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Angelo Maniccia

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Walden University 2018

Abstract

Strategies and Assessments to Support Special Education Students' Writing the

Literacy Test

by

Angelo Maniccia

MS, Canisius College, 1998 BS Major, McMaster University, 1995 BS, McMaster University, 1993

Project Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Walden University

August 2018

Abstract

Many special education (SPED) students are failing the Ontario Secondary School Literacy Test (OSSLT) despite writing instruction provided by SPED teachers. The purpose of this study was to understand teachers' perceptions about why students were failing the literacy/writing test and document whether evidence-based assessment and writing practices were implemented. Cognitive-behavioral theory served as the conceptual framework for this study. The research questions in this study focused on SPED teachers perceptions regarding students not passing the OSSLT, observations of whether assessment and instruction for writing aligned with best practices, and collecting baseline curriculum-based measurement (CBM) data of SPED students' current writing skills. To best answer the research questions, a multiple case study design was selected. Four 10th grade SPED literacy teachers from 4 high schools in a Canadian District School Board were interviewed and observed. A total of 28 SPED students' writing samples were evaluated using CBM assessment procedures. The findings showed that teachers were not adequately prepared to teach SPED; there were modifications and challenges with students' work; there were useful techniques for assessment, teaching and writing. The White Paper project was a presentation to district practitioners and leadership recommending writing/literacy to be grounded in scientifically validated assessment and writing instruction for SPED students. Positive social and educational change may occur when the district adopts measurably superior instructional practices for writing to the extent that SPED students write more effectively and pass the OSSLT.

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Section 1: The Problem

The Local Problem

Students with learning disabilities in both general and special education (SPED) classes are performing poorly on the Ontario Secondary School Literacy Test (OSSLT) which is a common problem, and some educators may not know how to teach their students. Educators need to deal with students who struggle to learn to write, and must provide intensive, direct and explicit instruction to modify and adapt to their pupils' educational needs to support best teaching practice (Archer & Hughes, 2011). SPED students in the district failed the OSSLT more frequently than non-SPED students, as evidenced by the 2015, 2016, and 2017 data from the Education Quality Accountability Office (EQAO; See Table 1). In this study of four schools in a local district, some educators may not have the necessary strategies or skills to provide students with essential knowledge in literacy. Educators reported that they often feel they do not have the proper training skills to teach students in writing because they did not receive adequate and effective pre- and in-service training in the selection and use of evidencebased writing assessment and instructional strategies (Graham, Harris, Bartlett, Popadopoulou, & Santoro, 2016). This study aimed to comprehend educators' perceptions as to why SPED students were failing the OSSLT and reported if evidencebased practices were being used.

According to the EQAO (2017), 48% (n = 1,204) of SPED students at the Toronto District School Board (TDSB) in Toronto failed to pass the OSSLT as compared to 19% (n = 2,742) for the general student body. Substantially more SPED students failed the OSSLT in 10th grade which is a requirement in order to graduate from high school. Students are first eligible to take the OSSLT in Grade 10 which consists of multiple choice, and short and long written answers. Those students that do not pass on the first attempt must rewrite the entire OSSLT in subsequent years. In 2016, 48% (n = 1,198) of SPED students at the TDSB failed to pass the OSSLT as compared to 19% (n = 2,826) for the general student body. In 2015, the comparison was similar, with 48% (n = 1,218) of SPED students at the TDSB failed to pass the OSSLT versus 18% (n = 2,696) in the general student body.

Table 1

Toronto District School Board 10th Grade Special Education (SPED) and General Student Body (GSB) Educational Quality Accountability Office Ontario Secondary School Literacy Test Failure Rates

Year	Total SPED Tested	SPED Failed	Total GSB Test	GSB Failed
2015	2,541	48% (<i>n</i> = 1,218)	14,690	18% (<i>n</i> = 2,696)
2016	2,484	48% (<i>n</i> = 1,198)	14,943	19% (<i>n</i> = 2,826)
2017	2,512	48% (<i>n</i> = 1,204)	14,602	19% ($n = 2,742$)

Note. Data retrieved from the Education Quality Accountability Office (2017)

Educators may benefit from assessing writing problems using curriculum-based measurements (CBM) data to guide their instruction to improve teaching competency when assessing SPED students work (Amato & Watkins, 2011). Graham, Capizzi, Harris, and Morphy (2014) showed that using evidence-based practices, interventions, and assessments improves students writing which includes pupil writing samples. The researchers discovered that there was a small amount of student compositional writing in the classroom but rather short answer responses and copying text. With the implementation of professional development training, teachers should be trained and required to implement evidence-based (a) direct and explicit instruction (Archer & Hughes, 2011); (b) CBM practices to assess directly and monitor the process and growth of students' academic skills (Hosp, Hosp, & Howell, 2016); and (c) methods and strategies for teaching writing to special needs students (Graham & Harris, 2005). Archer and Hughes (2011) indicated that applying the 13 principles associated with the effective delivery of explicit and direct instruction (EQAO; See Table 1) can significantly improve the writing skills of struggling students. According to Mason, Harris, and Graham (2011), explicit instruction through self-regulated strategy development (SRSD) improved student achievement with those who struggle with writing.

CBM has been shown to be a reliable tool that may be utilized by teachers within the Response to Intervention (RTI) framework to assess and modify students writing instruction (Dombek & Otaiba, 2016). Also, Gillespie and Graham (2014) suggested that applying planning and revising strategies is effective for writing instruction. Despite these findings, research-based recommendations for effective assessment and teaching of writing to struggling students, the district may have an opportunity to move beyond the fact that SPED students do not perform well on the OSSLT and focus on whether more effective assessment and teaching practices are being used. Gabriel and Davis (2015) suggested that teaching instruction with at-risk students lacks effective strategies and relevant content, and professional development on evidence-based strategies produced positive experiences for teachers' practices. The OSSLT passage rate of the TDSB high school students who are on Individual Education Plans (IEPs) suggested a gap in effective teaching of writing. There may be factors to the local schools such as SPED that may place these students at a disadvantage in their performance on the standardized test. The results of this criterion-based, standardized test is published on the EQAO website and broken down by the following educational streams used in the Canadian educational system: *academic, applied*, and *locally developed* (i.e., the special education stream).

According to the Toronto District School Board Choices (2011-2012), academic streams is course work that "develops students' knowledge and skills by emphasizing theoretical and abstract applications of the essential concepts and incorporating practical applications as appropriate" (p.36). Applied streams is course work that "develops students' knowledge and skills by emphasizing practical, concrete applications of these concepts and incorporating theoretical applications as appropriate" (p.36) relating to reallife conditions using hands-on applications. In addition, locally-developed streams are course work that have "educational needs not met by the existing provincial curriculum. These courses will provide additional support for students who experience considerable difficulties in the study of one or more of these subjects" (p.36), specifically with respect to the curriculum of SPED students. The implications and significance of the quoted material for the information discussed and the overall problem is to understand and adjust the curriculum as needed to meet the needs of at-risk students who struggle with their writing skills. Each school's scores are published on the EQAO website. Data are aggregated by SPED groups per school. As such, personal student information is not published on the website. In order to help students improve their literacy and be successful in their writing on the OSSLT, teachers can be provided with correct implementation of evidence-based approaches to instruction. Teachers can also benefit and provide better structure and appropriate supports for these pupils at the school district. CBM helps teachers understand whether students are making writing progress as a function of the RTI framework being used for effective teaching (Fisher & Frey, 2011). CBM is a core part of RTI but RTI is not necessary for the effective use of CBM practices. RTI is related to my study because it evaluated and aligned students writing instruction when using CBM.

