follow-up study could explore the potential of a functional relation between students' increased on-task behavior and the integration of tableau activities into science, math, and/or social studies lessons. Another follow-up study may include a randomized control trial with pre, post, and delayed post-tests to compare the comprehension of narrative story elements across matched conventional units and integrated science and social studies units with tableau for elementary-aged students with LD. A third study could employ a randomized control trial with pre, post, and delayed post-tests to compare 21st century skill learning (e.g., peer collaboration, problem solving, connections between oral and written literacy) for students with LD across matched cross-curricular tableau and conventional units.

Theoretical research. A final recommendation reflects the need for future researchers to develop a theoretical framework for arts integration. The current study drew from several theories and lines of research, including Behaviorism, Social Interactionist Theory and Activity Theory, Total Physical Response, recent developments in neuroscience, and research on drama and language learning. To ensure that a cohesive and clear theoretical framework is in place, future researchers should develop conceptual

papers that identify the theories and lines of research that most contribute to a rationale for the value of arts integration for disability populations.

Summary

This chapter included an overview of the research and an interpretation of the results, which consisted of similarities and differences to previous literature and explained limitations to the findings. The study's implications for 21st century skill learning through the CCSS, communities of practice, teacher training, and arts integration intervention research were discussed. Future directions as policy, practice, and research recommendations were provided for further exploration of this topic. Policy recommendations included: (a) additional content in general and special education teacher preparation programs; (b) the development of arts integration communities of practice; and (c) the use of arts integration strategies in Tier-2 and Tier-3 of the RTI model. Practice recommendations consisted of: (a) increased focus on arts integration as a curricular framework; (b) ongoing professional development and training opportunities; (c) coaching and mentoring from arts integration experts; and (d) the use of tableau across content areas and with other disability populations. Conducting (a) high quality arts integration intervention research; (b) cross-curricular research; and (c) theoretical research were discussed as recommendations for future research. The current research has created a space for high quality single-case designs with consideration for the added value of the arts for supporting students with LD. Replication of this work is needed to expand the vision for special education and the arts and to ensure that students with disabilities succeed in inclusive classrooms.

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Appendix A

Definition, Examples, and Non-Examples for On-Task Behavior

Components of On-Task Behavior	Examples	Non-Examples
Sitting/standing in a designated space	Sitting at one's desk, standing at one's desk	Getting out of one's seat or designated space
Keeping hands, feet, and objects to oneself	Keeping one's feet on the floor and objects in the desk	Constant and noticeable fidgeting, playing with pencils/toys, hitting, biting, or throwing objects
Participating in the class activity	Working in small groups to complete an assigned activity	Delaying starting assigned task, skipping class, and/or coming to class late
Interacting with peers and teacher	Asking/answering the teacher's questions about lesson	Looking around, staring into space, or looking out the window
Listening to and following directions	Demonstrating eye contact with the teacher, raising hand following teacher instruction to ask a question	Calling out or talking to someone when prohibited
Looking at/using materials appropriately	Using a pencil and a piece of paper to write an answer	Playing with materials, including pencils and paper

Appendix B

Oral Story Retelling Procedure and Assessment Form

Student ID: _____ Story Selection: _____

Recording Begin Time: _____ Recording End Time: _____

School ID/Setting:

_____

Procedure:

1. The primary researcher directs the student to a quiet space in the hallway outside the classroom and explains that she wants to complete a 5-min activity with him/her.
2. The researcher explains to the student that she is going to ask a question and would like for him/her to respond by answering into the audio digital recorder.
3. The researcher starts a timer, turns on the audio digital recorder, says the child's ID, and repeats the name of the story selection that was discussed in the previous lesson.
4. The researcher requests, "Please tell me about [name the story], the story you just talked about in class."
5. The researcher waits while the student tells the story.
6. If the student fails to mention the characters or events, the researcher will prompt, "Can you tell me anything you remember about the characters or events in (name the story)?"
7. The student stops speaking and makes eye contact with the researcher.
8. The researcher prompts, "Is there anything else you want to tell me about [name the story]?"
9. The primary researcher waits while the student speaks.
10. The student adds any other information about the story.
11. The student stops speaking and makes eye contact with the researcher.
12. The primary researcher turn offs the audio digital recorder, thanks the student, and escorts him/her back to the classroom.

Additional notes regarding the audio digital recording session:

_____

_____

_____

Student ID: _____ Date: _____

Story Selection: _____

School ID/Setting:

_____

Description	Score
Recalled no character traits or events Random or irrelevant description	1
Recalled **any character names** Described **one character's feelings, traits, and/or motives** Recalled **at least one story event, may be out of order**	2
Recalled **all the main characters' names** Described the feelings, traits, and/or motives of **two characters** Recalled **two key events in order**	3
Recalled **all of the main characters' names** Described the feelings, traits, and/or motives of **more than two characters** Recalled **three or more key events in order**	4

Adapted from Garrett and O'Conner's (2010) Likert-scale benchmark assessment

Description of the student's oral retelling and rationale for score:

_____

_____

_____

_____

Student Score: ☐

Appendix C

On-Task Behavior Data Sheet

Observer: _____ Date: _____

Student ID: _____ School ID/Setting: _____

Begin Time: _____ End Time: _____

IOA Session: Y / N IOA Total Agreement: ___/___ = _____

	0-10 seconds		16-26 seconds		32-42 seconds		48-58 seconds		**Total**
Minute 1	+	−	+	−	+	−	+	−	
Minute 2	+	−	+	−	+	−	+	−	
Minute 3	+	−	+	−	+	−	+	−	
Minute 4	+	−	+	−	+	−	+	−	
Minute 5	+	−	+	−	+	−	+	−	
Minute 6	+	−	+	−	+	−	+	−	
Minute 7	+	−	+	−	+	−	+	−	
Minute 8	+	−	+	−	+	−	+	−	
Minute 9	+	−	+	−	+	−	+	−	
Minute 10	+	−	+	−	+	−	+	−	
Minute 11	+	−	+	−	+	−	+	−	
Minute 12	+	−	+	−	+	−	+	−	
Minute 13	+	−	+	−	+	−	+	−	
Minute 14	+	−	+	−	+	−	+	−	
Minute 15	+	−	+	−	+	−	+	−	
Minute 16	+	−	+	−	+	−	+	−	
Minute 17	+	−	+	−	+	−	+	−	
Minute 18	+	−	+	−	+	−	+	−	
Minute 19	+	−	+	−	+	−	+	−	
Minute 20	+	−	+	−	+	−	+	−	
	+	−	+	−	+	−	+	−	

Key:

Total No. Intervals OT: _____ = _____%
Total Intervals: 80

Scoring: + On-task behavior − Off-task behavior

On-Task Behavior Definition
Sitting/standing in a designated space
Keeping hands, feet, and objects to oneself
Participating in the class activity
Interacting with peers and teacher
Listening to and following directions
Looking at/using materials appropriately

