# The Challenge of Learning to Comprehend Language

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## Chapter 1—Introduction

#### Background

Accurate estimates of the prevalence of emotional or behavioural disorders among children who attend public schools are essential for effective service planning, allocation of resources, and development of educational policy (Olsen, 2015; Polanczyk, 2015). Of special concern to special education teachers, school administrators, and educational policymakers are prevalence rates of students who experience severely impairing psychiatric disorders that cause substantial disruption in daily functioning and learning (Costello, 2005). Clinically, there is evidence that students who experience substantial impairment because of a psychiatric disorder have a different educational course and prognosis than their less impaired peers, are at greater risk for negative long-term outcomes, and require specialized interventions with more intensive levels of care (Costello, 1999; Costello, 2003). Despite this, many of these students do not receive necessary mental health services (Costello, 2005). As their educational career progresses, they fall behind in the fundamental skills necessary for success in the classroom and in life. The most important of these fundamental skills is reading (Williams et al., 2018).

Researchers have found that many students with or at risk for behavioural disorders (BD), emotional disturbance (ED), and emotional / behavioural disorders (EBD) experience reading difficulties that are recalcitrant to quality reading intervention (Benner et al., 2005). Trout et al. (2003), examined the research on the academic status of students with emotional and behavioural disorders from 1961 to 2000 and reported that the prevalence of underachievement in reading for students with emotional disorders (ED) ranged from 31% to 81%. The authors noted that magnitude of reading deficits ranged from 0.53 grade levels to

over 2 grade levels behind same-aged peers without disabilities. Greenbaum et al. (1996) and Mattison et al. (2002) assessed the prevalence of reading skill deficits among students with BD. Greenbaum et al. (1996), sampled from all youth with ED (N = 812) across six states. The percentage of students reading below grade level at intake (ages 8 to 1 1 years), 4 years later (ages 12 to 14 years) and 7 years after intake (ages 15 to 18 years) was 54%, 83%, and 85%, respectively. Furthermore, Anderson, Kutash, and Duchnowski (2001) found that students with BD (n = 42) performed significantly better than those with Learning Disabilities (LD) (n = 61) on reading measures in kindergarten and first grade but not in the fifth and sixth grade. The reading achievement scores of students with BD did not improve over time, whereas students with LD showed statistically significant improvement in the 5 years from intake to follow-up (p < .001). Taken collectively, these studies show that students with or at risk for BD, ED, and EBD are likely to experience moderate reading difficulties that remain stable or worsen over time (Nelson, Benner, et al., 2004).

#### Reading and Self-Regulation

Prior to 2019 (Skibbe et al., 2019), no study has examined how the development of behavioural self-regulation relates to the way language and literacy develop across multiple school years. Skibbe et al. (2019) examined how the development of a child's self-regulation relates to how the child develops core literacy skills from preschool through second grade. Using previously established trajectories, the researchers investigated whether individual differences in the self-regulation trajectory a child follows (i.e., early, intermediate, or late) predict individual differences in language and literacy skill development in four key areas: decoding, reading comprehension, phonological awareness, and vocabulary. They considered

how self-regulation relates to the level, rate of growth, and timing of growth of language and literacy skills. They showed that earlier development of self-regulation has an advantage in children's language and literacy learning.

## Behaviours and Challenges to Overcome

In 1997, an amendment of the Individuals with Disabilities Education Act (IDEA) included the language, "Positive Behaviour Interventions and Supports" (PBIS), which described methods used to identify and support desired behaviours in the school setting. With the new guidance in mind, the educational research community began developing and studying these PBIS. In the modern context, PBIS seeks to reduce or eliminate poor behaviour schoolwide through the encouragement of positive behaviours. According to PBIS Rewards (2021), the goal of PBIS was to create a positive school climate in which students learn and grow. However, school climate can vary widely from school to school. Several factors affect school climate, including school location, neighborhood culture, instructional methods, student diversity, and school administration.

Changing school climate may seem like a daunting task. Schools that successfully employ the PBIS framework can make the task more manageable. According to PBISRwards.com, the key to an effective PBIS implementation is an "all-in" mentality among teachers and administrators at a school site. For PBIS to produce positive change in a school's climate, it needs to be employed schoolwide and with consistency.

School climate has bearing on attendance rates, academic achievement, and graduation rates. Regardless of socioeconomic status, students in a positive school climate are more likely to have higher test scores and greater academic success. In addition, positive school climate

helps students to develop the social and emotional skills they will need to become productive members of society.

Yet PBIS does not have a track record of reducing severe behaviours within the special education setting. That studies show that "all-in" seldom includes special education students or teachers. Kahn (2020) studied the efficacy of PBIS within special education, asking questions about students with disabilities and their experience and conceptions of implementing PBIS in their classrooms. Findings from that study suggest that students collectively held negative perceptions of the exclusionary practices often featured within the upper tiers of PBIS. The student responses revealed the low efficacy of punitive discipline. In theory, cycles of frustration and aggression appeared to be associated with student experiences of exclusionary discipline and punitive threats (i.e., "you will remain in class with the teacher for a silent lunch"), which seems to result in student apathy and undesirable teacher-student relationships. The researchers also observed negative teacher behaviours, such as yelling and belittling comments, including low fidelity of PBIS implementation. Last, many student participants expressed the desire for calm learning environments that offer freedom, play, and opportunities to engage in dialogue for reconciliation.

#### Physical Aggression and Severe Behavioural Challenges

Physical aggression towards others is one of the most prevalent forms of challenging behaviour reported amongst people with disabilities in special education settings. Effective support for aggressive behaviour is likely to require both pro-active behaviour change strategies (e.g., environmental and antecedent manipulation, skill building, and reinforcement based approaches) and reactive behaviour management plans (e.g., diffusion strategies, self-

protective procedures, and minimal restraint). Whilst research is available concerning the former, little is available for the latter. This is unfortunate because, despite the relative success of positive behaviour change strategies, it is apparent that physical aggression may be difficult to eliminate from behavioural repertoires. Therefore, it is not surprising that aggressive behaviours endure over prolonged periods of time. This has implications for learning for students with or at risk for EBD, as rigorous instruction is often a trigger for aggression and other inappropriate behaviours (Adams & Allen, 2001).

#### Description of the Research Site and Studied Population

The research shows that teachers could increase the reading and comprehension scores of students with or at risk for EBDs. However, most of the studies took place in what we can call ideal or controlled settings. To date, no study has examined these issues in an urban or US Title 1 school setting. This small-scale action research study will feature a cohort of 8<sup>th</sup> grade public school students (n=12) with well below baseline English language skills as determined by statewide standardized testing who are with or at risk for EBD.

The studied student population contains students with an Other Health Impairment (OHI), Autism Spectrum Disorder (AUT), or Specific Learning Disability (SLD) eligibility for Special Education services where EBD is or may also present. An analysis of the initial / intake forms of the studied student population shows that parents, teachers, and school psychologists were all concerned about the behavioural challenges of these students.

Given that the studied population have many years of experience with their school district's PBIS strategies, the assumption is that the students would not still present challenging

behaviours and learning deficits. Yet, the data show that each year, the students fall further behind their peers in reading skills and comprehension.

#### Behaviourism vs. the Quality School

How teachers manage their classrooms is an important part of achieving an effective learning environment. Educators know all students learn differently and choosing the right instructional style can mitigate behavioural issues and make good instruction possible.

According to Oliver & Reschly (2007), a significant body of research also shows that classroom organization and the ability to manage student behaviour significantly influences the persistence of new teachers in teaching careers. Within this context, instructional theory and classroom management strategies are among the most important aspects of teacher education.

With the constantly developing nature of classroom management theory, one key theorist stands out. Throughout the 20th and 21st centuries, the theories of B. F. Skinner revolutionized how teachers deliver education. Understanding his theories within the context of PBIS can help educators define their own classroom management methods and decide about how to best approach interactions with students (Lynch, 2018). B. F. Skinner's contribution to learning theory is significant. He based his work on the idea that learning is a function of change in overt behaviour. According to Skinner, changes in behaviour result from individuals' responses to events, or stimuli, that occur in their environment. By rewarding the stimulus-response (S-R) pattern, the individual responds similarly in the future. The key to Skinner's theory is reinforcement, or anything that strengthens the desired response. This could include praise, good grades, a reward, or even a feeling of accomplishment. Of course, negative reinforcement occurs when a stimulus results in increased response upon withdrawal. The

central tenet of Skinner's work is that positively reinforced behaviour will reoccur. Therefore, teachers must present information in small amounts, reinforcing desired responses. In each case, reinforcement applies to similar stimuli.

Modern classroom management systems, as well as current instructional development methods, integrate Skinner's work on operant conditioning. Operant conditioning is the process of learning through reinforcement and punishment. When applied to programmed instruction, Lynch (2018) notes that the following should occur:

- Practice should occur in a question-answer format that exposes students to information gradually through a series of steps.
- The learner should respond each time and receive immediate feedback.
- Teachers pair excellent student performance with secondary reinforcers, such as praise,
   prizes, and good grades.
- Instructional designers arrange questions by difficulty, with the desired response being the correct answer. This creates positive enforcement.

There are many obvious ways in which Skinner's work has been directly incorporated into modern school systems. Though teachers used rewards for good behaviour long before Skinner, his theories influenced many behaviour management systems used in today's classrooms.

Teachers use immediate praise, feedback, or rewards when seeking to change problematic student behaviour. Some even use "token economies" to reward students systematically. But what good is a sticker or a cookie when the student makes the choice to be aggressive or to use violence to satisfy some other basic need?

In contrast to the externally directed methods of operant conditioning, Choice Theory and the Quality School concept seek to help teachers build relationships with students and support their efforts towards self-regulation of their emotions. William Glasser coined the term "Choice Theory" in 1998. Choice theory states that all we do in life is behave. Glasser suggested people willfully and intentionally choose their behaviour. He proposed genetics drive people to satisfy five Basic Needs: survival, love and belonging, power, freedom, and fun. In Choice Theory, the most important need is love and belonging. Love and belonging, also known as connectedness with others, help to satisfy all other needs (Glasser, 1998a).

Glasser's work affects learning theory in a variety of ways. First, Glasser identified teachers as managers who need to work effectively when teaching their students. The role of teachers as managers requires them to guide students in understanding that working hard and being obedient has value and will have a positive influence on the trajectory of their lives.

Teachers achieve this influence in developing positive relationships with students and creating active, relevant learning experiences that enable students to show mastery and success. In this way, the classroom becomes a needs-satisfying place for students. In developing lessons, teachers who practice Choice Theory work to make sure that student classroom activities satisfy the students' needs. This allows learning to increase while diminishing disruption.

Students can connect, feel a sense of competence and power, have some freedom, and enjoy themselves in a safe environment (Sullo, 2011).

Glasser (1998b) distinguished the difference between traditional schools and his Quality Schools concept. He described the former as schools engaging in "schooling", which he defined as being enforced by low grades and failure, and the latter as engaging in the "education" of

students. Glasser believed that "schooling" is what students, even many outstanding students, rebel against in school. He saw "schooling" as making students gain knowledge or memorize facts that have no value for anyone, including the students, in the real world. Glasser noted that in or out of school, there is nothing good about knowing something or not knowing something unless you use it or intend to use it. He saw the purpose of education as nurturing a love of lifelong learning in all students, not in stifling it.

Operationally, Glasser (1998b) envisioned classrooms composed of students who differ by at least one grade level, which creates a mix of ideas and abilities. This multi-age classroom differs from the traditional classroom model, but not from a special education Special Day Class. In multi-age classrooms, students remain in a classroom for over one year, which fosters closer relationships with their teacher and their peers. This allows the teacher to develop a deeper understanding of a child's strengths and needs. Thus, the teacher is more capable of guiding and supporting the students. Building a relationship based on trust and respect provides the students with a classroom ecology (Hoerricks, 2022a) conducive to cooperative learning.

A Quality School (1998b) personalizes learning experiences so each student can reach their full potential. Teachers meet the students where they are, and students learn at their own pace. Students take responsibility for their own learning and this self-direction helps students discover that learning is meaningful and adds value to their lives. The multi-age classroom uses peer mentoring and cooperative learning to improve competence and create small learning communities. Younger students look to older students for help, which leads to younger students accomplishing assignments they may not have been able to complete on their own.

The benefits to older students mentoring younger students are increased independence, self-confidence, and competence. Cooperative learning also builds relationships; therefore, decreases bullying behavior and increases the positive school culture comprising a family of learners who support and care for one another. The varied level of maturity and development offers students more opportunities to gain social-emotional skills. Older students learn patience, tolerance, self-confidence, and nurturing whilst younger students overcome shyness, become more confident, and understand how to meet their needs appropriately.

There are three common characteristics of classrooms and schools that apply choice theory:

- Minimize coercion. Coercion never inspires quality. Students aren't "made" to behave
  using rewards and punishments. Instead, teachers build positive relationships with their
  students. The teacher, as manager, helps the student increase their own self-regulation
  skills.
- Effective teachers focus on quality. They expect mastery of concepts and encourage students to redo their work and try again until they have showed competence and highquality work. The emphasis is on deep learning through application.
- Self-evaluation is common. When students receive timely and helpful feedback, they
  take ownership of their learning by evaluating their own performance. This promotes
  responsibility and helps students reach goals whilst becoming skilled decision-makers.
   As a result, students become actively involved in their own education.

#### Self-Regulation Strategy Development

The Quality School's emphasis on self-direction does not negate the need for direct, explicit instruction. Teachers are vital to not only provide instruction but also to model appropriate behaviours (Hoerricks, 2022). One of the most important behaviours that teachers model in a Quality School is self-regulation. Like all other topics presented in the classroom, self-regulation strategies must be explicitly taught and modeled if the students are to learn the concepts and begin to develop strategies on their own.

Self-Regulation Strategy Development (SRSD) is an evidence-based instructional approach that supports the self-regulated use of academic strategies by combining direct explicit instruction of an academic strategy with self-regulation skills (e.g., goal setting, self-reinforcement, self-monitoring, and self-statements; Scruggs & Mastropieri, 2007). SRSD has been an effective instructional method for improving reading comprehension deficits (Mason, 2013; Sanders et al., 2019) for students diagnosed with various disabilities, including those with or at risk for EBD, spanning Grades 4 through 12.

The components of SRSD make it an ideal instructional method to use with students with and at risk for EBD. To begin with, the SRSD instructional approach accounts for students' metacognitive skills and learning behaviors (Harris & Graham, 1999). Many students with or at risk for EBD have developed inefficient learning behaviors (e.g., use of inappropriate behavior to avoid a situation or task, noncompliance with academic requests) and have deficits in self-regulation skills (Mastropieri & Scruggs, 2014), requiring instruction on how to use self-regulation skills to plan, execute, adapt, and complete academic tasks (Smith et al., 2015). SRSD also provides explicit instruction on how to integrate self-regulation skills into the learning

process within the stages and allows for the opportunity for any of the self-regulation skills to be intensified for students who need additional supports (Sanders et al., 2021). The structure of SRSD also supports the learning needs of students with or at risk for EBD (Ennis & Jolivette, 2014).