Different teaching strategies amongst educators at the secondary level both at the local school and board level for these at-risk students in locally-developed streamed classes may have contributed to low-OSSLT scores. The problem is teachers may use a variety of approaches that may not be delivered effectively or implemented with fidelity. This is confirmed by Spear-Swerling and Zibulsky (2014) who stated that based on teacher interviews there is a lack of professional development time allocated to teaching writing skill strategies and processes in the areas of assessment, vocabulary, spelling, planning, and revision from interviews with educators. Teachers need more professional development or specialization teaching strategies and CBM to address the learning needs of SPED students in writing.

In order to provide boards of education with tools to respond to students who fail the OSSLT, the Government of Ontario (2016) supports and develops inclusion of locally-developed streamed courses that accommodate educational needs that are not met through courses currently offered within the established provincial curriculum. A goal of this study was that the board can obtain SPED students failing rates around the same rate of non-disabled students. The issue with some of the population of non-disabled students who do not pass the OSSLT may be an undiagnosed learning disability, and a lack of effective instruction in writing prior to taking the OSSLT. As literacy testing is first conducted in Grade 10, SPED students enrolled in locally-developed courses will be selected for this study.

Rationale

The purpose of this study was to provide educators with effective teaching practices in order to raise SPED students' level of competency in writing. As noted previously, many SPED students in the TDSB failed the OSSLT (EQAO; See Table 1). The magnitude of this issue justifies examining reasons and explanations teachers gave for students' poor performance on the OSSLT as it relates to the assessment and instruction of students who struggle to write effectively. This challenge is echoed by Soine and Lumpe (2013), teachers' perceptions of professional development and classroom observations determined the usage of effective teaching and assessment practices in writing to engage and improve student outcomes. Some students may require more intensive intervention or evidence-based practices to prepare them for the OSSLT. There are effective measures that can be adopted. For example, Kiuhara, Graham, and Hawken (2009) examined areas of importance for teaching writing in the high school level to improve literacy for students with learning disabilities including the value of tests and projects, skills needed for employment, texting, reformed writing, and the effects on how students are taught to write. Adopting such practices has the potential to improve results for students on IEPs. Ernest, Thompson, Heckaman, Hull, and Yates (2011) showed a 30% increase in writing test scores for students who were given different strategies for their learning and provided with accommodations by their teachers.

In order to provide effective intervention using evidence-based instructional strategies, educators needed support and professional development to better prepare students for high-stake tests. Teachers needed a supportive work environment which included coaching and feedback, planning time for students IEPs, and continual professional development for writing instruction (Nierengarten, 2013). Also, scaffolding was beneficial to assess progress of an individual at each level of the process. Hamman, Lechtenberger, Griffin-Shirley, and Zhou (2013) stated cooperating educators used scaffolding that proved to be the most effective when collaborating with student teachers on their activity goals.

This rationale provided data that will help educators at the district to make better decisions on effective teaching strategies and assessment in writing for SPED students. I looked at which schools offered locally-developed streamed English courses in Grade 10 over the past three years that included schools with the highest OSSLT passage rate for SPED students and ones that had the lowest OSSLT passage rate in order to help better understand the results of student scores. This study aimed to identify what factors may account for the similarities and differences in OSSLT outcomes. Initial exploratory interviews with educators at different high schools in the district helped reveal what research-based teaching strategies and methods for teaching literacy are being implemented. The emphasis of this examination however was conducted to direct observations of what evidence-based, effective teaching strategies and/or methods teachers implemented when working with SPED students who struggle with their writing skills, and reviewed and scored district 10th graders' journal writing samples using CBM. The ultimate goal of this qualitative case study was to be able to provide information to the school board, administrators and other educators to help understand how to improve student writing skills and hopefully increase test scores across the school district.

Definition of Terms

Special education (SPED): All areas of education that are applicable to exceptional individuals which include physical and/or mentally challenged students. Educational programs are specifically designed in addition to the regular program to cater to these students (Jain, 2006). Special education must follow the Individuals with Disabilities Act (IDEA) regulations and Individual Education Placement (IEP) process (Yell, Shriner, & Katsiyannis, 2006).

Assessment tools: Measure and evaluate the performance and skill levels of students for comprehension and mastery of content taught, and to assist in modifying instruction to support student learning (Dombek & Otaiba, 2016).

Curriculum-Based measurements (CBM): Modifies instruction which supports students' individual needs by aiming at specific skill abilities (Hosp et al., 2016).

Effective instructional strategies: Techniques put in place to improve student outcomes through teacher planning, implementing, evaluating and modifying curriculum in the school classroom (Astleiner, 2005).

Literacy: Knowledge and comprehension for an individual to read and write effectively in society (Keefe & Copeland, 2011).

Locally-Developed streamed courses: Courses that adapt to educational requirements that are not offered in the generally accepted curriculum (Government of Ontario, 2016).

Ontario Secondary School Literacy Test (OSSLT): A literacy test that is made up of reading and writing skills based on the Ontario curriculum that students must successfully pass to graduate from high school (EQAO, 2007).

Professional development: Training in a subject area to coach educators to develop and enhance their instructional competency through workshops, seminars, and professional learning communities (Dixon, Yssel, McConnell, & Hardin, 2014).

Significance of the Study

The significance of this study was to collect information to understand what effective teaching strategies, tools, and resources (best practices) were used to improve student writing skills in SPED and make recommendations for teacher professional development. I identified evidence-based practices in literature, compared and observed to see if practices were being used by educators, and examined what teachers implemented and understood from these practices. For example, Graham and Harris (2009) highlighted that when students are provided with SRSD instructional goals and self-assessment their performance in writing improved. This project potentially informed board policy and practices on professional development teaching practices and tools.

This study benefited the local setting by revealing data that informed the board about the degree of effective teaching of writing for Grade 10 students. The study provided base-rate data of writing deficits comparing SPED students' skills to typicallydeveloping students. Also, it provided administrators with guidance on where to direct limited resources for teacher in-service training in SPED at the local level. Gillespie and Graham (2014) stated that SPED students improved in writing performance through explicit instruction, text structure, and teacher feedback techniques. This research may help implement improvements and aid in the development of more effective teaching strategies for writing. Celik and Vuran (2014) suggested that direct instruction and feedback are beneficial for SPED students because they improved students' writing and provided structure.

The district should routinely assess student writing skills, and student CBM scores would serve as baseline data for the district for any future comparisons against OSSLT results. According to Hosp et al. (2016), CBM data can be used for best practice, and educators may need to understand student skills to guide their instruction. This approach could also provide a benchmark for objective, skill-based data of students writing skills.

The local level educational system benefited from this study, particularly relating to SPED students and educators. The intent is to help teachers become more aware of improved literacy instruction and to align their teaching behaviors with best practices. Students will be educated in a way that will support their learning.

Research Questions

To answer the research questions, I used teacher interviews, classroom observation and checklists, student archival work, and OSSLT scores. My study addressed the potential reasons students with disabilities are not performing well on the OSSLT in writing. This research aimed to support and provided at-risk students with specially designed instruction.

Research Question 1 (RQ1): What are district teachers' perceptions and experiences of assessment and teaching strategies used with SPED students to improve their OSSLT writing skills?

Research Question 2 (RQ2): What are the differences and/or similarities in teachers' perceptions about SPED students taking the OSSLT in high- and low-performing schools?

Research Question 3 (RQ3): When it comes to preparing SPED students to take the OSSLT, what differences and/or similarities in assessment and teaching practices exist between higher-performing schools compared with lower-performing schools?

Research Question 4 (RQ4): What is the mean, median, and standard deviation of SPED students' writing skills, as measured by CBM assessment probe of samples in their writing journals?

Review of the Literature

Conceptual Framework

The effective instructional practices conceptual framework of my study was based on cognitive-behavioral theory. According to Graham and Harris (1989), cognitivebehavioral theorists have proposed that there are three major components of effective instruction including strategies, knowledge about the use and significance of those strategies, and self-regulation of strategic knowledge. Smith (1982) validated this cognitive approach by characterizing writing as a complex process in which the writer works both as author and secretary. When writing as an *author*, the focus is on content and organization; whereas, the *secretary* is concerned with the revision of writing tying it back to the types and use of effective teaching strategies. The research questions required the examination of knowledge, application, and significance of teaching strategies and assessment. Teacher self-regulation came into play through interviews, observations, and CBM.