Examples
Sitting at one's desk, standing at one's desk
Keeping one's feet on the floor and objects in the desk
Working in small groups to complete assigned activity
Asking/answering the teacher's questions about lesson
Demonstrating eye contact with teacher, raising hand
Using a pencil and piece of paper to write an answer

Appendix D

Teacher Consent Form

The Use of Tableau to Increase the On-Task Behavior of Students with Language-based Learning Disabilities in Inclusive Settings

Principal Investigator: Maxine Freund, Ed.D.
Primary Contact: Kate Berry

Teacher Participation in Research: Consent Form

Introduction: You are invited to take part in a research study that is being conducted by Kate Berry, a doctoral student at The George Washington University within the Graduate School of Education and Human Development under the guidance and direction of her Principal Investigator, Dr. Maxine Freund. You are being asked if you want to take part in this study based on the following criteria: (1) your position as third or fourth-grade language arts teacher in an inclusive classroom; (2) your limited training and experiences using the arts, specifically drama, as an instructional strategy; and (3) the selection of one of your students as a participant in the study. Please read this form and ask me any questions that will help you decide if you want to participate in the study. Participating in the study is completely voluntary and even if you decide you want to, you can withdraw at any time. Your standing and reputation as a teacher will not be affected in any way should you choose not to participate in the study or to withdraw at any time.

Purpose: The purpose of this research is to determine if using a drama intervention called tableau increases the on-task behavior of third and fourth-grade students with language-based learning disabilities (LD) in inclusive classrooms. In a tableau, students work in small groups to physically show (through gesture and body language) the character(s), characters' thoughts, and/or the event from a story. Secondary data will be collected regarding students' understanding of character traits and sequence of events. Descriptive data will be collected on teachers' perceptions of students' behavior across traditional lessons and lessons that use tableau.

Procedures: The total amount of time you will spend in this study is 20 minutes per day over the course of 6-8 weeks. In addition, you will participate in a 3-hour training session in which you learn how to implement the tableau drama intervention. The individual training will take place during the second phase of data collection, after the on-task behavior data are consistent and stable during the first phase. If you choose to participate in this research, you will need to do the following:

1) Allow the primary researcher to administer the Woodcock-Johnson III Tests of Achievement to the participating student in your class.
2) Complete a background questionnaire about your teaching experience.
3) Allow the primary researcher (and secondary independent observer every third session) to sit in the back of your classroom and record the participating student's

on-task behavior for 20 minutes of the language arts block during traditional lessons.

4) Spend one afternoon after school (approximately 3 hours) learning how to implement the tableau drama intervention.
5) Allow the primary researcher to model tableau in your classroom during several lessons.
6) Implement tableau and allow the primary researcher (and secondary independent observer every third session) to sit in the back of your classroom and record the student's on-task behavior for 20 minutes of the language block during lessons that integrate tableau.
7) Allow the primary researcher to provide feedback via e-mail after every lesson during which you implement tableau.
8) Allow the primary researcher to pull the participating student out of class for 5 minutes at the end of each lesson to determine his/her understanding of character traits and sequence of events by using an audio digital recorder to record his/her answer to the following statement: Please tell me about the story you just talked about in class.
9) Complete the self-monitoring checklist of procedural fidelity at the end of every lesson during which the primary researcher observed the student. The checklist takes 2 min to complete and will be used to confirm that you are not using drama strategies during traditional language arts lessons and to monitor your implementation and delivery of tableau during tableau lessons.
10) Allow the primary researcher to complete the self-monitoring checklist of procedural fidelity at the end of every lesson to confirm that you are not using drama strategies during traditional language arts lessons and to monitor your implementation and delivery of tableau during tableau lessons.
11) Complete the social validity questionnaire at the end of the tableau training and at the end of the study to determine your perception of the feasibility and acceptability of tableau. The questionnaire will consist of a 5-point Likert scale with four questions, as well as one short-answer question.
12) Complete the behavioral checklist of the Teacher's Report Form for your participating student before the start of the study and at the end of the study.

Risks and Confidentiality: There are minimal risks because the drama intervention consists of all of the students in the class working in small groups to physically show a word, scene, or theme from a story. Also, the student behavioral observations and 5-minute audio digital recordings should not interfere with your teaching or the child's regular school day. There is a small chance that someone not on our research team could find out that you took part in the study or somehow connect your name with the information we collect about you or the participating student in your class, however, the following steps are being taken to reduce this risk:

1) All person-identifiable data, including the selected schools, teachers, and students, as well as any personal and demographic information, including names, ages, ethnicity, gender, location of the school, position/job, and grade/year level, only will be identified indirectly through the use of a unique alphanumeric code that

links to a key stored in a separate and secure location (i.e., the primary researcher's locked office).

2) The consent and assent forms, on-task behavior recording forms, oral retelling assessment forms, oral retelling procedure forms, audio digital recordings of students' oral story recalls, inclusion criteria teacher verification checklists, teacher pre-study questionnaires, researcher's procedural fidelity checklist, self-monitoring checklist of procedural fidelity, social validity questionnaires, and completed Teacher Report Forms will be double-locked in a personal filing cabinet in the primary researcher's locked office. Data collected from the students and teachers will be stored on a personal computer, which will be stored in a locked drawer in the locked office with a password known only to the primary researcher.
3) If specific codes are referred to in the completed dissertation, these codes will be replaced with pseudonyms to maintain the confidentiality of the individuals participating.
4) The records of this study will be kept private. In any published articles or presentations, we will not include any information that will make it possible to identify your child as a subject because information only will be identified indirectly through the alphanumeric code that links to a key stored in the locked office.
5) All indirectly identified data (including key and actual identifiers) will be destroyed at the end of the study.
6) Any audio digital recordings will be destroyed at the end of the study.

The Institutional Review Board of The George Washington University, which is responsible for overseeing research safety and compliance, may review the data from your classroom for the study.

Benefits: While there are no direct benefits to you or to your participating student, your participation in the tableau drama activities may have an unintended benefit. For this study, your participation will provide insight into how the use of drama may support the on-task behavior of students with language-based LD.

Participation: Your participation is completely voluntary. You may withdraw from the study for any reason and at any time, including after you have started to participate in the study. There is no penalty for not participating or withdrawing. There are no negative employment consequences if you choose to not participate or to withdraw from the study.

Contact: Please contact the primary researcher, Kate Berry, or the Principal Investigator, Dr. Maxine Freund, for questions or to discuss a research-related concern. Also, you may contact The George Washington University's Office of Human Research if you have questions or comments regarding your child's right as a participant in this research.

Documentation of Consent: This research has been reviewed according to The George Washington University procedures governing your child's participation in this research.

If you have read this consent form and you agree to participate in this study, please sign below. After you sign this consent form, the research team will provide you with a copy. Please keep it in case you want to read it again or call someone about the study.

_____ Date_____

(Teacher Signature)

Appendix E

Teacher Pre-Study Questionnaire

Directions: Please circle or fill in the appropriate responses.