SRSD uses multiple recursive stages to teach an academic strategy to mastery; these stages can be combined, reordered, or repeated as necessary (Harris et al., 2002). Teachers should manipulate these stages based on the individual needs of their students. These stages are (1) develop and activate background knowledge, (2) discuss it, (3) model it, (4) memorize it, (5) support it, and (6) independent practice (Sanders et al., 2021). A brief description of the six stages is found in the Methodology section.

## Summary of Problem to be Solved

The studied population of students are all well below their grade level benchmark in reading and comprehension. According to their standardized test data, many are at least three grade levels below their peers. This severely impacts their ability to access the curriculum in any meaningful way. Additionally, many have behavioural challenges, including aggressive tendencies that interfere with interventions.

The intertwined academic and behavior deficits, often referred to as the failure cycle, of students with and at risk for EBD negatively impact learning and skill acquisition. Reading comprehension is one academic area where students with and at risk for EBD display significant deficits. The self-regulated strategy development (SRSD) instructional approach is one method that accounts for students' metacognitive skills and learning behaviors, making it a promising

approach for use with students with and at risk for EBD, including students served in more restrictive setting (Sanders et al, 2021).

## Chapter 2 – Literature Review

#### Introduction

Self-regulated strategy development (SRSD) is an instructional approach designed to help students learn, use, and adopt the strategies used by skilled readers. It is an approach that adds the element of self-regulation to strategy instruction for reading. It encourages students to monitor, evaluate, and revise their thinking about what they read, which in turn reinforces self-regulation skills and independent learning.

One of the greatest challenges for instructors in special education programs is to help students acquire the basic cognitive skills and habits needed to be self-directed learners. Research from both secondary and postsecondary general education settings suggests that strategy instruction strengthens students' abilities to engage with learning, benefit from instruction, and succeed. Strategy instruction is an approach that teaches the tools and techniques necessary for understanding, learning, and retaining new content and skills. It involves teaching strategies that are both effective in assisting learners with acquiring, retaining, and generalizing information, and efficient, helping them acquire the information in the least amount of time. There is a range of approaches and a range of uses for strategy instruction in all content areas for learners of all ages.

As with other types of strategy instruction, SRSD is explicit, direct, and guided so that strategies become integrated into the overall learning process. Instruction begins as teacher-directed but with a goal of empowering students to be self-directed. The self-regulation element addresses negative self-talk or perceptions of self-as-learner through replacement with positive self-talk, self-instructions, and new habits with which to approach learning tasks.

Strategies can then be used to teach learners how to learn and study, how to accomplish specific cognitive tasks, or how to apply and communicate their knowledge in a variety of contexts. The goal is for learners to internalize the process and strategies and to select and use them independently and with confidence. Strategies thus become tools in the learner's toolbox.

As noted previously, SRSD is not new. There is a considerable body of research on the use of SRSD in various contexts going back more than 10 years. This research includes needs analyses, meta-analyses, intervention studies, and writings specific to the implementation of SRSD in various populations. Yet, despite all of this, precious little can be found that applies SRSD to a special education student population with or at risk for EBD in a US Title 1 setting.

## Needs Analyses

Adams and Allen (2001) assessed the need for reactive behaviour management strategies in children with intellectual disability and severe challenging behaviour. They noted that the adult population had been previously studied in great depth, but children had yet to be assessed. A retrospective study was thus conducted to ascertain the nature of aggressive behaviours amongst a cohort of children referred to a specialist support service. Aggressive behaviours were found by the authors to occur at high rates within the study group. Almost 60% of the children displayed aggression that occurred at least daily, and the behaviours resulted in serious consequences for carers in almost one-third of the group. Physical interventions were already in use in 56% of cases but were largely improvised by carers. The need to include reactive behavioural training as part of an overall intervention package for carers of children with challenging behaviour appeared to be supported by the results. Despite the relative success of the positive behaviour change strategies, it was apparent to the

researchers that physical aggression may be difficult to eliminate from behavioural repertoires. Therefore, the authors concluded, it is not surprising that aggressive behaviours endure over prolonged periods of time. This has implications for learning for students with or at risk for EBD, as rigorous instruction is often a trigger for aggression and other inappropriate behaviours.

In 2001, Anderson, Kutash, & Duchnowski conducted a comparison of the academic progress of students with or at risk for EBD and students with a learning disability (LD). Their article presented findings from a study that compared academic progress over five years for students with EBD and students with LD. Their findings indicated that students with LD made significant progress over time in reading and this progress was associated with receiving less full-time special education services. Similar findings, however, were not uncovered for students with or at risk for EBD.

As these two, often cited examples note, there is clearly a need to incorporate a behaviour management strategy with any form of reading instruction for students with or at risk for EBD. This need echoes throughout the many studies conducted within this research area.

## Previous Reviews / Meta Analyses

In 2010, Benner et al. conducted a meta-analysis of the effect of reading instruction on the reading skills of students with or at risk of EBD. The goal of the analysis was to extend the work of Coleman and Vaughn (2000) by (a) detailing independent variables and outcome measures for each study, (b) including studies sampling from students with or at risk of EBD, (c) analyzing study outcomes using average effect size estimates as a common metric, and (d) summarizing literature on reading interventions conducted with students with or at risk of EBD over nearly

four decades (from 1970 to present). The results of the review suggested that effective literacy instruction has a positive effect on the reading skills of students with or at risk of EBD.

Elsewhere, in developing a Culturally Responsive Positive Behavioural Interventions and Supports (CRPBIS) framework, Bal (2018) first conducted a systematic review of literature. Then, they developed the CRPBIS framework based on the literature review and interdisciplinary literature from cultural psychology, organization studies, learning sciences, critical geography, cultural studies, as well as education research. Although their work was conducted in Wisconsin, their literature review and findings suggest that an SRSD-like intervention could be applied in a variety of contexts.

Garwood (2018) attacked the lack of research on the literacy skills of adolescents with or at risk for EBD compared to the amount of intervention research targeting their behavior. Within the limited literacy research available, they noted, there are multiple issues that still need to be addressed, including (a) a predominant focus on children in elementary school, (b) gender differences in students with or at risk for EBD, and (c) variation in the labels of research participants. The purpose of their integrative, comprehensive review was to investigate these concerns and provide a summary of the data to guide future research studies. A total of 63 articles targeting the reading and/or writing skills of middle and high school students with or at risk for EBD were identified, spanning 37 years of research (1980–2016). Analysis of the articles revealed that less than 15% of the participants were female, and the percentage of females included in this research has declined across time; 11 different labels have been used to describe research participants; oral reading fluency, persuasive writing, and reading comprehension were the three most common dependent variables; and less than 5% of studies

took place in inclusive general education settings. Garwood thus serves as a key piece in the design of this action research project.

Narrowing the criteria for review, Ennis et al. (2017) examined the instructional technique of Precorrection, a technique often found within SRSD strategies. Precorrection is a proactive strategy designed to prevent problem behavior from occurring by identifying contexts likely to occasion problem behavior and facilitating the occurrence of appropriate behavior. To determine the evidence-base for this practice the authors applied the Council for Exceptional Children's (CEC) Standards for Evidence-Based Practices in Special Education to the body of research on precorrection. They identified 10 single-case research design articles that (a) evaluated the effects of a precorrection intervention, (b) occurred in a PK-12 traditional school settings, (c) used experimental or quasi-experimental design, and (d) were published in a peer-reviewed journal. They identified five articles meeting an 80% weighted criterion of CEC's quality indicators. These five articles contained over 20 participants with positive effects based on CEC standards; therefore, they concluded precorrection to be an evidence-based practice using a weighted coding criterion to examine the evidence-based determination (retaining the presence and absence coding for each item constituting each quality indicator).

Narrower still, Individual intervention studies exist in the literature for a variety of contexts and student groups. Burke et al (2015) noted that many students with or at risk for EBD experience learning problems in reading at the middle and secondary school levels. Yet, the academic performance of students with or at risk for EBD is often overlooked in the research literature. The purpose of their article was to provide a quantitative synthesis of the published, peer-reviewed, single-case research literature on reading interventions for students with or at-

risk for EBD. The findings were discussed in the context of improving the academic and behavioural outcomes of middle and secondary students with or at risk for EBD. Examining their findings in greater detail yields a list of intervention studies that require further examination.

Lane (2004) also reviewed the literature on academic instruction and tutoring interventions for students with or at risk for EBD. Building on the importance of academic instruction for students with or at risk for EBD, the author stressed that the EBD research community must identify effective, efficient strategies and procedures for building these students' academic skills to enable maximum participation in the general education curriculum. She conducted an analysis of the research literature from 1990 to the present (2004) pertaining to academic interventions in the areas of reading, written expression, and mathematical skills conducted with students with or at risk of EBD and concluded that this literature provides a solid foundation from which to launch additional inquiries. She noted, however, that new research studies must address issues of unclear population focus; concerns regarding the breadth of the students involved, the scope of the content, and replication of studies; the limited presence of design features that are needed to draw accurate conclusions about intervention outcomes; and insufficient reporting procedures.

Along the same line, Mastropieri and Scruggs (2014) summarized the major findings in this area and provided direction for future researchers and practice. They noted that in the past decade (2004-2014), the amount of instructional research on writing for students with or at risk for EBD has increased dramatically. They found that students with or at risk for EBD greatly improve their writing skills when they are systematically taught to write using metacognitive strategies with embedded self-regulation strategies. They discovered that researchers have

demonstrated that, in many cases, the intensity and duration of instruction required for these students to be successful is significantly longer and more intense that what is typically provided in schools.

#### Intervention Studies

Individual intervention studies exist in the literature for a variety of contexts and student groups. Ennis et al, (2018), examined the phenomenon utilizing precorrection. Precorrection, as presented in the article, is a low-intensity strategy that focuses on preventing problem behaviors from occurring by providing reminders for appropriate responding, context modification to support student success, and reinforcement for appropriate responding.

Throughout the article, the authors offer lessons from the field featuring the perspectives of practitioners who have successfully implemented this strategy with students, including those with or at risk for EBD.

Garwood et al., (2017), found that many children with or at risk for behavior problems perform poorly academically and can disrupt regular classroom instruction. They noted that although good classroom management strategies can benefit children with behavior problems, it is not clear whether these students need consistently good classroom management across the early elementary school years to improve their academic performance. Their study examined the quality of classroom management from kindergarten through third grade experienced by children who were rated as exhibiting symptoms of EBD in the classroom to understand the cumulative effects in relationship to third grade reading performance. Results indicated that higher-quality classroom management in the first 4 years of school was significantly related to higher scores on standardized measures of reading achievement in third

grade for boys exhibiting EBD, but girls exhibiting EBD appeared unaffected by the quality of teachers' classroom management during this same time. This was followed up by Garwood et al., (2020), helping practitioners serving elementary school students with or at risk for EBD with a variety of options for delivering reading instruction with embedded behavioural supports. Here, the authors discuss the co-occurrence of reading difficulties and behavioural struggles among some young children. Then, they highlight the importance of early and intensive reading instruction, and they review three rigorous studies that have targeted the reading achievement of elementary-grades students with or at risk for EBD. These studies focused on the development of foundational reading skills, such as phonological awareness and decoding skills. Next, they describe five research-based behaviour management strategies that can support students' engagement during reading activities. Finally, they provide practitioners with an indepth how-to section on early reading instruction that incorporates proactive behavior management strategies.

Khan (2020) took a phenomenographical approach, studying fifteen students with disabilities from one middle-grades setting. The students were recruited to explore the qualitatively different ways they experience and conceive of exclusionary discipline (i.e., inschool suspension (ISS), out-school suspension (OSS), and detention) and PBIS. The participants engaged in interviews and produced two (2) visual representations to investigate the following research questions: (1) How do students with disabilities experience and conceive of school discipline?; (2) How do students with disabilities experience and conceive the implementation of Positive Behavior Intervention and Supports (PBIS); and (3) In what ways can voices of students with disabilities help transform school discipline and PBIS implementation to meet

their desired learning environments? An outcome space with seven categories of descriptions emerged. The author's findings suggest that students collectively held negative perceptions of exclusionary practices, and their responses revealed low efficacy of punitive discipline. As noted by the authors, cycles of frustration-aggression appeared to be associated with student experiences of exclusionary discipline and punitive threats (i.e., "you'll have silent lunch!"), which seems to result in student apathy and undesirable teacher-student relationships.

Negative teacher behaviors were also observed such as yelling and belittling comments, including low fidelity of PBIS implementation. Lastly, many student participants expressed that they desired calm learning environments that offer freedom, play, and opportunities to engage in dialogue for reconciliation.

McKenna et al., (2021), commented on the substantial body of observation research that investigates the way reading instruction is provided to students with learning disabilities. They opined that there is little research in this area involving students with and at risk for EBD. The purpose of their investigation was to contribute to the limited body of observational studies investigating school-based practice in reading for this student population. In their investigation, 11 teachers from two states were systematically observed whilst providing reading instruction over the course of the 2017-2018 school year. Participating students were also observed over the course of the year and completed two standardized reading assessments at the beginning and end of this investigation. Teachers were also interviewed to identify contextual factors that promote or impede the provision of high-quality reading instruction to this student population. The study's findings suggest that teachers need additional training, support, and resources to maximize instructional time. Students in this study's sample tended to make no or minimal

progress in reading and were frequently observed displaying low levels of academic engagement across settings.

#### Self-Regulated Strategy Development

Moving from the generic to the specific, we next investigate the available studies that feature our chosen intervention, SRSD. Ennis and Jolivette (2014) noted that students with or at risk for EBD have academic deficits that affect their success in school. However, they found few research studies investigating what strategies work best for this population. They found that one promising intervention to support the literacy skills of students with and at risk for EBD is SRSD. Their study describes SRSD as a six-stage explicit strategy instruction model that includes procedures for goal setting, self-monitoring, self-instruction, and self-reinforcement that can be generalized to a variety of tasks. Their article summarized the existing literature using SRSD with students with and at risk for EBD, including 3 group design and 11 single-subject studies. They suggested using teachers as interventionists, conducting interventions within three-tiered models of PBIS.

Blair and Diamond (2008) examined interrelations between biological and social influences on the development of self-regulation in young children and considered implications of these interrelations for the promotion of self-regulation and positive adaptation to school. Emotional development and processes of emotion regulation were seen as influencing and being influenced by the development of executive cognitive functions, including working memory, inhibitory control, and mental flexibility important for the effortful regulation of attention and behavior. Developing self-regulation was further understood to reflect an emerging balance between processes of emotional arousal and cognitive regulation. Their results showed that

early childhood educational programs that effectively link emotional and motivational arousal with activities designed to exercise and promote executive functions could be effective in enhancing self-regulation, school readiness, and school success.

Mason continued this line of inquiry in 2013 finding that explicit strategy instruction combined with student-directed self-regulation in conjunction with cognitive strategies had proven effective in supporting low-achieving students' reading comprehension. The author noted that experts have extended 1 such approach, SRSD, for the expository reading comprehension Think before reading, think While reading, think After reading (TWA) strategy, finding that by integrating instruction for writing, language development, and prompted discourse into the instructional framework. Researchers, as such, have found positive performance effects following SRSD for TWA instruction across reading comprehension and language measures, oral and written summarization, oral and written retelling, and informative essay writing.