The proposed study was also grounded on the principles of effective instruction as described by noted learning disability researchers and instructional design experts, Archer and Hughes (2011). Archer and Hughes' work and dissemination of research-validated methods of effective instruction complements the cognitive-behavioral process for writing as described by Graham and Harris (1989). The cognitive-behavioral based principles of effective teaching included the following: have teachers optimize engaged time and/or time on task, promoted high levels of success, increased content coverage, have students spend more time in instructional groups, scaffold instruction, and addressed different forms of knowledge to pass the OSSLT in reading and writing skills. Due to the limited time available in the classroom, it is essential that teachers engage time and/or time on task to its maximum effect with behaviors on writing. This would include educators staying on topic and avoiding digressions. Harris and Graham (2013)

identified five areas that were challenging for learning disability (LD) students in writing which included content, organization, setting goals, application and revision of text due to a lack of evidence-based effective instruction, and time restrictions with explicit teaching in the classroom.

Hough, Hixson, Decker, and Bradley-Johnson (2012) suggested that an effective writing program explicitly instructs pupils to brainstorm, draft, and revise within a certain time period teaching summarization, peer assistance, and setting goals using basic writing skills which included letter and word processes, spelling, punctuation, vocabulary, and proper sentence structure. Also, planning and drafting stories (who, when, where, and how) can be taught at the elementary level explicitly using self-regulated strategy development (SRSD) steps which included identifying and brainstorming elements in the story, determining the rationale, organization, collaboration, and becoming independent writers (Hough et al., 2012). In addition, these authors suggested that students' undertimed conditions produced more written work, and through repetition pupils retained their writing skills. According to Simmons, Fuchs, Fuchs, Mathes and Hodge (1995), and Swanson (2001), explicit instructional behaviors included (a) focusing instruction on important content; (b) sequencing skills in a logical manner; (c) breaking down complex skills and strategies of instruction into smaller units; (d) designing organized and concentrated lessons; (e) starting lessons with a clear statement of goals and expectations; (f) reviewing important skills and knowledge before starting instruction; (g) modeling and providing step-by-step demonstrations of lessons; (h) using clear and comprehensive language; (i) providing an acceptable variation of examples and nonexamples; (j) giving guided and supportive practice; (k) requiring continual responses; (l) closely observing student behavior and production; (m) providing instant and corrective feedback; (n) delivering a lesson at an active speed; (o) assisting students to structure knowledge; and (p) giving a delivery of cumulative application. The explicit instructional behaviors listed above tied into the intersection between principles of effective teaching and effective teaching strategies for students who struggle to write.

Corrective feedback for an academic error; and then practicing the correct way of doing the academic skill(s) helped to strengthen future correct responding, and improved success rates for students (Simmons et al., 1995). According to Mason et al. (2011), effective instruction in writing needs to be modeled, memorized, supported, and independently practiced which is adopted in SRSD. Coyne et al. (2011) extended this research-validated evidence further by showing how effective instructional methods aimed at developing mastery of skills applied and work with SPED students (Simmons et al., 1995). Coyne et al. (2011) acknowledged that writing is a challenge for SPED students due to the complex and inter-related elements of social interaction, and cognitive processes which needed more concrete assistance.

Knowing these strategies of the writing process, the principles of effective instruction supported and assessed student writing. This would include planning, drafting, editing and revising, and publishing (Coyne et al., 2011). They further discussed effective instructional practices that related to process writing, text structure and collaboration to evaluate students' success rate in writing. Coyne et al.'s (2011) authoritative text on effective teaching of diverse learners complemented Archer and Hughes (2011) work because they connected effective teaching to writing and explicit instruction, and the research fit nicely with the theoretical framework for students who struggle academically. In addition, Graham and Santangelo (2014) found that explicit and direct instruction of mastering spelling skills is effective, and improved writing, reading, and phonological skills with LD students.

Graham and Harris' (2005) showed that applying the process and principles of explicit writing strategy instruction helped students with disabilities improve their writing skills as they related to planning, monitoring, evaluating, and revising text for effective teaching strategies. Graham and Harris incorporated the SRSD model which is grounded in cognitive-behavioral principles, where educators taught students to set goals, selfdirect, and strengthen their writing behaviors as it relates to the author and secretary. Harris and Graham (2013) suggested that explicit instruction used SRSD with LD students addressing meta-cognition, executive functions, self-regulation, and retention with writing. The framework helped to identify and describe the nature of the problem by collecting data on teacher interviews and classroom observations on whether best research-based practices outlined here were being implemented by educators in the district.

I utilized the principles of effective-based instructional practices, and cognitivebehavioral based principles of effective teaching when conducting my teachers' interviews and classroom observations. The aforementioned researchers mentioned in this section discussed self-monitoring, goal setting, and checklists to implement in the area of writing strategies. Effective teaching strategy principles for SPED include explicit instructional behaviors, planning, drafting, and revising. Educators using these strategies may help support SPED students to score well on the OSSLT. Also, I expected to determine if there was any relevancy between the use of these explicit instructional behaviors and cognitive approaches in passing rates and/or non-use in failures rates on the OSSLT.

Review of the Broader Problem

The gap in practice for this research related to effective teaching strategies and assessment of writing skills. The search engines *Education Source, Education Research Complete, ERIC, SAGE, ProQuest Central, PsychINFO, Google Scholar, Tests & Measures Databases, and Thoreau* were used in conjunction with a keyword search using the following terms: assessment tools, coaching, CBM, curriculum-based evaluation (CBE), RTI, EQAO, evidence-based practices assessing and teaching writing, explicit and direct instruction, hands-on activities, instructional strategies, literacy, locally-developed stream, OSSLT, problem solving, professional development, scaffolding, smaller study groups, special education, writing revision and repetition processes which yielded hundreds of articles. I narrowed down the search by selecting peer-reviewed journals within the last five years, and read the abstracts to determine which articles were most relevant to my research. I used published books and my chairperson's recommendations related to this area of research.

The evidence-based literature supports provided detail about the important theme topics in this study: writing assessment tools, writing needs for SPED, instructional strategies for writing, and professional development for teaching writing. Teaching

strategies included writing revision and repetition processes, scaffolding, explicit and direct instruction, smaller study groups, hands-on activities and problem solving, and coaching. When working on the exhaustive and thorough search of the literature, I focused on describing the articles and published books, why and how the information would be used, and what I expected. Note that many of the articles speak to multiple themes as already defined (See Definition of Terms above).

My search approach was made even more exhaustive by going through key and relevant articles conducting an author-name search of more published materials by authorities in the area relevant to my topic. I used Google Scholar and other search engine citations to link to more current published research to assist in developing the critical analysis of the research evidence.

Writing Assessment Tools

Assessment is used to aid teachers to determine which skill levels students have mastered and comprehended from the instructed material (Dombek & Otaiba, 2016). CBM is a tool used to assess, adapt and modify teaching instruction and curriculum which supported students' educational needs (Hosp, Hosp, & Howell, 2016). CBE is a decision-making procedure to support teachers on directing systematic evaluation and effective instruction for students (Hosp et al., 2014). Assessment may help educators understand what students' writing skills are to guide instructional planning. CBM has an impact on the educational process for accountability, intervention, and decision-making on students' high-stake literacy assessments (Patton et al., 2014). In this study, pupils failed the standardized test, and the CBM diagnostic criterion-referenced state test was used to measure student's literacy skills to help make instructional modifications and accommodations to support these SPED students.