GENERAL BACKGROUND INFORMATION

Gender: (circle one): Male Female

Highest Degree Obtained (check one):

_____ Undergraduate degree Major: _____
_____ Master's level coursework
_____ Master's degree Major: _____
_____ Doctoral coursework
_____ Doctoral degree Concentration: _____
_____ Other (Please specify: _____)

Educational Certifications (describe any certifications you hold that are not reflected in your degrees specified above):

_____

_____

_____

_____

INSTRUCTIONAL BACKGROUND INFORMATION

Age Range: **< 25** **25-30** **30-35** **35-45** **45+**

Years Teaching: _____

Current Teaching Assignment (specify grade level and content area):

_____

Years Teaching This Grade Level: _____

Years Teaching at this School: _____

ARTS INTEGRATION BACKGROUND INFORMATION

Arts Integration Experiences and Training (please check all that apply and describe each checked item):

1. _____Taken graduate coursework in arts integration.
If checked, please describe.

_____

_____

2. _____Taught graduate coursework in arts integration.
If checked, please describe.

_____

_____

3. _____Taken undergraduate coursework in arts integration.
If checked, please describe.

_____

_____

4. _____Taught undergraduate coursework in arts integration.
If checked, please describe.

_____

_____

5. _____Participated in school or district training in arts integration.
If checked, please describe.

_____

_____

6. _____Conducted school or district training in arts integration.
If checked, please describe.

_____

_____

7. _____Participated in training at an arts organization in arts integration.
If checked, please describe.

_____

_____

8. _____Conducted training at an arts organization in arts integration.
If checked, please describe.

_____

_____

9. _____Work *with* teaching artist(s).
If checked, please describe.

_____

_____

10. _____Worked *as a* teaching artist.
If checked, please describe.

_____

_____

11. _____Other.
If checked, please describe.

_____

_____

12. Describe any other relevant experiences you have had with art, drama, music, and dance (in childhood, during college, as part of your teacher training, etc.).

_____

_____

_____

_____

13. Do you use the arts (i.e. art, drama, music, and/or dance) when you teach? If so, which art forms do you use? How do you use these art forms?

_____

_____

_____

_____

14. Circle any of the drama-based strategies listed below that you utilize in your classroom.

See-Think-Wonder	**Tableau**	**Role-Play**
Mantle of the Expert	**Improvisation**	**Reader's Theater**

15. If you circled any of the drama-based strategies in question 14, explain how you use the strategy/strategies in your classroom?

_____

_____

_____

_____

_____

_____

16. In the space below, please provide any additional information you feel is relevant to your experiences with the arts.

_____

_____

_____

_____

Appendix F

Inclusion Criteria Teacher Verification Checklist

Teacher ID: _____ Student ID: _____

Date:_____

	Yes	**No**
1. Does the student nominee have a primary diagnosis of a language-based learning disability according to the IEP?	___	___
2. Does the student nominee have specific language and/or literacy goals in his/her IEP?	___	___
3. Does the student nominee have an IQ of 85 of above, as indicated by current cognitive assessments?	___	___
4. Does the student nominee have specific language and/or literacy goals that are addressed in the inclusive classroom?	___	___
5. Does the teacher report that the student nominee exhibits frequent off-task behaviors in the classroom?	___	___

Appendix G

Teacher Training Materials

Note: Teacher training materials have been adapted from Focus 5 Inc.

I. Background:

What is tableau?
Tableau is a drama intervention in which pairs or small groups of students are given a scene to depict and asked to freeze in appropriate positions. The audience may be asked to describe what they see, what it means, and what makes them believe in the picture. They also may ask questions of the members of the tableau, especially related to their feelings and motives. Thought tracking often is used in a tableau scene to learn additional information about each of the characters. During *thought tracking*, specific characters in a tableau scene are tapped on their shoulders to invite them to speak a sentence or two about their thoughts or feelings.

Why is tableau a useful teaching intervention?

- Can be used to explore a particular moment in a story or drama, or to replicate images from a picture for deeper analysis
- Allows students to take on the roles of specific characters, which requires the use of shared knowledge, contextual clues, and high frequency vocabulary
- Encourages the use of gestures of body language to concretely communicate mental representations of characters' intentions, thoughts, and actions
- Supports students with language-learning challenges by creating a learning context that scaffolds student language
- Can lead into extended drama activities
- Aligns with language arts standards related to character traits and sequencing of events
- Generalizes across content areas, disciplines, and classes
- Allows students to interact and holds promise for improving students' on-task behavior
- Is easily manageable (i.e., no movement; average time = 20 min)

II. Videos:

#1 (first 3 minutes): https://www.youtube.com/watch?v=Nlxw9qflKxk
#2 (both clips): http://www.artsintegrationconsulting.com/resources/videos/tableau-in-the-classroom.html

III. **How do students create a tableau scene?**

1. **Actor's Toolbox**
2. **Concentration Circle**
3. **Cooperation Challenge**
4. **Tableau Challenge**

1. The Actor's Toolbox (explain that the music will "cue" us to get into a circle)
The class begins with the Actor's Toolbox (see below).

The Actor's Toolbox is the physical contract that students sign to demonstrate their agreement to control their bodies, voices, and minds, as well as to concentrate and cooperate. I will introduce the Actor's Toolbox to students when I model the first few tableau lessons for you. By the time you begin to implement tableau, students should be familiar with the Actor's Toolbox. You need to begin each of your tableau lessons by playing the concentration CD (which should alert students that the lesson is beginning) and doing the short movement routine in a circle with students. During my initial lesson modeling, I will explain to students that they will need five tools to successfully complete a tableau: body, voice, imagination, concentration, and cooperation. To help students remember the five tools, I will teach them a short movement routine during which they will listen to a concentration CD.

We are going to become actors this spring to learn about acting and to learn about other subjects. To do this, we will need an Actor's Workout. Actors don't work out these muscles (point to arms), or these muscles (point to legs). Actors work out THESE muscles (point to brain). To begin our workout, we need to know that an actor's job is to PRETEND. Actors pretend to be someone or something else. In order to do that, they use some tools—not tools like hammers and saws! What kind of tools would an actor use?

When we look into our Actor's Toolbox this spring, we will not find all of the tools we just talked about. We will find five tools that you bring to school with you every day. The first tool is your body. The second tool is your voice. The third tool is your imagination. The other two tools in the toolbox are skills. A skill is something we can get better at doing. The first skill is concentration. The second skill is cooperation.

So we have five tools: Body, voice, imagination, concentration, and cooperation. I need you to remember all five tools. I will show you an easy way to remember. We put the words in our bodies, just like this.

Watch me first, and the you get to try. WATCH ME.