Elsewhere in the literature, Ennis et al., (2014), presented a brief synthesis of nine studies investigating SRSD in alternative education settings, including self-contained day and residential schools, with 113 students with or at risk for EBD in grades 3 through 12. A brief synthesis of this body of SRSD research was presented, which represented SRSD implementation in individualized, small-group, and class-wide formats using group and single-case research design methodology. The lessons learned from this research were presented to inform both practitioners and researchers, including guidelines for overcoming the unique barriers to SRSD implementation that students with or at risk for EBD in alternative education settings may present. The author's recommendations include the need for (a) developing strategies for

increasing students' academic engagement, (b) further addressing behavioural and academic needs, (c) overcoming issues of truancy and transience, (d) promoting maintenance and generalization, and (e) increasing teacher buy-in.

Sanders et al., (2019), conducted a meta-analysis to investigate the effectiveness of SRSD reading interventions for students with disabilities in school settings. The authors used the Council for Exceptional Children's Standards for Evidence-Based Practices in Special Education (CEC-EBP) to evaluate experimental investigations that targeted reading comprehension using an SRSD reading intervention and included students with disabilities. Summary outcome measures presented in the analysis included the between-case standardized mean difference, percentage of non-overlapping data, and visual analysis. The authors found that although the results indicated SRSD to be generally effective, the small number of studies and the fact that only 2 studies met all the CEC-EBP quality indicators prevent the strategy from presently being considered evidence based.

Sanders et al., (2021), continued along similar line of inquiry and found that the intertwined academic and behavior deficits of students with or at risk for EBD negatively impact learning and skill acquisition. They noted that reading comprehension is one academic area where students with or at risk for EBD display significant deficits. The commented that the SRSD instructional approach is one method that accounts for students' metacognitive skills and learning behaviors, making it a promising approach for use with students with or at risk for EBD, including students served in more restrictive settings. Their journal article provided an overview of SRSD, a reading comprehension strategy taught using the SRSD instructional approach and described how to integrate low-intensity behavior strategies into SRSD reading instruction to

further support the needs of students with and at risk for EBD. It is this article that spurred the idea for the current study.

## Summary

The problem of academic decline in student populations with or at risk for EBD has been studied for at least two decades. Yet, as Sanders (2019) notes, the small number of studies and the fact that only 2 studies met all the CEC-EBP quality indicators prevent the strategy of SRSD reading interventions for students with disabilities in school settings from presently being considered evidence based. The current study attempts to add to the body of available research with a studied population of disadvantaged students in a United States Title 1 setting.

## Chapter 3 – Methodology

#### Introduction

The present study examines a small population of public-school students that are well below their grade level benchmark in reading and comprehension. Most are at least three grade levels below their peers as indicated by their standardized test scores. This struggle with reading and comprehension severely impacts their ability to access the general education curriculum in any meaningful way. Additionally, the students display behavioural challenges, including aggressive tendencies and violence, that interfere with general academics as well as interventions.

The intertwined academic and behavior deficits of students with and at risk for EBD negatively impact learning and skill acquisition. Reading comprehension is one academic area where students with and at risk for EBD often display significant deficits. The SRSD instructional approach is one method that accommodates students' metacognitive skills and learning behaviors, making it a promising approach for use with students with and at risk for EBD, including students served in more restrictive setting (Sanders et al, 2021).

Having now surveyed the available literature and finding the gaps that lead us to the present study, an exploration of the methodology of this study follows. This chapter begins with the choice of methodology. Within this exploration, the basic tenets of action research will be outlined as well as the reasons for choosing this approach. This sets the stage for the next section, the context of the study. The context here is important. None of the previously reviewed studies were conducted within a context like the one featured in this study. In the

literature review, it was found that none of the results of the previous studies could apply to the current population due to dissimilarities with the context.

Whilst the overall design is not novel, the use of regression discontinuity in examining the problem is. Regression discontinuity designs are designs in which participants are assigned to the intervention and the control conditions based on a cut-off score on a pre-intervention measure that typically assesses need or merit. This measure is one that has a known functional relationship with the outcome of interest over the range relevant for the study sample. The primary difference between a regression discontinuity design and a nonequivalent comparison group design is that in the former, assignment to intervention group is made based on the individual's score on a pre-program measure (pre-test). This strategy allows the researcher to target an intervention to a certain individual or group in need of the intervention without compromising internal validity.

The subjects of this study will be recruited from among the special education population of 8<sup>th</sup> grade students at a Title 1 middle school in California. An exploration of what informed consent looks like within public school special education when framed by social justice will colour the discussion of participant recruitment and participation.

This chapter concludes with an outline of the proposed intervention, data collection, and analysis.

## Choice of Methodology

Participatory Action Research (PAR) can be seen as a bridge between science and practice, combining the best of the two. PAR facilitates people in a community to co-discover, co-design, and co-implement solutions to the problems and challenges of their community. This

approach strongly differs from the traditional top-down research approaches as it leverages the strengths within a community to discover and solve internal issues.

When conducting PAR, researchers do not focus their efforts in simply collecting data - as in traditional scientific research. In PAR, the researcher also facilitates a process in which proposed solutions to the research problem are put into action within the studied population. In traditional science, concepts and theories are often formulated in isolation: from behind the desk of the researcher. In practical development cooperation, which is often seen in projects with a national or international focus, people often start a project from their own passion for helping people, whilst lacking the scientific knowledge and skills required for successfully implementing the project. PAR merges the two together. Through on-the-ground research, researchers zoom-in to the different perspectives on a particular issue, as seen by all stakeholders. Through the co-creation of solutions with these stakeholders, the researchers can put their findings into practice immediately.

In the context of this study, we can say that action research supports educators in seeking out ways in which they can provide an enhanced quality of instruction. With this purpose in mind, the following features of the action research approach are worthy of consideration (Koshy, 2010: 1):

- Action research is a method used for improving practice. It involves action, evaluation, and critical reflection and – based on the evidence gathered – changes in practice are then implemented.
- Action research is participative and collaborative; it is undertaken by individuals with a common purpose.

- It is situation-based and context specific.
- It develops reflection based on interpretations made by the participants.
- Knowledge is created through action and at the point of application.
- Action research can involve problem solving if the solution to the problem leads to the improvement of practice.
- In action research findings will emerge as action develops, but these are not conclusive or absolute.

PAR was chosen here as it allows the researcher to focus on a type of change that promotes democracy and challenges inequality. The ability to read and comprehend is fundamental to full participation in life's affairs. Thus, PAR here is context-specific and targeted on the needs of a particular group – special education students with a history of reading and comprehension struggles. PAR was also chosen as it supports an iterative cycle of research, action, and reflection; using the development of self-regulation to 'liberate' participants to have a greater awareness of their situation to act on their own behalf.

## Context

This small-scale PAR study will feature a mixed cohort of 8<sup>th</sup> grade public school students (SPED students = 12, general education students = 52, n=64) with well below baseline English language skills (as determined by state-wide standardized testing). The studied student population contains students with an eligibility for special education services of OHI, AUT, or SLD where EBD is or may also present who are in a general education (mainstream) setting. An analysis of the initial / intake forms of the special education student population shows that parents, teachers, and school psychologists were all concerned about the behavioural

challenges of these students. Given that the studied population have many years of experience with their school district's PBIS strategies, the assumption is that the students would not still present problematic behaviours and learning deficits. Yet, the data show that each year, the students fall further behind their peers in reading skills and comprehension.

Also relevant to the context of the study, but not a feature, is the fact that although the school district professes an adherence to Multi-Tiered Systems of Support (MTSS), which is a mix of Response to Intervention (RtI) and PBIS, the school site does not feature an RtI program. Thus, the proposed intervention may serve as an ad-hoc Tier 2 intervention for the general education students who may meet the criteria for inclusion lessons that are a feature of this study after the regression discontinuity analysis of pre-test scores has been applied.

It is this context, the legacy of behavioural challenges and their correspondence with academic struggles, that is most relevant to the present study. The relationship between academic and behaviour problems is a long-recognized phenomenon (Alexander, Entwisle, & Horsey, 1997; Hinshaw, 1992). In their meta-analysis, Maguin and Loeber (1996) found that poor academic performance appears to be related to frequency, persistence, and seriousness of so-called delinquent activity. A more recent study (Joffe & Black, 2012) revealed that those with low academic performance had significantly greater social, emotional, and behavioural difficulties. Educators can clearly see this in their schools and classrooms, yet they continually try to add more rigor to academic instruction without trying to work on the barriers that many students have in reaching academic success.

The context and location were chosen for the researcher. The researcher is a current member of Teach for America. As a part of that program, they were placed in the Los Angeles

Unified School District as a Special Education Teacher. At the research site, the researcher is a Resource Specialist Teacher. Thus, they are in a unique position to be able to facilitate this research, to work with the stakeholders, to hopefully improve the outcomes of the students involved with this study, and to model this process to other teachers at the school site – thus improving their practice.

#### Overall design

The guiding purpose of the current study is to examine the effectiveness of an instructional program in improving the performance of struggling students attending an urban school that serves a high percentage of children from low-income families (US Title 1). A struggling student is defined for the current study as a student who has scored well below the state benchmark on a norm-referenced test (California Assessment of Student Performance and Progress (CAASPP) Smarter Balanced Interim Assessment Blocks (IAB)), who has had behavioural challenges, and who may have been selected for intervention by their classroom teacher. This means that the studied population will include students who are assigned to a special education program and have an individualized educational program (n=12) as well as students in the general 8<sup>th</sup> grade population (n=52).

The experimental intervention, self-regulated strategy development (SRSD; Harris & Graham, 1996, 1999), is compatible with current theories on the development of competence in a subject-matter domain (Alexander, 1992, 1997; Chi, 1985; Harris & Alexander, 1998; Pintrich & Schunk, 1996). These conceptualizations emphasize that learning is a complex process that depends, in large part, on changes that occur in a learner's strategic knowledge, domain specific knowledge, and motivation (Alexander, Graham, & Harris, 1996).

Although the primary focus of SRSD is on teaching students strategies for successfully completing an academic task, students are also taught self-regulatory procedures (e.g., goal setting, self-monitoring, and self-instruction) that are needed to carry out the target strategies and better understand the tasks presented to them in their classrooms. In addition, instructional procedures for fostering aspects of motivation, such as student effort, are embedded within the model. This emphasis on addressing multiple aspects of development reflects a basic premise that guided construction of the SRSD model over 20 years ago (Harris & Graham, 1999); students who experience academic difficulties benefit from an integrated approach to intervention that directly focuses on cognitive, metacognitive, behavioral, and affective factors. The theoretical underpinnings of this emphasis included Meichenbaum's (1977) integration of cognitive and behavioral perspectives; Brown and Campione's research (Brown, Campione, & Day, 1981) on the development of self-regulation, metacognition, and critical components of strategy instruction; and the work of Soviet theorists, such as Vygotsky (1978), on the origins of self-control.

The research seeks discover if such an SRSD intervention can improve students' scores on a norm-referenced test (e.g., IAB). The research questions thus become:

- $H_0$  An SRSD intervention will not improve student scores on the norm-referenced test.
- H<sub>1</sub> An SRSD intervention will improve student scores on the norm-referenced test.

The study will use a regression discontinuity (RD) approach to examine whether a research-based intervention, SRSD, is effective for special education students with or at risk for EBD who receive instruction in general education classroom setting (inclusion) as well as their struggling general education peers. The performance of these students will be compared via an

examination of pre and post intervention norm-referenced test scores. RD designs are quasi-experimental and permit strong causal inferences like those associated with randomized controlled trials for research in tiered instruction (Ashworth & Pullen, 2015; Lee & Lemieux, 2010). In special education, RD designs are appropriate in studying the effectiveness of interventions such as with MTSS studies when using a cut-off so that "the treatment effect observed visually around a cut-off value can also be extended in both directions from the cut-off value" (Ryoo & Pullen, 2017, p. 138).

## Participants' recruitment

This study's participants will be recruited from the school site's 8<sup>th</sup> grade population. As is customary in studies with human subjects, the researcher will seek out the informed consent of the participants. The informed consent process is generally described as needing voluntary participation which is based on full and open information. This includes the risks benefits and what will happen to the information given (Mishna, Antle & Regehr, 2004). Traditional methods of gaining informed consent from children and people with disabilities have differed from that of the wider society (Alderson & Goodey, 1996; Shakespeare, 2006). For students / children with complex disabilities, proxies are continually used (Shakespeare, 2006), therefore their consent to the research process had sought assent as a token secondary action, rather than as a primary concern for those researchers. Furthermore, many scholars have noted that the consent process for children and youth does not genuinely address them as participants in their own right (Alderson & Goodey, 1996). Instead, it gives overriding power to parents and therefore many researchers only obtain assent with a tokenistic sense of consent from the actual participants.

Informed consent is interwoven with other ethical concerns like issues of power. This is of concern within an educational setting and can be found in the status of the students as being vulnerable because of maturation and disability labels (Grieg et al., 2007; Mahon, Glendinning, Clarke & Craig, 1996; Stainton-Rodgers, 2004). In relation to informed consent, the power of who gives consent is important. As highlighted earlier, adult proxies have been used for disabled students and indeed, the practices of the schooling system see that parental consent is necessary for student participation, which has seen some schools stick rigidly to this practice. This immediately places the students within an unequal power relationship. As power is an ambiguous and engrained aspect of research it is impossible to eliminate fully, however it is hoped that some strategies including asking for informed consent or 'informed dissent' (Alderson & Goodey, 1996, p.107) directly from the participants will lessen the effects of the power imbalance and at the very least, acknowledge their participation as individuals.

The use of adult proxies undermines this and ignores the inherent right of the participant to decide to give informed consent or informed 'dissent' (Shakespeare, 2006). By perpetuating the myth of non-capacity, traditional research maintains a deficit perspective of disability and students in general. It is important that the participants are recognized by any research as having the same human rights, authority, and self-determination over their lives as any peer would have as a participant (even if this is not so in their life in general). This is especially important regarding any form of (non)participation, that the participants' inherent rights and wishes will not be over-ridden by formal powers of authority including that of the researcher.

However, it is not generally necessary to ask for / receive consent for students to participate in state-mandated standardized testing. The pre / post test instrument administration will feature the IAB from CAASPP, which is a standardized test normally given to students in California. The IABs are tests that measure what students know and can do using the Common Core State Standards for English language arts/literacy and mathematics. The IABs are versatile and can be administered to students in either a standardized (e.g., benchmark) or non-standardized manner, or used by school and district staff for professional development. IABs focus on smaller sets of targets to provide more detailed information for instructional purposes (e.g., reading comprehension). Each IAB contains approximately 5–15 items.

As this study will not utilize additional administrations of the IAB, but will support the regular administration cycle, the lessons that are the feature of this study could be considered a normal part of the students' academic experiences, acting as a quasi Tier 2 Rtl intervention.

Nevertheless, students will be informed of the study and it's goals first. Their express consent will be requested. If consent is granted, then parents will be contacted, informed of the study and it's goals, and asked for their consent. Both parties will be notified of their rights regarding the ethical testing of human subjects, including the right to remove themselves from the study and it's activities at any time. These affirmative consent requests / receipts will take place prior to the administration of any interventions. It is important to note that students / parents who opt out of the study will still be required by the school to participate in the regular cycle of standardized testing.