Similarly, Stecker, Fuchs, and Fuchs (2005) looked at expert system groups that measured written-retell student outcomes using descriptive statistics. Their discussion included CBM that helped identify SPED students, assessed and improved programs, integrated pupils in general education classrooms, and monitored and planned teacher instruction (Stecker et al., 2005). The assessments focused on reading and writing which was relevant to my research in literacy. Measurement tools included the Stanford Diagnostic Reading Test (Karlsen, Madden, & Gardner, 1976) and the Comprehensive Reading Assessment Battery (Fuchs, Fuchs, & Hamlett, 1989). Also, Fuchs, Fernstrom, and Reeder (1992) stated that CBM improved an educators' decision-making by performing many assessments on student academics and provided effective teaching strategies for SPED students. This study included teachers identifying student skill levels and behaviors, curriculum content and planning, and modifying the program (Fuchs et al., 1992); the researchers suggested that modifying teaching or peer instruction leads to student success. Wesson et al.'s (1989) findings indicated an improvement in student outcomes based on modeling methods focused on teacher CBM and assessments, makeup of instruction, student performance, and modification. Stecker et al. (2005), Fuchs et al. (1992), and Wesson et al. (1989) are all examples of research using evidence-based assessment and effective teaching of writing to SPED students.

In a seminal study by Marston and Magnusson (1985), they worked with the Minneapolis Public Schools to create a Five Year Plan that would enable school districts to use the Peabody Individual Achievement Test and CBM literacy assessments to help determine student academic growth and achievement. These authors examined means and standard deviations of student literacy scores for regular and SPED classroom comparisons to monitor pupil achievement and levels within the English curriculum. Also, a survey of teachers' perceptions on CBM indicated the majority felt it was a valuable measurement tool or exercise. SPED students data was collected and analyzed to determine what effective teaching strategies were being used and/or needed by educators to improve writing. The strategies and assessments identified that were applicable are direct instruction, student study groups, repetition, and monitoring student progress.

According to Amato and Watkins (2011), educators have to set realistic goals and shift the focus away from spelling, punctuation, and grammar for students that struggle with writing and concentrate on content. CBM may be used to assess secondary students writing but are limited for standardized testing. The authors used CBM probes to determine how many words secondary students with LD wrote down within a time frame to examine pupil writing in spelling, grammar, punctuation, and vocabulary. However, grammar was not used when calculating the number of words written as part of the assessment. Dombek and Otaiba (2016) used CBM to score students who struggle with writing. The scoring method included total words written, words spelled correctly, correct letter sequences, correct word sequences, and incorrect word sequences. As a result, I used CBM to assess students writing levels by looking at how many words were written, spelled correctly, and correct and incorrect word sequences within a three-minute

time period. Also, I used the Scoring Rubrics and Sample Student Responses from the EQAO website (2016) as a reference when examining and marking SPED students writing from each school for my research. In addition, I increased my subject matter expertise to better assess SPED students' journals. The dissertation "*The Utility of CBM Writing Indices for Progress Monitoring and Intervention*" by Jewell (2003) included scoring rules for CBM writing measures based on total words written, words spelled correctly, and correct writing sequences. Jewell's dissertation also included a teacher instructional questionnaire, writing skill survey, and the Tindal and Hasbrouck Analytic Scoring System rubric (Tindal & Hasbrouck, 1991), and examples of writing probes which were helpful as references for helping teachers in the TDSB understand the process for assessing and teaching writing to struggling students.

According to Elliot, Kurz, and Neergaard (2012), large-scale assessments are used as effective measures of schools and teachers accountability to increase equity for all students progress following standard policies; content, performance and proficiency. There are four common areas of policies put in place to improve education which included large-scale achievement tests, student mastery, application of standards to all students, and reliance on achievement testing by monitoring, identifying, modifying, and reforming academics, specifically with SPED students (Elliot et al., 2012). All students should have the opportunity to learn to meet learning expectations by being assessed through concept and guided principles on large-scale assessments that are valid and reliable. Alternate assessments are examined in writing, vocabulary and reading comprehension. Also, cognitive disability approaches included portfolios, checklists and student work samples to characterize students' knowledge and understanding, and proficiency-level. In addition, status and growth models are discussed for multiple measurements for achievement.

Hosp et al. (2016) recommended and promoted effective-based and validated CBM to improve the assessment and evaluation quality of decision-making in education. The authors discussed the history of CBM, what and why it should be used in special education, criterion-referenced measures, RTI, multi-tiered systems of support, themes, concepts, universal screening, progress monitoring, and planning. The published book covered areas in conducting CBM in reading, spelling, writing, numeracy, content-area, charting and graphing data. Also, the three types of CBM were examined which included general outcome measures, skills-based measures, and mastery measures. The authors explained how to score writing with story starters in CBM, and how total words written (TWW), words spelled correctly (WSC), and correct writing sequences (CWS) linked to goals and objectives in SPED students' IEPs. In addition, the appendix in the textbook provided CBM resources on performance standards (benchmarks), online websites administration guides and scoring for writing, progress monitoring graphs, and checklists.

Comparatively speaking, according to Hosp et al. (2014), curriculum-based evaluation (CBE) was used in a systematic way to plan instruction and help with decision making when monitoring SPED students learning and behaviors dealing with assessment, evaluation and instruction. There are three phases that infer reliability and validity which included fact finding that collected all the information and aligned to the problem to make informed decisions, summative decision making that determined what the problem

was and how to solve it by analyzing information, and formative decision making provided items on how to solve and implement effective instruction (Hosp et al., 2014). Evidence-based assessments discussed by the authors, Hosp et al. (2014) improved student outcomes and set goals including "Reviewing work samples, interviewing, observing, and testing performance (RIOT)", and "Facts assumed cause, test, and results (F.A.C.T.R.)". F.A.C.T.R. is a checklist used to verify assumptions when collecting data for interviews and observations. The authors examined professional development for educators to aid student intervention by looking at frequency, focus, format, and size when designing instruction. Also, alterable variables on how to change the stages of instruction, and different types of knowledge (Factual, conceptual, procedural, metacognition) were used. This was used in my study to determine how to assess the results of SPED students' writing. The National Center on Intensive Interventions is an association that was recommended by Hosp et al. when choosing progress monitoring instruments. According to Blankenship and Margarella (2014), technology provided educators the opportunity to give effective and efficient feedback when assessing and instructing SPED students in writing. The authors pointed out that by using technology, student test scores increased in high school.

These articles were used as a source for my writing assessment tools research with 10th grade SPED students' writing samples (CBM scoring) as it connected to the OSSLT scores. By looking at SPED students writing samples (journals), I was able to determine and monitor the improvement of student writing scores on standardized tests. I examined SPED students' cognitive-behavior and writing work through CBM to determine effective teaching strategies. I used the information on CBM to increase my subject matter expertise to better prepare myself for these teacher interviews, and assess SPED students' journals between CBM and higher literacy levels.

The expectation is that the journals aligned with the assessment points and CBM were tied to higher literacy levels. I leveraged the details on CBM probes to improve my competency when assessing SPED students' journals. Graham, Hebert, Sandbank, and Harris (2016) suggested knowledge and writing improved learning abilities through prompting stories and opinion essays. I expected that the students' work linked with enhanced writing, spelling, grammar, punctuation, vocabulary, content, performance and proficiency in literacy. I used CBM and CBE to determine effective teaching strategies. I expected to find themes for effective teaching strategies through CBE in conjunction with CBM to improve SPED students skill levels, curriculum content, and scores on the OSSLT.

