ADVANCE ORGANIZERS IN SECONDARY SPECIAL EDUCATION RESOURCE

CLASSROOMS: EFFECTS ON STUDENT ENGAGEMENT BEHAVIORS

by

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Liberty University

A Dissertation Presented in Partial Fulfillment
Of the Requirements for the Degree

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Effects on Student Engagement Behaviors  
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ABSTRACT

Student engagement and appropriate behaviors are essential for effective instruction in secondary special education classrooms. Research suggests that proactive engagement strategies and interventions can have a greater effect on overall classroom behaviors than negative consequences. A single case experiment measured the effects of *expository advance organizers* on academically engaged behavior, respectful behavior, and disruptive behavior in the special education self-contained resource classroom. The single-case A-B-A-B design for this study evaluates these components of student engagement during academic instruction over a four-week period. Three secondary special education small-group resource Language Arts classes from a Northeast Georgia high school comprised the subject for this study. The *Direct Behavior Rating (DBR)* Form: 3 Standard Behaviors instrument was used to collect and analyze data. Hypotheses stated that the expository advance organizer strategy has an impact on student academic engagement behaviors, student respectful behaviors and student disruptive behaviors in the special education resource classroom.

Descriptors: academic engagement, disruptive behaviors, expository advance organizer, respectful behaviors, resource (self-contained) special education class
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CHAPTER ONE: INTRODUCTION

Introduction

Students with disabilities often “exhibit disruptive and destructive behavior that interferes with the process of education and places great stress on teachers” (Westling, 2010, p. 48). Disruptive incidents or off-task behaviors during instructional time directly affect student engagement in secondary special education resource classrooms. Positive instructional strategies, like the use of expository advance organizers, foster appropriate classroom behaviors. Therefore, student engagement increases, and conversely disruptive, inappropriate behaviors decrease.

This study examines the effects of a specific expository advance organizer strategy on student engagement in secondary special education self-contained resource classes through a Single-Case A-B-A-B experiment. The researcher hypothesized that the study results would indicate increased observed student academic engagement during instruction, increased observed respectful behaviors in the classroom, and a concurrent decrease in observed disruptive behaviors in a secondary special education resource classroom.

Background

Instructional time during high school years is invaluable, particularly when teachers are attempting to educate students while implementing effective classroom-based interventions (Gureasko-Moore, DuPaul, & White, 2006). Behaviors that distract or detract from academic lessons interrupt the instructional flow in secondary special education self-contained resource classes. A classroom climate survey administered to high school special education resource teachers in 2006 corroborated this idea. Survey
results suggested that teaching high school age students would be easier and generally more productive if classroom engagement issues and discipline problems were not so prevalent (Warren et al., 2006). In high school special education self-contained resource classes, engagement and discipline issues are directly related to and influenced by instructional practices and teaching routines.

Secondary special education self-contained resource teachers face many professional challenges within a small group such as; different and varied learning styles, poor or non-existent organizational skills, lack of adequate resources, and a range of personality traits. Research on various interventions and strategies is available for teachers addressing these challenges in the special education collaborative settings and the general education settings. However, the empirical research base directly addressing similar strategies and interventions in special education resource classrooms for students with learning disabilities is currently minimal. Connecting classroom practices with findings from current research and literature regarding effective management strategies is imperative for all teachers (Ratliff, Jones, Costner, Savage-Davis, & Hunt, 2010). Further research to address these classroom management issues would be helpful and relevant for current and future special education resource teachers in small group, self-contained classroom settings.

**Problem Statement**

Secondary special education resource teachers often spend a significant amount of class instructional time redirecting students back to the lesson or activity. Because of this, managing students’ disruptive behaviors has become a consuming task that reduces the amount of time that special education teachers actually spend delivering quality
instruction and implementing engaging activities (Reinke, Lewis-Palmer, & Martin, 2007). As a result of this lack of engagement, students may miss important aspects of the lesson. Losing out on key information hinders the cognitive process of learning itself. Disengagement and interrupted instruction can affect just one student or a few students, but often it affects the entire class.

Increasing student engagement during instruction is an essential component in the process of increasing academic performance, which is the primary goal of education altogether. In a 2008 study, McIntosh, Flannery, Sugai, Braun, & Cochrane determined that “engagement is related to success at school (i.e., academic success)...it may be necessary to add academic support to behavior support to allow students access to success” (p. 252). The lack of student academic engagement and the varied disruptive student behaviors are interrupting natural fluidity of instructional lessons, therefore affecting academic success and progress of individual students or the class group as a whole.

**Purpose Statement**

Classroom management interventions that encourage student involvement in instructional activities contribute to a positive and productive classroom environment. According to educational researchers Haydon & Hunter, effective instructional strategies are key components of dynamic and effective student learning environments (Haydon & Hunter, 2011). These statements are true of any type of class and any type of student. Expository advance organizers outlining lesson schema and individual activities for the upcoming class period are examples of positive, proactive instructional strategies. The evaluation of student engagement before and after the intervention periods will provide
valuable insight on effective management and instructional techniques in the classroom: specifically, in this research study, the secondary special education small-group resource classroom.

Research has indicated that, “proactive approaches to decreasing disruptions and improving classroom climate will effectively reduce behavior problems while strengthening student academic success” (Anderson & Spaulding, 2007, p. 27). In addition, other research studies on positive behavior interventions have also documented and evidenced similar increases in student academic engagement (Green, 2009). The purpose of this study was to examine how a specific classroom intervention strategy, expository advance organizers, affected student academically engaged behaviors, respectful behaviors, and disruptive behaviors during instruction in a secondary special education resource classroom.

Significance of the Study

Most educators agree that the primary goal of the school environment is for students to increase and maximize their academic achievement and potential (Graham-Day, Gardner, & Hsin, 2010). Reducing classroom disruptions and distractions will likely increase attentiveness to the instructional activities, foster a sense of respect between peers and towards teachers, and also increase student engagement during academic learning time. This research study sought to determine if the use of a specific management intervention strategy would increase student engagement and respect and decrease disruptive behaviors in special education resource students. Effective instruction ultimately depends on a classroom environment that is conducive to learning (Parker, Nelson, & Burns, 2010, p. 817). Overall student performance will most likely increase
also due to a positive shift in classroom climate. Thus, it is reasonable to assume that time on-task is linked to positive student outcomes (Burns & Dean, 2008). Studies and research supporting specific instructional strategies improve overall teacher effectiveness, student engagement, and student performance.

Decreasing problem behaviors and increasing academically positive behaviors are considered “reciprocal actions because of the relationship between behavioral engagement and academic outcomes” (Parker, et al., 2010, p. 817). This research study increases the research base on effective instructional strategies for special education teachers and related professionals. This study examines the use and effects of expository advance organizers in secondary special education resource classrooms on student academic engagement behaviors, student respect behaviors, and student disruptive behaviors as measured by the Direct Behavior Rating (DBR) assessment instruments. DBR yields behavioral data to demonstrate effectiveness of interventions over a specified period of time (Chafouleas, Riley-Tillman, & Christ, 2010). Experiment results identify the consistent use of expository advance organizers as an effective instructional method for increasing engaged learning time and appropriate classroom behaviors in special education self-contained resource classrooms.

**Research Question(s)**

**RQ1:** Will expository advance organizers have an effect on the percentage of observed student academic engagement behaviors in secondary special education self-contained resource classrooms as measured by the Direct Behavior Rating Form (2013)?
**RQ2:** Will expository advance organizers have an effect on the percentage of observed student respect behaviors in secondary special education self-contained resource classrooms as measured by the Direct Behavior Rating Form (2013)?

**RQ3:** Will expository advance organizers have an effect on the percentage of observed student disruptive behaviors in secondary special education self-contained resource classrooms as measured by the Direct Behavior Rating Form (2013)?

**Hypothesis or Hypotheses**

**H₁:** Expository advance organizers will increase the percentage of observed student academic engagement behaviors in secondary special education self-contained resource classrooms as measured by the Direct Behavior Rating Form (2013).

**H₂:** Expository advance organizers will increase the percentage of observed student respect behaviors in secondary special education self-contained resource classrooms as measured by the Direct Behavior Rating Form (2013).

**H₃:** Expository advance organizers will decrease the percentage of observed student disruptive behaviors in secondary special education self-contained resource classrooms as measured by the Direct Behavior Rating Form (2013).

Alternatively, the following are the stated null hypotheses:

**H₀₁:** Expository advance organizers have no statistically significant effect on the percentage of observed student academic engagement behaviors in secondary special education self-contained resource classrooms as measured by the Direct Behavior Rating Form (2013).
H₀₂: Expository advance organizers have no statistically significant effect on the percentage of observed student respect behaviors in secondary special education self-contained resource classrooms as measured by the Direct Behavior Rating Form (2013).

H₀₃: Expository advance organizers have no statistically significant effect on the percentage of observed student disruptive behaviors in secondary special education self-contained resource classrooms as measured by the Direct Behavior Rating Form (2013).

Identification of Variables

The independent variable in this study is the daily use of expository advance organizers as a dual instructional/classroom management strategy. The dependent variables are observed student academic engagement, observed student respect, and observed student disruptive behaviors. The control variable is the secondary special education resource classroom. Operational definitions for the study variables, as defined from related research or researcher-created, clarify the components of this study.

Definitions

- **Academic Engagement** - actively or passively participating in the classroom activity (Riley-Tillman, Christ, Chafouleas, Boice-Mallach, & Briesch, 2011, p. 121). Examples of academically engaged behavior include raising hand to participate in class discussions or respond to teacher requests, answering questions about the lesson or activity, active listening, and/or looking at and following along with instructional materials.

- **Disruptive Behavior** - “student actions that interrupt regular school or classroom activities” (2011, p. 122). Examples of disruptive behaviors include: out of seat
without permission, aggressive speech or actions towards peers or adults, and talking or yelling about things unrelated to current classroom activities.

- **Expository Advance Organizer** – quick overview of the lesson for the instructional period; a schedule of the learning activities presented in list or chart format, how the activities interrelate, important materials needed, and the amount of time set aside for each activity. (US Dept. of Education, 2004).

- **Respect** - “compliant and polite behavior in response to adult direction and/or interactions with peers and adults” (2011, p. 122). Examples of respectful behaviors include following teacher directions, positive interactions with peers and adults, or giving responses with positive, appropriate tone of voice.

- **Special Education Resource Class**– comprised of a small group, usually ten to twelve special education students that require the structure and support of a low student to teacher ratio to best meet individual academic and social needs. Placement in the resource setting is contingent upon need established in a student’s Individual Education Plan (IEP).

**Research Summary**

A Single-Case A-B-A-B design was utilized for this research study. Three special education self-contained resource Language Arts classes from a high school in a large district school system in Northeast Georgia were researcher-selected through volunteer participation request. An invitation to participate was extended to special education resource Language Arts teachers at the school level. Based on response and personal interest of the respondents a participating teacher and three of the participating teacher’s classes were chosen for the study participant group.
The research period encompassed four calendar school weeks. The intervention strategy described was implemented and withdrawn over a total four week period; one week baseline period, one week treatment period, one week removal of treatment period, one week reinstated treatment period. The DBR Form: 3 Standard Behaviors rating scale was used for behavioral observation data collection and data analysis. The participating classroom teacher completed the DBR assessment rating form daily and randomly on each student from all three class periods.

An in-person training between the participating teacher and the researcher occurred prior to the start of the research study. The training session included a review of the operational definitions, the objectives of the research, and the DBR program overview. The process for completing the DBR daily forms was discussed and reviewed. An informal simple coding system was created to assign anonymous numbers for students present in order to gain a more accurate assessment of overall class-wide behavior instead of individual student behavior. DBR assessment purposes, components, and overall objectives related to instruction were also reviewed during the brief training session.

At the conclusion of the study, the results were compiled and analyzed using Microsoft Excel and the Statistical Package for the Social Sciences (SPSS) software programs. Implications for future research were identified and recommendations for effective teacher practice were discussed. The assumed results were that expository advance organizer instructional strategies would be effective and useful interventions for a secondary special education self-contained resource classroom. It was also assumed that
the organizer strategies implemented increased student engagement, increased student respectful behaviors, and decreased classroom disruptive behaviors in the secondary level special education resource classroom.

Assumptions and Limitations

Assumptions

The primary assumption precluding this study was that disruptive or distracting behaviors significantly interrupt academic learning time in secondary special education self-contained resource classrooms. A second legitimate assumption was that a significant statistical relationship exists between the use of expository advance organizers and perceived frequency of disengagement or disruptive behavioral incidents in the classroom.

It was assumed that the participating teacher would implement the expository advance organizer strategy consistently throughout the treatment period. The researcher also assumed that the participating teacher would utilize the operational definitions provided. It was still further assumed that the participating teacher would complete the DBR evaluation and assessment instrument accurately and in accordance with the operational definitions and any other supplementary DBR training information provided by the researcher. The DBR assessment format provides a standardized method for teachers to record their evaluations of classroom behavior problems (Christ, Riley-Tillman, Chafouleas, & Jaffrey, 2011). Consistencies and clearly-defined structure in the DBR program directly addressed these concerns and assumptions presented by the researcher.
Limitations

Differential-selection effect occurs when different initial characteristics of the selected groups affect the outcome variable (Gall, Gall, & Borg, 2010). Within this research experiment, history was an extraneous variable that is difficult to control. Background knowledge and skills, previous experiences, and discipline experiences may have affected the outcome of the study. The small size of the single-case group could also be interpreted as a limitation for this type of study. Single-case designs have often been criticized for having low external validity according to Gall, et al. (2010). A common limitation of all baseline designs is that the observed treatment effects are dependent upon the initial baseline conditions included in the experiment itself (Gall, et al., 2010). Prior to the experiment beginning, baseline conditions and baseline assessments of the experiment were described and illustrated in detail to aid in reducing possible limitations of the A-B-A-B research design on the outcomes of the study.