## Plan for the proposed intervention

SRSD is a trans-theoretical teaching approach that was first developed nearly 40 years ago by Karen Harris and Steve Graham. They designed the approach to fill a gap in writing instruction for students with disabilities. It can be used with individuals, in small groups, and class wide with students in grades two through twelve. SRSD integrates multiple effective instructional components with self-regulatory processes to empower students as learners. SRSD is similar to PBIS in that it is a teaching framework rather than a teaching product. It is comprised of six interconnected and iterative stages (Harris, Graham, Mason, & Frielander, 2008):

- Develop and activate background knowledge.
- Discuss skill and strategies.
- Model skill and strategies.
- Memorize strategies.
- Guided practice of skill and strategies.
- Independent practice.

The What Works Clearinghouse (WWC) is an investment of the Institute of Education Sciences (IES) within the U.S. Department of Education (DOE) that was established in 2002. The WWC (2017) reviewed nine studies that met the methodological parameters of the IES Students with a Specific Learning Disability review protocol with reservations. Eighty-eight percent of the experiments showed positive results, whilst none of the included studies yielded negative results.

Whilst the WWC review is useful, it does not fully encompass the breadth of research that has been conducted on the effects of SRSD. The research shows that SRSD has been used with general education students, autistic students, students with learning disabilities, and students with or at risk for EBD (Asaro-Saddler, 2016; Garwood, 2018; Graham, McKeown, Kiuhara, & Harris, 2012; Losinski, Cuenca-Carlino, Zablocki, & Teagarden, 2014). Further, SRSD has been used to improve students written expression, reading comprehension, math fractional skills, and self-advocacy (Cuenca-Carlino, Freeman-Green, Stephenson, & Hauth, 2016; Cuenca-Carlino, Mustian, Allen, & Whitley, 2018; Garwood, 2018; Mason, 2004; Mason, 2013; Mason, Davidson, Schaffner, Hammer, Miller, & Glutting, 2013; Mason, Snyder Hickey, Sukhram, & Kedem, 2006; Sanders, Ennis, & Losinski, 2018).

In keeping with the framework versus product concept, online resources that freely offer SRSD resources have been identified. One such resource, ThinkSRSD.com, offers a host of resources for educational personnel who seek a repository of seminal and current SRSD research. ThinkSRSD.com also offers pre-constructed assessments, graphic organizers, mnemonics, graphs, self-regulatory strategies, and plans that may be implemented or used as exemplars for instructor-constructed materials.

Below is a breakdown of the different parts of the proposed SRSD intervention with explanations and seven lessons that will be the feature of this study. Again, SRSD prepares students for success by following the gradual release of responsibility model (Fisher & Frey, 2013), which begins with direct instruction and modeling. Direct instruction and modeling are essential for reading and writing instruction. Students with disabilities as well as culturally and linguistically diverse students, who may be used to different communication and writing styles,

can especially benefit from this form of instruction. Students benefit from seeing clear models of both the process and the product in addition to explicit instruction on what to do and how to do it.

#### Pre-Intervention Data Analysis

- The District utilizes it's Whole Child data repository to house student standardised test scores. The test scores from the previous administration of the IAB for reading comprehension will be retrieved and placed within a spread sheet.
- RD analysis will be conducted to identify those students who will be selected for the intervention. A sharp RD analysis is a rigorous approach that can be used to estimate program impacts in situations in which candidates are selected for treatment based on whether their value for a numeric rating exceeds a designated threshold or cut point. The IAB reports focus on a smaller set of skills and are designed to provide information about student performance on a related set of standards. IAB results are reported based on three classifications: "Below Standard," "Near Standard," and "Above Standard." Those chosen for intervention will be those students either Below or Near Standard.

#### The Intervention

Lesson 1: Teach POW + genre-based mnemonic. Explicit strategy instruction
begins by teaching mnemonics for the reading and writing process as well as the
specific genre or subject that will be taught. As students eventually learn a
structured process for how to read and write, students analyze exemplar texts to

- develop a clear understanding of what the expectations of the genre with which they are working. (See Appendix F)
- Lesson 2: Model identifying genre / subject elements in an exemplar. Identifying
  genre / subject elements in an exemplar helps students to understand the
  expectations of academic reading and writing. The teacher will complete a genre
  or subject specific graphic organizer with the elements to model for students
  how notes and an outline are connected to reading / writing. (See Appendix G)
- Lesson 3: Review mnemonics & model identifying genre / subject elements in a poor example. Reinforce students' understanding by analyzing a poor example. The teacher will model the identification of the genre / subject elements in an exemplar until students really understand. Then, repeat the process and involve the students with a poor example and guide the students so that they begin to see what is missing or incorrect. This is a structured way for them to see what checking and revising their work looks like and reinforces their understanding of the genre / subject elements and writing structure. (See Appendix H)
- Lesson 4: Model the entire process from start to finish. Students need to see and hear what happens from identifying key information in a text, making notes, reading, writing, and then checking and revising their work. The teacher will "think aloud" whilst modeling. This allows students to understand what they are supposed to be thinking about and what questions they can ask themselves during the reading / writing process. These think alouds should also include teachers modeling self-statements of what they do when they make a mistake or

get stuck so that students can learn to internalize these to support their persistence through academic tasks. Students should follow along with the teacher and complete all the same tasks (analyzing the topic, taking notes, etc.) so that they are already comfortable with the process as the teacher begins to release some of the responsibility to them. Here, the goal is to use a graphic organizer to assemble information relative to the questions being asked of a text, using this information to select the appropriate answer from each question's answer pool. (See Appendix I)

each stage of the process but support the students to supply the information / produce most of the work product. The teacher will lead the class in guided practice whilst they provide information, and they scribe whilst the class follows along. The teacher leads the process (all the steps from Lesson #4) with the students helping to supply the information throughout. Also, the teacher reviews self-statements to support persistence and success, as well as encouraging students to create their own content whilst reminding them to graph their work. (Note: if students completed a writing prior to instruction, they can now graph that work product and see how much better they did by using the strategies.) Here, the students are instructed in the basics of the writing process, using this information to deconstruct the writing process to find where in the sample paragraphs answers to comprehension questions may be discovered. (See Appendix J)

- Lesson 6: Support students to work collaboratively but with more independence.
   Lead the students in the steps of the process (all the steps from Lesson #4).
   Monitor and support students to work collaboratively to:
  - Take notes from the source
  - Turn the notes into sentences
  - Paraphrase what they have read
  - Check their own use of their graph organizers
  - Support each other to use self-statements.

Here, the students collect information from the text, seeking to link specific words in the question pool to words in the sample text. This direct correlation of answer text to source text supports the goal of citing evidence from the source text in providing answers to questions. (See Appendix K)

Lesson 7 and Beyond: Support independent work if the students are ready. The teacher will support students to generalize and use the strategies in other subject areas as well as to write independently. Here, the students are presented with a sample text and a mix of constructed response and multiple-choice questions. They will be able to choose the strategy that works best for them for each of the presented questions. This serves a two-fold purpose of assessing their proficiency in the use of the presented strategies as well as attempting to control for prompt dependence. Prompt dependence occurs when a person needs a prompt to initiate a skill or activity that they have already mastered (Hoerricks, 2022b). (See Appendix L)

#### Post-Intervention Assessment & Data Analysis

Students will log into CAASPP's on-line platform. They will be directed to the
testing area for an administration of the IAB. Following the administration of the
assessment, scores will be transferred from the web site to the spread sheet
used for data collection and analysis purposes.

## Data collection and analysis

Data on students' testing outcomes will be collected from the District's Whole Child interface as a comma separated values file and transferred to a common spreadsheet format.

The test instrument, the Focused IAB (Grade 8 ELA - Research: Use Evidence - FIAB), consists of 16 questions. According to the state of California, once students have completed the FIAB, the platform provides a scaled score that can be used to evaluate the student's proficiency on the tested skill relative to the state's benchmarks as well as in relation to their grade-level peers. Each student who completes the FIAB receives an overall scale score. The scale score is the basic unit of reporting. It allows for fair comparisons at both the individual student level and the aggregate or group level. This scale ranges from approximately 2000 to 3000 which includes grades 3-8 and high school. The Smarter Balanced scale is a vertical scale, which means that student performance in all grades is reported on the same scale. According to the Developers (Smarter Balanced, 2021) this allows educators to compare a student's scale score from a test in one grade to that student's scale score from a test in another grade. However, this comparison should be done with caution, especially when interpreting or predicting scores for non-adjacent grade levels. An important aspect of a vertical scale is that

the overall score range for each grade steadily increases, and the threshold scores between each level increase across grade levels.

Based on their individual scale scores and the error band, student results for FIABs are reported as one of three reporting categories: Above Standard, Near Standard, or Below Standard. Each reporting category represents a range of scale scores. Rather than reporting sub-scores as observed scale scores with standard errors, student performance on the content on which sub-score is based is classified by whether the student's performance is "below standard," "near standard," or "above standard." These designations are based on how far the sub-score is from the standard, in terms of its standard error of the mean (SEM), with the lower boundary of level 3 (the level 3 cut score) being the standard. The level 3 cut score is used as the standard because it represents being on track for college or career readiness according to a criterion-referenced standard setting process.

The criteria for each of the three performance classifications, with respect to the college and career readiness standard, are:

- Above Standard: The sub-score is at or above the level 3 cut score by more than
   1.5 of its SEM.
- Near Standard: The sub-score does not meet the definition for above or below standard.
- Below Standard: The subscore is below the level 3 cut score by more than 1.5 of its SEM.

Figure 1 below illustrates one way to understand performance classifications. The topmost band in this figure represents achievement level boundaries on the vertical scale used to report the overall scale score. Below this are two bands for each of the two hypothetical claims, claim X and claim Y, the correspondence between "most likely" performance classifications and achievement levels. For both claims X and Y, the "at/near" classification is centered on the level 3 cut score (the standard). This will be true for all claims. Students who score very close to the level 3 cut score will certainly be classified as "near standard."

As the student's sub-score gets further away from the standard, however, the student is more likely to be classified as "above standard" or "below standard." The distance from the level 3 cut score at which an "above" or "below" classification becomes more likely than "near" varies from claim to claim as shown in the figure. The distance will be greater for claims whose scores have larger standard errors. The figure indicates that claim Y scores tend to have larger standard error than claim X scores because the "near" classification band extends farther away from the standard for claim Y than for claim X. In general, the larger the standard error, the further a sub-score must be from the level 3 cut score in order to meet the 1.5 standard error criterion for an "above" or "below" classification.

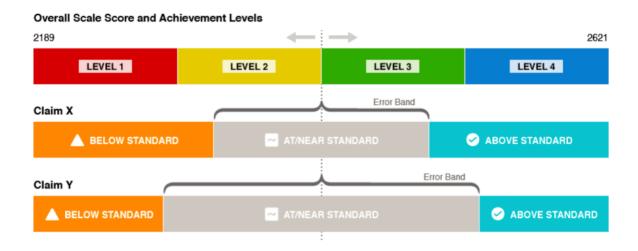


Figure 1 - Sample Scale Score

For this study, the previous test administration's scaled scores will be used to provide the cut-off for inclusion in the intervention. Those with near standard or below will be included in the intervention. After the intervention is completed, the scaled scores from the current test administration will be collected and compared, previous data vs current data, to judge if growth or improvement has occurred.

# Chapter 4 – Data Analysis

#### Introduction

In Chapter 3, we explained the research design and data collection methods used in this project to investigate if an SRSD themed literacy intervention given at a public Title 1 middle school in southern California to students with or at risk for EBD could increase reading their comprehension scores on a standardized state test. Chapter 4 of this project will provide a description of our findings and a discussion based on the data analysis. We will explain the extent to which the data answered the following research question: can an SRSD intervention improve student scores on a state-administered norm-referenced test.

Pre and post intervention data was collected from the District's Whole Child data repository. Several interesting discoveries emerged from the data: 1) the special education students' mean scale score (2519 – Near Standard) was significantly higher than the mean scale score of their grade-level peers (2456 – Below Standard), 2) every special education student who had 81% or better attendance for the intervention sessions improved their scores over the previous administration of the test, 3) five of the twelve special education students scored above the state's mean scale score, and 4) one of the special education students was among the three 8<sup>th</sup> graders at the school site to score in the Above Standard range. That student's change in score was 126 points from the previous administration. Presentation of the results are followed by a discussion of themes revealed during the data analysis and their connection to the research questions. Our findings and discussions will also be situated in relation to information found in the literature review in Chapter 2.

## Pre-Intervention Data Analysis

The standardized test scores for all 8<sup>th</sup> grade students were retrieved from the District's Whole Child database and analysed via a regression discontinuity (RD) approach. The total current student population of the 8<sup>th</sup> grade, n=64, had data available in the system for the test's prior administration. The analysis revealed that less than 10 of the total 8<sup>th</sup> grade population had scored at or above the standard on the previous administration of the assessment. Of those students, none were significantly higher than the state's mean scale score. Therefore, upon consultation with the general education staff, the decision was made to include all students in the intervention.

#### Intervention

The 8<sup>th</sup> grade English Language Arts students at the school site are distributed across four class periods. The intervention was held during the first quarter of the class period on seven consecutive weeks between December 2021 and March 2022.

The first session introduced the intervention and sought student assent to participate.

Whilst there was 100% agreement across all classes, students were informed that they could opt to not participate if they chose to do so. The session also introduced the intervention's common core basis, vocabulary, and graphic organizers. The students were then guided through a sample text to demonstrate how the necessary elements could be found (See Appendix F for Lesson 1 demonstratives). The teacher did not collect any materials at the end of the session but did walk through the class to monitor participation and to offer constructive commentary.

The second session allowed the students to use the graphic organizer, introduced to them in Lesson 1, on a sample paragraph. Given the fact that many of the students are several grade levels below state standards, a paragraph at the 4<sup>th</sup> grade reading level was chosen. The teacher read the paragraph aloud and pointed to the key elements that were projected on the screen. The teacher engaged in a "think aloud" about the key elements, inviting the students to fill in their graphic organizers with the relevant information (See Appendix G for Lesson 2 demonstratives). Again, the teacher did not collect any materials at the end of the session but did walk through the class to monitor participation and to offer constructive commentary.

The third session featured a paragraph taken from Bransford & Johnson's (1972) paper on the importance of context in reading comprehension. The selection, a procedure for performing a common household task, was leveled at the 5<sup>th</sup> grade. Left out of the text was the procedure's purpose. Students were shown through teacher "think aloud" dialogue how to build context from the embedded clues and thus discern the main idea of the selection, even when the topic is outside of their own culture's sphere. The students were informed of the purpose of the selection, that Bransford & Johnson had argued against the inclusion of the paragraph in standardized tests due to the problems with the context – that most of the male respondents failed to identify the procedure whilst most of the female respondents correctly determined that the text was a procedure for folding laundry. A discussion was held whereby most students admitted that they had never helped to do the laundry at home (See Appendix H for Lesson 3 demonstratives), thus lacking the context by which they could understand the purpose of the procedure. Again, the teacher did not collect any materials at the end of the

session but did walk through the class to monitor participation and to offer constructive commentary.