- BODY: Students stand up and imagine their bodies are a building. Students bend over and touch their toes. Students slowly stand up, keeping their fingers in contact with the sides of their bodies. *This reminds us that actors use their bodies.*

- VOICE: Students raise their fingers up while keeping them in contact with the sides of their bodies. Once their fingers reach their throat, students stop. *This reminds up that actors use their voices. Take a deep breath and hold it. Make a small sound with your voice when you let it out.*

- IMAGINATION: Students keep moving their fingers up their bodies until they reach their temples. *This reminds us that actors need to use their imaginations. Close your eyes and--without using your voice or body—take a field trip anywhere in the universe using your imagination. Go somewhere that makes you happy. I am going to a beach. I will be right back. Pause for 30 seconds. Come back by opening your eyes.*

- CONCENTRATION AND COOPERATION: Students place their hands beside their eyes. *Now place your hands on either side of your eyes blocking out everything beside you. Zoom your focus in on one thing. This shows that actors CONCENTRATE. Now put your hands up and bring them down and put them on the person's back or shoulder on either side of you. This reminds us that actors COOPERATE.*

Now you are ready to try. Stand up and let's start from the beginning. Bend over and put your fingers in the basement of the building. The elevator starts to go up…this reminds us that actors use their…[prompt students to answer] ***BODIES.***

Stop at your throat. The reminds us that actors use their [prompt students to answer] ***VOICES.*** *Take a deep breath. Hold it. And make a small sound as you let it out.*

Keep moving up the elevator and stop here [Gesture towards temples]. Actors use their [prompt students to answer] ***IMAGINATIONS.*** *Close your eyes and use your imagination to go anywhere you want—back home---to grandma's house—to another state—another planet—somewhere that makes you happy. Your eyes should be closed and your voices silent. Come back by opening your eyes.*

Now place your hands on either side of your eyes blocking out everything beside you. Zoom your focus in on one thing in front of you. Stretch your hands out to keep your focus on that one thing. This shows us that actors [prompt students to answer] ***CONCENTRATE.***

Now put your hands up and bring them down and put them on the person's back or shoulder on either side of you. This reminds us that actors [prompt students to answer] ***COOPERATE.***

Put your arms down and let's try it again. This time, I won't talk and you won't talk. I will put on some music and we will just move our bodies that way. Even though no one is talking, you are saying a lot to me! It's like you are speaking in sign language to me.

Here is what you are saying when you move your body this way:
*[Start Step 1] Today I agree to control my **body.***
*[Continue to Step 2] When we do this step, we are really saying, 'Today I agree to control my **voice**.'*
*[Continue to Step 3] When we do this step, we are really saying, 'Today I agree to control my **imagination**.'*
*[Continue to Step 4] When we do this step, we are really saying, 'Today I agree to **concentrate** and **cooperate**.'*

This is now a contract you are signing. We don't have pens and paper—we just have your bodies. I will know you are agreeing to the contract if you move your body that way. We are going to try one more time, and this time I will be watching to see if you sign the contract AND I will be looking for 3 more things. I will be looking for CALM, FOCUS, and BALANCE. Let me explain.

Calm is about your body. This is calm [Demonstrate a still body].
Focus is about your mind. This is focus [Demonstrate looking straight ahead.]
Balance is not about the outside of your body. It is about the inside—your emotions. Demonstrate a mad face and huffing and puffing. Explain that this is not balance. This is balance [demonstrate neutral energy]. Demonstrate a laugh and a large grin. Explain that this is not balance. This is balance [demonstrate neutral energy].

Let's try again and see who is strong enough to sign the contract calm, focused, and balanced.

When practicing the Actor's Toolbox, say *Bring you brain to this movement. Become the boss of your brain. Your fingers should not be moving. Your shoulders are not moving. Make sure your body is calm. Make sure your brain is focused. Make sure your emotions are balanced.*

2. The Concentration Circle
The class participates in the **Concentration Circle** to prepare and focus for the upcoming tableau (see below).

Now we will participate in a Concentration Circle to make sure we are ready for the tableau activity.

Let's see how strong your concentration muscles are. They are not here (point to arms). They are not here (point to legs). They are HERE (point to brain). So, you will have to SHOW me and here is how you will do it. Everyone has a wall right in front of you. No one has to turn around to see a wall. With your eyes, find one spot on the wall in front of you and stare at that spot. This spot will not move. Do not choose a person or an object because they might move. This point will be called your FOCAL POINT because it is the point that is getting all of your focus and attention. Find that point on the wall in front of you. If your concentration muscles are strong, you should be able to keep your eyes locked on that focal point. You can blink and you can breathe, but you are not looking

around the circle laughing, smiling, or talking. If your concentration muscles are super strong, you should be able to stand like that for 30 seconds. Before you begin—now that you know what your challenge is—take your eyes OFF of your focal point, laugh, smile, and talk to your neighbor for three seconds. Go! [Students laugh and talk for three seconds].

Now make ME your focal point. Great! Everyone understands what I mean. Our focal point can change. It does all day long. Make your shoes your focal point. Make the ceiling your focal point. Make your neighbor your focal point. Make your tongue your focal point. Make ME your focal point.

Before we begin, it will help if you imagine your concentration (which is here—point to brain) is really here (hold out hand like you are holding something). It is something that you can really hold on to. It also will help to think of your concentration as something that is priceless. It is like a gem, a jewel. It is your Jewel of Concentration. Everyone has one. Hold it out in front of you [Pretend to hold jewel in your hand].

Some people are strong enough to hold onto their concentration while other people make choices with their bodies and their voices and their minds and they [pretend to drop the jewel] lose it. Have you heard someone say, 'I lost my concentration?' That is what they mean. In this game, I need to see who is strong enough to hold on to their concentration, and whose muscles are weak and who will lose their jewel.

To help us keep track of that, I have a real bag of Jewels of Concentration. I want to show you what one of the jewels looks like right now [take a jewel out and hold it in your hand].

They all look about the same. I am coming around and putting one in your hand. When I do, if you REALLY can't hold onto it and you drop it on the ground—even if it is an accident—I will take it back. If you put it in your mouth or nose, I will take it back. If you throw it up in the air or trade with your classmate, I will take it back. Let's see who is strong enough to REALLY hold on to it. As I walk around the circle and pass these out, your eyes DO NOT need to be on your focal point. Take a minute to look at your jewel. Once everyone has one, we will begin.

Is this REALLY your concentration? [No.]
Is this magic? Will it MAKE you concentration? [No.]
Why do we have these in our hands? [To remind us to hold on to our concentration].

Alright. Everyone has a jewel and we are ready to begin. Close your hand around that jewel and put both arms by your side. Your body is standing up, your arms are by your side, and your eyes are on a focal point. This is called NEUTRAL POSITION. Your body is neutral—plain. Your arms are not crossed or behind your back. Your hands are not in your pockets or on your hips. Body is straight, arms by side, eyes on focal point—this is neutral position. You should be able to stand in NEUTRAL POSITION with your eyes on a FOCAL POINT for 30 seconds. If you move around or look around, it means

that you lost concentration. It means that your brain told you to do something and you did not talk back to your brain. CONCENTRATION IS A CONVERSATION YOU HAVE WITH YOUR BRAIN.

Level 1: Maintaining Focus

Here is how we play. You will stand in neutral position and lock your eyes on the wall in front of you for 30 seconds. If you look back, smile, laugh, talk, or move out of neutral position, I will take the jewel out of your hand. If I take the jewel, it means that you lost your concentration. So let's see who is strong enough to hold on to it. Body is in neutral position, eyes on a focal point. Here we go [Count to 30 and remind students to stay frozen. If students take their eyes off their focal point, remind them to re-focus. Do not take any jewels away the first time]. I am finished. Take your eyes off your focal point. Laugh, smile, and talk to your neighbors for three seconds. Go.