Teacher perceptions of engaged behaviors, the concept of respect, and assessments of disruptive behavior could also have been subjective and open to interpretation. The DBR Form contains specific descriptions of the behaviors assessed, to help reduce inconsistencies within interpretations and perceptions. Research-based operational definitions were provided to the participating teacher and discussed in detail with the researcher prior to beginning the experimental phases. To increase the reliability of this particular experiment, there was one observer, thus avoiding different perceptions and interpretations of behavior and the intervention strategy. Reliability was also increased through structured experimental phases of the study, clearly defined operational
definitions, simple and direct observation recording forms, and consistent data recording times over several data collection points. Single-case designs typically require many observations of behavior (Gall, Gall, & Borg, 2007, p. 430).

Treatment fidelity was likely the most difficult aspect to control aside from the personal, emotional, and mental characteristics and tendencies of the sample. With any assessment related to judgment decisions, concerns arise about the subjectivity of the participants and the evaluators (Briesch, Chafouleas, & Riley-Tillman, 2010). It is subject to human judgments, cultural norms, interpretation of training, and perceptions on behavior. Behavior is often fundamentally qualified by personal core value systems. Utilizing an evidence-based rating instrument, DBR, helped to narrow the gaps between beliefs or perceptions among participants.
CHAPTER TWO: REVIEW OF THE LITERATURE

Introduction

Classroom teachers would like to assume that students come to class everyday ready to learn, eager to participate, and primed to be engaged learners for the duration of the academic instructional period. Reality, however, confirms a different scenario. Teachers in every content and program area consistently deal with a variety of challenging student behaviors (Scott, Park, Swain-Bradway, & Landers, 2007), specifically inattention to instruction and lack of academic engagement. This is as true in the special education setting as it is in the general education setting.

At the secondary level, there is typically a mix of students with learning disabilities and students with emotional/behavioral disorders within special education resource, small-group classes. In a 2008 study focused on special education interventions, Trussell, Lewis, & Stichter associated increases and decreases in classroom behavior with classroom environmental factors and instructional models. This association is logical to ascertain for most education professionals. Finding practical engagement and instructional strategies that are consistently effective across the broad range of disabilities and learning styles within a classroom has been a more challenging task. Because of this challenge, teachers have frequently fallen into the ineffectual negative reinforcement “trap” for managing students’ lack of interest and engagement during the lesson. The negative reinforcement cycle sets precedents that can be difficult to reverse. Likewise, positive interventions can be equally or even more difficult in creating lasting change.

Research has proven that negative reinforcement can produce results. However, repeating ineffective management strategies in the classroom may actually cause an
escalation of problem behaviors (Allen, 2010) rather than improvements in desired behaviors. Implementing strict rules with several “Do not…” and “No…” statements lean towards stifling the learning environment and actually producing more rule-breakers than rule-followers. Gable, Hester, Rock, and Hughes (2009) observed that, “simply establishing a set of classroom rules does not guarantee positive outcomes” (p. 197). Negative consequences and punishments can create repeat offenders instead of changing the undesirable patterns of behavior. Negativity breeds negativity, so logic assumes that positive actions will likewise breed positive results.

In recent years, preventative classroom interventions have earned attention and focus over the use of consequent events (Gable et al., 2009). Proactive interventions can have significant influence on patterns of distracting or disruptive behavior, student engagement during instructional activities or lessons, and overall student performance. Specifically, instructional strategies designed to affect behavior can prove to be even more successful in promoting student engagement. Consistent and purposeful approaches to classroom management will “effectively reduce a range of behavior problems while strengthening student academic success” (Anderson & Spaulding, 2007, p. 27).

Some examples of classroom management strategies designed to increase engagement are: self-monitoring procedures, teacher praise, opportunities for student response, curricular adaptations, structured academic learning and transition times, and precise classroom expectations (Johns, Crowley, & Guetzloe, 2008). Each of these management strategies can contribute to an overall positive classroom environment. In a classroom of students with varying learning and behavioral disabilities, organization and structure are critical to behavior management and positive academic performance. The
concept of positive strategies being more effective than negative strategies is not new to education professionals, i.e., special education resource teachers. As demonstrated in a study by Scheuermann and Hall (2008), the concept of positive behavior management strategies represents:

a fundamental shift in managing unacceptable behavior from reactive, punitive responses to challenging behavior to a proactive emphasis on prevention of behavior problems, and to using positive, instructional, research-based strategies to teach and encourage appropriate behavior and manage the learning environment.

However, identifying specific instructional strategies that are most effective for the range of disabilities within the small group special education resource classroom setting warrants further examination, study, and scholarly research. This study specifically explored one instructional strategy and its effect on behaviors in the special education classroom. The results are intended to become relevant and useful to many special education teachers and other professionals within education and other similar career fields.

**Conceptual or Theoretical Framework**

The assumption that student engagement can be influenced by simple, yet profound strategies is based upon concepts of sound and long-standing learning theories. In 1963, David Ausubel introduced Subsumption Theory (“Subsumption Theory,” n.d.). This theory states that a key component of the learning process is *subsumption*. This term is not widely known, however, the concept is more familiar. Subsumption is the method of relating new concepts to relevant ideas in existing knowledge. Central to this learning
theory is the focus on how individuals learn large amounts of meaningful material from verbal/textual presentations in a school setting (Culatta, 2011).

Ausubel (1963) determined that advance organizers are the vehicles used to deliver the basis of the Subsumption Theory. Dr. Ausubel (1963) also maintained that advance organizers used as instructional tools help learners, with or without disabilities, to categorize content information and make the information a meaningful part of the learning process. Meaningful content within the lesson fosters interest in the subject matter and ultimately engagement in the instructional activities.

The advance organizer strategy has also been associated with another significant and influential learning theory developed by Dr. Albert Bandura in 1969. Bandura’s Social Cognitive Theory (Bandura, 1969) suggests that people learn from one another, through observation and imitation or by modeling the observed behaviors. This theory applies to students with and without disabilities. Students with learning disabilities, attention deficits, distractibility issues, or mild intellectual disabilities learn and internalize new information through role-play, imitation, repetition or modeling of the skills and concepts conveyed.

Advance organizer strategies are designed to provide structure and organization to a lesson, as well as deeper understanding of a concept or skill. Expository advance organizers are presented as scripts, schedules, checklists, or detailed agendas for the upcoming lesson period and instructional activities. To be most effective and successful in the classroom environment lesson activities are consistently presented every class period and are also included in the classroom routine through expository advance organizers. Structure in the classroom enhances the learning process, strengthens
interpersonal interactions within a class period, and helps to prevent disruptive behavioral incidents. Learning environments that are clear, consistent, and organized facilitate appropriate behavior and maximize academic progress (Scheuermann & Hall, 2008).

Effective prevention of class disruptions involves predictable, positive, and structured environments that support students’ behavioral and academic needs (Moore-Partin, Robertson, Maggin, Oliver, & Wehby, 2010). Teacher use of organizational strategies during instruction, like the aforementioned expository advance organizers, and the peer modeling of engaging classroom behaviors are examples of Bandura’s theoretical assumptions on the processes of learning. Scheduling, classroom climate, classroom physical arrangement, and organization are also components of prevention of negative and inappropriate student behaviors (Scheuermann & Hall, 2008). This study implemented the expository advance organizer strategy and measured its effects on behaviors in students with disabilities.

Learning disabilities manifest not only through decreased academic performance on assignments, tests, and projects or gaps in achievement test scores, but also manifest as disengagement and disruptive classroom behaviors. Understanding content and staying on task may be difficult for students with learning disabilities and attention issues; student engagement therefore may be compromised. However, learning disabilities are not the only cause of behavioral disruptions or decreased academic engagement; there are numerous influences on student behavior in the special education self-contained resource classroom (Englehart, 2007). In a classroom of mixed and varying disabilities and special education eligibilities, disruption and disengagement may occur for different reasons. One key reason could be a lack of structure and organization to instruction during a class
period(s).

The ever-present focus for many special education teachers is about maintaining control and a steady flow of the classroom activities during instruction while also managing distracting incidents and influences. There are many consequences for disruptive behavior in the classroom, but preventative instructional strategies have proven to have further-reaching and more lasting effects towards expected behaviors (Scheuermann & Hall, 2008).

Sometimes teachers overlook very basic instructional and organizational procedures. However, it is often the most basic instructional practices that put teachers closer to creating a classroom where students become successful learners (Gable, et al., 2009). Teachers that provide expectations and structured outlines for the class period establish lasting standards for student behavior during academic learning time. Clear, explicit expectations and point-by-point instruction agendas/outlines are examples of effective classroom prevention strategies.

Education researchers, Clunies-Ross, Little, & Kienhuis (2008), observed and reinforced the notion that proactive strategies are conceptualized as being preventative with strong antecedent-based components intended to reduce the likelihood of students exhibiting inappropriate classroom behaviors. By providing well-defined classroom plans for students, teachers can make a positive difference in student behavior and overall classroom climate simultaneously.

Additional research and scholarly studies from various professional journals, textbooks, and other education sources also provide practical insights on promoting academic engagement and decreasing student distractions during instruction. These
research-based ideas and theories further suggest that prescriptive and preventative approaches, including strategies like advance organizers and explicit modeling of desired behaviors, are more effective at positively managing student behavior during classroom instruction. These studies recommend the use of instructional strategies to improve overall classroom behavior in the general education setting. This research study advocates for a specific strategy to positively affect academic engagement and decrease disruptive behaviors in the secondary special education self-contained resource classroom.

**Current Issues**

Reviews of special education research literature reveal a definitive need for positive management and academic engagement strategies in secondary resource classrooms (Englehart, 2007; Graham-Day, 2010; McIntosh, Flannery, Sugai, Braun, & Cochrane, 2008; & Westling, 2010). Peer-reviewed research studies and professional educational journal articles link theories of behavior and behavior modification with effective instructional strategies. Peer-reviewed research also provides general, solid evidence of positive outcomes in student performance and engaged learning time.

However, specific current or recent research studies specifically for the secondary special education self-contained resource classroom for students with learning disabilities has thus far proven difficult to locate or is outdated in relevancy. The following review of the current research literature involving the secondary special education self-contained resource classroom includes relevant, interrelated information on: (a) classroom management; (b) engaged learning time; (c) expository advance organizers; (d) student performance; (e) Direct Behavior Rating (DBR); and (f) the culminating impact on
special education resource classrooms.

**Classroom Management.** Student behavior is a recurrent issue in the realm of special education. Ratliff et al. (2010) contended that, “classroom management may be the most discussed topic among teachers at all grade levels and career stages” (p. 307). Scott et al. (2007) further contends that simple routines and structure may be effective for most classrooms, particularly classes of students with disabilities that require more intensive supports in order to be successful. Conversely, behaviors that detract from the lessons and activities interrupt the instructional flow in secondary special education classes. Examples of these distracting or deterrent classroom behaviors are: lack of attention to instruction, verbal and/or non-verbal interruptions, and general apathy towards assignments and activities. Reinke, et al. (2007) described disruptive behaviors as interfering with academic instruction; behaviors such as negative verbal or physical interactions, talking out in class, out-of-seat without permission, disrespect towards teachers and staff members, and noncompliance.

Student behavior undoubtedly has a direct impact negatively on classroom climate and overall achievement, particularly in the special education classroom setting. Because behavior is profoundly related to academic achievement (Algozzine, et al., 2007), current federal legislation mandates evaluation of current behavioral observations and discipline/behavior histories when identifying students with specific learning disabilities (Individuals with Disabilities Education Act [IDEA], 2004).

Academic engagement has been identified as an overall enabling skill that includes behaviors such as writing, participating in lesson tasks, reading aloud, reading silently, talking about academics, and asking and answering questions (Ornelles, 2007).
Behavior directly impacts student performance as well as the atmosphere in the classroom during instructional activities. Engaging classroom environments facilitate student achievement (Ediger, 2009).

There are many positive and negative approaches to behavior management. Many teachers react to class disruptions with negative consequences. Also, for many education professionals, the assumption is that responding to problem behavior with increasingly severe consequences will teach students that unruly behaviors are unacceptable (Sugai & Horner, 2006). However, these responses are often short-term solutions for a larger, chronic problem. Successful behavior modification has often been achieved through proactive, positive interventions designed to produce appropriate and desired behaviors. Proactive behavior management is the primary key for preventing negative behaviors (Ackerman, 2007, p. 3).

Appropriate behaviors can be taught and modeled for a generalization of skills across school classrooms and cultures. Positive approaches such as, structured instructional activities, encouragement, and distinct classroom expectations strengthen academic and social interactions and yield more effective results in student behavior. Accurate and consistent monitoring of social and academic behaviors ensures that the correct interventions are being implemented to ultimately improve behaviors (Scheuermann & Hall, 2008).

There is a wealth of information in the research about the functions of behavior, behavior modification strategies, theories of behavior, and behavior management plans. Often, the research studies are directed towards more severe emotional and behavior disorders and disabilities rather than students with milder attention disorders and learning
disabilities. The primary management goal for many teachers is finding the interventions and strategies that best meet student needs and the context of each specific classroom environment.

**Engaged Learning Time.** Understanding the nature of student behavior and student engagement is necessary for identifying and implementing appropriate strategies for productive, engaged learning time. Student engagement is defined as sustained attention to and involvement with instructional activities accompanied by an overall positive emotional tone in the classroom (Skinner & Belmont, 1993). Other education professionals and scholarly researchers have defined academic engagement as, “actively (e.g., writing, raising one’s hand) or passively (e.g., listening to the teacher, reading silently) participating in classroom activities” (Briesh et al., 2010). Engagement can take on different forms and can be difficult to quantify or even qualify accurately. Nevertheless, it comes back to finding strategies and interventions that attend to the situation or task(s) in the immediate present. Most educators agree that active engagement in the classroom is paramount to the progress of academic instruction and lesson activities.