In the fourth session, the teacher modeled the entire process from start to finish. Students were shown the relevant steps in identifying key information in a text, making notes, reading, writing, and then checking and revising their work. The teacher engaged in a "think aloud" whilst modeling the appropriate behaviours for this session. This allowed students to understand what they are supposed to be thinking about and what questions they can ask themselves during the reading / writing process. These "think alouds" also included the teacher modeling self-statements of what they do when they make a mistake or get stuck so that students can learn to internalize these to support their persistence through academic tasks. Students followed along with the teacher and completed all the relevant tasks (analyzing the topic, taking notes, etc.) so that they could become comfortable with the process as the teacher began to release some of the responsibility to them. Here, the goal was to use a graphic organizer to assemble information relative to the questions being asked of a text, using this information to select the appropriate answer from each question's answer pool (See Appendix I for Lesson 4 demonstratives and select student samples). For this lesson, there were two special education students absent and one who opted to not participate. After the lessons were completed, the work was collected, scored, and returned to the students with comments on where they could improve (if needed). The average score for the special education students on this task was 77.5/100. This was slightly above that of their general education peers who scored 73.96/100.

In the fifth session, the teacher guided students in working collaboratively. They prompted the students through each stage of the process but let the students support their peers by sharing the relevant information and producing most of the work product. Also, the teacher provided positive self-talk to support student persistence and success, as well as encouraging students to create their own content whilst reminding them to document their work. Here, the students were provided a review of the basics of the writing process, using this information to deconstruct the sample text to find where the answers to comprehension questions may be discovered (See Appendix J for Lesson 5 demonstratives and select student samples). For this lesson, there were no students absent and all present chose to participate. Again, the work was collected, scored, and returned to the students with comments as needed. The average score for the special education students on this task was 79.17/100. This was below that of their general education peers who scored 91/100.

In the sixth session, students interacted with three sample texts taken from a Smarter Balanced 8<sup>th</sup> grade test preparation packet acquired from Teachers Pay Teachers. The first item was an informational text paragraph about archaeology. Students were asked to answer a question about an element of the text. The second item was a poem from Scottish Poet, Charles Mackay. Two questions were presented to the students, again asking about elements of the text. The third item was a narrative paragraph. A single question was offered to the students. All the questions were in support of the task of finding and citing textual evidence to support one's assertion as to the correct answer. Students were also introduced to the concept of the attractive wrong answer and provided with strategies to spot such answer choices (See Appendix K for Lesson 6 demonstratives and select student samples). For this lesson, there

were two special education students absent and one who opted to not participate. Again, the work was collected, scored, and returned to the students with comments as needed. The average score for the special education students on this task was 72.5/100. This was below that of their general education peers who scored 87/100.

In the seventh and final session, students interacted with an information text about the baobab tree. Seven questions followed that allowed students the opportunity to demonstrate their proficiency in using the techniques learned over the preceding sessions. No specific instruction was provided as to which technique was suited to a specific question. Students were advised to use their best judgement as well as any notes that they had taken over the course of the intervention (See Appendix L for Lesson 7 demonstratives and select student samples). For this lesson, there were four special education students absent and all who were present opted to participate. Again, the work was collected, scored, and returned to the students with comments as needed. The average score for the special education students on this task was 62.5%. This was above that of their general education peers whose average score on this task was 46.17%. The overall class median was 37.4%, indicating that most students struggled with this lesson.

#### Post-Intervention Assessment

Over the week following the end of the intervention, all the students in the 8<sup>th</sup> grade took the CAASPP IAB standardized test (Grade 8 ELA - Research: Use Evidence (FIAB)). They were directed by the teaching staff to the testing area of the CAASPP web site utilizing a Secure Browser environment for an administration of the FIAB. Following the administration of the assessment, the scores were transferred from the portal to a spread sheet used for data

collection and analysis purposes. Accommodations were provided to those students with IEPs requiring more time to complete the test as well as those requiring testing be done in a smaller, quieter environment.

## Data Analysis

When the special education students took the FIAB in the previous year (2021), their group's average scale score was 2428. After engaging with the intervention, the current year's (2022) FIAB average scale score for the special education students rose to 2548. CAASPP reported that the average scale score for the state for 2022 was 2554. As shown in Table 1, 8 of the 12 (66%) special education students scored above the state's average scale score. The average scale scores for the special education students are slightly higher but are relatively comparable with the average scale score for the general education population, which was 2525. For the general education population, only 42% of the students were above the state's average scale score.

Table 1 – FIAB scores for the special education students – 2021 vs 2022

Student	IEP	Grade	2021 Score	2021 Level	2022 Score	2022 Level	Attendance %
1	SLD	8	2541	Near Standard	2584	Near Standard	97.56
2	SLD	8	2500	Near Standard	2464	Below Standard	78.95
3	SLD	8	2593	Below Standard	2371	Below Standard	70.69
4	SLD	8	2325	Below Standard	2469	Below Standard	95.33
5	SLD	8	2536	Near Standard	2563	Near Standard	93.1
6	SLD	8	2492	Near Standard	2586	Near Standard	94.83
7	AUT	8	2260	Below Standard	OPT OUT	Below Standard	93.1
8	ОНІ	8	2230	Below Standard	2445	Below Standard	92.24
9	SLD	8	2476	Near Standard	OPT OUT	Below Standard	81.03
10	AUT	8	2539	Near Standard	2665	Above Standard	95.1
11	ОНІ	8	2461	Near Standard	2492	Near Standard	83.48

12	ОНІ	8	2472 Near Standard	2580 Near Standard	86.9
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When considering the results in terms of the students' eligibility for services, the autistic student (AUT) who opted to take the test increased their score by 126 point and placed in the Above Standard range. The students with other health impairments (OHI) increased their scores by an average of 118 points. The students with a specific learning disability (SLD) who were present for more than 82% of the sessions increased their scores by an average of 77 points. For those students whose attendance was below 82%, all of whom have an SLD eligibility, the average point loss from the previous administration was -148.

#### Observations

Allowing the students to freely opt out of lessons was a controversial decision in the design of this intervention. It required negotiation with the general education teachers as it was outside of their class norms. Yet, through it all, only one student opted out of a single lesson. All present seemed to be quite engaged. Additionally, in subsequent visits to the general education classrooms, the teachers have been observed using many of the skills and techniques found in the intervention in their regular classroom work.

The skewness of the results of the seventh lesson within the intervention was unexpected, and significant for several reasons. First, based on the observations of student activities during the subsequent lessons, no instruction was provided to the students as to which technique to use for a particular question. Students, it seemed, were used to being prompted by their teachers at every step in their lessons and appeared to be confused as to how to proceed independent of prompting. This prompt-dependence (Hoerricks, 2022b) can be

a result of the behaviourist practices embedded within modern classroom management routines (Hoerricks, 2022a; Sandoval-Norton & Shkedy, 2019). Second, the special education students appeared to be better prepared to work with the offered supports as well as being more adept at switching between different support types. The general education students, who do not receive dedicated RSP services in their classes, had to decide if and when to use the offered supports on their own. As noted previously, the lack of prompting seemed to negatively impact their ability to maneuver through the question pool quickly and accurately. Finally, the issues raised by the observations from the seventh lesson should prompt further inquiry in an attempt to isolate the factors contributing to the skewness of the results.

As regards to the performance of the special education students on the assessment, they outperformed their general education peers in terms of numbers of students above the mean, 66% to 42%. Additionally, of the three 8<sup>th</sup> graders at the school site who scored Above Benchmark, one of them was a special education student. For the special education students with better than 82% attendance for the intervention sessions, all showed growth in their scores from the previous administration. Those whose scores fell from the previous year all had less than 82% attendance, reinforcing the importance of being present and engaged for instruction.

Although none of the students involved in this intervention had an eligibility of Emotional Disturbance (ED), there is often an underlying EBD presence in students with an AUT or OHI eligibility. With this in mind, we did expect that the specific, explicit instruction on self-regulation strategies related to instructional tasks would benefit these groups of students the most. Indeed, the data do show the largest point gains in these two groups.

## Significance of Findings

The work performed at the school site ahead of this participatory action research study demonstrated a need to focus significantly on elevating students' reading comprehension abilities. The data gathered and the literature reviewed ahead of the classroom work reinforced that opinion.

The research questions for this study were:

- $\bullet$  H<sub>0</sub> An SRSD intervention will not improve student scores on the norm-referenced test.
- H<sub>1</sub> An SRSD intervention will improve student scores on the norm-referenced test.

As we have demonstrated, the null hypothesis has been disproven. We therefore reject the null and accept the alterative hypothesis, that an SRSD intervention will improve student scores on the norm-referenced test. The extent to which the data collection answered the research questions guiding the study is discussed below.

The special education students at the school site, a Title 1 middle school in Southern California, increased their scale score by an average of 120 points from the previous year's administration of the norm-referenced test. In the current year's administration of the test, they outperformed their general education peers by an average of 29 points. The students with eligibilities for special education services that often have an underlying or secondary EBD component (AUT & OHI) experienced greater growth than those whose eligibility often does not feature such a secondary component (SLD).

SRSD, as an instructional approach, is designed to help students learn, use, and adopt the strategies used by skilled readers. It adds the element of self-regulation to strategy instruction for reading and writing. It encourages students to monitor, evaluate, and revise

their thinking about what they read, which in turn reinforces self-regulation skills and independent learning.

As with other types of strategy instruction, SRSD is explicit, direct, and guided so that strategies become integrated into the overall learning process. Instruction begins as teacher-directed but with a goal of empowering students to be self-directed. The self-regulation element addresses negative self-talk or perceptions of self-as-learner through replacement with positive self-talk, self-instructions, and new habits with which to approach learning tasks. Strategies can then be used to teach learners how to learn and study, how to accomplish specific cognitive tasks, or how to apply and communicate their knowledge in a variety of contexts. The goal is for learners to internalize the process and strategies and to select and use them independently and with confidence. Strategies thus become tools in the learner's toolbox.

The problem of academic decline in student populations with or at risk for EBD has been studied for at least two decades. Yet, as Sanders (2019) notes, the small number of studies and the fact that only two studies met all the CEC-EBP quality indicators prevented the strategy of SRSD reading interventions for students with disabilities in school settings from presently being considered evidence based. The current study attempted to add to the body of available research with a studied population of disadvantaged students in a Title 1 setting.

The students involved in this study demonstrated that they could apply the lessons learned to not only overcome the emotions of test day, but to achieve significant growth from the test's previous administration. Their ability to perform well on the test indicates that they are clearly learning and growing in class. With their newly gained skills and strategies, they are

now better able to demonstrate that growth as reflected in their standardized, norm-referenced test scores.

## Conclusion

This chapter provided an overview of the findings resulting from this study's data collection. Limitations in this study included a limited sample size for the student cohort, meaning results may not necessarily be generalizable. Yet, the results do track with previous studies, and attempt to fill in the gap found in the literature review in that such work had not been conducted in an urban / Title 1 setting with a mixed cohort of special education students.

Despite the small sample size, the data collected added evidence to the extremely vital area of study concerning reading comprehension and emotional regulation within the public school system. In Chapter 5, we will conclude this study by summarizing our findings and making recommendations for further study based on the data collected.

## Chapter 5 – Discussion & Conclusion

## Introduction

The researcher conducted this Capstone Project study at a Title I public school (8<sup>th</sup> grade) in urban Los Angeles, California with the intention of building on existing literature regarding the use of SRSD among students with or at risk for EBDs. In Chapter 4, the extent to which the data answered the research question, can an SRSD intervention improve student scores on a state-administered norm-referenced test of reading comprehension was explained.

Pre-intervention data analysis revealed that the studied population of students were well below their grade level benchmark in reading and comprehension. According to their norm-referenced standardized test data, many were at least three grade levels below their peers. This continued to impact their ability to access the curriculum in meaningful ways.

Additionally, many have behavioural challenges, including aggressive tendencies that interfere with interventions.

In the literature review, we demonstrated how the intertwined academic and behavior deficits of students with and at risk for EBDs often negatively impact learning and skill acquisition. Reading comprehension is one academic area where students with and at risk for EBDs display significant deficits. Through the intervention, we demonstrated that the SRSD instructional approach is a method that can account for students' metacognitive skills and learning behaviors, making it an appropriate methodology for use with students with and at risk for EBDs.

## Research Questions and Findings

The work performed at the school site ahead of this participatory action research study demonstrated a need to focus on improving the students' reading comprehension abilities. An inability to comprehend what one reads significantly impacts learning across the many subjects that students encounter during their time in the classroom. The data gathered and the literature reviewed ahead of the classroom work reinforced that opinion.

The research questions for this study were:

- H<sub>0</sub> An SRSD intervention will not improve student scores on the norm-referenced test.
- $H_1$  An SRSD intervention will improve student scores on the norm-referenced test.

As we have demonstrated, the SRSD intervention improved student scores on a norm-referenced standardized test. The 8<sup>th</sup> grade special education students at the school site increased their scale score by an average of 120 points from the previous year's administration. Fully supported with new skills and strategies, they outperformed their 8<sup>th</sup> grade general education peers by an average of 29 points on the assessment battery. We found that the students with eligibilities for special education services that often have an underlying or secondary EBD component (e.g., AUT & OHI) experienced greater growth because of the intervention than those whose eligibility often does not usually feature such a secondary component (e.g., SLD).

SRSD, as an instructional approach, is designed to help students learn, use, and adopt the strategies used by skilled readers. It adds the element of emotional self-regulation to strategy instruction for reading and writing. It encourages students to monitor, evaluate, and

revise their thinking about what they read, which in turn reinforces emotional self-regulation skills and independent learning.

The students involved in this study demonstrated that they could apply the lessons learned to not only overcome the emotions of test day, but to achieve significant growth from the test's previous administration. Their ability to perform well on the test indicates that they are clearly learning and growing in class. With their newly gained skills and strategies, they are now better able to demonstrate that growth as reflected in their standardized norm-referenced test scores.

## **Educational Implications**

The literature review revealed that SRSD could not yet be considered an evidence-based practice. No studies were found where SRSD approaches were used on a population of special education students with or at risk for EBDs in a US Title 1 setting. Yet, this study attempted to ascertain if this promising approach could improve outcomes of such a population, thus adding the results of this small-scale participatory action research study to the literature. This study's results showed that special education students with or at risk for EBDs could, when properly supported, perform as well or better than their peers in their general education classrooms.

It is hoped that the results of this study will inform both the school site and the wider special education community as to the need to fully support students' needs, both academic and emotional. The results also speak to the intertwined nature of such supports. For example, the school site lacks a fully implemented MTSS program. It has a mature PBIS program but lacks the RtI component. In this case, the intervention served as an RtI intervention for the school's 8<sup>th</sup> grade students. As a proof of concept, it worked. The results indicate that the students that

participated in the intervention achieved meaningful growth. As such, the results make the case for using this approach as a whole-class method in schools that practice full inclusion of their special education students.

It is important to note that the effects of the COVID-19 pandemic and the resulting distance learning regime likely played a role in the students low pre-intervention scores. Thomas (2019) performed an interdisciplinary review of research of trauma-informed practices in schools across two decades. Their work speaks to the need to create emotionally healthy school cultures. Gibson (2019) also researched this concept, noting that one could build resilient schools and communities through meeting the emotional needs of students, staff, and families. As a method for accommodating the emotional needs of students, SRSD fits into the wider trauma-informed practices of schools who may be struggling with closing the achievement gap post-COVID (Richards-Tutor & Solari, 2022; Sanders et al, 2022). The COVID-19 pandemic and resulting nation-wide shutdowns of entire sectors of the economy were certainly traumatic. Coming back to school after such an event, trauma-affected students can enter the classroom presenting dysregulated, angry, or disengaged behaviours (Brunzell, 2019). These students will naturally struggle to grasp the content of lessons given that many simply tuned out of their school's Zoom sessions for well over a year. The direct and explicit modeling of the component strategies of SRSD by the teacher takes the struggle out of learning, which can help students ease back into the rhythm of their in-person learning environments (Serhan, 2020).