Now make me your focal point. This is like a video game. There is level one, two, three, four, five, and six. Each level gets more challenging. That was level one. If a person laughs, talks, smiles, or loses focus, we ALL stay at level one until everyone is strong enough to move up together.

Level 2: Adult Distraction

During level 2, I walk around in front of you and look at you in your eyes. If your concentration muscles are strong, you won't look back, laugh, or smile. If your brain tells you to look at me, what will you say back? [No]. Let's give it a try.

As I walk around the circle, I am looking behind me to make sure your eyes are on your focal point. I am also looking ahead of me to make sure your eyes are on your focal point.

I am finished. Take your eyes off your focal point. Laugh, smile, and talk to your neighbors for three seconds. Go.

Level 3: Peer Distraction

A chosen student leader walks around the circle and looks at the other students in the eyes as they try to maintain their focal points. Remind the leader that he/she cannot talk, make sounds, or touch the students. Also, tell the leader that you are the judge and will collect the jewels (not him/her) if necessary.

Level 4: Visual Distraction

A chosen student leader walks around the circle and makes funny faces. The leader remains silent, but tries to break students' concentration. Remind students that they are still participating BEFORE and AFTER the leader looks at them.

Level 5: Visual and Sound Distractions

A chosen student leader walks around the circle and makes a funny face AND sounds. Remind students that they are still participating BEFORE and AFTER the leader looks at them.

Level 6: Look, Listen, and Speak
Students stand in a circle. One student starts by turning to the person to his/her left. The student looks at him/her in the eyes and says, "Won't you please, please smile?" They say it in a way as to try to get the student to break his/her concentration.

The other student looks at the leader without smiling and says, "I will not smile." That student then becomes the leader and the game continues until the students have made it around the entire circle.

3. The Cooperation Challenge
The class participates in the Cooperation Challenge to create inclusive and exclusive groups (see below).

The challenge provides a way to develop student cooperation before students create their tableau scenes to ensure that students understand and practice how to work together. I will administer the Cooperation Challenge to the class a few times before you implement tableau. After you introduce the Actor's Toolbox, you should implement the Cooperation Challenge because the game provides a perfect transition into the tableau activity.

Students begin by standing in a large circle. *We are going to participate in a very fast-paced activity to test and strengthen your cooperation muscles. Right now, we are all on the Playing Field. Your challenge on the Playing Field is to follow my directions. If you cannot follow my directions, you move from the Playing Field to a place in the game called the Observation Deck. We will talk about that place later. Right now let's talk more about the Playing Field. I said, when you are on it, your challenge is to follow my directions. Here is an example of a direction I might give you. Don't do it, just listen. By the time I count to 3, you are in a group that has more than 2 people. When I get to the number 3, you must be in a group of more than 2 people or EVERYONE moves to the Observation Deck. Let me show you how to make a group (select 3 students and demonstrate how they should turn and face each other with their hands on each other's shoulders). If a person's hand is not on their neighbor's shoulder, this is NOT a group and the entire group moves to the Observation Deck. I change the numbers each time so you have to be listening. In this game, ONE is not a group. You have to talk in this game. You should say things like, "Get in this group. Put your hands on my shoulders."*

At first, I will give you challenges where everyone should be able to make it into a group. If someone does not make it into a group, the entire group will go to the Observation Deck. The Observation Deck is over here on the floor. When you are in the Observation Deck, you do three things: The first thing is with your body—you sit down. The second thing is with your voice—you turn it off. The third thing is with your focal point—you make me your focal point. The Observation Deck is not time out. It is just a place we will go to talk about what we did or observed on the Playing Field. To get back to the Playing Field from the Observation Deck, you must control your body by sitting down, control your voice by turning it off, and stay focused by keeping your eyes on a focal

point. If you do these three things, you will be invited to the Playing Field for the next round.

Students will be given several inclusive (i.e., everyone can make it into a group) challenges (e.g., *By the time I count to five, you are in a group that has more than 3 people. 1-2-3-4-5- FREEZE*). If at any point students are not in a group, they will be sent to the Observation Deck.

Next, students will be given several exclusive (i.e., not everyone can make it into a group) challenges (e.g., *By the time I count to seven, you are in a group that has an equal number of boys and girls). In our exclusive challenge, at least one student will not make it into a group. If you do not make it into a group, do not try to trade places with someone else, squeeze in the middle of a group, or stand on the outside of the group. If you do this, your entire group will be sent to the Observation Deck to watch the round and see how other classmates use their cooperation muscles to stay in the Playing Field.*

After the teacher implements the Actor's Toolbox, she will use the Cooperation Challenge to get students into tableau groups. The teacher might choose to administer 2-4 inclusive and exclusive challenges. Here are a few examples:

By the time I count to 7, you are in a group that has at least 5 people. 1-2-3-4-5-6-7-FREEZE.

By the time I count to 5, you are in a group that has only one boy and three girls. 1-2-3-4-5-FREEZE.

By the time I count to 4, you are in a group that has only one boy and one girl. 1-2-3-4-FREEZE.

4. Tableau Challenge

The students create their **tableau scenes** (a visual of tableau steps is on page 12). The teacher explains that students are going to create a living picture with their bodies, called a tableau.

Your group is about to create a picture together. Not a picture like a camera takes, but a living picture—one all of you make with your bodies. Living pictures are called tableau. When you create a tableau, you will follow this sequence: think, share, plan, create. [TEACHER SHOWS STUDENT THE GRAPHIC OF THE TABLEAU STEPS].

*Let's try. First, I will give you the challenge of what your group will make. For example, I might say, 'Create a tableau that shows something we eat for lunch.' The first thing you will do is **THINK** silently. When you have an idea, bring it in close and cross your arms. I may think to myself, 'a salad, a sandwich, pizza, or a hot dog.' I don't make faces, or sounds, or whisper. I just cross my arms.*

*The next thing you will do is **SHARE** your ideas with your small group. Everyone will quickly have a chance to share an idea. This is how we do that:*
One person will let his/her idea go and uncross his/her arms and say, 'This is what I was thinking…' No one can say anything about it. The next person will uncross his/her arms and says, 'This is what I was thinking…' Again, no one can say anything about it. Once everyone has a chance to share, the entire group is silent.

*Then, once your group has shared, it is time to come up with a **PLAN.** When you plan, you are asking and answering the following three questions:*

- What should we make?
- What parts will we need to make that?
- What part will you play?

Everyone in your group will need to know the answers to those questions. So if we go back to our example about something we eat for lunch, we may come up with this plan:
What should we make?
Let's say your group decides to show a hot dog.
What parts will we need to make that?
We will need the bun, the hot dog, and the ketchup.
What parts will you play?
One person will play the bun. One person will play the hot dog. One person will play the ketchup.