Time spent off-task or otherwise distracted from the instructional activities presents opportunities for disruptive behaviors that prevent learning and academic growth to occur. Disruptive behaviors have negative impacts on general classroom culture and on individual student progress (Anderson & Spaulding, 2007). Student engagement, or lack of, may manifest with different characteristics, but the defining functions and features of disengagement remain similar. Primary examples of off-task behaviors are: out of seat, fidgeting, playing around with objects or personal items, talking out or other interactions
with peers (usually unrelated to the activities in the classroom), and acting out aggressively.

Classroom management and engagement issues are directly linked to academic learning outcomes (Marzano & Marzano, 2003). Establishing and maintaining engagement during instructional lessons and activities is a principal component of forward academic progress. Most education professionals, parents, and other concerned people in general concur that the goal of education is to learn. Teachers usually strive to sustain engaged learning time and keep students’ attention to promote learning and attain this goal.

In the secondary special education resource setting, varying disabilities have continually increased the challenges of maintaining the attention and appropriate classroom behaviors of the students. Keeping students engaged is an objective of not only academic instruction but for general classroom management as well. Therefore, understanding the structure and function of student engagement is fundamental to the identification and implementation of appropriate and effective interventions for productive academic engagement.

As stated earlier in this literature review, secondary special education small-group resource teachers confront many challenges in the classroom. Classroom issues such as a wide range of student skills and behavioral concerns have “hampered teachers’ ability to deliver effective instruction” (Scott, et al., 2007). In 2010, Westling concluded that special education teachers did not have adequate pre-service preparation or in-service opportunities that addressed challenging student behaviors. Professional development
programs should address or offer specific and effective instructional strategies that help manage disruptive or difficult behaviors and increase student engagement.

Challenging behaviors include, but are not limited to: different learning styles and modalities, varying learning disabilities or gaps in achievement, student organizational skill deficits, adequate resources for instruction, and a multitude of ranging personality traits. Research and recommendations on various interventions and strategies are available for teachers to address these challenges in the collaborative and general education settings. A main purpose of this study was to viably contribute to the current, peer-reviewed research base by directly addressing academic engagement strategies in the resource special education classrooms for students with learning disabilities. It was also intended to contribute to the research base by identifying and describing the effectiveness of a specific instructional strategy, the use of expository advance organizers in secondary special education self-contained resource classrooms.

**Expository Advance Organizers.** The classroom management strategy for improving engagement examined in this study is the use of expository advance organizers. Expository advance organizers provide students with a visual overview of the activities planned for the instructional period presented in a checklist format. Checklists, graphic organizers, or cue card formats serve as an attention and procedural support system for student with learning disabilities (Conderman & Hedin, 2010). Expository advance organizers offer students one or all of the following: an agenda or schedule of the learning activities, how those activities interrelate, important materials needed for specific activities, and the estimated time designated for each portion of the lesson. The key to effectiveness is consistent use and creating routines using this strategy.
Activating prior knowledge and preparing students for the upcoming instruction helps generate interest for the lesson and make connections between new and old information (Porter & Herczog, 2009). The information may be presented in a text list or graphic organizer chart. Students may be required to write or recite the advance organizer information as part of the daily instructional activities. Multimedia resources, such as slide shows or overheads, may be utilized to initially present and later in the lesson refer to the advance organizers. This intervention is not just utilized for classroom management, but also for improving and enhancing academic instruction.

Viewed as outcomes, achievement and behavior have proven to be related to one another (Algozzine & Violette, 2010). Classroom disruptions reduce engaged learning time, specifically in the secondary special education self-contained resource classroom setting. Classroom strategies integrating structure and positive student-teacher interactions are generally more beneficial and productive than negative interactions. In 2010, Allen pointed out that effective management of student behavior in the classroom begins with effective instructional practices. One instructional strategy, the use of expository advance organizers, is a highly-structured classroom routine designed to promote engagement during instructional time and also to prevent distractions, time off-task, or disruptive student behaviors.

Specifically, expository advance organizers provide an overview of the lesson and the schedule for the class period in a chart or checklist format. Student participation may be writing or reciting specific components of the organizer or checking off segments as they occur during instruction. When appropriate or necessary, additional information like homework assignments or time management tips may also be included with the outline of
the lesson. Positive intervention strategies, like expository advance organizers, that are focused on promoting appropriate student behavior during academic learning time can be effective for increasing student engagement and decreasing disruptions or distractions.

The academic content is introduced resembling a timeline, schedule (see Figure 1), or checklist for the class period, thus familiarizing students with the upcoming lesson. The advance organizer could include blanks for students to complete as information is presented during the lesson introduction. It could also be presented as a graphic organizer checklist, with more visual shapes and lines (see Figure 2). An expository advance organizer from a ninth grade Language Arts lesson on character roles in To Kill a Mockingbird may look like one of the two following designs:
Essentially, the expository advance organizer strategy is a condensed overview of a lesson plan; as illustrated through the example, Figure 1. The information could also be presented as a checklist of the upcoming lesson activities; as illustrated in Figure 2. For a student with attention span issues or learning disabilities in any academic content area, knowledge of what is to come during the class period may prove very beneficial to the teacher, the individual student, and the class as a whole. However it is not just the knowledge of the next book or lesson, but rather it is how information is presented and whether the information is presented to attention deficit or learning disabled students in a meaningful, structured manner.
Previews of specific academic topics and vocabulary terms activate prior knowledge and establish connections between previously introduced content and new content. Schedules or checklists for the lesson serve a dual purpose; instructional organization and behavior management. Advance organizers yield structure to the classroom and preempt behavior problems (Ackerman, 2007). Based on information from the reviewed research studies, it can be assumed that disruptions to academic engagement are less likely to occur in classrooms where daily schedules and expectations are provided and reviewed at the beginning of each class period. Providing a visual of the organizer through a PowerPoint slide and on paper appeals to different learning styles and modalities. When explicit details about instructional objectives, content, procedures, and expectations are provided, student levels of achievement are likely to increase (Scheuermann & Hall, 2008).

The expository advance organizer is an example of a pre-correction instructional strategy. Pre-correction involves identifying areas of concern and purposefully designing instruction to ensure student success (Harlacher, Walker, & Sanford, 2010). A key point to emphasize with implementation of this strategy is consistency. Consistent application of the advance organizer process is fundamental to its success in improving engagement and student performance. All students reap the benefits of advance organizer procedures; however, typically-unengaged students especially benefit from the overview and structured visual aid of the daily learning activities (US Department of Education, 2004).

The target audience for this study was the secondary special education self-contained resource classroom where academic engagement is often a prevailing issue. Administering negative consequences to unacceptable behavior seems to be a reflexive
response for many educators. Nevertheless, teachers can be taught how to implement classroom management techniques that encourage appropriate academic and social student behavior (Simonsen, Myers, & DeLuca, 2010).

In response to educational research and changes in the understanding of the nature of students’ learning, there has been a shift towards more authoritative and proactive approaches to classroom management (Jennings & Greenberg, 2009). As stated previously, the use of expository advance organizers is a positive classroom intervention that encourages appropriate classroom behavior, engaged learning, and valuable study habits. Expository advance organizers provide students with a detailed, sequential outline of the upcoming lesson.

Positive approaches that simultaneously enhance students’ academic and behavioral success have proven to be more productive than negative approaches. Effective teachers employ more positive reinforcements than negative consequences to promote engagement (Ackerman, 2007). Precise positive intervention strategies implemented in secondary resource classrooms will inevitably improve the overall climate and academic progress of the class.

**Student Performance.** Student Performance determines overall achievement in the classroom. Increased or enhanced student performance is an indicator of success. The positive and negative connections between student behavior and levels of academic progress exist at all levels of the education system and in every classroom. McIntosh, et al. (2008) determined that the presence of problem behavior nearly always interferes with academic learning. The classroom behaviors that interrupt academic learning time also bring about reduced academic performance, the primary objective of education itself.
Thusly, engagement is consequently related to experiences of success at school (McIntosh, et al., 2008).

When students are not actively engaged in the instructional activities, learning is hindered. Unengaged students are likely missing key elements of the concepts and details that are necessary for comprehension. Assessment of content knowledge and application of skills is negatively affected by this also. On the flip side, students that are engaged and participating actively in the instructional activities are likely to experience success academically and perform well at school.

Based on current and previous research concerning the relationships between student engagement and student achievement, it is practical to examine instructional and management strategies in the special education classroom (Seonjin, Brownell, Bishop, & Dingle, 2008) to identify the achievement gap. Active engagement and participation in class is fundamentally related to and impacts overall academic performance. Ratliff et al. (2010) stated that, “A number of studies suggest that a direct link exists between teachers’ ability to manage classroom behavior and their students’ learning”. The evidence within the research further illustrated the need for strategies that increase appropriate behaviors and engagement in the classroom.

Research compiled in 2011 by the National Committee on Learning Disabilities explored how non-cognitive variables, motivation, self-efficacy, and engagement influence student learning and impact achievement. Not only did the research confirm complexities of the learning process, it also suggested the need for a variety of assessment tools and procedures to determine if and when such variables as listed above have an effect specifically on the learning processes of students with disabilities.
Interventions and instructional strategies should attempt to enhance these non-cognitive variables to improve overall student performance and levels of engagement.

**Direct Behavior Rating (DBR).** The Direct Behavior Rating (DBR) format was utilized in this study to measure the effects of the expository advance organizer instructional strategy on the following: (1) academically engaged behaviors, (2) respectful behaviors, and (3) disruptive behaviors in the classroom (http://www.directbehaviorratings.com/cms). It is generally understood among education professionals that a fundamental requirement of Response to Intervention (RTI) implementation is that problem behavior is efficiently and proactively identified. Not only should the problem behaviors be identified, but also effective preventative strategies as well.

Frequent and consistent assessments help determine whether intervention efforts are successful or alternate strategies are warranted for change (Briesch, et al., 2010). Many assessment tools and strategies either require complex training or are time-consuming for the evaluator. Instructional strategies or interventions administered by the classroom teacher are more aptly evaluated immediately after implementation. Direct Behavior Rating (DBR) evaluations are conducted immediately and are simple to complete.

DBR is an evaluative rating instrument designed to quickly and immediately assess behavior by “persons naturally present in the context of interest” (Christ, Riley-Tillman, & Chafouleas, 2009, p. 205). DBR data is collected at the time and place of
occurrence at the frequency and flexibility of the evaluator. DBR assessments are based on knowledge and experiences of the evaluator.

The observed student behaviors are:

- **Academic Engagement**, defined as, “actively or passively participating in the classroom activity” (Riley-Tillman, Methe, & Weegar, 2009, p. 226). Examples of academically engaged behavior include raising hand to participate in discussion, answering questions about the lesson, listening, or looking at instructional materials.

- **Disruptive Behavior**, defined as, “student action that interrupts regular school or classroom activity” (Riley-Tillman, Christ, Chafouleas, Boice-Mallach, & Briesch, 2011, p. 122). Examples of disruptive behaviors include: out of seat, aggressive speech or actions, and talking or yelling about things unrelated to current classroom activities.

- **Respect**, defined as, “compliant and polite behavior in response to adult direction and/or interactions with peers and adults” (Chafouleas, Riley-Tillman, & Christ, 2010, p.1). Examples of respectful behaviors include: follows teacher directions, positive interactions with peers and adults, or responses with positive tones.

For this study, the “context of interest” was the secondary special education self-contained resource classroom and the “person naturally present” was the classroom teacher (Christ, et al., 2009, p. 205). Short progress behavior rating instruments like DBR enable the assessment of multiple behaviors as related to interventions in the classroom (Volpe & Gadow, 2010). DBR rating scales are short and concise and deliver results that are functional for the classroom teacher. Training to utilize DBR instruments are simple
and available on the internet website as a PowerPoint slide show presentation (Chafouleas, et al., 2010).

Assessment methods that capture prosocial behaviors as well as minor social behavior problems are necessary for comprehensive social behavior assessments (Riley-Tillman, et al., 2009). DBR recognizes both positive and negative behaviors and can be used as an indicator of success for simple and less formal instructional strategies such as the expository advance organizer. In a 2011 research study three unique and specific characteristics were used to describe DBR:

First, the rating occurs in close temporal proximity to the target behavior. Second, the rating is typically completed by a person who has direct experience with the target of measurement (student behavior) during the period of interest. Finally, the rating requires a minimal level of inference, which implies that DBR may be most appropriate for assessing observable behaviors. This unique combination builds on the strengths of Systematic Direct Observations (e.g., repeatability, sensitivity to change) and of behavior rating scales (e.g., efficient data collection) to form a method of behavior assessment that can be usable in school-based settings. (Riley-Tillman, et al., 2011, p. 120)

DBR applied at the small-group level serves as an effective tool for assessing class-wide interventions for academic engagement (Riley-Tillman, et al., 2009). Riley-Tillman et al. (2009) suggested that empirical research continue on the use and effectiveness of the DBR program as an assessment method for class-wide interventions as well to increase the knowledge and literature base.
Analysis of class-wide behavioral data highlights environments exhibiting global problematic social behavior in which intervention should be targeted at the whole class group rather than a specific student (Riley-Tillman, et al., 2009). DBR assessment was utilized to evaluate the effectiveness of the expository advance organizer strategy in a secondary special education small group (self-contained) resource classroom. DBR specifically monitors behaviors targeted for improvement using the advance organizer instructional strategy; academic engagement, disruptive student behaviors, and respect in the classroom (Chafouleas, et al., 2010). When the research data is simply compiled and analyzed, the rating system information provides a distinct picture of overall behavior over a designated evaluation period.