#### Recommendations for Future Research

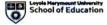
In Chapter 4, we noted that the data gathered from lesson seven of the intervention revealed a phenomenon known as prompt dependency in the studied population. For many students in special education settings, the cues and prompting strategies aimed at managing their behavioural difficulties frequently result in an over-reliance on adult support and development of prompt dependency (Bryan & Gast, 2000; Milley & Machalicek, 2012). MacDuff (2001) explained that "prompt dependence means that a person responds to the prompts instead of responding to the cues that are expected to evoke the target behaviour" (p. 43). In other words, an ongoing and explicit step-by-step instruction is required to produce the target behaviour, each time it is required. In the case of prompt dependency, self-initiated behaviour does not develop. Over time, prompt dependency not only inhibits the learning of new skills, but also reduces the ability to function without adult help (Mesibov, Shea, & Schopler, 2004). Subsequently, learned helplessness; the belief that one's own behaviour does not control outcomes, can develop (Sternberg & Williams, 2010; Wilson, 2021). Thus, future research should attempt to adapt SRSD in a way that can produce a reduction in prompt dependency.

#### Reflection

As a non-verbal autistic person and former special education student who graduated from high school functionally illiterate, literacy has been a passion of mine since gaining the ability to comprehend what I read. For me, this happened in my early 30's. I often share with my students that learning to read and comprehend as an adult is quite expensive, both in terms of the direct costs of instruction and in the indirect costs of not being able to fully participate in society. Thus, seeing that students are not comprehending what they read at my school site

motivates me to action. My position as an RSP, supporting students in just a few grades, helped me to target the intervention to maximum affect.

Moving forward from this experience, I hope to be able to publish a summary of these results to a suitable journal so that they inform a wider audience about this important topic. All students deserve to be properly supported in their learning. Teachers in Title 1 settings are often struggling to find evidence-based practices that they can utilise in their classrooms, practices that have been validated for use in similar contexts. Publishing the results can thus help them support their decisions to use this successful practice to lift their own students to literacy and success.



#### Approval to Conduct Research

As part of the graduation requirements at Loyola Marymount University, School of Education, Special Education Program, the researcher, Kenneth J Hoerricks, PhD, is required to conduct a small-scale study. The details of the study will be provided to you by the researcher. Please read and sign below if you agree to allow the researcher to conduct the study which was explained to you.

#### By signing this form, I understand:

- the study and what it requires of the staff, students, and/or parents in my school,
- the privacy and confidentiality of anyone participating will be protected,
- I have the right to allow or reject this research study to take place
- · I have the right to terminate the research study at any time,
- I have the right to review all consent forms and research documents at any time during the study

Name of School Personnel
Role of School Personnel
Signature of School Personnel
Date

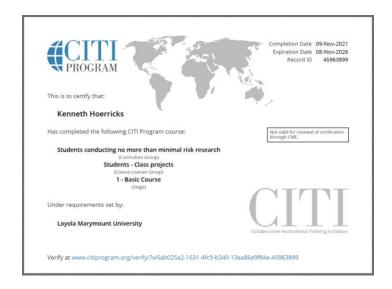
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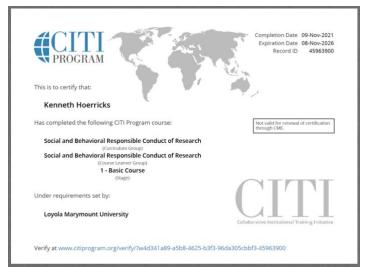
April

April

3/15/22

# Appendix B: PDF of Ethics and Responsible Conduct of Research





# Appendix C: Subject's Informed Assent Form

#### ASSENT TO PARTICIPATE IN RESEARCH

The Challenge of Learning to Comprehend Language - A Participatory Action Research Study

- My name is Dr. K. J. Hoerricks. I am from Loyola Marymount University as well as a Special Education Teacher at Sotomayor Arts/Sciences Magnet.
- We are asking you to take part in a research study because we are trying to learn more about if and how an intervention might improve your ability to comprehend what you read.
- If you agree to be in this study, you will participate in a reading comprehension intervention and your assessment data will be included in the data analysis sections of the study.
- 4. There are no known risks to participating in this study.
- As a result of participating in this study, you may find that your ability to comprehend what you read will improve, which may translate to better assessment scores.
- 6. Please talk this over with your parents before you decide whether or not to participate. Your parents have given their permission for you to take part in this study. Even though your parents said "yes," you can still decide not to do this.
- 7. If you don't want to be in this study, you don't have to participate. Remember, being in this study is up to you and no one will be upset if you don't want to participate or even if you change your mind later and want to stop.
- You can ask any questions that you have about the study. If you have a question later that you didn't think of now, you can call me 213-405-5381 or ask me next time.
- Signing your name at the bottom means that you agree to be in this study. You and your parents will be given a copy of this form after you have signed it.

Include the following, if a signature is to be obtained.						
Signature of Subject	-					
Printed Name of Subject	Date					

# Appendix D: Subject's Bill of Rights

#### RESEARCH PARTICIPANT'S

## **BILL OF RIGHTS**

These rights are the rights of every person who is asked to be in a medical research study. As a research participant, I have the following rights:

- 1. I have the right to be told what the research is trying to find out.
- 2. I have the right to be told about all research procedures, drugs, and/or devices and whether any of these are different from what would be used in standard practice.
- 3. I have the right to be told about any risks, discomforts or side effects that might reasonably occur as a result of the research.
- 4. I have the right to be told about the benefits, if any, I can reasonably expect from participating.
- I have the right to be told about other choices I have and how they may be better or worse than being in the research. These choices may include other procedures, drugs or devices.
- 6. I have the right to be told what kind of treatment will be available if the research causes any complications.
- I have the right to have a chance to ask any questions about the research or the procedure. I can ask these questions before the research begins or at any time during the research.
- 8. I have the right to refuse to be part of the research or to stop at any time. This decision will not affect my care or my relationship with my doctor or this institution in any other way.
- I have the right to receive a copy of the signed and dated written consent form for the research.
- 10. I have the right to be free of any pressure as I decide whether I want to be in the research study.

.....

# Appendix E: Student Participation Permission Slip

# LOYOLA MARYMOUNT UNIVERSITY

CASE STUDY FORM
Education Program University Hall 1 University Drive Los Angeles, CA 90045-2659 310-338-2863
January 2022
Dear Parents:
I am a Loyola Marymount University student, and I would like to ask your permission to observe your child, in class, and have access to her cumulative folder and any other education documents for a course I am taking at the university. All this information will be kept confidential and will only be shared with your child's teacher and my Loyola Marymount University Professor, Diana M. Limón, Ed.D.
Any papers that I turn into the University will not include your child's name or any other identifying information such as your phone number, address, etc. If you would like further information, please contact your child's teacher or Professor Dr. Limón at diana.limon@lmu.edu.
Thank you for your interest in helping me develop my skills in working with children, families, and professionals in the schools. If you give your permission, please sign below and return this letter to your child's teacher.
Sincerely,
Yes, I give my permission. No, I do not give my permission.
Parent signature Date

# Appendix F – Lesson 1



### Reading Comprehension Strategies

Dr. Hoerricks (they / them / Dr.) SPED RSP Teacher Lesson 1 of 7



# Unstructured Reading

When people don't have a routine or structure for their tasks it can cause increased stress and anxiety, as well as overwhelming feelings, lack of concentration, and focus.

A lack of structure and routine can exacerbate feelings of distress and make you pay more attention to the source of your problems.

## Our Promise to You.

Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.

CCSS.ELA-LITERACY.RI.8-10.2
Determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text.

Structured Reading: how we fulfill our promise to you. 1. Pick apart an idea or opinion.

- 2. Organize and generate notes and ideas for each part of your graphic organizer.
- **3. W**rite and say more.

POW

- 1. Think about the text. Predict what it will contain.
- 2. Read it. Take your time.
- 3. Ask yourself about the main idea and the supporting details.
- 4. Paraphrase: put it into your own words.



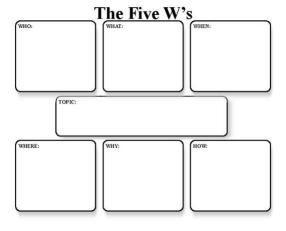
Reading with Structure and Support



# **TRAP**

The information is there, you just need to know where to look ...





# Appendix G - Lesson 2



# Reading Comprehension Strategies

Dr. Hoerricks (they / them / Dr.) SPED RSP Teacher Lesson 2 of 7



# Structured Reading Learning Goals

In this brief lesson, we will engage with two very short stories.

- I will model how to use the POW and TRAP strategies.
- I will show you where / how to find the 5W's information.

# Our Promise to You.

### CCSS.ELA-LITERACY.RI.8-10.1

Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.

CCSS.ELA-LITERACY.RI.8-10.2
Determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text.

### What are we looking for?

Who? - What? - When? - Where? - Why?

Who?	What?	When?	Where?	Why?	
	ACTION		1	9	
Who is involved?	What happened? What was the event?	When old if happen?	Where old if hoppen?	Why did it happen?	

### **Our First Story**

This was not how Jordan wanted to spend his Saturday morning! He finally told his mom about a toothache that had been bothering him all week. His tooth was really hurting now. His mom made an emergency appointment for him to see a dentist at the Super Smiles Dental Clinic. Jordan knew he needed to do a better job brushing and flossing his teeth. He better Job Drusning and Tiossing his teeth. He had a feeling the dentist didn't have good news, and he was right. Unfortunately, Jordan had a cavity that needed to be filled. He promised the dentist (and his mom) that he would brush and floss better from now on!

### First Read:

- POW TRAP



# Our First Story

This was not how Jordan wanted to spend his Saturday morning! He finally told his mom about a toothache that had been bothering him all week. His tooth was really hurting now. His mom made an emergency appointment for him to see a dentist at the Super Smiles Dental Clinic. Jordan knew he needed to do a better job brushing and flossing his teeth. He had a feeling the dentist didn't have good news, and he was right. Unfortunately, Jordan had a cavity that needed to be filled. He promised the dentist fand his mom) that he would brush and flossis better from now onl

### Reading with Structure and Support





# Appendix H - Lesson 3



# Reading Comprehension Strategies

Dr. Hoerricks (they / them / Dr.) SPED RSP Teacher Lesson 3 of 7 Modeling the Strategy



# Structured Reading Learning Goals

In this brief lesson, we will engage with an ambiguous paragraph.

- I will model how to use the TRAP strategy.
- I will show you where / how to find the 5W's information.
- Together, we will discover the main idea of the paragraph.

# Our Promise to You.

### CCSS.ELA-LITERACY.RI.8-10.1

Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.

CCSS.ELA-LITERACY.RI.8-10.2
Determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text.

### What are we looking for?

Who? - What? - When? - Where? - Why?

Who?	What?	When?	Where?	Why?	
	ACTION		1	9	
Who is involved?	What happened? What was the event?	When did # hopper?	Where old f.	Why did it	

### **Our Sample Paragraph**

Our Sample Paragraph
The procedure is actually quite simple. First you arrange things into different groups. Of course, one pile may be sufficient depending on how much there is to do. If you have to go somewhere else due to lack of facilities that is the next step, otherwise you are pretty well set. It is important not to overdo things. That is, it is better to do to foe whitigs at once than too many. In the short run this may not seem important, but complications can easily arise. A mistake can be expensive as well. At first the whole procedure will seem complicated. Soon, however, it will become just another facet of life. It is difficult to foresee any end to the necessity for this task in the immediate future, but then one never can tell. After the procedure is completed, one arranges the materials into different groups again. Then they can be put into their appropriate places. Eventually they will be used once more and the whole cycle will then have to be repeated. However, that is part of life.

# First Read: TRAP



### **Our Sample Paragraph**

Our Sample Paragraph
The procedure is actually quite simple. First you arrange
things into different groups. Of course, one pile may be
sufficient depending on how much there is to do. If you
have to go somewhere else due to lack of facilities that is
the next step, otherwise you are pretty well set. It is
the next step, otherwise you are pretty well set. It is
do not seen to see the process of the seen of the

### Reading with Structure and Support



# Appendix I – Lesson 4



# Reading Comprehension Strategies

Dr. Hoerricks (they / them / Dr.) SPED RSP Teacher Lesson 4 of 7 Using the Strategy



# Structured Reading Learning Goals

In this brief lesson, we will engage with a

- We will use the TRAP strategy.
- We will find the 5W's information.
- We will discover the main idea of the paragraph.

# Our Promise to You.

### CCSS.ELA-LITERACY.RI.8-10.1

Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.

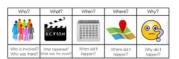
CCSS.ELA-LITERACY.RI.8-10.2
Determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text.

THE WRIGHT BROTHERS

Russell Freedman

# Remember what we looking for?

Who? - What? - When? - Where? - Why?



1903

Not listed

The Wright brothers are famous because they were inventors. Beginning at a young age, they built kites, bicycles, and other machines. That is not why they are famous, though. Orville and Wilburt Wright were not the first to experiment with building a plane. They are known for designing and building the first successful airplane. Their first flight in 1903 only lasted 12 seconds. It is still considered successful. Now, flying in an airplane is a normal way to travel. We can thank the Wright Brothers for being creative and brave. They worked hard to create the first successful flying machine.

### **Our Sample Paragraph**

# Structured Practice

# What's the Main Idea?

- a) Wilbur and Orville Wright liked to
- a) Wilbur and Orville Wright liked to explore the world.
  b) The Wright Brothers invented the first successful airplane.
  c) Their first flight was short, but still a success.
  d) Wilbur and Orville Wright invented machines when they were young.
  e) Airplanes have more than one engine.

- engine. f) Their first flight was in 1903.

First Read:

5 w's

- Which are Details?
- a) Wilbur and Orville Wright liked to explore the world.
   b) The Wright Brothers invented the first successful airplane.
   c) Their first flight was short, but still a
- success.
  d) Wilbur and Orville Wright invented
- machines when they were young.
  e) Airplanes have more than one
- engine.
  f) Their first flight was in 1903.

### Structured Practice

**Our Sample Paragraph** 

The Wright brothers are famous because they were inventors. Beginning at a young age, they built kites, bicycles, and other machines. That is not why they are famous, though. Orville and Wilbur Wright were not

the first to experiment with building a plane. They are known for **designing and building the first successful airplane**. Their first flight in **1903** only lasted 12

seconds. It is still considered successful. Now, flying in an airplane is a normal way to travel. We can thank the Wright Brothers for

being creative and brave. They worked hard to create the first successful flying

# What's the Main Idea?

- a)
   b) The Wright Brothers invented the first successful airplane.

### Which are Details?

Reading with Structure

The Five W

and Support

- c) Their first flight was short, but still a
- success.
  d) Wilbur and Orville Wright invented machines when they were young.
- e) f) Their first flight was in 1903.