*After you have your plan, you will **CREATE** your tableau with your bodies. Let's try it step by step.*

Your group is going to create a tableau of something that has wings.
*When I say, 'Go!' **THINK** about some ideas quietly. Cross your arms when you have an idea. 'Go!' [Students think] 5-4-3-2-1. Make me your focal point.*

*When I say 'Go!' take 10 seconds to **SHARE** your ideas. Remember that one person starts by uncrossing his/her arms. Only say your idea and nothing else. It is not a lot of time so you have to let everyone have a chance quickly. Go! [Students share. Even though you tell them 10 seconds, give them longer]. 5-4-3-2-1. Make me your focal point.*

*Now it is time to come up with a **PLAN.** When I say 'Go!' take 10 seconds to answer this question: **What should we make?** Now take 10 seconds to answer this question: **What parts will we need to make that?** Now take 10 seconds to answer this question: **What part will you play?** Go! [Students plan. Even though you told them 20 seconds, give them longer]. 5-4-3-2-1. Make me your focal point.*

The teacher checks student groups to make sure each group has a plan. *Raise your hand if you group DOES NOT have a plan. Raise your hand if you do not know what part of the plan you are. [Teacher addresses issues and spot checks.]*

*When I say 'Go!' your group has 30 seconds to **CREATE** your tableau. At the end of the 30 seconds, everyone will be frozen and no one will be talking, laughing, or moving. This means that some people may be on the ground, others may be kneeling, and others may be standing. Your tableau will need to have multiple physical levels. You are actually going to make it. 'Go!'*

You have 15 seconds left…10…. 5-4-3-2-1. Lock your eyes on a focal point. Show you are in control of body and voice.

*The teacher looks at the groups **without critiquing**. Say things like:*

- *"Interesting."*
- *"I see it."*
- *"Yes."*
- *"What is it I am looking at"*
- *"Do I see it?"*

[After the teacher has assessed that groups are ready to move on] *You have 15 seconds left. **Remember to choose a narrator who will explain your answer to the class.** You have 10 seconds to pick your narrator. The narrator should use a complete sentence and begin with, "Our tableau shows…" 10…5-4-3-2-1. Lock your eyes on a focal point. Show you are in control of body and voice. If you are laughing, moving, or talking, you have LOST control and you will take your entire group to the Observation Deck.*

One by one, the student groups present their tableau scenes. The narrator from each group will be "tapped" (i.e. thought tracking) by an audience member to share the group's answer.

The teacher asks audience or group members to comment on describe what they see, what it means, and what makes them believe/not believe in the picture. At this time, the students may be asked to make edits to their tableau scenes.

The teacher will informally assess students by giving each group 5 possible points (see the page 13 for teacher rubric template):

- Planning: 1 point
- Tableau (including frozen gestures and multiple levels): 1 point
- Narrator: 1 point
- Correct Answer: 1 point
- Listening Skills (while other groups are presenting): 1 point

At the end of the lesson, students may complete the self-reflection rubric (see page 14 for self-reflection rubric).

Informal Teacher Assessments

Questions to ask while students are talking and planning:

- Are students SEATED in a circle?
- Does everyone LOOK included and engaged?
- Is the ENERGY of the group stable?
- Is the conversation PURPOSEFUL/CONTENT-FOCUSED when you eavesdrop?

Questions to ask after students have planned:
Can random students from various groups answer any one of these questions without the help of others?

- What should we make?
- What parts do we need?
- What part will you play?

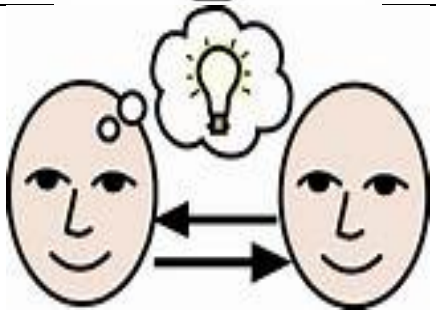
Questions to ask while students are creating the tableau:

- Is everyone in the group in the same general area?
- Does everyone LOOK included and engaged?
- Is the ENERGY of the group stable?
- Is the conversation PURPOSEFUL/CONTENT-FOCUSED when you eavesdrop?

Questions to ask while students are sharing the tableau:

- Are students FROZEN in the tableau?
- Does everyone LOOK committed to his or her part?
- Is the ENERGY of the group stable?
- **Does the tableau MATCH what the narrator describes?
- Does the tableau show [or communicate] the correct answer?
- Can anyone in the group answer a question about the tableau?
- Is the rest of the class in “Audience Position” when observing the tableau?
- Can an audience member answer a question about the tableau?

Tableau Steps

THINK	
SHARE	
PLAN 1. What should we make? 2. What parts will we need to make that? 3. What part will you play?	
CREATE	

Teacher Rubrics during Student Tableau Scenes (Total= 5 points)

Planning		**Points**	**Points**	**Points**	**Points**
Tableau Frozen gestures AND multiple levels		**Points**	**Points**	**Points**	**Points**
Narrator **"Our tableau shows…"**		**Points**	**Points**	**Points**	**Points**
Correct Answer		**Points**	**Points**	**Points**	**Points**
Listening Skills		**Points**	**Points**	**Points**	**Points**
		Total	**Total**	**Total**	**Total**

Student Tableau Self-Reflection Rubric

Name: _____ Date: _____

1. Next time I am going to work more on: (circle one)

Body Voice Imagination Concentration Cooperation

2. I need to work more on this because…

_____

_____

_____

_____

3. 3 things I learned about cooperation today were:

1._____

2._____

3._____

4. 3 things I learned about myself today were:

1._____

2._____

3._____

Types and Variations on Tableau

1. **The Frozen Picture:** pairs or small groups are given a scene to depict and asked to freeze in appropriate positions to show a tension-filled moment in a story or event.

Variation 1: Ask students to create three different tableau to a count. For example, "Remain in the same character but move into three different positions as I count 3, 2, 1."

Variation 2: Tell students to freeze, then move, then freeze on cue to bring the tableau to life. Give audience members a role (e.g., if the scene is Wilbur winning the blue ribbon, ask the audience to tell what they see as if they are farmers, Templeton, Charlotte, etc.).

Variation 3: Perform the frozen scene as a silhouette by using a light behind a taut sheet. Have students stand close to the sheet to present a clear image and turn the lights off.

2. **One-Liner Tableau:** Students re-create, in tableau, scenes from photographs, portraits, cartoon strips, etc. A series or cartoon strip can be performed, or the tableau can be created for scenes for scenes before or after a scene in a painting or photo to stretch thinking. After students are "set," the teacher taps them one by one and each says a one-liner of what they are thinking or feeling.

Variation: When students are tapped to say their one-liners, they come to life, do an action, and then freeze.

3. **Tableau Captions:** The teachers uses book titles, newspaper headlines, current events, advertisement slogans, quotes from famous people, or phrases from units as prompts for frozen picture tableau (e.g., "Mars Lander Hits Hard.").

Variation: Create three different tableau frames.