**Impact on Special Education Resource Classrooms.** To be able to focus on academics, teachers and students must confront behavior-related issues (Lampi, Fenty, & Beaunae, 2005) and seek to resolve such issues. Students with disabilities in special education self-contained or small-group resource classrooms often have predispositions to or habits of distractibility and off-task behaviors due to frustration or attention disorders. In a recent study on classroom behaviors (Westling, 2010), special education teachers reported that nearly half of their students consistently present with challenging and disruptive behaviors. Classroom climate can deteriorate, and teachers may resort to reactive and excessively punitive responses that ultimately contribute to a self-sustaining cycle of classroom disruption (Jennings & Greenberg, 2009). Punitive interventions, however, usually have limited or short-term effects on behavior rather than long-term change.
Engagement is characterized by either active (e.g., taking notes, discussing, or raising hand) or passive (e.g., silent reading, active listening, looking over lesson materials) participation in classroom activities (Riley-Tillman, et al., 2009). Teachers are always on the lookout for more effective classroom management techniques and strategies that address issues of student engagement during instruction. For instance, participants from a 2009 research study on Individualized Positive Behavior Supports stated that it was “not easy for some teachers to see the ‘triggers’ to behaviors; they may need to be walked through the process” (Bambara, Nonnemacher, & Kern, p. 172). Preempting lessons and instructional activities with organized, detailed agendas can be a strong beginning to a class period that ultimately eludes negative behavior triggers.

Proactive interventions are instructional strategies that demonstrate expectations for engaged learning time and teach appropriate social skills (Landers, Alter, & Servilio, 2008). The results from that particular study provided specific information on and descriptions of disruptive and inappropriate behaviors in secondary classrooms, but little discussion on positive intervention strategies to combat the issues. Most studies located during the literature search on engagement strategies were targeted to general education teachers rather than the special education profession populace.

In regards to secondary special education professionals, academic engagement research has primarily targeted teachers of emotional/behavioral disorder students in self-contained settings, teachers of mild or moderate intellectual disabilities, or teachers in collaborative/co-teaching inclusion settings. Secondary self-contained (small-group) resource classrooms are comprised of many different combinations of these disabilities. Teachers in the special education self-contained resource setting are required to wade
through and piece together information from different studies and research to find useful and applicable data. The question was then posed by the researcher: Where are the relevant and current studies focused on the specific needs of secondary special education self-contained resource teachers?

Specific intervention strategies that encourage proactive initiatives would greatly benefit special education resource teachers, but the current research base was found to be slim or outdated by 10 or more years. Over the past decade, the increase of inclusion and collaborative teaching models has shifted the focus of research away from the resource, self-contained/small-group delivery model. However, the special education small-group resource classroom for students with learning disabilities still exists and still warrants attention. Some education professionals have assumed that small class size automatically makes academic engagement easier. Teachers with experience in the resource classroom will most likely differ in opinion.

The secondary special education self-contained resource setting is often a part-time placement or limited to selective periods of the instructional day; students are placed in resource classes because of a weakness or deficiency in a particular area. The remainder of the school day is spent in general education or collaborative/co-teaching settings. Expectations of student behavior, level of independence during academic instruction, instructional strategies, pace of the content presentation, test delivery or accommodations, and other supports from special education teachers and staff is very different between the general education, collaborative, and special education resource settings.
Special education teachers consistently work towards maintaining the pace of the general education curriculum and meeting state and local academic standards while also addressing the individual needs of students with varying learning or behavioral disabilities. Exploring the behavioral outcomes of consistent, daily use of expository advance organizers in the secondary special education self-contained resource setting provides deeper insight into the connection between the proposed instructional strategy and engaged learning.

**Summary**

Providing specific directives on student behavioral expectations may be an oxymoronic idea for some teachers, therefore, those teachers have difficulty teaching appropriate classroom behavior, because it is simply expected to exist (Landers et al., 2008). Research studies and current statements from education professionals report that behavior continues to be a relevant and current issue, especially in programs for students with disabilities (Scott et al., 2007). More specifically, helpful and relevant research evidence is needed for teachers in the special education resource setting. Developing classroom routines that sustain engagement during academic instruction is fundamental to progress and structure in the secondary special education self-contained/small-group resource classroom.

Disruption and inattention to instruction negatively affect student academic performance and appropriate behavior. Haydon & Hunter (2011) suggested that challenging student behaviors have negative impacts on behaviors of the teacher and students as well as the overall classroom environment. Improving student engagement during academic instructional time will likewise improve academic performance and
classroom climate. Understanding some of the related theories behind student engagement such as, subsumption theory and cognitive learning theory, validates and encourages the use of instructional strategies designed to increase attentiveness and academic presence in the special education classroom setting.

Positive behavior interventions implemented consistently can reduce classroom behavior problems and strengthen student academic performance (Anderson & Spaulding, 2007). Expository advance organizers utilized as instructional interventions in a secondary special education small-group resource classroom will likely increase engaged learning time, therefore, positively affecting student academic performance. Positive interventions and academic strategies promote active classroom engagement through the instruction and practice of appropriate behaviors and interactions (Green, 2009).

The core objective of education is to learn. Negative behaviors consistently hinder student learning and academic progress. Research and results-based strategies for improvement and successful instruction are essential to change the patterns of behavior. Trial and error is an important part of the overall education research process. It allows researchers to have a plan, work out the plan into an experiment, and then derive results that may be beneficial and positively impact the targeted education community.

More research is necessary to substantiate the value of strategies that elicit student engagement and help improve academic performance. More intensive studies and scholarly research on the use of expository advance organizers is needed to determine the effectiveness of this intervention strategy for students with disabilities served in the secondary special education small-group resource setting. Continued research utilizing
the Direct Behavior Rating format would also support the findings from this study and strengthen the results and conclusions from other similar research projects using DBR.
CHAPTER THREE: METHODOLOGY

Introduction

Students with disabilities often “exhibit disruptive and destructive behavior that interferes with the process of education and places great stress on teachers” (Westling, 2010, p. 48). Many secondary special education self-contained/small-group resource teachers have difficulty with disruptive incidents or off-task behaviors during instructional time. Positive classroom strategies, like the use of expository advance organizers can be effective in fostering and maintaining appropriate behaviors during academic learning time. This type of instructional strategy likely increases student engagement during lesson activities and generates improved overall student academic performance.

Duchaine, Jolivette, & Fredrick (2011) indicated that future researchers may want to collect data on disruptive behaviors, work completion, work accuracy, and grade performance to reinforce the significance of on-task, engaged behaviors during instruction. The intention of this research study was to examine the effects of expository advance organizers as an intervention strategy on (a) observed student academic engagement, (b) observed student respectful behaviors, and (c) observed student disruptive behaviors. Utilizing a single-case A-B-A-B Research Design, this study investigated the outcomes from the strategic use of expository advance organizers at the beginning of instructional periods in a secondary special education Language Arts resource classroom. It was hypothesized that results from this research study would indicate a statistically significant increase in observed student academic engagement during instruction, a statistically significant increase in increased observed respectful
student behaviors in the classroom, and a parallel statistically significant decrease in observed disruptive behaviors during academic learning time in a secondary special education self-contained Language Arts resource classroom.

**Design**

A single-case A-B-A-B research design was utilized for this study in order to assess and determine the effects of expository advance organizer strategies on observed student academic engagement, observed student respectful behaviors, and observed student disruptive behaviors during academic instruction. The single-case experimental research design has been deemed highly appropriate for exploring effects of organizational strategies on student behaviors during academic instruction (Gall, et al. 2007, 2010). Specifically, the design is conducive to the special education classroom. Single-case design with a smaller group size (i.e., app. 20 subjects) keeps the research focused on the specific skills, strategies, and behaviors in the secondary special education small-group resource classroom and usually allows for one observer to record data (Gall, et al., 2007). If the overall study group size observed becomes too large, then there are more components to the research that must be taken into account and the design or outcomes of the research study may be adversely affected.

To further clarify the organization of this study, it is categorized into four distinct sections.

- **Section One:** Baseline data collection was collected during the first week of the study period by the participating teacher using the DBR assessment form. The treatment strategy (daily use of expository advance organizer strategies) was not administered to the class during this segment of the
research study period. Completed DBR forms were collected by the researcher at the end of this first week/phase of the experiment period for data analysis.

- **Section Two:** The intervention (daily use of expository advance organizer strategy) was administered and treatment data collected over the second week of the study period. Data was recorded by the participating teacher using the DBR assessment form. Completed DBR forms for data collection were utilized during the second week for data analysis and collected by the researcher at the end of the first treatment week/second research phase for data analysis.

- **Section Three:** A second group of baseline data was collected during the third week of the study period by the participating teacher using the DBR assessment form. The treatment strategy (daily use of expository advance organizer strategy) was not administered during this segment of the research study period. Completed DBR forms were collected at the end of the third week/phase of the experiment period by the researcher for data analysis.

- **Section Four:** The treatment strategy (daily use of expository advance organizer strategy) was re-introduced and administered during the fourth week of the study period. Data was recorded by the participating teacher using the DBR assessment form. Completed DBR forms for data collection and analysis were utilized during the fourth week also for consistency. Completed DBR forms were collected at the end of the fourth
week/final phase of the experiment period by the researcher for data analysis.

During the first week, the initial baseline phase of the study, only DBR Forms were completed by the participating teacher to establish baseline student engagement or disruptive behavior data. No expository advance organizer strategy was utilized during classroom instruction. The first treatment phase introduced the expository advance organizers strategy during the following week. DBR Forms were completed for treatment student engagement data during the second week. The same procedure occurred over the last two weeks of the experiment for the remaining baseline and treatment student engagement data necessary for data collection and analysis of results. Week three was a removal of the intervention strategy, and DBR data collection continued during this withdrawal phase of the study. During the final week of the experiment, the treatment intervention was reintroduced daily, and DBR data continued to be collected. Statistical data was organized and analyzed using Microsoft Excel and SPSS software programs at the end of the period. Visual analyses, i.e., tables and graphs, were constructed to illustrate the findings accompanied by narrative explanations and analytical information.

The researcher recognized that the use of frequent measurements provides a clearer, more reliable description of natural variances of behavior and also treatment response variances of behavior (Gall, et al., 2007) in an experiment concerning behaviors of secondary students with disabilities. For the purpose of identifying the effectiveness of an instructional strategy in regards to behavior and academic engagement, examining the single case over a specified period of time with administration and removal of the activity provided an appropriate, clear picture of the desired and expected outcome(s). Gall, et al.
stated that the single-case design was, “well suited to research on behavior modification...as an educational strategy, behavior modification is used extensively in such applications as classroom management, skill development, and training of individuals with disabilities” (Gall, et al., 2007, p. 427).

**Questions and Hypotheses**

The single case A-B-A-B research design demonstrated stronger internal validity because of the reversal phases of the experiment. After the initial baseline and treatment introduction phases of the experiment, the second ‘A’ phase illustrated a modicum of control of the target behaviors by removing the intervention or treatment (Gall, et al., 2010). In the final phase, the treatment was then reintroduced in order to measure the effects and success of the intervention. The single-case A-B-A-B research design is therefore likely a productive and appropriate choice for studies on instructional interventions and the effects on student academic engagement, student respectful behaviors, and student disruptive behaviors in the secondary special education small-group resource classroom setting.

The following research questions led to the research hypotheses about the use of expository advance organizers in a special education resource classroom and effects on overall student engagement.

**Research Question One:**

- Will expository advance organizers have an effect on the percentage of observed student academic engagement behaviors in secondary special education self-contained resource classrooms as measured by the Direct Behavior Rating Form (2013)?
Research Question Two:

*Will expository advance organizers have an effect on the percentage of observed student respectful behaviors in a secondary special education self-contained resource classroom as measured by the Direct Behavior Rating Form (2013)*?

Research Question Three:

*Will expository advance organizers have an effect on the percentage of observed student disruptive behaviors in a secondary special education self-contained resource classroom as measured by the Direct Behavior Rating Form (2013)*?

The independent research variable, the use of expository advance organizers as an instructional strategy, was analyzed for effects and relationships on the dependent research variables: observed student academic engagement, observed student respectful behaviors, and observed student disruptive behaviors.

A few areas of concern arose prior to the actual research study period. One area of researcher concern was the lack of effective and accurate ways to measure students’ prior exposure to similar interventions and instructional strategies, knowledge or training from individual students’ home environments, or students’ prior or current conduct in other social and school forums. Teacher’s general and specific perceptions of behavior as well as relationships between teachers and students were other possible threats to this study to be considered along with the results of the statistical analyses.

Student absences were also deemed to be an area of concern. The focus, however, was not on the individual DBR scores but rather on the daily means of the class scores.
Stated another way, the researcher was interested in the overall student academic engagement, student respectful behaviors, and student disruptive behaviors of the class as a whole in relation to the use of the expository advance organizer instructional strategy. Absences were noted for information purposes only, but did not have an impact on the data analyses. These research possibilities along with the data results were considered to make sound and reasonable observations concerning the outcomes of the study.

Participants

The sample population for this study consisted of three secondary special education self-contained/small-group resource ninth grade Language Arts class from a large-district high school in Northeast Georgia. The participating district in this study offers special education small group resource classes for secondary Language Arts, Social Studies, Math, and Science for students with learning disabilities who have demonstrated an inability to academically or socially progress in the general education classroom models. The ninth grade age group was the focus of this study with the intention of generalizing the findings to other secondary special education self-contained or small-group resource classes as well as similar upper middle school classrooms.

The first group, hereby referred to as class one, consisted of 10 students and took place in the first period of the school day. The second group, hereby referred to as class two, consisted of 12 students and took place immediately following the first group during the second period of the school day. The third group, hereby referred to as class three, consisted of 10 students and took place during the sixth and last period of the school day.

The participating teacher was chosen by invitation response for volunteer participation in the research study (see Appendix A). The invitation consisted of a brief
description of the research, general participant expectations, and the experimental phases of the study. The participating teacher had 11 years of experience in the special education classroom setting, held a master’s degree in special education, and had worked directly with a variety of students with disabilities over the years.