Writing Needs for Special Education

Special Education (SPED) applies to exceptional individuals with physical and/or mentally challenged students, and the curriculum is modified for these pupils (Jain, 2006). Yell, Shriner, and Katsiyannis (2006) stated that the Individuals with Disabilities Education Improved Act (2004) is intended to meet the needs of SPED students by requiring more accountability of administrators and educators. This would include teacher certification in SPED, planning IEPs, and professional development in teaching literacy. This aligned with my study and rationale focused on effective instruction in writing. Kiuhara, O'Neill, Hawken, and Graham's (2012) showed that essays followed the writing process of SRSD model and included the development of background knowledge, discussion, modeling instruction, memorizing, support, and performance. The researchers discussed how story writing, persuasive essays, and mnemonics were used as teaching strategies to improve Grade 10 to 12 students writing skills in literacy with LD. Kiuhara et al. (2012) stated that there was a relationship between these teaching strategies and when applied by teachers, student writing skills can often double over baseline writing scores.

According to these researchers, using SRSD, as previously noted, is a way to improve the writing of students with special needs. The various processes' include Suspend Judgement, Take a Position, Organize Ideas (STOP), Develop a topic, Add supporting ideas, Reject possible arguments, End with a conclusion (DARE), and Attract the readers' attention, Identify the problem, Map the context of the problem, State the thesis (AIMS). These processes are part of the SRSD intervention as it relates to teaching writing. In an early study by MacArthur and Graham (1987), stories produced by students suggest that different ways of putting down text must be taken into consideration when assessing pupils writing. The authors looked at writing instruction dealing with handwriting, word processing and dictation created by students with LD, and measuring tools were used for student interviews to collect data on writing instruction. De La Paz and Graham (2002) emphasized planning for students to obtain skills in writing instruction. The authors stated that modification, feedback, revising, SRSD, and brainstorming are essential for writing instruction to support special needs students' literacy levels.

According to Rijlaarsdam et al. (2012), designed writing instruction has four issues: more than one path leads to good writing, not all students make use of cognitive activities, quality of planning, structuring and revision has a positive role, and students monitoring their own writing. Hayes and Flower's model framework for writing looked at task environment, writer's long-term memory and cognitive operations (Rijalaarsdam et al., 2012). In conjunction, technology that supported writing instruction included speech recognition dictation and word processing that corrected student writing errors. Also, SRSD model, explicit teaching, modeling, scaffolding, collaborative writing, feedback, and setting product goals were discussed with students planning, drafting and revising their written compositions on personal reactions, summaries or portfolios. Graham et al. (2016) stated that instructional supports and accommodations included extra time for struggling students on assessments but instruction needed to meet experiences that are relevant to students which included pupils working collaboratively.

Furthermore, Meltzer and Krishnan (2007) recommended executive functions to educators which focused on goal setting, planning, organizing, self-regulation, flexibility, and feedback with SPED students. Meltzer and Krishnan connected executive functions with cognition and behavior and indicated that there is a lack of open-ended tasks on standardized testing. In conjunction, the Tower Test and Survey of Problem-Solving and Educational skills were used to measure executive functions and writing skills. Also, the Behavior Rating Inventory of Executive Function (BRIEF) is an instrument designed to measure executive function skills. This instrument was used to measure baseline skills, and then used once more to find any improvements made after teaching students with poor executive functioning meta-cognition. BRIEF determines the skills required to perform better on writing and academically-related tasks.

Bock and Erickson (2015) suggested that comprehensive literacy instruction for SPED, which includes students with mild intellectual disabilities, supported reading and writing through repetition of print, phonetics, and alphabet skills. Bock and Erickson explored student engagement, collaboration, and instructional feedback through studentcentered and teacher-directed approaches. The information on repetition, collaboration and feedback provided effective teaching strategies to improve student writing.

In contrast, Gillespie and Graham (2014) stated that students in elementary and secondary levels with LD can improve the quality of writing through explicit instruction by process planning, text structure, and teacher feedback. Student IEPs and marks were used to support writing and assessment of pupils. Educators used the SRSD method on LD students to help them design, write, and revise their work. According to Kohl, McLaughlin, and Nagle (2006), all students with disabilities must be included in general classrooms and assessments but the accuracy to these evaluations are being called into question as appropriate and meaningful. These authors discussed alternative assessments and modified curriculum to support students with cognitive disabilities writing the standardized test. Troia and Graham's (2016) data showed that educators working with SPED students believed that standardized tests in literacy did not accommodate, meet or solve writing development for struggling learners. Graham, Hebert et al. (2016) discovered writing strategy themes to aid struggling writers that included conferencing between teacher and pupils about their writing and shared work, student progress in the

class, and determining what programming needs to be modified and assessed to support SPED students.

Instructional Strategies for Writing

Instructional strategies are approaches implemented by educators to enhance student results through planning, implementing, evaluating and modifying curriculum in the school classroom (Astleiner, 2005). According to Early and Saidy (2014), students in a workshop went through a scaffolding process. The revision feedback cycle included direct instruction, modeling, self-and peer feedback, self-planning and revision. This qualitative study used writing revision as a teaching strategy to improve students' literacy skills. The study looked at Grade 10 English classes in high school identified as SPED and other diversified backgrounds.

Celik and Vuran (2014) showed that direct instruction is effective with reading and writing and provided feedback for at-risk students. This study dealt with direct instruction for special needs students with intellectual disabilities and behaviors observed through teaching approaches. Also, colors and shapes were used to aid these special needs students to communicate their ideas and stories. Similarly, according to Grundmeyer (2015), word problems, categorizing, and visual cues were teaching strategies used to retain content and showed to be effective with at-risk students. In this study, Grundmeyer re-tested students in literacy using problem solving.

According to Mason, Harris, and Graham (2011), SRSD was used to set objectives and goals, monitor behavior, self-instruct, and reinforce behaviors. This included background knowledge, modeling and memorizing strategies, and supporting the use of independent writing (Mason et al., 2011). The researchers discussed planning, composing and writing revision using explicit instruction with learning disabled students. In contrast, Spear-Swerling and Zibulsky (2014) stated teachers trained in RTI assessments were better equipped to deal with SPED students than educators in general. This study used a 2-hour language arts block out of the school day to allow educators to plan instruction and choose a topic on what literacy they had an interest in. In conjunction, this teaching strategy can be used in the high school setting for writing skills focusing on planning and revision allocated for students. Graham et al. (2016) suggested that writing well can be achieved through planning, drafting, revising and editing for struggling students by building a new knowledge of skills which included spelling, sentence construction, grammar, and setting goals.

Astleitner (2005) pointed out that there are thirteen principles of effective instruction which included planning, implementing, evaluating, and adapting instruction that helped improve learning for students writing. Graham and Harris (2005) recommended effective strategies for SPED educators teaching students writing with learning difficulties which included Stop Think Of Purposes (STOP) and List Ideas Sequence Them (LIST), SRSD, and persuasive writing. The authors showed that planning, motivating, evaluating, and revising text supported at-risk students.

Similarly, according to Graham and Harris (1989), there are three important parts to support effective writing instruction on cognitive-behavioral theory which included strategies, the importance and knowledge on how to use these strategies, and selfregulation. In conjunction with Smith (1982) stated that cognitive approaches supported writers using the "author" and "secretary" steps. The author looked at content and organization, and the secretary looked at writing revision. According to Archer and Hughes (2011), explicit instruction was used for teaching skills in a structured and systematic approach which is characterized with instructional supports. The areas included declarative knowledge based on fact, procedural knowledge on how strategy processes are completed and conditional knowledge where the strategy is to be used or not (Archer & Hughes, 2011).

Graham and Harris (2009) examined students with LD who struggle with writing and how using SRSD instruction, goals, and self-assessment improved pupil performance, and provided information on cognitive behavior modification. Also, it allowed for planning and revision in writing as an ongoing process. The subject matter can be modified and used by educators for effective instruction. Scaffolding is a technique used to engage students to reach their objectives in writing. Hamman, Lechtenberger, Griffin-Shirley, and Zhou (2013) suggested that scaffolding is most effective when educators collaborated with student teachers on their activity expectations in this study. The researchers discussed how student teachers were supported by experienced educators on inclusive instruction for SPED students. Graham et al. (2009) and Hamman et al. (2013) study highlighted teachers' perceptions in improvement of individual effectiveness using these instructional strategies.