Video Activity

Directions: You will watch video clips of teachers implementing tableau. After you watch each clip, answer the following questions below. We will discuss your answers, thoughts, and questions about each video.

Video Clip:

1. What academic subject, lesson, and objectives are shown in the video?

_____

_____

_____

_____

2. Describe the tableau scenes, including the specific characters and events depicted.

_____

_____

_____

_____

3. Which type and/or variation of tableau was used?

_____

_____

_____

_____

4. Was thought tracking used? If so, provide examples.

_____

_____

_____

_____

5. Were multiple levels used? If so, provide examples.

_____

_____

_____

_____

6. Do you think the inclusion of tableau in the lesson was effective? Why or why not?

_____

_____

_____

_____

Appendix H

Procedural Fidelity Provided by Primary Researcher for Baseline, Withdrawal, and Tableau Phases

Observer: _____ Date: _____ Phase #: _____

School ID/Phase: _____ Begin Time: _____ End Time: _____

IOA Session: Y / N IOA Total Agreement: (___/___) = _____

	Yes	**No**
1. Taught an English Language Arts (ELA) lesson that included a story	___	___
2. Targeted character traits and/or sequence of events in the ELA lesson	___	___
3. Began lesson with the Actor's Toolbox contract (i.e., control bodies, voices, and minds, concentrate, and cooperate) and concentration CD	___	___
4. Administered the Concentration Circle and Cooperation Challenges to help students to focus and to create exclusive and inclusive groups	___	___
5. Reviewed the following question with students: What should we make?	___	___
6. Reviewed the following question with students: What parts will we need to make that?	___	___
7. Reviewed the following question with students: What parts will you play?	___	___
8. Administered the Tableau Challenge during which students created tableau scenes related to character traits and/or sequence of events	___	___
9. Reminded students to maintain a focal point, stay frozen, and create multiple physical levels	___	___
10. Guided students with number countdowns	___	___

11. Facilitated students' use of thought tracking	___	___
12. Provided supportive and constructive feedback	___	___
13. Managed challenging classroom behaviors using the Observation Deck	___	___
14. Administered students' self-reflections based on work with tableau	___	___
15. Informally assessed student groups on planning, tableau, narrator, answer, and listening	___	___
	% Yes___	**%No___**

Appendix I

Self-Monitoring Checklist of Procedural Fidelity Provided by Teacher

Teacher ID: _____ Date: _____ Session #: _____

School ID/Phase: _____ Begin Time: _____ End Time: _____

Put a ✓ next to the items you completed for the corresponding day.

	Mon	**Tues**	**Weds**	**Thurs**	**Fri**
1. Taught an English Language Arts (ELA) lesson that included a story					
2. Targeted character traits and/or sequence of events in the ELA lesson					
3. Used any drama, music, dance, or visual art techniques in the lesson					
4. Began lesson with the Actor's Toolbox contract (i.e., control bodies, voices, and minds, concentrate, and cooperate) and concentration CD					
5. Administered the Concentration Circle and Cooperation Challenges					
6. Reviewed the following question: What should we make?					
7. Reviewed the following question: What parts will we need to make that?					
8. Reviewed the following question: What parts will you play?					
9. Administered the Tableau Challenge during which students created tableau scenes related to character traits and/or sequence of events					
10. Reminded students to maintain a focal point, stay frozen, and create multiple physical levels					
11. Guided students with number countdowns					
12. Facilitated students' use of thought tracking					
13. Managed challenging classroom behaviors using the Observation Deck					
14. Administered students' self-reflections based on work with tableau					
15. Informally assessed student groups on planning, tableau, narrator, answer, and listening					
16. Provided feedback					

Appendix J

Sample Teacher Feedback E-Mail

Dear Ms. Newton,

I hope you had a great rest of the day! Please find my feedback for today's session below. You are implementing tableau with perfect fidelity!!!!!

3 strengths:
1. Did a great job asking students questions about the steps and requirements of the tableau.
2. Did an excellent job targeting character traits and a story event.
3. Integrated a specific passage from *Money Hungry* into the tableau to guide students' thinking.

Area for Improvement:
For the next tableau lesson (because they now are familiar with tableau), I suggest probing students to think more deeply about the passage before students create their tableau scenes. Asking students why/how the characters might be feeling a certain way may make the tableau more complex and may allow for better comprehension. Also, when they are in the tableau, you can probe the students more about why they chose specific positions and whether those positions/poses are the best way to depict the characters. You can ask the other students to provide suggestions for changes to any of the poses.

Appendix K

Pre-Intervention Social Validity Questionnaire

Directions: Circle one number for each of the following four items.

Teacher ID: _____Date: _____ School: _____

	Strongly Agree	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**
1. I anticipate that the tableau intervention will not take more than 15 min to implement.	**1**	**2**	**3**	**4**	**5**
2. I anticipate that I will be able to implement tableau correctly.	**1**	**2**	**3**	**4**	**5**
3. I anticipate that implementing tableau will not disrupt my class structure and/or routines.	**1**	**2**	**3**	**4**	**5**
4. I anticipate that students will be highly interested in tableau.	**1**	**2**	**3**	**4**	**5**
5. I anticipate that the students will increase their on-task behavior.	**1**	**2**	**3**	**4**	**5**

6. In the space below, please write any questions, wonderings, and/or general feelings about the upcoming intervention process.

_____

_____

_____

_____

_____

Appendix L

Post-Intervention Social Validity Questionnaire

Directions: Circle one number for each of the following four items.

Teacher ID: _____Date: _____ School: _____

	Strongly Agree	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**
1. The tableau intervention did not take more than 15 min to implement.	**1**	**2**	**3**	**4**	**5**
2. I was able to implement tableau correctly.	**1**	**2**	**3**	**4**	**5**
3. Implementing tableau did not disrupt my class structure and/or routines.	**1**	**2**	**3**	**4**	**5**
4. The students were highly interested in tableau.	**1**	**2**	**3**	**4**	**5**
5. The students increased their on-task behavior.	**1**	**2**	**3**	**4**	**5**

6. In the space below, please write any questions, wonderings, and/or general feelings about your experience with the intervention process.

_____

_____

_____

_____

_____

Appendix M

Parent/Guardian Cover Letter and Consent Form

Dear Parent or Guardian,

I am a doctoral student at The George Washington University, and I am doing a study with three students with learning disabilities (LD) and their classroom teachers. The purpose of this study is to find out if using a drama intervention called tableau improves the behavior of students with LD. Tableau is a drama intervention in which students work in small groups and create poses with their bodies to show a character, scene, or theme from a story. Students also pair words with their actions to show their understanding of the story. The class may be asked to describe what they see, what it means, and what makes them believe in the picture. They also may ask questions of the students in the tableau. Your child's participation can help us understand how the use of drama may improve the behavior of students with LD.