**Setting**

The target population was the secondary special education self-contained/small-group resource classroom. The study and intervention took place in three ninth grade special education self-contained resource Language Arts classes. Language Arts classes were selected because of the researcher’s personal past experience with student engagement and disruptive incidents in that specific academic content area and special education small-group resource classrooms. There were primarily Specific Learning Disabilities (SLD) students enrolled in resource classrooms. Within this type of class, however, there were a mix of students classified as Other Health Impaired (OHI), Emotional and Behavioral Disorder (EBD), or Specific Learning Disability (SLD). There are typically between seven and ten students enrolled in an individual secondary special education self-contained resource class. A total of 32 students were enrolled in the chosen classes. Students present each day were observed, and DBR data was recorded over the course of a four week study period. There were 13 student absences during the study period that did not have an impact on the results of the daily means of each observed behavior as described in the research plan.

The Language Arts class periods were 50 minutes in length. There are typically a variety of lesson activities using different modalities and styles in a resource class. This variety was expected over the four week study period and was dependent upon the
instructional calendar mandated by the existing curriculum and/or topics planned prior to participation in this study. Lessons included any or a combination of the following activities: silent sustained reading, oral reading, class discussions, writing assignments, cooperative group assignments, independent seat work, reviews for quizzes/test, or written quizzes/tests.

The participating teacher controlled the consistency and accuracy of the highlighted intervention strategy and the observation reporting data. Because of the participants’ control of the intervention administration in a single-case research design study, target behavior changes can be credited to the effect of the treatment variable on the research outcomes (Gall, Gall, & Borg, 2007). The purpose of this research study and the treatment strategy was to generalize the findings for class-wide use of an intervention strategy for management of behavior and academic engagement. Gall, et al. (2007, p. 427) stated that single-case experiments such as this one are “well suited to research on behavior modification”.

Experimental treatment intervention strategies occurred at the beginning of each class period. The strategy was administered by the participating teacher all days of the treatment periods. The participating teacher was not absent during any of the research study days. Observation data recording occurred at the end of each class period evaluating all students present. The expository advance organizer strategy was administered within the first ten minutes of each class period at the beginning of the instructional lesson during treatment phases. DBR behavior ratings were completed at the end of each class period during both baseline and treatment phases of the research period.
The consistency of routines with both interventions and data collection increased the reliability of results and the recall of events and information.

**Instrumentation**

The *Direct Behavior Rating (DBR) Form: 3 Standard Behaviors* (Christ et al., 2009) was used to assess the dependent variables of student engagement during instructional time. Permission was obtained from the DBR author for research and data collection prior to the proposal stage of this study (see Appendix B). The participating teacher completed rating forms on all students at the end of or soon after the class periods ended to record and measure perceptions of overall student engagement and behaviors for that day. DBR Forms consist of three parts regarding the assessment of target student behaviors during a class period or other designated time period; *academically engaged, respectful, and disruptive*.

Academically Engaged is defined as, “actively or passively participating in the classroom activity” (Riley-Tillman, et al., 2009, p. 226). Examples of academically engaged behavior include: raising hand to participate in discussion, answering questions about the lesson, listening, or looking at instructional materials. Respectful behavior is defined as, “compliant and polite behavior in response to adult direction and/or interactions with peers and adults” (Chafouleas, et al., 2010, p.1). Some examples of respectful behaviors include: following teacher directions, positive interactions with peers and adults, or responding with positive tones and attitude. Disruptive Behavior is defined as, “student action that interrupts regular school or classroom activity” (Riley-Tillman, et al., 2011, p. 122). Examples of disruptive behaviors include: being out of seat without
permission, aggressive speech or actions towards adults or peers, and talking or yelling about things unrelated to current classroom activities.

On a 0 (never) to 10 (always) percentage rating scale, the participating teacher estimated according to DBR training, individual perceptions, and classroom experience the ratio of total time a student exhibited the target behaviors during that class period. 0 on the DBR scale represents 0% of the time the behavior was displayed, with 10 representing 100% of the time the behavior was displayed. Each interval in between corresponds to the percentage level on a 0-10/0-100% scale. For example, a 7 DBR score for academic engagement denotes that the student was observed to be engaged in the activity for 70% of the designated observation period.

The combined percentages for the behavior components in the DBR rating system did not have to equal 100, though, because some behaviors may have overlapped or occurred simultaneously. For instance, a student may have been exhibiting both academic engagement and respectful behaviors at the same time, or the student could have been academically engaged and partially disrespectful during the observation period (see Appendix C). This behavior assessment rating form best encompassed the tenets of engaged behavior for the purposes of this study. It was simple to use and has been proven effective for gauging appropriate classroom behavior as related to the overall effectiveness and success of an instructional strategy for improved academic engagement and behavior (Brieseh, et al., 2010; Chafouleas, et al., 2010; Christ, et al., 2009; Christ, et al., 2009; Riley-Tillman, et al., 2011; Riley-Tillman, et al, 2009).
Procedures

Baseline data collection occurred across the first week of the research study period with no expository advance organizer strategy implemented. Each day the teacher began each of the classes without providing a preview or agenda of the instructional period. The students were not made aware of how much time would be spent on lecture, writing assignments, group activities, or other engagement strategies during the upcoming class period. No remarkable redirections or behavior management strategies were utilized to address off-task or disruptive behaviors. A total of four instructional periods were observed to establish a baseline for academic engagement, respectful behaviors, and disruptive behaviors.

During the second week of the research study period, the expository advance organizer strategy was introduced and utilized at the beginning of each class period. The participating teacher chose to present the agenda in checklist format (see Fig. 2) throughout the treatment weeks. The lesson agenda (checklist) was projected onto the classroom television monitor listing the main activities and portions of the upcoming lesson. An oral review of the agenda/checklist was presented, and the organizer was left on the television monitor screen for the duration of the class period. A total of four class periods were observed for the first phase of treatment DBR data.

Withdrawal data collection occurred during the third week of the research study period and the lesson checklists were not displayed or reviewed orally with the class. The students were not informed of how much approximate time would be spent on lecture, writing assignments, group activities, or other engagement strategies. No remarkable redirections or behavior management strategies were utilized to address off-task or
disruptive behaviors during the withdrawal phase. A total of four class periods were observed for academic engagement, respectful behaviors, and disruptive behaviors during this phase of the experiment.

Patterned after the first treatment phase, the expository advance organizer strategy was again introduced at the beginning of each class period for the second intervention phase. Each day, agendas in checklist format were projected onto the classroom television monitor listing the main activities of the upcoming lesson. The teacher orally reviewed the agenda with the students and kept the organizer on the television monitor screen for the duration of the class period. A total of four class periods were observed for the second phase of treatment DBR data.

Supporting the researcher’s design choice for this study, it was understood that DBR data from 10 or more overall observation periods were reliable for use with decisions related to instructional interventions and strategies for classroom management (Riley-Tillman, et al., 2009). DBR data was recorded for a total of 16 class periods over four calendar weeks of the research study. Several behavioral measures over treatment and non-treatment periods provide “….a clearer, more reliable description of how the child’s behavior natural varies and how it varies in response to the treatment condition (Gall, et al., 2007, p. 431).”

**Participant Selection.** After obtaining research approvals from the Liberty University Institutional Review Board and approval letters from the participating school’s administration, the researcher executed the experimental phases of the research study on the first day of the following school week. Participants from a list of Language Arts special education teachers were solicited through written request for participation at the
local school level. The researcher then selected the participating teacher from interested responses.

**Participant Training.** The selected teacher was presented with the following program materials: DBR Forms (Appendix C), DBR instruction manuals with accompanying website references (Appendices D & E), target behavior reference sheets (Appendix F), and two expository advance organizer strategy formats (Appendix G). The expository advance organizer strategy and behavior rating form directives included examples and specific guidelines for implementation, relying on the research-based premise that teachers can be taught to implement management interventions to cultivate appropriate classroom student behavior (Simonsen et al., 2010).

Training consisted of an in-person session between the researcher and the participating teacher to review and discuss the expository advance organizer strategy, formats and examples of the strategy, treatment intervention guidelines and plans, the DBR rating assessment process, and random anonymous coding of the students for the researcher’s data. The training session took place the week prior to the beginning of the experimental four-week period. Detailed and specific information on the target behaviors, perceptions of academic engagement and disruptive behaviors were given to the participating teacher through brief reviews of web-based readings and publications from the DBR website (Chafouleas, et al., 2010). Observing the students daily on the DBR forms, absentees, and other miscellaneous questions were also discussed during the training session. Communication times were tentatively planned for updates, question-and-answer issues, and other reminders between the researcher and participating teacher.

The questions and hypotheses guiding this study identified the term *observed* as
describing the behaviors of student engagement and student behaviors. To avoid difficulties in replication of variables and operational definitions, the conditions of the baseline and treatment conditions were discussed and defined as precisely as possible (Gall, et al., 2007) in the training session and also reviewed informally during the research period for clarification as needed. The researcher provided the participating teacher with operational definitions for academic engagement, student respect, and student disruptive behaviors to encourage and support accurate, consistent data collection.

The researcher also provided the participating teacher with target behavior reference sheets (Appendix F), DBR instructions (Appendix E), and two specific expository advance organizer format examples to use daily before each lesson or activity (Appendix G). Two formats, *outline* and *checklist*, were provided for the participating teacher to use according to and most appropriate for individual lesson activities or teaching style at the teacher’s discretion. The participating teacher selected the checklist format as a method of instructional preference. Regardless of the organizer format, the same information was ultimately disseminated to the students daily before each lesson. Further conversations and informal discussions between the researcher and the participating teacher also addressed possible previously unforeseen issues and clarified specific study details throughout the research period.

**Data Analysis**

Data analysis included descriptive statistics, inferential statistics, and graphical visual analysis representations. DBR data scores were identified and translated to graphs and other simple visual representations of the collected information (see data analysis
directives and other examples – Appendix H) to create a more articulate picture of the results of this research study. It was further noted through the research study period that graphs or visual representations are often standard in single-case design studies and are reflective of the effectiveness of the instructional intervention (Gall, et al., 2010).

Results were presented through narrative text and graphical means for increased understanding of the information and to respond to the research questions posed. Descriptive statistics were used to organize the raw data from the observation forms. Descriptive statistics are defined as, “mathematical techniques for organizing and summarizing data” (Gall et al., 2007, p. 132). The combined mean scores for each class were plotted onto line graphs using Microsoft Excel to illustrate trends in behaviors and student engagement as a result of the strategy. Inferential statistics were used to make inferences about the effectiveness of the intervention strategy. The pooled means of the baseline and treatment phases of each dependent variable were compared through a paired samples t test to either accept or reject the null hypothesis. Effect size, statistical power, and confidence intervals were also derived from the pooled means to reject the null hypotheses and confirm the stated research hypotheses.

The primary objective of this research study was to determine if the use of expository advance organizers could possibly be generalized to the secondary self-contained or small-group resource special education population to improve student behavior and engagement during instructional time. An experiment including several observations of behavior with the identified strategy was conducted to support the researcher’s hypotheses. Repeated measures of observation for data collection along with
consistency in the participating teacher’s instructional methods and other classroom procedures served to increase the reliability of this study (Gall, et al., 2007).

Data collected from observations of behaviors occurring during academic instructional time helped to ensure that appropriate interventions can be implemented to prevent future unacceptable behaviors in the classroom (Scheuermann & Hall, 2008). Examining and analyzing the participating teacher’s observations of the components of student engagement during instruction and likewise respectful behaviors and disruptive behaviors, before and after the use of the expository advance organizer strategy yielded valuable insight into the strategy’s potential for improving classroom climate in secondary special education self-contained resource classrooms.

Research Question One:

*Will expository advance organizers have an effect on the percentage of observed student academic engagement behaviors in a secondary special education self-contained resource classroom as measured by the Direct Behavior Rating Form (2013)?*

Data points were analyzed using descriptive statistics and graphical representations for related means before and after the baseline and treatment cycles to determine statistically significant differences in the observed student academic engagement behaviors variable due to treatment effect. Through graphical representations, treatment effects were determined by calculating the percentages of non-overlapping data (Gall, et al., 2007).
Research Question Two:

*Will expository advance organizers have an effect on the percentage of observed student respect behaviors in a secondary special education self-contained resource classroom as measured by the Direct Behavior Rating Form (2013)?*

Data points were analyzed using descriptive statistics and graphical representations for related means before and after the baseline and treatment cycles to determine statistically significant increases in the observed student respect behaviors variable due to treatment effect. Through graphical representations, treatment effects were determined by calculating the percentages of non-overlapping data (Gall, et al., 2007).

Research Question Three:

*Will expository advance organizers have an effect on the percentage of observed student disruptive behaviors in a secondary special education self-contained resource classroom as measured by the Direct Behavior Rating Form (2013)?*

Data points were analyzed using descriptive statistics and graphical representations for related means before and after the baseline and treatment cycles to determine statistically significant decreases in the observed student disruptive behavior variable due to treatment effect. Through graphical representations, treatment effects were determined by calculating the percentages of non-overlapping data (Gall, et al., 2007).
CHAPTER FOUR: FINDINGS

Introduction

The intention of this research study was to examine the effects of expository advance organizers as an intervention strategy on (a) observed student academic engagement, (b) observed student respectful behaviors, and (c) observed student disruptive behaviors. Duchaine, Jolivette, & Fredrick (2011) indicated that future researchers may want to collect data on disruptive behaviors, work completion, work accuracy, and grade performance to reinforce the significance of on-task, engaged behaviors during instructional time. Utilizing the single-case A-B-A-B research design, this study investigated the outcomes of the use of expository advance organizers at the beginning of instructional periods on the aforementioned behaviors in a ninth grade secondary special education resource Language Arts classroom.

This chapter describes the findings for this research study in three sections. Each section identifies and describes the effects of the expository advance organizer strategy on academic engagement, respectful behaviors, and disruptive behaviors in three secondary special education resource classrooms over the course of eight class periods. Narrative text, data tables, and line graphs containing the mean scores and analyses from each phase of the treatment describe the results and respond to the null hypotheses.