Ramos (2014) stated communication through shared experiences, persuasive essay, use of vocabulary, color-coded resources, planners, email, video, and language choice provided options in this research. The researcher discussed how "reading to learn" used reading and writing instruction, and scaffolding which supported literacy. This approach supported diversity and may motivate students with language difficulty. This article provided various learning strategy options (persuasive writing, use of vocabulary, and experiences) to enhance and improve student literacy. According to Fleury, Hedges, Hume, Browder, Thompson, Fallin, El Zein, Reutebuch, and Vaughan (2014), SPED students have difficulty communicating, planning, organizing and revising their ideas in writing.

Martinussen and Major (2011) noted that educators can break down instruction into chunks and use explicit instruction for difficult tasks that have a systematic approach for students to process information. To aid with short-term memory, phonological loops are used for verbal information that included words and digits, and visual sketchpads (Martinussen & Major, 2011). Also, monitoring tests, strategic questioning, and stories were used for student understanding of the language. Explicit instruction and chunking may determine the major keys to answer why students are achieving higher test scores. Simmons et al. (1995) identified instructional behaviors and aspects of explicit instruction on literacy achievement with LD students that included peer tutoring, grouping, and scaffolding to accommodate students' individual differences. Swanson (2001) also discussed and supported this research-validated evidence of the elements of direct instruction with LD pupils.

Simmons et al. (1995) recommended that educators modify their literacy instruction through explicit teaching and peer tutoring to real-life conditions that may provide better outcomes for students with LD which included teachers' time, observations, behaviors, performance, feedback, and learning activities. Based on the evidence and recommendations from the Simmons et al.'s (1995) study, and Fuchs, Fuchs, and Vaughn (2014) stated that smaller student groups in the classroom gave educators the opportunity to deliver specialized instruction that is appropriate with SPED children's literacy which is an effective instructional strategy for writing. In this case, RTI and data-based individualization may be used to meet the needs of students with LD. There were goals and monitoring put in place to determine the effectiveness of this program. Smaller student groups and RTI are two specific strategies that improved student writing in high school. According to Ernest, Thompson, Heckaman, Hull, and Yates (2011), there was a 30% increase in student test scores when different pupil learning options were available which included hands-on activities. The data collected were based on student test scores and journal entries to measure literacy.

Coyne et al. (2011) recommended and promoted effective-based and validated instructional practices in reading, reading comprehension, and writing for diverse learners. The authors showed that process writing, text structure, and collaboration are strategies and approaches that supported LD students. Graham, Harris, and Olinghouse (2007) recommended and advocated executive functioning for writing which involved planning, organizing, monitoring, and evaluating of teaching strategies to motivate students to reach a goal. The model used for effective teaching strategies is SRSD. Pick Ideas, Organize Notes, and Write (POW) was a strategy discussed by the authors to support student writing. Akcin (2013) suggested that literacy skills provided SPED students the opportunity to learn and communicate their ideas leading to career opportunities and functioning independently in their community. The author pointed out that educators are lacking training required to support these at-risk students. This aligned with my research problems at the local level to prepare educators effective teaching strategies for SPED students in writing for the OSSLT.

Fisher and Frey (2011) stated that RTI makes modifications to instruction and curriculum and creates opportunities for educators learning effective teaching strategies. RTI helped to identify and provides intervention for SPED students by choosing, organizing, and delivering effective programs (Fisher & Frey, 2011). According to Hosp (2012), progress decisions are essential to RTI, and assessment and evaluation. Review, Interview, Observe and Test (RIOT), and Setting, Curriculum, Instruction and Learner (SCIIL) are used to collect data on assessment to make informed decisions on evaluation (Hosp, 2012). The researcher in the published book provided information to educators on using assessment to make decisions on teaching and learning assessment; instrumentation, measurement and evaluation, and theories; classical test theory, item response theory and generalization theory. Also, screening decisions for students are examined and criterion and norm-referenced standardized tests, and experimental designs. In addition, interviews and observations were discussed on open-ended questions, paraphrasing participants' answers and perceptions, school setting, bias, checklists, work samples, and other protocols to collect data.

Pressley, Rankin, and Yokoi (1996) suggested that students learn the writing process through experience and modeling from their teacher, and how it connected to planning, drafting, and revising in writing instruction. Yang, Richardson, French, and Lehman (2011) looked at the process of writing while observing courses online postings using a confirmative factor analysis to modify measurement models. Elish-Piper and Schwingendorf (2014) showed that text engaged students reading through technology which included social media, videos, music, and lyrics incorporated pupils' diverse backgrounds and learning abilities. Particularly, there are three phases of text: engaging, exploring, and expanding (Elish-Piper & Schwingendorf, 2014).

Troia and Olinghouse (2013) showed that 75% of North American students graduating from high school are not able to meet basic writing levels. These authors discussed Common Core State Standards and the importance of evidence-based practices on writing instruction and assessment. According to Grisham et al. (2014), diversity in instructional strategies is necessary to improve student achievement in literacy. The researchers discussed teacher preparation programs that lacked professional development in SPED in reading and writing, and a need for declarative knowledge. Spooner, McKissick, and Knight (2017) stated that evidence-based practices for writing should be instructed in regular learning skills and used as an intervention for at-risk students.

These research articles on instructional strategies helped document the effective instructional strategies for writing to use for my teacher interviews and classroom observations. I looked at teachers' different strategies of instruction in writing and how it improved student literacy. I took field notes to see if there is a link for educators that used these strategies for the students passing and non-passing rates on standardized tests. In addition, I used information on cognitive behavior modification and SRSD instruction by developing these skills; planning drafting and revising for my research to improve literacy with SPED students. The effective teaching strategies included scaffolding that will be assessed while observing educators in the schools. I examined evidence of explicit and direct instruction in the classroom observation with some improvement in students' writing where there is evidence of this instruction. I used the teacher preparation strategies information on scaffolding, collaboration and self-efficacy that supported students with SPED learning.

I used the declarative knowledge of curriculum instruction and assessment to determine if educators are using effective teaching strategies in literacy from the teacher interviews and classroom observations. This helped to make a connection between teacher training programs and students' literacy scores. I utilized the principles of effective instruction when conducting my teachers' interviews and classroom observations. When interviewing and observing educators, I looked for these effective teaching instructions to improve students writing. I expected to determine if there was any relevancy between adopting these cognitive approaches in passing rates and/or nonadoption in failure rates on the OSSLT. I documented the assessment and evaluation in decision-making information to use for my teacher interviews, classroom observations and when reviewing SPED work in writing.

Professional Development for Teaching Writing

Professional development is a resource to train and support educators to enhance their teaching instruction and assessment in the classroom (Dixon et al., 2014). Gabriel and Davis (2015) stated that many SPED students do not have the grade-level writing skills that are required to attend a post-secondary education, and professional development was necessary for educators to make instruction relevant and engaging for students. In this study, researchers discussed writing strategies to support these at-risk students in high school with learning disabilities. Gabriel and Davis showed that evidence-based practices provided productive and positive experiences for educators to achieve successful teaching practices. The strategic instructional model and proficiency in the "sentence writing strategy" was used to assist students in writing complete sentences and proved to be effective in pupil literacy (Gabriel & Davis, 2015).

Soine and Lumpe (2014) stated that teacher professional development improved student outcomes through collaboration and active learning in the classroom. This study may benefit social change in professional development and strengthen community partnerships. Also, educators would have an opportunity to review expectations in the curriculum to support pupil achievement. Furthermore, Hardre and Hennessey (2013) showed that students supported by teachers and peers with relevant content, goals and values were qualities that motivated students. Harde and Hennessey obtained secondary teachers perceptions on students' motivation, and strategies to engage pupils. In addition, teacher professional development training and hands-on activities were used to motivate and engage students. The strategies discussed in this article speak to relevant content, goals and values which motivated and engaged students.