# MAIN IDEA: THE WRIGHT **BROTHERS**

The main idea of a text tells what the text is mostly about. Supporting details are the sentences that support the main idea

**Directions:** Read the paragraph below. Then complete the graphic organizer by choosing the best main idea and supporting details. Some answer choices will not be used.

he Wright brothers are famous because they were inventors. Beginning at a young age, they built kites, bicycles, and other machines. That is not why they are famous, though. Orville and Wilbur Wright were not the first to experiment with building a plane. They are known for designing and building the first successful airplane. Their first flight in 1903 only lasted 12 seconds. It is still considered successful. Now, flying in an airplane is a normal way to travel. We can thank the Wright Brothers for being creative and brave. They worked hard to create the first successful flying machine.

### Main Idea:

A. Wilbur and Orville Wright liked to explore the world.

B. The Wright Brothers invented the first successful airplane.

### Supporting Details:

- C. Their first flight was short, but still a success.
- D. Wilbur and Orville Wright invented machines when they were young.
- E. Airplanes have more than one engine.
- F. Their first flight was in 1903.

Who?	What?	When?	Where?	Why?
	ACTION	1		0.05
Who is involved? Who was there?	What happened? What was the event?	When did it happen?	Where did it happen?	Why did it happen?

MAIN IDEA: THE WRIGHT **BROTHERS** 

Date: 2-2-2020\_
The **main idea** of a text tells what the text is mostly about. Supporting details are the sentences that support the main idea

Directions: Read the paragraph below. Then complete the graphic organizer by choosing the best main idea and supporting details. Some answer choices will not be used.

he Wright brothers are famous because they were inventors. Beginning at a young age, they built kites, bicycles, and other machines. That is not why they are famous, though. Orville and Wilbu Wright were not the first to experiment with building a plane. They are known for designing and building the first successful airplane heir first flight in 1930 only lasted 15 seconds. It is still considered successful. Now, flying in an airplane is a normal way to travel. We can hank the Wright forthers for being creative and brave. They worked hard to create the first successful flying machine.

### Main Idea

Supporting Deta

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- . D
- A. Wilbur and Orville Wright liked to explore the world.
- 6. The Wright Brothers invented the first successful airplane.
- . Their first flight was short, but still a success.
- 6. Wilbur and Orville Wright invented machines when they
- E. Airplanes have more than one engine.
- Their first flight was in 1903.

Who?	What?	When?	Where?	Why?
	ACTION		1	0.0
Who is involved? Who was there?	What happened? What was the event?	When did it happen?	Where did it happen?	Why did it happen?
the wright rothers	bailling and Destining are successful airplane	1963	Vot listed	Because the enjoyed build and Engre inventoring

Name:

MAIN IDEA:

THE WRIGHT

**BROTHERS** 

The main idea of a text tells what the text is mostly about. Supporting details are the sentences that support the main idea

Directions: Read the paragraph below. Then complete the graphic organizer by choosing the best main idea and supporting details. Some answer choices will not be used.

he Wright brothers are famous because they were inventors The Wright brothers are famous because they were inventors.

Beginning at a young age, they bulk tiles, bicycles, and other
machines. That is not why they are famous, though, O'rillie and
Wilbu Wright were not the first to experiment with building a plane.

They are known for designing and building the first successful airplane.

Their first flight in 1903 only lasted 12 seconds. It is still considered
successful. Now, flying in an airplane is a normal way to travel. We can
thank the Wright stothers for being creative and brave. They worked
hard to create the first successful flying machine.



Main Idea:

·B ()

**Supporting Det** 

·c (;) ·F 5 · D 1

- Wilbur and Orville Wright liked to explore the world.
- The Wright Brothers invented the first successful airplane
- C. Their first flight was short, but still a success.
- D. Wilbur and Orville Wright invented machines when they were young.
- Airplanes have more than one engine.
- E Their first flight was in 1903

Who?	What?	When?	Where?	Why?
İ	ACTION		1	00
Who is involved? Who was there?	What happened? What was the event?	When did it happen?	Where did if happen?	Why did it happen?
RIGHT BROTHERS	Designing and	1903 1903	NORTH	Because they were inventors

# Appendix J – Lesson 5



# Reading Comprehension Strategies

Dr. Hoerricks (they / them / Dr.) SPED RSP Teacher Lesson 5 of 7 Using the Strategy



# Structured Reading Learning Goals

In this brief lesson, we will engage with a short story.

- We will use the TRAP strategy.
- We will find the 5W's information.
- We will discover the main idea of the paragraph.

# Our Promise to You.

CCSS.ELA-LITERACY.RI.8-10.1
Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.

Think: what do

video games are used in the classroom?

we know about how

CCSS.ELA-LITERACY.RI.8-10.2
Determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text.

### Reading with Structure and Support



Video Games: Not Just for Fun

# Remember what we looking for?

Who? - What? - When? - Where? - Why?

Who?	What?	When?	Where?	Why?
	ACTION		1	9
Who is involved? Who was there?	What happened? What was the event?	When old if hoppen?	Where old if happen?	Why did it happen?

# First Read:

5 w's



The answers are paraphrased versions of what's found in the text.



### Video Games: Not Just for Fun

Read the paragraph. Write the main idea and three details that

Do you like to play video games? Most kids do, at least from time to time. That's why so many game designers and teachers believe that using educational games are a great way to help children learn about school subjects like math, reading, science and word study. Educational video games are effective because they take the elements of games and apply them to learning in ways that are difficult to do in a traditional classroom. Learning games are usually based on some kind of problem that the player needs to solve. They can fail and learn from their mistakes in a safe setting, without being "put on blast" in front of their peers. Learning games usually incorporate fun, challenging, and unexpected elements to keep players interested, like sound effects, incentives, and fun characters. If the game is designed well, it is engineered so that players are challenged just enough to motivate them, but not so much that they get frustrated. Some learning games are able to assess whether students are learning the targeted learning skill that players practice in the game Teachers can track student learning on a separate dashboard and provide help when students struggle. Learning games don't address all of the learning needs in schools, but they can be an effective and fun addition to traditional learning.

A. What is the MAIN IDEA of this paragraph? Find a sentence in the paragraph or write it in your own words.

	in idea
•	
·	77.7
	77.07

Video	Games: Not Just for Fun	(
Tarrie.	Date: 2/8/12 te the main idea and three details that	4

**Bo** you like to play vi so games? Most kids do, at least from time to time. That's why so many game designers and teachers believe that using adjucational games are a great way to help children learn about school subjects like math, reading, science and word study. Educational video games are effective because they take the elements of games and apply them to learning in ways that are difficult to do in a traditional classroom. Learning games are usually based on some kind of problem that the player needs to solve. They can fail and learn from their mistakes in a safe setting, without being "put on blast" in front of their peers. Learning games usually incorporate fun, challenging, and unexpected elements to keep players interested, like sound effects, incentives, and fun characters. If the game is designed well, it is engineered so that players are challenged just enough to motivate them, but not so much that they get frustrated. Some learning games are able to assess whether students are learning the targeted learning skill that players practice in the game. Teachers can track student learning on a separate dashboard and provide help wi students struggle. Learning games don't address all of the learning needs in schools, but they can be an effective and fun addition to traditional learning.

A. What is the MAIN IDEA of this paragraph? Find a sentence in the paragraph or write it in your own words.

Howthey	Mare	lear nin	g 4 9n	for s	19dents	
B. Name THREE	Jannes	are h				but!
also edi 2. How te	aratin achers	alle Use the	/n · · · ·	gue n	e Mare	detail.
3. St 4 Jen	19 car	FOUL	and	Harn	From	thir

### Video Games: Not Just for Fun





Read the paragraph. Write the main idea and three details that support it.

Do you like to play video games? Most kids do, at least from time to time. That's why so many game designers and teachers believe that using educational games are a great way to help children learn about school subjects like math, reading, science and word study. Educational video games are effective because they take the elements of games and apply them to learning in ways that are difficult to do in a traditional classroom. Learning games are usually based on some kind of problem that the player needs to solve. They can fail and learn from their mistakes in a safe setting, without being "put on blast" in front of their peers. Learning games usually incorporate fun, challenging, and unexpected elements to keep players interested, like sound effects, incentives, and fun characters. If the game is designed well, it is engineered so that players are challenged just enough to motivate them, but not so much that they get frustrated. Some learning games are able to assess whether students are learning the targeted learning skill that players practice in the game Teachers can track student learning on a separate dashboard and provide help when students struggle. Learning games don't address all of the learning needs in schools, but they can be an effective and fun addition to traditional learning.

 $\textbf{A. What is the MAIN IDEA of this paragraph? Find a sentence in the paragraph or write a sentence of the paragraph of the$ 

Many game designers and teachers believe that using educational games are a great way to help children learn.

B. Name THREE IDEAS that the author used to SUPPORT the main idea

1. Students can fail and learn from their mistakes in a safe setting.

2. The games are engineered so that players are challenged just enough to motivate them, but not so much that they get frustrated.

3. Some games are able to assess whether students are learning the targeted skills they are practicing in the game

# Video Games: Not Just for Fun

Date: 2-9-22 Read the paragraph. Write the main ide support it.



Do you like to play video games? Most kids do, at least from time to time. That's why so many game designers and teachers believe that using educational games are a great way to help children learn about school subjects like math, reading, scier and word study. Educational video games are effective because they take the elements of games and apply them to learning in ways that are difficult to do in a traditional classroom. Learning games are usually based on some kind of problem that the player needs to solve. They can fail and learn from their mistakes in a safe setting, without being "put on blast" in front of their peers. Learning games usually incorporate fun, challenging, and unexpected elements to keep players interested. like sound effects, incentives, and fun characters. If the game is designed well, it is engineered so that players are challenged just enough to motivate them, but not so much that they get frustrated. Some learning games are able to assess whether students are learning the targeted learning skill that players practice in the game Teachers can track student learning on a separate dashboard and provide help when students struggle. Learning games don't address all of the learning needs in schools, but they can be an effective and fun addition to traditional learning.

A. What is the MAIN IDEA of this paragraph? Find a sentence in the paragraph or write

it in your ov			2.10		2000	
The	main	ileg	of this	Paragn	1Ph is	
that	Isids	can	earn	by 1919	ying	
B. Name THE	gamts. REE IDEAS that th	e author used t	to SUPPORT t	he main idea:		
1. Educe	ational vid	eo gar	its ar	e effec	tive because	
they t	alir the	Clemen	n B of	game 5	and apply	to learning
2. Learn	a game	s are usi	ually ba	sed on	some Kin	1
of Prob	em that	dayer	nerds	to 50	le	
	are 9					
lera a	bout scho	d subi	ects 1	ike mo	th, reading,	
and sci	ence				, ,,	

# Appendix K – Lesson 6



## Reading Comprehension Strategies

SPED RSP Teacher Lesson 6 of 7 Using the Strategies

# Structured Reading Learning Goals

In this brief lesson, we will engage with a

- We will use all our strategies.
- We will find relevant information.
- We will discover the Textual Evidence, also known as the supporting details.

# Our Promise to You.

### CCSS.ELA-LITERACY.RI.8-10.1

Cite the **textual evidence** that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.

CCSS.ELA-LITERACY.RI.8-10.2
Determine a central idea of a text and analyze its development over the course of the text, including its relationship to *supporting ideas*; provide an objective summary of the text.

# Task 1: Find the Textual Evidence

Archaeology is the study of past human life and culture through systematically examining and interpreting the material remains let behind. These material remains that behind. These material remains nicted archaeological stee, of existements, building features, growsh, as well as cultural materials or arthicts such as tools and pottery, and an experiment of the steel 
Q: According to the passage, what changed in the 19th century?

- the 19th century?

  a) The study of archaeology became more accessible to modern students.

  b) The techniques used for study were more systematic and understandable for modern students.

  C) The study of archaeology were tied together.

  d) The interpretation and classification of archaeological materials changed.

# Task 1: Find the Textual Evidence

Archaeology is the study of past human life and culture through systematically examining and interpreting the material remains left behind. These material remains include archaeological istels (e.g., settlements, building features, graves), as well as cultural materials or artifacts such as tools and potteyr. Through the interpretation and classification of archaeological materials, archaeologists work to understand past human behavior. In some countries, archaeology is often historical or art historical, with a strong emphasis on culture history, archaeological sites, and artifacts such as art objects. In the New World, archaeology can be either a part of history and classical studies or anthropology.

The exact origins of archaeology as a discipline are uncertain. Excavations of ancient monuments and the collection of antiquities have been taking place for thousands of years. It was only in the 19th century, however, that the systematic study of the past through its physical remains began to be carried out in a manner recognizable to modern students of archaeology.

- a) The study of archaeology became more accessible to modern students. b) The techniques used for study were more systematic and understandable for modern students c) The study of
- modern students
  c) The study of
  archaeology and
  anthropology were
  tied together.
  d) The interpretation and
  classification of

### Task 2: Find the Textual Evidence

I lay in sorrow, deep distressed; My grief a proud man heard; His looks were cold, he gave me gold, But not a kindly word.

My sorrow passed-I paid him back The gold he gave to me; Then stood erect and spoke my thanks And blessed his charity.

I lay in want, and grief, and pain; A poor man passed my way; He bound my head, He gave me bread, He watched me day and night.

How shall I pay him back again For all he did to me? Oh, gold is great, but greater far Is heavenly sympathy. - Charles Mackay

Q: According to the poet, what did he feel was most important?

- a) giving away foodb) blessing charityc) Sympathyd) Gold

Q: What does the first stanza tell us about the

- a) The poet experienced an event which made him deeply sorrowful.
  b) The poet wrote this poem when he was a proud man.
  c) The poet wrote this poem when he was in need of money.
  d) The poet was friends with the proud man.

# Task 2: Find the Textual Evidence

Which strategy will you use?

l'lay in sorrow, deep distressed; My grief a proud man heard; His looks were cold, he gave me gold, But not a kindly word.

My sorrow passed-I paid him back The gold he gave to me; gold he gave to me; Then stood erect and spoke my thanks And blessed his charity.

A poor man passed my way; He bound my head, He gave me bread, He watched me day and night.

How shall I pay him back again For all he did to me? Oh, gold is great, but greater far Is heavenly sympathy. - Charles Mackay

# Q: According to the poet, what did he feel was most important?

- a) giving away food b) blessing charity c) Sympathy d) Gold

Answer choice C is correct and directly stated in the last two lines of the poem. Answer choice D is incorrect. While the poet does recognize gold is good, he states sympathy is greater. Answer choices A and B do not provide evidence to

### **Task 2: Find the Textual Evidence**

Which strategy will you use? I lay in **sorrow**, deep distressed; My grief a proud man heard; His looks were cold, he gave me gold, But not a kindly word.

My sorrow passed-I paid him back The gold he gave to me; Then stood erect and spoke my thanks And blessed his charity.

A poor man passed my way; He bound my head, He gave me bread, He watched me day and night.

How shall I pay him back again For all he did to me? Oh, gold is great, but greater far Is heavenly sympathy. - Charles Mackay

# Q: What does the first stanza tell us about the poet?

- a) The poet experienced an event which made him deeply sorrowful.
   b) The poet wrote this poem when he was a proud
- man.
  c) The poet wrote this poem when he was in need
- of money.
  d) The poet was friends with the proud man.

### Task 3: Find the Textual Evidence

Megan couldn't believe her luck. She had been standing in line with her best friend Jessica for thirty minutes. Their excitement was mounting as they neared the front of the line for the famed Greased Lightning rollercoaster. Just as they took their seats, the clouds opened up. Soaking wet and disappointed, the girls followed the directions of the ride employees and took shelter under the nearby canopies.