Results

Hypothesis One. Will expository advance organizers have an effect on the percentage of observed student academic engagement behaviors in a secondary special education self-contained resource classroom as measured by the Direct Behavior Rating Form (2013)? Hypothesis one stated that expository advance organizers would increase
the percentage of observed student academic engagement behaviors in secondary special education self-contained resource classrooms. The expository advance organizer strategy was administered to three classes over a total of eight class periods to generate 24 mean intervention scores for academic engagement. Baseline and withdrawal phase mean scores were generated likewise; three classes and eight class periods observed with no intervention to generate 24 mean scores.

The mean baseline/withdrawal phase DBR score for academic engagement behaviors was 5.6 and the mean intervention DBR score for academic engagement was 8.8, for a mean gain of 3.3 interval points or 33.0% increase.

This difference was statistically significant \( t(23) = 16.8, p < .05 \). The effect size estimate \( d \) based on the baseline/withdrawal phase standard deviation was 3.9, indicating an increase of over three and one-half standard deviations from the non-intervention periods. The 95% confidence interval for academic engagement was \( 2.9 \leq \mu \leq 3.7 \), denoting that the expository advance organizer strategy has the potential for increasing academic engagement in the secondary special education resource classroom (Table 1).
Table 1

Paired Sample Statistics For Academic Engagement:
Treatments and Baseline/Withdrawal Phases

<table>
<thead>
<tr>
<th>Pair</th>
<th>AE Means w/o Strategy</th>
<th>AE Means with Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>5.559</td>
<td>8.846</td>
</tr>
<tr>
<td>N</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.8470</td>
<td>.4905</td>
</tr>
<tr>
<td>Std. Error Mean</td>
<td>.1729</td>
<td>.1001</td>
</tr>
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</table>

Paired Samples Test

<table>
<thead>
<tr>
<th>Pair</th>
<th>AE w/o Strategy</th>
<th>AE w/ Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paired Differences</td>
<td>Std. Mean</td>
<td>Std. Deviation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.559</td>
<td>8.846</td>
</tr>
</tbody>
</table>

Note. AE = academic engagement; df = degrees of freedom
*p < .05, two-tailed

Based on data results and analysis, the researcher rejected the null hypothesis that expository advance organizers have no statistically significant effect on observed academic engagement behaviors. The researcher then accepted the research hypotheses stating that expository advance organizers will increase academic engagement behaviors in the secondary special education resource classroom. The results for academic engagement are further illustrated in a line graph. Note the following phases that are indicated: baseline, intervention phase one, withdrawal, and intervention phase two and the trends of the mean scores (Figure 3).
Figure 3. Note the following phases indicated: baseline (Days 1-4), intervention phase one (Days 5-8), withdrawal (Days 9-12), and intervention phase two (Days 13-16) as well as the trends of the mean scores; Academic Engagement (AE) mean without strategy, 5.6; AE mean with strategy, 8.9
Hypothesis Two. Will expository advance organizers have an effect on the percentage of observed student respectful behaviors in a secondary special education self-contained resource classroom as measured by the Direct Behavior Rating Form (2013)? Hypothesis two stated that expository advance organizers would increase the percentage of observed student respectful behaviors in secondary special education self-contained resource classrooms. The expository advance organizer strategy was administered to three classes over a total of eight class periods to generate 24 mean intervention scores for respectful behaviors. Baseline and withdrawal phase mean scores were generated likewise; three classes and eight class periods observed with no intervention to generate 24 mean scores.

The mean baseline/withdrawal phase DBR score for respectful behaviors was 8.3 and the mean intervention DBR score for respectful behaviors was 9.0, for a mean increase of .7 interval points (7.0% increase). This difference was statistically significant ($t (23) = 3.3, p < .05$). The effect size estimate ($d$) based on the baseline/withdrawal phase standard deviation was 1.1, indicating an increase of just over one standard deviation from the non-intervention periods. The 95% confidence interval for respectful behaviors was $0.30 \leq \mu \leq 1.0$, denoting that the expository advance organizer strategy has the potential for increasing respectful behaviors in the secondary special education resource classroom (Table 2).
Table 2

Paired Sample Statistics For Respectful Behaviors:
Treatments and Baseline/Withdrawal Phases

<table>
<thead>
<tr>
<th>Paired Samples Statistics</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1 RESP Means w/o Strategy</td>
<td>8.298</td>
<td>24</td>
<td>.6200</td>
<td>.1266</td>
</tr>
<tr>
<td>RESP Means with Strategy</td>
<td>8.963</td>
<td>24</td>
<td>.5661</td>
<td>.1156</td>
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</tbody>
</table>

Paired Samples Test

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Paired Differences</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Std. Deviation</td>
<td>Std. Error Mean</td>
</tr>
<tr>
<td>Mean</td>
<td>Std. Deviation</td>
<td>Std. Error Mean</td>
</tr>
<tr>
<td>-.6654</td>
<td>.9810</td>
<td>.2002</td>
</tr>
</tbody>
</table>

Note. RESP = respectful behaviors; df = degrees of freedom
* p < .05, two-tailed

Based on the data results, the researcher rejected the null hypothesis that expository advance organizers have no statistically significant effect on observed student respectful behaviors. The researcher then accepted the research hypotheses stating that expository advance organizers will increase observed student respectful behaviors in the secondary special education resource classroom. The results for respectful behaviors are further illustrated in a line graph. Note the following phases that are indicated: baseline, intervention phase one, withdrawal, and intervention phase two and the shifts in mean scores (Figure 4).
Figure 4. Results of Single Case ABAB Design Using Data Points to Represent Trends of Respectful Behaviors

Figure 4. Note the following phases indicated: baseline (Days 1-4), intervention phase one (Days 5-8), withdrawal (Days 9-12), and intervention phase two (Days 13-16) as well as the trends of the mean scores; Respectful Behaviors (RESP) mean without strategy, 8.3; RESP mean with strategy, 8.9
**Hypothesis Three.** Will expository advance organizers have an effect on the percentage of observed student disruptive behaviors in a secondary special education self-contained resource classroom as measured by the Direct Behavior Rating Form (2013)? Hypothesis three stated that expository advance organizers would decrease the percentage of observed student disruptive behaviors in secondary special education self-contained resource classrooms. The expository advance organizer strategy was administered to three classes over a total of eight class periods to generate 24 mean intervention scores for disruptive behaviors. Baseline and withdrawal phase mean scores were generated likewise; three classes and eight class periods observed with no intervention to generate 24 mean scores.

The mean baseline/withdrawal phase DBR score for disruptive behaviors was 1.9 and the mean intervention DBR score for disruptive behaviors was .97, for a mean decrease of .93 interval points (app. 1.0% decrease). This difference was statistically significant ($t (23) = .93, p < .05$). The effect size estimate ($d̂$) based on the baseline/withdrawal phase standard deviation was .52, indicating a decrease of a one-half standard deviation from the non-intervention periods. The 95% confidence interval for disruptive behaviors was $1.4 \leq \mu \leq 2.3$, denoting that the expository advance organizer strategy has the potential for decreasing disruptive behaviors in the secondary special education resource classroom (Table 3).
Table 3

Paired Sample Statistics For Disruptive Behaviors:
Treatments and Baseline/Withdrawal Phases

<table>
<thead>
<tr>
<th>Paired Samples Statistics</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DB Means w/o Strategy</td>
<td>1.901</td>
<td>24</td>
<td>.8109</td>
<td>.1655</td>
</tr>
<tr>
<td>DB Means with Strategy</td>
<td>.969</td>
<td>24</td>
<td>.4544</td>
<td>.0927</td>
</tr>
</tbody>
</table>

<table>
<thead>
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<th>Paired Samples Test</th>
<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Paired Differences</td>
<td>Mean</td>
<td>Std. Deviation</td>
<td>Std. Error Mean</td>
<td>95% Confidence Interval of the Difference</td>
</tr>
<tr>
<td></td>
<td>Lower</td>
<td>Upper</td>
<td>t</td>
<td>df</td>
</tr>
<tr>
<td>Pair 1 DB w/o Strategy vs DB w/ Strategy</td>
<td>.9325</td>
<td>.9883</td>
<td>.2017</td>
<td>.5152</td>
</tr>
</tbody>
</table>

Note. DB = disruptive behaviors; df = degrees of freedom
* p < .05, two-tailed

Based on analysis of the data, the researcher rejected the null hypothesis that expository advance organizers have no statistically significant effect on observed student disruptive behaviors. The researcher then accepted the research hypotheses stating that expository advance organizers will decrease observed student disruptive behaviors in the secondary special education resource classroom. The results for disruptive behaviors are further illustrated in a line graph (Figure 5). Note the following phases that are indicated: baseline, intervention phase one, withdrawal, and intervention phase two and the shifts in mean scores.
Figure 5. Results of Single Case ABAB Design Using Data Points to Represent Trends of Disruptive Behaviors

Figure 5. Note the following phases indicated: baseline (Days 1-4), intervention phase one (Days 5-8), withdrawal (Days 9-12), and intervention phase two (Days 13-16) as well as the trends of the mean scores; Disruptive Behavior (DB) mean without strategy, 1.9; DB mean with strategy, 1.0
CHAPTER FIVE: DISCUSSION

Summary of Findings

The purpose of this research study was to examine how the instructional strategy, expository advance organizers, affected class-wide academic engagement behaviors, respectful behaviors, and disruptive behaviors in a secondary special education resource classroom. The researcher hypothesized that the results would indicate increased observed student academic engagement during instruction, increased observed respectful behaviors in the classroom, and a concurrent decrease in observed disruptive behaviors in a secondary special education resource classroom as measured by the Direct Behavior Rating Form (2013). A single-case ABAB design research study was implemented to defend the researcher’s hypotheses and explore the possible benefits of the advance organizer instructional strategy.

Discussion of Findings

The research period encompassed four calendar school weeks. The participating teacher completed the DBR rating form daily and randomly for the students present from all three class periods included in the research study. The daily scores were pooled to create a weekly mean score from each class for all three behaviors. The baseline and withdrawal scores were then combined for a non-intervention score. A score was calculated for the combined intervention periods also.

The results indicated a positive shift and increase in observed student academic engagement with the use of the expository advance organizer strategy. A more subtle positive shift and increase in observed student respect was indicated with the use of the strategy. Finally, the results indicated a significant decrease in student behavioral
disruptions. Tables one through three provide statistical data to support the findings for each, representing the analyses procedures. The data presented in Figures 3-5 are visual representations that the strategy was effective in the research setting and classes evaluated for this study. Similar results may be replicated in secondary special education classrooms and possibly other types of classroom settings also.

The analyzed data were the daily means of each class over the baseline phase (week one), first treatment phase (week two), withdrawal phase (week three), and second treatment phase (week four) in each dependent variable category: academic engagement, respectful behaviors. The statistically significant shift in mean scores between the designated treatment periods and the designated non-treatment periods indicated that the research hypotheses stand true with limitations and within similar academic settings. The statistically significant shift also provides support for the use of expository advance organizers as a viable instructional strategy for increasing appropriate student behaviors in the secondary special education resource classroom.

**Study Limitations**

Although this study revealed results favorable to the research hypotheses, there are several points to consider concerning replication and generalizability in the classroom. First, there were random and varied student absences during the study period. The missing scores, however, were not relevant in response to the research questions or hypotheses and did not impact the results of the data collected. Missing scores were not included or calculated in the daily mean score data. For instance, if the class enrollment was 10 students and one student was absent for a data collection period, then the daily scores for the dependent variables were calculated by dividing the sum of the recorded
scores, rather than the total number of students on the roster.

Students present each day were observed and DBR data recorded over the course of a four week period. A total of 32 students were enrolled in the chosen classes. There were 13 total student absences during the study period that did not have an impact on the results of the daily means of each observed behavior. While absentees did not necessarily have a negative effect on the mean scores, it is possible that the dynamics and behavioral climates of the classes were altered due to a shift in dominant personalities and interactions between students or students and the teacher.

History is most always a difficult extraneous variable to control in research studies utilizing single case designs. Observed treatment effects are often ultimately dependent upon initial baseline data (Gall, et al., 2010) or student’s background and prior knowledge. Background knowledge, skills, and experiences of students may have positively or negatively impacted the results. The interests, skills, and experiences of the teacher may also impact the results.

The researcher also assumed that the participating teacher would utilize the operational definitions provided and interpret the behaviors consistently. Individual interpretations or utilization of the strategy and student behaviors may have resulted in different outcomes. The DBR assessment format provides a standardized method and specific descriptions for teachers to record their evaluations of classroom behavior problems (Christ, Riley-Tillman, Chafouleas, & Jaffrey, 2011). Specific descriptions and instructions would have likely helped to ensure consistency, but the human element is still a component. Teacher perceptions of engaged behaviors, the concept of student respect, and student disruptive behaviors were all subjective and open to individual
interpretation. Aside from the personal, emotional, and mental characteristics of the sample population, this was likely the most difficult aspect of the treatment fidelity to control.

It was assumed by the researcher that the participating teacher would implement the expository advance organizer strategy consistently throughout the two separate intervention phases. The strategy was certainly open and likely susceptible to interpretation of delivery and variations in teaching style. The content of the lessons was also a factor that may have had a direct impact on the levels of engagement or the presence of disruptive student behaviors. For instance, playing a game or working on a project may have been more interesting to some students than a notes or lecture lesson. A movie presented or silent sustained reading time may have been better suited to some students. It is also not uncommon in the special education resource classroom for students to act out or exhibit disruptive behaviors when a difficult or detailed task is presented. Any of these situations could have occurred but were not quantified or qualified as part of the research data.

To increase the reliability and experimental control of this study, there was one observer to avoid different or varied perceptions of behavior between multiple raters. Reliability was also increased through structured experimental phases, simple and direct observation recording forms, and several data collection points. With any assessment related to judgment decisions, concerns can arise about the subjectivity of the participants and the evaluators (Briesch, Chafoules, & Riley-Tillman, 2010). Behavior assessments are always subject to human judgments, cultural norms, interpretations, and perceptions.
of behavior. Perceptions of behavior are fundamentally qualified by personal values and life experiences of the observer.