Graham et al. (2016) showed that observations of professional development to educators on planning, drafting, revising, and editing writing was implemented by teachers in their instructional schedule through stories, personal narrative, and opinion writing. Dixon et al. (2014) stated that teacher efficacy gave educators confidence and the opportunity to teach curriculum to high school students in a variety of different ways. The researchers discussed consultants providing feedback to teachers on their differentiated instruction, and a questionnaire used to measure the relationship between how professional development workshops connected to teacher efficacy.

In contrast, Ozguc and Cavkaytar (2014) suggested there is a lack of professional development to train educators that teach SPED students. The researchers interviewed teachers to get their perceptions on what type of instruction they used in the classroom, observations of teaching strategies, and reflective journals on qualitative data collected. Nierengarten (2013) noted that teachers needed support in the work environment which included coaching, professional development in writing instruction, and planning time for students IEPs used to address special needs students' diverse backgrounds. Kiuhara, Graham, and Hawken's (2009) recommended writing reform for secondary students through longer compositions and analysis, evidence-based practices that are modified for students with learning disabilities, and professional development for educators teaching writing connected to the subject matter. In this study, the researchers discussed teaching writing at a national level and randomly sampling English educators' students work. In addition, Ludlow, Dieker, and Powell (2014) recommended that educators when reading professional development journals write down information on strengths and weaknesses of SPED students to support their learning.

I used the information from these articles on professional development for teaching writing to understand how these teaching strategies can be used to support educators and to improve student learning. I determined if there was a relationship between coaching educators and high- and low-performing student scoring schools in writing. When interviewing these teachers, I determined if these strategies were being put in place. I used the relevant options with my teacher interviews and classroom observations to find assessment areas to determine students' writing level. Finally, I expected to find out what evidence-based teaching practices and assessments Grade 10 high school educators were using for literacy in my teacher interviews that connected with student scores on the OSSLT.

Implications

Gabriel and Davis' (2015) showed that SPED students are not adequately equipped to writing or communicate effectively to perform at the post-secondary educational level. This study may provide teachers with improved strategies for teaching writing which may be reflected through improved performance on the OSSLT. The implications for social change from this research could be that at-risk students in the district on IEPs will improve their writing in post-high school adult life, which includes vocation and education, and from this research educators may teach more effectively, raising their instructional efficacy and assessments.

Professional development workshops and community partnerships could be developed for educators from the data collection and analysis of this research. I developed a white paper outlining and recommending research-based solutions to the problem. A professional workshop could supply teachers with information that may have a better impact on SPED students writing on the OSSLT. Simonsen et al. (2014) stated that workshops are inadequate on their own and need to be supplemented with ongoing self-management, coaching, consultation, and performance feedback. Regarding the white paper options, outlining and recommending research-based solutions to the problem could be shared with the school board to encourage political action from these board and community leaders to implement evidence-based educational practices to be used for students who struggle to write and communicate effectively.

Summary

The literature review shows four key concepts that included writing assessment tools, writing needs for SPED, instructional strategies for writing, and professional development for teaching writing. I used research-validated methods of effective instruction that enhanced cognitive-behavioral processes when interviewing SPED teachers and observing their classrooms. The evidence-based literature supported and supplied information on writing assessment tools, writing needs for SPED, instructional strategies for writing, and professional development for teaching writing. Teaching strategies that improve writing include writing revision and repetition processes, scaffolding, explicit and direct instruction, smaller study groups, hands-on activities and problem solving, and coaching. The educators that use these strategies; planning, drafting, and revising in literacy with at-risk students may improve student scores on the OSSLT. By using the aforementioned strategies, educators can hope to gain greater success with students, in particular SPED when implemented. School districts would benefit by encouraging and training educators in professional development to use these strategies in order to assess and evaluate their students' needs.

Students with learning deficits in both general and SPED classes are performing poorly on the OSSLT, and some educators may not know how to support their students writing. More SPED students in the district failed the OSSLT than non-SPED students based on the data from the EQAO (EQAO; See Table 1). The purpose of this research was to benefit educators to develop and examine effective teaching practices and assessment in order to advance SPED students' level of proficiency in writing. The conceptual framework is based on cognitive-behavior theory, the principles of effective instruction, and explicit instructional behaviors using theories by Graham et al. (1989), Archer et al. (2011), and Coyne et al. (2011). The following research questions explored and obtained educators perceptions from high- and low-performing schools on assessment and teaching strategies with SPED students writing the OSSLT, teaching practices and assessments used, and CBM writing journals. The research questions investigated the insight, practice, and significance of teaching strategies and assessment.

These research articles on literacy helped determine if there is any relevancy between the adoption of SRSD in passing rates and non-adoption in failure rates on the OSSLT. Information was obtained when interviewing educators' perceptions on effective teaching strategies. The research articles on special education helped determine if teaching strategies for SPED educators helped improve student scores on the OSSLT. Data collected from teacher interviews and classroom observations determined themes for writing needs for SPED. I used executive functions with cognition and behaviors when conducting teacher interviews and classroom observations on standardized tests for SPED students. The information provided on alternate achievement standards and assessment by educators was used in teacher interviews and classroom observations, and CBM to better understand and examine teacher strategies to support students with cognitive disabilities in writing. This helped determine if there is any relevancy between these standards and assessments, and high- and low-performing schools' students' scores. The results of this research determined the methodology for effective teaching strategies and assessments, preparing SPED students to write the OSSLT. The project was the final study of the data collected and analyzed. The reflections and conclusions section determined the strengths and limitations of the study, recommendations and future research. The first thing to be considered for this research was the methodology.

Section 2: The Methodology

Qualitative Research Design and Approach

The archival written work samples of Grade 10 SPED students (first-time eligible test takers) in locally-developed programs in the Toronto, Ontario, Canada area were used. This is consistent with the sampling method defined in the definition of terms above. A qualitative case-study design was used in my research. A case study design explores a process or record of research in which detailed consideration is given to the development of a particular person, group or situation over a period of time (Creswell, 2012). Hancock and Algozzine (2011) defined case studies as possessing the following characteristics: (a) individuals or a group, particular situations; (b) time bounded; (c) exploratory; (d) in-depth and descriptive. In my research, a case study was the most appropriate method based on the literature review and research questions.

According to Yazan (2015), case study designs are often used for qualitative research, and that the research methodologists Yin, Merriam, and Stake have similar and different techniques and strategies on why a case study should be used. Stake (1995) observed the process of analyzing and developing an idea for a case study by interpreting, gathering and constructing qualitative research. Developed research questions aided the formation of observations, interviews, and document reviews (Stake, 1995). Yin (2002) advocated towards the social sciences by directing and exploring suggested theories by collecting, analyzing, and categorizing data from real-life situations. The quality of the case study design included construct validity, internal validity, external validity, and reliability for program evaluation (Yin, 2002). Merriam (1998) noted that qualitative

research for a case study may contribute to social change by getting individuals descriptive perceptions and interpretations of a situation being studied. Merriam (2009) explores in-depth explanations within defined parameters of systems. Yazan (2015) pointed out that Stake, Yin, and Merriam used interviews, observations, and archival records when collecting data for qualitative case study research. The approach with my study of the local problem aligned with and is based on the recommendation by Stake, Yin, and Merriam because I interviewed and observed teachers and analyzed archived writing samples of students with specific learning disabilities.