At this time, I am looking for three students in different third and fourth-grade classrooms at Center City Public Charter Schools who want to take part in my study. If you agree, I will watch your child during normal language arts lessons and during language arts lessons that use tableau. I will watch your child for twenty minutes during language arts lessons over a two-month period. My partner and I will be recording your child's behavior on recording sheets during the lessons. For five minutes at the end of each lesson, I will find a quiet area in the classroom to ask your child about the story he/she just talked about in class. Your child's answers will be recorded using an audio digital recorder.

Your child's identity and all of the data collected on him/her will be kept private during the study, and no information about him/her will be shared. All data about your child only will be identified through the use of a letter and number code that links to a key stored in a safe place. If any codes are written in any paper or article, these codes will be changed to fake names to keep the privacy of your child. Any audio digital recordings will be destroyed at the end of the study. Please know that keeping your privacy and confidentiality, as well as that of your child, is very important to me.

If you want to have your child take part in the study, please read and sign the parent/guardian consent form. You may choose to have your child take part or to not take part in the study. You have the right to take your child out of the study at any point in time, even after you have signed the parent/guardian consent form.

Thank you for taking the time to look at this letter and for thinking about having your child take part in this study. You can email me or call me if you have any questions and/or concerns.

The Use of Tableau to Increase the On-Task Behavior of Students with Language-based Learning Disabilities in Inclusive Settings

Principal Investigator: Maxine Freund, Ed.D.
Primary Contact: Kate Berry

Parent/Guardian Permission for Child Participation in Research: Consent Form

Introduction: Your child is being asked to take part in a research study that is being led by Kate Berry, a doctoral student at The George Washington University within the Graduate School of Education and Human Development, with the help of her Principal Investigator, Dr. Maxine Freund. Your child is being asked if he/she wants to take part in this study because he/she is a third or fourth-grade student with a learning disability (LD), has language and/or literacy goals in his/her IEP, and learns in an inclusion classroom. Please read this form and ask me any questions that will help you decide if you want your child to be in the study. Taking part is all your choice and even if you decide you want to, you can drop out at any time. Your child's grades will not be affected in any way should you choose for him/her not to take part or to drop out of the study at any time.

Purpose: The purpose of this research is to find out if using a drama intervention called tableau improves the behavior of third and fourth-grade students with learning disabilities (LD). In a tableau, students work in small groups to create poses with their bodies to show the character(s) and/or the events from a story.

Procedures: The total amount of time your child will spend in this study is 20 minutes per day for 6-8 weeks. All students in the class will take part in the tableau drama activities. If you choose to let your child take part in this research, the following will happen:

1) Your child will take an achievement test with the researcher. Note: You will not have access to the achievement scores or research records.
2) Two researchers will observe your child's classroom behavior and record the behavior during 20 minutes of normal language arts lessons and language arts lessons that use tableau (20 minutes).
3) One researcher will ask your child about the story he/she just talked about in class for five minutes at the end of each lesson. Your child's answers will be recorded using an audio digital recorder (5 minutes).

Risks and Confidentiality: There are minimal risks because in the tableau drama activity, students are just working in small groups to create poses to show a character or event from a story. Also, the behavior observations and 5-minute audio digital recordings should not disrupt your child's normal school day or learning. Your child will not miss any instruction by taking part in the study. There is a small chance that someone not on our research team could find out that your child took part in the study or somehow link your name with the information we collect about your child, however, we are lowering this risk by taking the steps below:

1) All data about the participants only will be identified through the use of a letter number code that links to a key stored in the primary researcher's locked office.
2) All of the forms will be double-locked in a personal filing cabinet in the primary researcher's locked office. Data collected from the students and teachers will be stored on a personal computer, which will be stored in a locked drawer in the locked office with a password known only to the primary researcher.
3) If any codes are written in the completed dissertation, these codes will be changed to fake names to keep the privacy of your child.
4) The records of this study will be kept private. In any published articles or presentations, we will not write anything that will allow someone to identify your child as a subject because information only will be identified indirectly through the alphanumeric code that links to a key stored in the locked office.
5) All data about your child (including your real information and the coded information) will be destroyed at the end of the study.
6) Any audio digital recordings will be destroyed at the end of the study.

The Institutional Review Board of The George Washington University, which is responsible for keeping research safe and compliant, may look at your child's data for the study.

Benefits: While there are no direct benefits to having your child participate, your child's participation in the tableau drama activities may have an unplanned benefit. For this study, student participation will help us learn how the use of drama may support the behavior of students with LD.

Participation: Your child may choose to take part or to not take part in the study. He/she may drop out of the study for any reason and at any time, even after he/she has started to take part in the study. There is no penalty for not taking part or for dropping out of the study.

Contact: Please call the primary researcher, Kate Berry or the Principal Investigator, Dr. Maxine Freund for questions or to discuss any research concerns. Also, you may call The George Washington University's Office of Human Research if you have questions or comments about your child's rights as a participant in this research.

Documentation of Consent: This research has been reviewed according to The George Washington University procedures governing your child's participation in this research. If you have read the cover letter and this consent form and you agree to have your child take part in this study, please sign below. After you sign this consent form, the research team will give you a copy. Please keep it in case you want to read it again or call someone about the study.

_____ Date_____
(Parent Signature)

□ I agree for my child to be recorded using an audio digital recorder for this study.
□ I do not agree for my child to be recorded using an audio digital recorder for this study.

Appendix N

Student Assent Form

The Use of Tableau to Increase the On-Task Behavior of Students with Language-based Learning Disabilities in Inclusive Settings

Principal Investigator: Maxine Freund, Ed.D.
Primary Contact: Kate Berry

Student Informed Assent to Participate in Research: Assent Form

Introduction: You are being asked to take part in a research study that is being led by Kate Berry, a doctoral student at The George Washington University with the help of her Principal Investigator, Dr. Maxine Freund. A research study is like a science project where we try to answer a question.

Please read this form with me and ask me any questions that will help you decide if you want to be in the study. Taking part is completely your choice and even if you decide you want to, you can quit at any time. No one will be mad at you. Your grades will not be harmed in any way should you choose not to take part or to drop out at any time.

Purpose: This research is to find out how your behavior may change when you participate in drama activities during language arts lessons.

Procedures: The total amount of time you will spend in this study is 20 minutes per day for 6-8 weeks. All students in your class will participate in the drama activities. If you choose to take part in this research, the steps below will happen:

1) You will take test with the researcher.
2) Two researchers will watch you during your language arts lessons.
3) One researcher will ask you about the story discussed in class. Your answers will be recorded using an audio recorder.

Risks and Confidentiality: There is a small chance that someone not on our research team could find out that you took part in the study or somehow connect your name with the information we collect about you, however, we are taking the steps to make sure this does not happen.

The Institutional Review Board of The George Washington University, which is responsible for making sure research is safe and follows the rules, may look at your data for the study.

Benefits: There may be no direct benefits for you, but this study may help other kids with LD.

Contact: Please call the primary researcher, Kate Berry or the Principal Investigator, Dr. Maxine Freund for questions or to talk about any problems. Also, you may call The George Washington University's Office of Human Research if you want to talk to someone else.

After you verbally assent to the research study, the research team will give you a copy of this form. Please keep it in case you want to read it again or call someone about the study.