Implications and Recommendations for Future Research

The single-case design has been proven to be well suited to studies concerning behavior modification, but there are components to this study that must be considered for future research utilizing the expository advance organizer strategy. The researcher acknowledges that this study may serve a small interest group in education, particularly the special education realm. The researcher also acknowledges and has shown that there are benefits to observation and modeling of the small-group class settings. Replication of the experimental conditions are limited to a specific type of class in this setting.

There may be a limited audience that would find the results and the research study as a whole relevant and remarkable. Special education teachers and other special education professionals will likely find the review of the literature, results of this study, and the DBR behavior rating system valuable to the practice and professional development. The results of this study contributed to the research base that student engagement in the special education resource class setting can be improved through the use of an instructional strategy.

This study highlighted an ongoing need for instructional strategies to effectively manage classroom behavior and improve student academic engagement in the special education resource class. The expository advance organizer strategy and behavior management tools described in the study can be useful in the inclusion classroom as well as the previously described, smaller-group special education resource setting. Much attention is focused on individual child behavioral research in education settings.
However, group-level strategies are increasingly shifting to the front line to aid in class-wide or school-wide behavior and classroom management problem solving (Riley-Tillman, et al., 2009).

Continuing changes in curriculum and shifts in delivery service models shift and broaden gaps in the current research. These changes also create the need for more research-based classroom management and academic engagement strategies. Some educators may find the expository advance organizer strategy unnecessary or may not understand a purpose for implementing a checklist at the beginning of class periods. However, to special education teachers and other related professionals, a specific strategy like the expository advance organizer in the classroom is always welcomed. Sometimes also it is the simplest ideas that have the greatest impact.

The shifts and changes from individual research to group or class-wide studies also highlighted the need for improved data collection. The DBR program warrants further exploration and experimentation for providing usable data linking assessment and instruction. DBR is a relatively young behavior rating system with its conception in 2006. DBR research is on-going and new information related to and concerning this system continues to develop. The youth of the program substantiates the need for further research utilizing the behavioral rating system and strategies involving student engagement behaviors.

The results from this research study are not intended to provide finite or concrete answers to improving student academic engagement in the special education resource classroom. Further research is warranted and will most likely always be needed regarding student engagement. The researcher’s review of the literature in this study on defining
factors of behaviors in secondary special education classrooms and relationships between instructional strategies and student academic engagement has provided a foundation of valuable information to support intervention strategies. The researcher’s experiment further supported this foundation, however, there is always more to learn and more to add to the literature and to the research base.

The research study results provide insight on a working instructional strategy to utilize in any classroom. Structure is important for all students in all types of classes, general and special education. Scheuermann & Hall (2008) stated that preventative instructional strategies have further-reaching and more lasting effects towards acceptable, positive behaviors. Ausubel’s expository advance organizer strategy provides structure to a classroom through a defined introduction and a specified agenda to academic activities and lessons. The results of this research spotlight experimental research utilizing a behavioral data rating system that is quick, efficient, and user-friendly for teachers in any classroom setting to collect “snapshots” of information for assessment and analysis of student engagement. Interventions that encourage student involvement in instructional activities contribute to a positive and productive classroom environment.

Trial and error is an important part of the overall education research process that ultimately produces results that may be beneficial to and positively impact the targeted education community. School district staff development departments, individual schools, or special education departments may be able to use information from this study to improve student engagement.

More research is necessary and will further substantiate the inherent value of strategies that elicit student engagement and help improve academic performance.
Continued research utilizing the Direct Behavior Rating format would also support the findings from this study and promote a viable option for behavioral data recording and analysis. Continued scholarly research and studies on the use of expository advance organizers are still needed to corroborate the effectiveness of intervention strategies, like the expository advance organizer strategy, for students with disabilities served in the secondary special education small-group resource setting.

As stated earlier, the core objective of education is to learn. Negative classroom behaviors hinder student learning and academic progress. Research and results-based strategies for successful instruction are essential to change the patterns of behavior and increase overall student academic engagement.
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APPENDIX A

Request for Volunteer Participant Letter

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Special Education Teacher
Language Arts - Resource
Collins Hill High School
50 Taylor Rd.
Suwanee, GA 30024

Dear SPED LA Resource Teachers:

I am conducting a study on the effects of Expository Advance Organizer Strategies on aspects of student engagement and disruptive behaviors in a special education resource classroom. The purpose of this study is to generalize the findings for class-wide use of an intervention strategy for management of behavior and academic engagement in the resource setting.

The study period will last four weeks. The participant(s) will use the Direct Behavior Rating (DBR) Form to assess and record daily observations for each student in the chosen class period. Time required to complete the DBR forms is approximately 1-2 hours of training prior to the research and 10-15 minutes daily to record data. All data will be compiled and analyzed by the researcher. This is a voluntary position and there is no risk for harm to anyone involved. Students will remain anonymous and only known to the volunteer participant teacher.

If you are interested in participating in this doctoral dissertation research study, please respond via email to lking5@liberty.edu. If you have any further questions regarding this volunteer participation request, please contact me by phone or e-mail (listed below).

Sincerely,
Lisa King

E.A.S., NBCT
LU Doctoral Candidate
(770) 880-7952
lking5@liberty.edu
RE: DBR Forms

Chafouleas, Sandra [sandra.chafouleas@uconn.edu]

To:  [redacted]
Cc:  [redacted]

You forwarded this message on 6/27/2012 4:17 PM.

Hi Lisa,

Congratulations on moving forward with the dissertation project. You may certainly use the DBR forms that we have on the website (or modify for your own needs), as for permission to use in your research project, we ask only that you provide citation as appropriate in your work.

Best of luck.
Sandy

__________________________________________
Sandra M. Chafouleas
Professor, School Psychology Program
Associate Dean of the Graduate School
Research Scientist, Center for Behavioral Education and Research

Neag School of Education
Department of Educational Psychology
216 Glenbrook Rd. (U-2664)
University of Connecticut
Storrs, CT 06269
860-486-6808
www.ucb.org
www.directbehaviorratings.org
APPENDIX C

Direct Behavior Rating (DBR) Form: 3 Standard Behaviors

<table>
<thead>
<tr>
<th>Date:</th>
<th>Student:</th>
<th>Activity Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>M T W Th F</td>
<td>Rater:</td>
<td></td>
</tr>
</tbody>
</table>

Observation Time:
Start: _______
End: _______

☐ Check if no observation today

Behavior Descriptions:

**Academically engaged** is actively or passively participating in the classroom activity. For example: writing, raising hand, answering a question, talking about a lesson, listening to the teacher, reading silently, or looking at instructional materials.

**Respectful** is defined as compliant and polite behavior in response to adult direction and/or interactions with peers and adults. For example: follows teacher direction, pro-social interaction with peers, positive response to adult request, verbal or physical disruption without a negative tone/connotation.

**Disruptive** is student action that interrupts regular school or classroom activity. For example: out of seat, fidgeting, playing with objects, acting aggressively, talking yelling about things that are unrelated to classroom instruction.

**Directions:** Place a mark along the line that best reflects the percentage of total time the student exhibited each target behavior. Note that the percentages do not need to total 100% across behaviors since some behaviors may co-occur.

---

**Academically Engaged**

% of Total Time

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>50%</td>
<td>Always</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>Sometimes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Respectful**

% of Total Time

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>50%</td>
<td>Always</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>Sometimes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Disruptive**

% of Total Time

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>50%</td>
<td>Always</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>Sometimes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Remember that a lower score for “Disruptive” is more desirable.
DIRECT BEHAVIOR RATING (DBR): AN OVERVIEW FOR TEACHERS

By Ajala Music, T. Chris Riley-Tillman, & Sandra M. Chafouleas

What is Direct Behavior Rating (DBR)?
Direct Behavior Rating (DBR) refers to the rating of one or more specified behavior(s) at least daily and the sharing of that information with someone other than the rater. For example, a teacher might use a DBR form to rate how well Johnny paid attention in math class. Then, the teacher might share that rating with Johnny and, as part of an intervention, link a consequence (e.g., a sticker) to that rating. DBR tools have a long history of use as a component of behavior support plans (e.g., self-management, behavior contracts) and are also used to collect information about behavior change over time (e.g., monitoring effects of medication for Attention-Deficit/Hyperactivity Disorder). Other common terms for DBR tools have included home-school note, good behavior note, behavior report card, etc.

Why is DBR appealing?
DBR can be appealing from a communication standpoint as the ratings can provide a simple, inexpensive, and flexible method of providing frequent feedback about behavior among students, parents, and teachers. Another appealing aspect of DBR is that use requires only minor change to existing classroom practices. DBR form completion time has been estimated to be between 10 seconds and slightly less than 1 minute per student, depending on the number of behaviors being rated. Thus, DBR data can provide a quick assessment of relevant behaviors, especially those not easily captured by other means.

Another reason for the appeal of DBR relates to the connection between data collection and intervention – DBR may serve both purposes! When used to communicate information about student behavior across settings, the home environment can offer an opportune setting to increase the number of potential contingencies and promote generalization of school-based intervention efforts. For example, parents may choose to provide reinforcers (e.g., movie, family outing) depending on if rating goals were met. Additionally, DBR can help increase communication between teachers and students, offering an opportunity to teach expected behavior and even have students participate in independent rating (e.g., self-monitoring). In summary, DBR offers opportunities for use in purposes related to assessment, communication, and/or intervention.

Why is data collection important, and what do I do with the obtained data?
Given that intervention effectiveness can be difficult to predict, we need ongoing sources of data to inform us about progress toward intended goals. DBR offers potential for collecting “quick” data across a wide variety of cases. Obtained data can then be quantified and compared for both summative (pre/post) and formative (ongoing) assessment purposes. For example, DBR data of Susie’s disruptive behavior over the past week can be summarized into a statement of average rating (e.g., 6 out of 10 points) or be used to determine the most likely period of high or low disruption if multiple ratings per day are taken (e.g., just before lunch). Data are
summarized relevant to the DBR scale used to rate behavior. For example, rating information might be plotted on a line graph, with the gradients along the y-axis showing the DBR scale (e.g., 0-10) and observation period on the x-axis (e.g., Monday, Tuesday, etc.).

**How is a DBR completed?**

Step 1: Complete the top of the DBR form (e.g., Date, Student, Day of Week).

Step 2: Define the observation rating period (e.g., 9:00am – 9:45am) and activity (e.g., independent work).

Step 3: Determine whether to rate an additional behavior (e.g., sleeping, tantrums). If so, complete the “optional behavior” section; this includes defining the behavior and completing information about the DBR scale (i.e., scale anchors, type of rating).

Step 4: Immediately following the observation period, rate the student’s behavior (e.g., percentage of time displayed, total number of times displayed).

**Example 1:** Mrs. Smith is estimating the percentage of time that Emily displayed disruptive behavior during math (10:10-10:44am).

![Disruptive Behavior Graph]

In this example, Emily displayed disruptive behavior 35% of the total observation period.

**Example 2:** Mr. Green is estimating the intensity of disruptive behavior displayed by during science class (1:12-1:50pm).

![Disruptive Behavior Graph]

In this example, John’s behavior during science was rated at 6, which represents moderately disruptive.

**Example 3:** Mrs. Wright has chosen to add the behavior “Yells at Other Students” and is estimating the percentage of time Sam displayed this behavior during language arts (8:30-9:25am).

![Yells at Other Students Graph]

In this example, Sam yelled at other students about 50% of the observed time.

V2.0 DBR: An Overview for Teachers was created by Ajlana Music, T. Chris Riley-Tillman, & Sandra M. Chafouleas.

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Downloadable at www.directbehaviorratings.org.
APPENDIX E

Directions for Using a Direct Behavior Rating (DBR) Form

What is a DBR?
- DBR is a tool that involves brief rating of student behavior following a specified period of time (e.g., 45-minutes of math group work).
- DBR offers a defensible, flexible, repeatable, and efficient way to gather information about student behavior (for more information, see www.directbehaviorratings.org).

How to use the DBR form.
Step 1: Complete information at the top of form, including specifying the observation period.
Step 2: Review the definitions for any pre-specified target behaviors. If additional behavior target(s) are warranted for the assessment situation, define the target and write in the associated definition.
Step 3: Review the directions for rating to ensure understanding of how to use the scale.
Step 4: Immediately following the observation period, complete the ratings. Check the “no observation today” box if unable to observe the student enough to confidently rate behavior.

Example 1: Mrs. Smith is rating the % of total time that Emily was academically engaged during math instruction (10:10-10:44 a.m.). In this example, Emily displayed academic engagement 70% of the total observation period.

Academically Engaged

<table>
<thead>
<tr>
<th>% of Total Time</th>
<th>Never</th>
<th>Sometimes</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-2%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-4%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-6%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7-8%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9-10%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Example 2: Mr. Green is estimating the % of total time that Seth was disruptive during morning circle. Here, Seth was disruptive during 20% of the total observation period.

Disruptive

<table>
<thead>
<tr>
<th>% of Total Time</th>
<th>Never</th>
<th>Sometimes</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-2%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-4%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-6%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7-8%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9-10%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Target Behavior Reference Sheet

Behavior Descriptions:

- **Academically engaged** is actively or passively participating in the classroom activity. For example: writing, raising hand, answering a question, talking about a lesson, listening to the teacher, reading silently, or looking at instructional materials.

- **Respectful** is defined as compliant and polite behavior in response to adult direction and/or interactions with peers and adults. For example: follows teacher direction, pro-social interaction with peers, positive response to adult request, verbal or physical disruption without a negative tone/connotation.

- **Disruptive** is student action that interrupts regular school or classroom activity. For example: out of seat, fidgeting, playing with objects, acting aggressively, talking/yelling about things that are unrelated to classroom instruction.