# Q: What happened as Megan and Jessica boarded the ride?

- a) It started to rain, and they had to find shelter.
   b) The park closed, so they had to

- wet.
  d) They became overheated and had to find some shade.

# Task 3: Find the Textual Evidence

Megan couldn't believe her luck. She had been standing in line with her best friend. Jessica for thirty minutes. Their excitement was mounting as they neared the front of the line for the famed Greased Lightning rollercoster. Just as they took their seast, the clouds opened up. Saaking wet and disappoints, the clouds opened up. Saaking wet and disappoints of the gift followed the directions of the ride employees and they disable the directions of the ride employees and they are supposed.

Answer choice A is correct. Text evidence supporting this inference can be found in the line stating the girls were soaking wet and disappointed. They were wet and disappointed because the clouds opened up, meaning it

There is no evidence to support answer choices B, C or D.

Q: What happened as Megan and Jessica boarded the ride?

- a) It started to rain, and they had to find shelter.
  b) The park closed, so they had to

- leave.
  c) One of them spilled soda on the other and they both got wet.
  d) They became overheated and had to find some shade.

### Find the Textual Evidence

### Task 1: Find the Textual Evidence

An Charology is the study of past human fire and collare through systematically examining and interpreting the motival ensurance for behind. These material ensurance include an chaeological interpreting the motival ensurance in the fair study and the street in the state of a relation of relation of a re

The exact origins of archaeology as a discipline are uncertain. Excavations of ancient monuments and the reflection of antiquetes have been taking place for thousands of years. It was only in the 50th century, however, that the systematic study of the past thoughly this physical remains began to be carried out in a manner recognizable to modern students of

- Q: According to the passage, what changed in the 19th century?

  a) The study of archaeology breame more accessible to modern students.

  b) The techniques used for study were more systematic and understandable for modern
- students

  c) The study of archaeology and anthropology were field together.

  d) The interpretation and classification of archaeological materials changed.

### Task 2: Find the Textual Evidence

Which strategy will you use?

Hay in sorrow, deep distressed; My grief a proud man heard; His looks were cold, he gave me gold, But not a kindly word.

My sorrow passed I paid him back The gold he gave to me, Then stood erect and spoke my thanks And blessed his charity.

Hay in want, and grief, and pain; A poor man passed my way: He bound my head, He gave me bread He watched me day and night.

### Find the Textual Evidence

How shall I pay him back again For all he did to me? Oh, gold is great, but greater far is heavenly sympathy. Charles Mackay

### Q: According to the poet, what did he feel was most important?

- a) giving away food b) blessing charity r) Sympathy d) Gold

- Q: What does the first stanza tell us about the poet?

  d) The poet expressed an event which made him deeply sorrowful b) The poet work that hip own when he was a proud man.

  () The poet work this poem when he was in need of money.

  d) The poet was friends with the proud man.

Task 3: Find the Textual Evidence

Megan couldn't believe her luck. She had been standing in line with her best friend Jessica for thirty minutes. Their excitement was mounting as they neared the front of the line for the farned Greazed Lightning roller coaster. Just as they took their seats, the clouds opened up. Sookling wet und disappointed, the gris followed the directions of the ride employees and took shelter under the nearby ranopies.

- Q: What happened as Megan and Jessica boarded the ride?

  a) It started to rain, and they had to find shelter.

  b) The park closed, so they had to fease.

  c) One of them spilled dook not the other and they both got wet.

  d) They became overheated and had to find some shade.

100%

### Find the Ventual Svidence

Date 2-15-202

Period: 8

# Yash 1: Find the Teptual Evidence Which strategy will you use?

Archaeology is the study of past human life and culture through systematically examining and interpreting the material remains left behind. These material remains include archaeological sites (e.g., settlements, building features, graves), as well as cultural materials or artifacts such as took and pottery. Through the interpretation and dissiffication of archaeological materials, as characheologists work to understand apast human behavior. In some countries, archaeologist soften historical or art historical, with a strong emphasis on culture history, archaeological sites, and artifacts such as art objects. In the New World, archaeology can be either a part of history and classical studies or anthropology.

The exact origins of archaeology as a discipline are uncertain. Excavations of ancient monuments and the collection of antiquities have been taking place for thousands of years. It was only in the 15th century, however, that the <u>agatastile study</u> of the past through its physical remains began to be carried out in a manner recognizable to <u>modern students</u> of archaeology.

- Ascording to the possage, what changed in the 19th century?
   a) The study of archaeology became more accessible to modern students.
   The techniques used for study were more systematic and understandable for modern
- students
  c) The study of archaeology and anthropology were tied together.
  d) The interpretation and classification of archaeological materials changed.

### Vash &: Find the Testani Evidence hich strategy will you use? \_

I lay in <u>sorrow,</u> deep distressed; My grief a proud man heard; His looks werecold, he gave me gold, But not a kindly word.

My sorrow passed-I paid him back The gold he gave to me; Then stood erect and spoke my thanks And blessed his charity.

I lay in want, and grief, and pain; A poor man passed my way; He bound my head, He gave me bread, He watched me day and night.

## Find the Textual Evidence

How shall I pay him back again For all he did to me? Oh, gold is great, but greater far is heavenly sympathy. - Charles Mackay

# Q: According to the poet, what did he feel was most important? a) giving away food b) bilessing charity § Sympathy d) Gold

### Q: What does the first stanza tell us about the poet?

- what does the first stanta ten is about the just?

  If no pot experienced a nevent which made him deeply sorrowful.

  b) The poet wrote this poem when he was a proud man.

  c) The poet wrote this poem when he was in need of money.

  d) The poet was friends with the proud man.

# Task 3: Find the Textual Evidence Which strategy will you use?

Megan couldn't believe her luck. She had been standing in line with her best friend Jessica for thirty minutes. Their excitement was mounting as they neared the front of the line for the famed Greased Lightning rollercoaster. <u>List as they took their ways, the clouds opened up.</u> Soaking wet and isappointed, the girls followed the directions of the ride employees and took shelter under the nearby canopies.

- Q: What happened as Megan and Jessica boarded the ride?

  It started to rain, and they had to find shelter.

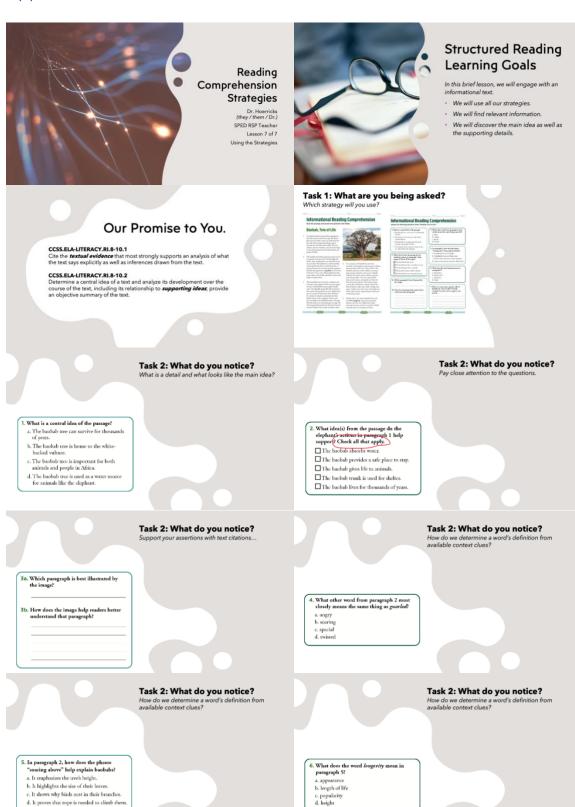
  b) The park closed, so they had to leave.

  c) One of them spilled sod on the other and they both got wet.

  d) They became overheated and had to find some shade.

# Appendix L – Lesson 7

d. It proves that rope is needed to climb them



# Task 2: What do you notice?

What are some reasons people call the baobab the "Tree of Life"? Provide examples from the text to support your answer.

# Task 3: Now, it's your turn.



);(O);(O);(\*)<mark>}}{{(\*)</mark>;(O);(O);(\*)<mark>}}}{{(\*)</mark>;(O);(O);(O);(\*)}}

# **Informational Reading Comprehension**

Read the passage and answer the questions that follow

# Baobab, Tree of Life

- An elephant lumbers across African grassland as dust rises up from each of her steps. She finds a crust ruses up from each of her steps. She finds a giant tree and works to pierce its thick bark with her rusks. She is prying and poking to get ar the water the tree often stores inside. This is no ordinary tree but a baobab, a tree that looms large in size and importance for both the animals and people of Africa.
- 2 The baobab's assonishing appearance alone proves it is special. It can grow up to 60 feet high and 30 feet wide, soaring above most other life in the dry assuranth. The baobab has a wide barrel-like trunk topped with shorter, twisted branches. It only grows leaves for two short periods, giving the branches the appearance of gnarled roots for most of the year. In fact, some African legends say that a god, angry at the baobab, decided to uproot and replant it upside down.
- This remarkable tree survives dry conditions and is found in many regions of Africa. Its roots spread out up to a hundred feet away to gather needed water. The adaptable sponge-like bank contracts in dry months and espands in wet ones. Baobab trees serve as a source of water, flood, and a safe home for a variety of animals. In particular, the white-backed vulture, with a wingspan of about seven feet, ness high in the baobab's branches. The great bird only nests once a year, laying just one egg. The fall, strong baobab provides the ideal site for several months of safety for the mother and baby vulture.



- endure this practice, regenerating its bark and continuing to grow.

For centuries, the baobab has also been essential to the people in various parts of Africa, many of whom call it the "Tree of Life." The baobab's immenser trunk is hollow, creating a large circular chambers at the center. Baobab chambers have been used as shelters, prisons, and animal stablet. The tree's spinach like leaves can be eaten, and people use them for both food and medicine. The fruit provides a cirrus-like refreshment. People strip off the fibrous bark to make rope, cloth, roofing, and paper. Unlike most other trees, the baobab can endure this practice, regenerating its bark and

Perhaps this is one reason baobabs have such incredible **longevity**. Some have even been known to live for over 2,000 years! These amazing survivors continue to provide valuable resources across 32 countries in Africa.

# **Informational Reading Comprehension**

Answer the following questions about "Baobab, Tree of Life."

- 1. What is a central idea of the passage?
  - a. The baobab tree can survive for thousands of years,
- b. The baobab tree is home to the white-backed vulture.
- c. The baobab tree is important for both animals and people in Africa.
- d. The baobab tree is used as a water source for animals like the elephant.
- What idea(s) from the passage do the elephant's actions in paragraph 1 help support? Check all that apply.
- ☐ The baobab absorbs water.
- The baobab provides a safe place to stay.
- ☐ The baobab gives life to animals ☐ The baobab trunk is used for shelter.
- ☐ The baobab lives for thousands of years
- 3a. Which paragraph is best illustrated by the image?
- 3b. How does the image help readers better understand that paragraph?

- a. angry b. soaring c. special d. twisted
- 5. In paragraph 2, how does the phrase "soaring above" help explain baobabs? a. It emphasizes the tree's height.
- b. It highlights the size of their leaves
- It shows why birds nest in their branches
- d. It proves that rope is needed to climb them.
- 6. What does the word *longevity* mean in paragraph 5?
- a. appearance b. length of life
- d. height
- 7. What are some reasons people call the baobab the "Tree of Life"? Provide examples from the text to support your answer.

a. appearance
b. length of life ☐ The baobab lives for thousands of years. c. popula d. height 3a. Which paragraph is best illustrated by Paragraph 2 What are some reasons people call the baobab the "Tree of Life"? Provide examples from the text to support your answer. 3b. How does the image help readers better understand that paragraph? Answers will vary The image helps readers understand what The baobab is a "Tree of Life" because the baobab tree looks like. It shows the people use it in many ways to support their wide, barrel-like trunk and the twisted lives. The text says that people use the leaves for food and medicine and the bark to make rope, cloth, and paper. Informational Reading Comprehension 6/2/2 1. What is a central idea of the passage? a. The baobab tree can survive for thousands of years. a. angry b. soaring b. I he baobab tree is home to the white-backed vulture. c. special d.) twisted 6-3 he baobab use is important for both animals and people in Africa. d.-I he baobab use is used as a water source for animals like the elephant. 5. In paragraph 2, how does the phrase "soaring above" help explain baobabs?

a. It emphasizes the tree's height.

b. It highlights the size of their leaves. What idea(s) from the passage do the elephant's actions in paragraph 1 help support: Check all that apply. c. It shows why birds nest in their branches.
d. It proves that rope is needed to climb then The byobab provides a sale place to stay. 1 he buobab gives life to ann 1 he buobab trunk is used for shelter a. appearance b. length of life c. popularity d. height ☐ I he byobab lives for thousands of years. 3a. Which paragraph is best illustrated by the image? pargaraph 2. . What are some reasons people call the baobab the "Tree of Life"? Provide 3b. Huw does the image bely readers better understand that paragraph?

It help's un to in the shape and size of the size of th examples from the text to support your nives people. food and shelter. Fried. 

Name ANSWER KEY

**Informational Reading Comprehension** 

4. What other word from paragraph 2 most closely means the same thing as gnarled?

5. In paragraph 2, how does the phrase "soaring above" help explain baobabs?

(a. It emphasizes the tree's height.)

b. It highlights the size of their leaves.

6. What does the word longevity mean in

c. It shows why birds nest in their branches

d. It proves that rope is needed to climb them.

a. angry

c. special d. twisted

paragraph 5?

Answer the following questions about "Baobab, Tree of Life."

What is a central idea of the passage?
 a. The baobab tree can survive for thousands of years.

 The baobab tree is home to the white backed vulture.

c. The baobab tree is important for both animals and people in Africa.

What idea(s) from the passage do the elephant's actions in paragraph 1 help support? Check all that apply.

☐ The baobab provides a safe place to stay

☑ The baobab gives life to animals.

☐ The baobab trunk is used for shelter.

✓ The baobab absorbs wa

d. The baobab tree is used as a wa for animals like the elephant.

1-25-2022 Period Informational Reading Comprehension . What is a central idea of the passage? 4. What other word from paragraph 2 most closely means the same thing as gnarled? a. The baobab tree can survive for thousands a. angry b. The baobab tree is home to the whiteb. soaring • The baobab tree is important for both animals and people in Africa. d. The baobab tree is used as a water for animals like the elephant. 5. In paragraph 2, how does the phrase "soaring above" help explain baobabs?

It emphasizes the tree's height.

b. It highlights the size of their leaves. What idea(s) from the passage do the elephant's actions in paragraph 1 help support? Check all that apply. c. It shows why birds nest in their branches. d. It proves that rope is needed to climb them The baobab absorbs water The baobab provides a safe place to stay. The baobab gives life to animals. 6. What does the word *longevity* mean in paragraph 5? The baobab trunk is used for shelter ☐ The baobab lives for thousands of years length of life d. height 3a. Which paragraph is best illustrated by the image? paragraph e 7. What are some reasons people call the baobab the "Tree of Life"? Provide 3b. How does the image help readers better understand that paragraph?

It gives the readers a examples from the text to support your It's call the tree of life chance to see what the because it provides food water, materials, investent and shelters 405

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