-L. King (2013)
APPENDIX G

Expository Advance Organizer Formats

Format #1: Outline

Language Arts – Ms. ___________ 3rd period
Date ________________

I. Vocabulary Warm-up (in notebook)
   A. apothecary
   B. sojourn
   C. taciturn

II. Character Roles - Group Activity
    A. get assigned characters from Ms. ----- 
    B. review and discuss 1st 99 pages
    C. complete Protagonist/Antagonist Analysis sheet

III. Group Presentations (3 mins. each)
IV. Turn in Analysis sheets
V. Check homework assignments

Fig. 1. Expository Advance Organizer example; note similarity to a Workshop agenda or lesson plan outline.
APPENDIX G (cont.)

Format #2: Checklist

Language Arts – Ms. -------- – 3rd period
Date: ______________________

_____ Vocabulary Warm-up (in notebook)
    _____ apothecary
    _____ sojourn
    _____ tacitum

_____ Character Roles - Group Activity
    _____ get assigned characters from Ms. ------
    _____ review and discuss 1st 99 pages
    _____ complete Protagonist/Antagonist Analysis sheets

_____ Group Presentations (3 mins. each)
_____ Turn in Analysis sheets
_____ Check homework assignments

Fig. 2 Expository Advance Organizer example; checklist format.
APPENDIX H

DIRECT BEHAVIOR RATINGS

DIRECT BEHAVIOR RATING (DBR):
SUMMARIZING DATA FOR INTERPRETATION

By Ajiana Music, T. Chris Riley-Tillman, & Sandra M. Chafouleas

Why and How to Summarize DBR Data

Once data are collected, it is important to figure out how to efficiently organize it in a meaningful way. Doing so can help ensure that information is effectively used to make decisions about student behavior – which is the point of collecting data in the first place! Data can be quantified, compared, combined, and summarized for both summative (pre/post) and formative (ongoing) purposes. For example, DBR data of Susan’s disruptive behavior over the past week can be summarized into a statement of average daily or weekly rating (e.g., 8 of 10) or can be used to determine the most likely period of high or low disruption if multiple ratings per day are taken (e.g., “Susan is most disruptive just before lunch”). Summarized DBR data can be presented as a list of ratings or in a chart, table, and/or graph. You can examine individual ratings or perform simple calculations to further summarize your data for interpretation. A simple way to summarize DBR data is to create a chart which displays the ratings. For example, if a teacher rates Susan’s on-task behavior using a DBR with a 0-10 scale (0=0%, 10=100%) 3 times a day for one week, the chart might look as follows:

Example Chart of Susan’s On-Task Behavior

<table>
<thead>
<tr>
<th>Day 1</th>
<th>Morning Meeting</th>
<th>Reading</th>
<th>Social Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 2</td>
<td>7</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Day 3</td>
<td>6</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Day 4</td>
<td>9</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Day 5</td>
<td>10</td>
<td>10</td>
<td>5</td>
</tr>
</tbody>
</table>

Looking at the information contained in the above chart, a clear difference in ratings can be noted based on time of day. That is, the Social Studies period appears to be the most problematic activity for Susan. Of course, in many situations you may want to do more with your data than simply list it out, particularly if there is too much data to digest. In these cases, you may want to create a data table (i.e., spreadsheet) as shown below.

Example of DBR Data Entry in a Spreadsheet for a Single Student

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Disruptive Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johnny</td>
<td>Date 1</td>
</tr>
<tr>
<td>Silent</td>
<td>4</td>
</tr>
<tr>
<td>Reading</td>
<td>5</td>
</tr>
<tr>
<td>Math</td>
<td>6</td>
</tr>
<tr>
<td>Science</td>
<td>1</td>
</tr>
</tbody>
</table>

The above table provides an example of how data can be entered into a spreadsheet. This example demonstrates ratings of disruptive behavior entered for two weeks for one student. Note that the design of your spreadsheet will depend on your actual data, including the number of students. For instance, you may be rating a group of children or an entire class once per day. In such situations, the spreadsheet might be designed in the following manner:
APPENDIX H (cont.)

Example of DBR Data Entry in a Spreadsheet for Multiple Students

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Date 1</th>
<th>Date 2</th>
<th>Date 3</th>
<th>Date 4</th>
<th>Date 5</th>
<th>Date 6</th>
<th>Date 7</th>
<th>Date 8</th>
<th>Date 9</th>
<th>Date 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johnny</td>
<td>7</td>
<td>5</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>5</td>
<td>0</td>
<td>7</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Bobby</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Sarah</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Tom</td>
<td>6</td>
<td>7</td>
<td>5</td>
<td>0</td>
<td>3</td>
<td>5</td>
<td>8</td>
<td>2</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Ryan</td>
<td>8</td>
<td>7</td>
<td>8</td>
<td>6</td>
<td>3</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>John</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>AVEAN</td>
<td>4</td>
<td>3</td>
<td>3.5</td>
<td>4.8</td>
<td>2.5</td>
<td>3.7</td>
<td>3</td>
<td>2.2</td>
<td>4</td>
<td>3.7</td>
</tr>
</tbody>
</table>

Once the data are entered, you can use a spreadsheet program (e.g., Excel) to make simple calculations. For example, if you want to average disruptive behavior data for each student, highlight the data you want averaged, click the “AutoSum” button, and select “Average” to automatically create a new cell displaying the average. A row with the average scores is highlighted in green in both tables above.

Typically you will want to summarize your data using an average, or mean, rating. However, you can also determine the median and/or mode. These terms are described below:

- **Mean**: A value that is computed by dividing the sum of a set of scores by the number of scores (e.g., if you want to know an average of Johnny’s disruptive behavior in science).
- **Median**: The value that half of the scores fall above and half of the scores fall below (e.g., if you want to know the midpoint academic engagement rating for a class of students).
- **Mode**: The most frequent value of a set of data (e.g., if you want to know what the most common rating is for Johnny’s disruptive behavior in math).

**How to Graph DBR Data**

Although calculating averages can be useful, it may be even more helpful to create a visual display of your data through a graph! Research has demonstrated that visual formats (versus a table or just list of numbers) are the most effective and efficient way to present data. DBR data are generally presented using line or bar graphs. For example, line graphs provide a simple way to review data collected over time (i.e., progress monitoring).

**Line Graph**

If you are examining data for one student or a small number of students, it may be useful to graph data points individually. You may also have collected data during a pre-intervention (e.g., baseline) phase and an intervention phase. To look at intervention effects, a line graph is a good option for visual display. Here is an example line graph for a student assessed during baseline and intervention phases of data collection.

As you can see, the graph depicts daily DBR data, using a scale of 0-10, for 6 baseline days and 10 intervention days. You can tell from the downward trend that the student is improving (e.g., amount of disruptive behavior is decreasing) on the intervention plan. Such graphs can be very useful when presenting data in child study team meetings, parent-teacher conferences, or when sharing with administrators or students. To create this graph, DBR data is placed on the y-axis and the observation interval (e.g., day or date) on the x-axis.
**APPENDIX H (cont.)**

**HOW TO CREATE A LINE GRAPH**

- Label the y-axis (vertical axis) with the behavior of interest (e.g., disruptive behavior or academic engagement).
- Select the scale for the y-axis based on the data collected (e.g., percentage vs. 0-10 scale).
- Label the x-axis (horizontal axis) with the observation interval (e.g., day, week, date).
- Separate the data in the baseline (pre-intervention) and intervention phases with a vertical line.
- Connect points within a phase.
- Represent missing data points by a break in lines.

**Bar Graph:**

An alternate option to the line graph is to create a bar graph of DBR data. A bar graph can be useful when looking at multiple data for a group of students or whole class, or when comparing behavior across different observation periods.

**Example of Susan’s On-Task Behavior in Math vs. Reading**

![Bar Graph Example]

**HOW TO CREATE A BAR GRAPH**

- Label the y-axis according to the DBR scale used (e.g., percentage vs. 0-10 scale).
- Label the x-axis with the appropriate observation interval (e.g., day, month, class).
- Select the behaviors (e.g., disruption, academic engagement) and the data (e.g., means) to be presented.
- Make sure to assign a label to the bar colors (e.g., blue is Reading class).
Table 1

*Paired Sample Statistics For Academic Engagement:*

*Treatments and Baseline/Withdrawal Phases*

<table>
<thead>
<tr>
<th>Paired Samples Statistics</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1 AE Means w/o Strategy</td>
<td>5.559</td>
<td>24</td>
<td>.8470</td>
<td>.1729</td>
</tr>
<tr>
<td>AE Means with Strategy</td>
<td>8.846</td>
<td>24</td>
<td>.4905</td>
<td>.1001</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Paired Samples Test</th>
<th>Paired Differences</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std. Error Mean</td>
<td>Lower</td>
<td>Upper</td>
<td>23</td>
</tr>
<tr>
<td>Pair 1 AE w/o Strategy</td>
<td>-3.2875</td>
<td>.9619</td>
<td>-3.6937</td>
<td>-2.8813</td>
<td>.000</td>
</tr>
<tr>
<td>-AE w/ Strategy</td>
<td>.1963</td>
<td>-16.743</td>
<td>-16.8</td>
<td><em>p &lt; .05</em></td>
<td></td>
</tr>
</tbody>
</table>

*Note:* The mean baseline/withdrawal phase DBR score for academic engagement behaviors was 5.6 and the mean intervention DBR score for academic engagement was 8.8, for a mean gain of 3.3 interval points or 33.0% increase. This difference was statistically significant (*t* (23) = 16.8, *p* < .05). The effect size estimate (*d̂*) based on the baseline/withdrawal phase standard deviation was 3.9, indicating an increase of over three and one-half standard deviations from the non-intervention periods. The 95% confidence interval for academic engagement was 2.9 ≤ *µ* ≤ 3.7, denotes that the strategy has the potential for increasing academic engagement.
Table 2

Paired Sample Statistics For Respectful Behaviors:

Treatments and Baseline/Withdrawal Phases

<table>
<thead>
<tr>
<th>Paired Samples Statistics</th>
<th></th>
<th></th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1 RESP Means w/o Strategy</td>
<td>8.298</td>
<td>24</td>
<td>.6200</td>
<td>.1266</td>
</tr>
<tr>
<td>RESP Means with Strategy</td>
<td>8.963</td>
<td>24</td>
<td>.5661</td>
<td>.1156</td>
</tr>
</tbody>
</table>

Paired Samples Test

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
<th>95% Confidence Interval of the Difference</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Upper</td>
<td></td>
</tr>
<tr>
<td>Pair 1 RESP w/o Strategy – RESP w/ Strategy</td>
<td>-.6654</td>
<td>.9810</td>
<td>.2002</td>
<td>-.10796</td>
<td>.003</td>
</tr>
</tbody>
</table>

Note: The mean baseline/withdrawal phase DBR score for respectful behaviors was 8.3 and the mean intervention DBR score for respectful behaviors was 9.0, for a mean increase of .7 interval points (7.0% increase). This difference was statistically significant ($t (23) = 3.3, p < .05$). The effect size estimate ($d̂$) based on the baseline/withdrawal phase standard deviation was 1.1, indicating an increase of just over one standard deviation from the non-intervention periods. The 95% confidence interval for respectful behaviors was $0.30 \leq \mu \leq 1.0$, denoting that the expository advance organizer has the potential for increasing respectful behaviors.
Table 3

Paired Sample Statistics For Disruptive Behaviors:

Treatments and Baseline/Withdrawal Phases

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DB Means w/o Strategy</td>
<td>1.901</td>
<td>24</td>
<td>.8109</td>
<td>.1655</td>
</tr>
<tr>
<td>DB Means with Strategy</td>
<td>.969</td>
<td>24</td>
<td>.4544</td>
<td>.0927</td>
</tr>
</tbody>
</table>

Paired Samples Test

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DB w/o Strategy</td>
<td>.9325</td>
<td>.9883</td>
<td>.2017</td>
<td>.5152</td>
<td>1.3498</td>
<td>23</td>
<td>.000</td>
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<tr>
<td>– DB w/ Strategy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.623</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The mean baseline/withdrawal phase DBR score for disruptive behaviors was 1.9 and the mean intervention DBR score for disruptive behaviors was .97, for a mean decrease of .93 interval points (app. 1.0% decrease). This difference was statistically significant ($t$ (23) = .93, $p < .05$). The effect size estimate ($\hat{d}$) based on the baseline/withdrawal phase standard deviation was $.52$, indicating a decrease of a one-half standard deviation from the non-intervention periods. The 95% confidence interval for disruptive behaviors was $1.4 \leq \mu \leq 2.3$, denoting that the expository advance organizer strategy has the potential for decreasing disruptive behaviors.
Figure 3. Results of Single Case ABAB Design Using Data Points to Represent Trends of Academic Engagement

*Figure 3.* Note the following phases indicated: baseline (Days 1-4), intervention phase one (Days 5-8), withdrawal (Days 9-12), and intervention phase two (Days 13-16) as well as the trends of the mean scores; Academic Engagement (AE) mean without strategy, 5.6; AE mean with strategy, 8.9
Figure 4. Results of Single Case ABAB Design Using Data Points to Represent Trends of Respectful Behaviors

Figure 4. Note the following phases indicated: baseline (Days 1-4), intervention phase one (Days 5-8), withdrawal (Days 9-12), and intervention phase two (Days 13-16) as well as the trends of the mean scores; Respectful Behaviors (RESP) mean without strategy, 8.3; RESP mean with strategy, 8.9
Figure 5. Results of Single Case ABAB Design Using Data Points to Represent Trends of Disruptive Behaviors

Figure 5. Note the following phases indicated: baseline (Days 1-4), intervention phase one (Days 5-8), withdrawal (Days 9-12), and intervention phase two (Days 13-16) as well as the trends of the mean scores; Disruptive Behavior (DB) mean without strategy, 1.9; DB mean with strategy, 1.0