Other designs considered but not chosen were ethnography, grounded theory, and phenomenology. Ethnography is a method of inquiry involving a cultural group in a natural setting (Creswell, 2012) which was not part of my study. Ethnography was not a useful method for this research because my study looked at SPED student's which is not culturally relevant. According to Creswell, Hanson, Plano Clark, and Morales (2007) grounded theory has no existing theory in a particular field; grounded theory researchers interpret data collected from a sample to then develop a theory or explanation for how and why a little-understood phenomenon occurs or exists. This approach did not align with the nature of the local problem nor how it should be resolved, which is why I did not use it. In my case study, I have existing theorists, Graham et al. (1989), Archer et al. (2011), Simmons et al. (1995), and Coyne et al. (2011) whose research helped support the exploratory framework for this study. Creswell et al. (2007) explained phenomenology as a method of investigating patterns and relationships of lived experiences of a group over a prolonged period of time. I looked at teaching strategies and assessments to

improve SPED students writing and not examining their lived experiences as a group. Therefore, these are reasons why I approached my research as a case study with interviews, observations, CBM, and OSSLT scores.

Participants

The criteria I used to select participants were the following: Grade 10 certified educators who teach locally-developed English classes for SPED students and are provincially qualified. Purposeful sampling was used to choose the participants. From the Walden University residency presentations, it was suggested that the number of participants be kept to a manageable load. My justification for choosing this sample size number was to obtain different teacher perspectives from each school and a deeper inquiry. According to Guest, Bunce, and Johnston (2016), a large sample size is beneficial at the conceptual level but provides very little practical guidance for determining a sample size. There is little consensus on what contributes an appropriate sample size (Guest et al., 2016). Therefore, a sample size should be determined by the research questions and availability of participants. The point of saturation derives from certain themes that are repetitive with time. Participation was voluntary at all times.

Grade 10 locally-developed English students (CBM journal writing samples only were taken from 1 writing probe/5 minutes to administer and 3 minutes to write). I coached teachers on the process of this activity. The student participants were grouped based on whether they attended a high or low performing OSSLT school, and taking the test for the first time in Grade 10. A pass is a score of 50 or above, and a fail is a score of 49 or below. This was measured by teacher interviews and observations, CBM, and OSSLT archival data. The schools mean scores on the OSSLT were categorized as highperforming and low-performing. High-performing schools were defined as having a range of 31-100% SPED students' scores on the OSSLT, and low-performing schools were defined as having a range of 0-23% SPED students' scores based on four local schools (EQAO; See Table 2). I looked at the difference between high-performing and low-performing schools. The middle performing schools were defined as having a range of 24-30% SPED students' scores on the OSSLT. The EQAO website data did not provide disability, ethnicity/race or social economic status categories; as such were not considered in this case study.

I obtained and completed the IRB application permission form from the Walden University website. I provided verification and obtained permission to conduct research from the district board, such as the External Research Review Committee (ERRC) office and school sites letter of cooperation. Once approved, I recruited four participants at four different schools by contacting administrators at the prospective schools. An informational and invitational letter to school principals was sent. Potential staff meetings; where teacher members were invited to volunteer for interviews and classroom observations.

I did in-person meetings with the principal and teachers, at which I outlined my research and hoped to gain from their participation. I obtained consent forms from all of the participants involved. The setting was teachers' schools that shared the same course, that is, Grade 10 locally-developed English classes. These teachers' identities were kept confidential by numerically coding their names. Respondents' names were not used in

the reporting of this data. I assigned respondent codes to protect the individuals' identities. For journal samples, the teachers redacted the names of students.

The case study employed purposeful sampling to recruit four Grade 10 SPED English teachers. Purposeful sampling is a qualitative sampling process where individuals are selected to explain and comprehend a certain event or case with descriptive information (Creswell, 2012). Suri (2011) stated that purposeful sampling reviews, analyzes and synthesizes original research to understand and make more informed decisions for in-depth case studies. I chose four schools that offer Grade 10 English locally-developed classes. This sample was comprised of two high-performing schools on the OSSLT writing in SPED and two low-performing schools. The goal was to improve and analyze the problem with an in-depth explanation to support this research.

Table 2

Four Local Schools at the Toronto District School Board 10th Grade Special Education (SPED) and General Student Body (GSB) Educational Quality Accountability Office Ontario Secondary School Literacy Test Failure Rates: Schools #1 and #2 High-Performing, and Schools #3 and #4 Low-Performing

Year	School #	Total SPED Tested	SPED Failed	Total GSB Tested	GSB Failed
2017	1	42	31% (<i>n</i> = 13)	208	17% (<i>n</i> = 35)
2016	1	14	57% (<i>n</i> = 8)	46	50% (<i>n</i> = 23)
2015	1	37	35% (<i>n</i> = 13)	207	15% (<i>n</i> = 31)
2017	2	63	70% (<i>n</i> = 44)	296	32% (<i>n</i> = 94)
2016	2	37	68% (<i>n</i> = 25)	226	31% (<i>n</i> = 70)
2015	2	40	70% (<i>n</i> = 28)	254	33% (<i>n</i> = 84)
2017	3	11	73% (<i>n</i> = 8)	11	73% (<i>n</i> = 8)
2016	3	12	83% (<i>n</i> = 10)	13	85% (<i>n</i> = 11)
2015	3	12	75% (<i>n</i> = 9)	14	71% (<i>n</i> = 10)
2017	4	1	100% (<i>n</i> = 1)	1	100% (<i>n</i> = 1)
2016	4	4	100% (<i>n</i> = 4)	4	100% (<i>n</i> = 4)
2015	4	4	75% (<i>n</i> = 3)	4	75% (<i>n</i> = 3)

Note. Data retrieved from the Education Quality Accountability Office (2017)

Data Collection

The following data collection was used to address the research questions individually. Types of data sources used to address the proposed research questions were (a) OSSLT descriptive statistics related to student and school participant variables, which

were provided off the EQAO website (EQAO; See Table 1); (b) teacher open-ended interviews (see Appendix B) on educators' perceptions of teaching strategies, which were audio-taped and transcribed. The modified teacher interview questionnaire is based on an approach by Kiuhara, Graham, & Hawken (2009). (c) Classroom observations taking field notes and using a teacher-observation checklist protocol approach by Simmons et al. (1995), which was entered into a computer document (see Appendix C); and (d) students' journals as they compare to CBM practices, and OSSLT scores (years 2015, 2016, 2017) were used to categorize high- and low-performing schools. I collected CBM writing journal narrative samples, 5 minutes to administer from point of instruction and 3 minutes to student completion. I coached teachers but not delivered the CBM writing probe to Grade 10 locally-developed English students. Students' names were redacted by teachers before submitting to researcher. Non-participating students' data was not included in this study. This type of writing exercise is part of an English teacher's regular routine and curriculum. Early and Saidy (2014) and Ernest et al. (2011) supported the use of student journal writing samples to determine what types of effective instruction improved pupil success and test scores; and (e) descriptive statistical data related to CBM scoring of students writing journals.

To justify the use of CBM-related descriptive statistics in case-study designs, I used research from Patton et al. (2014), Hosp et al. (2016), Simonsen et al. (2014), Council, Carledge, Green, Barber, and Gardner (2016), and Stoicovy, Fee, and Fee (2016). Patton et al. (2014) collected data using CBM to measure SPED students' writing skills to aid with instructional accommodations. Hosp et al. (2016) discussed how CBM writing probes can be used to collect data to meet the goals and objectives of SPED students' IEPs. Similar to Patton et al. (2014), I used CBM procedures to assess writing skills as explained by Hosp et al. (2016). Qualitative case studies are not limited to word data but can have numerical data that is descriptive. For example, Simonsen et al. (2014) collected and compared numerical data of teacher's positive reinforcements toward students in the classroom in fifteen-minute intervals using a tally. Descriptive statistics of high- and low-frequency ranges were noted in field notes (Simonsen et al., 2014).

Council et al. (2016) case study used repeated reading intervention timed sessions with students. The researchers observed incorrect words and total words read that was descriptive in nature based on previous interviews from educators (Council et al., 2016). This aligned with my case study that used CBM probes to collect data on students' journal writing. Similarly, Stoicovy et al. (2012) case study observed and interviewed participants and collected samples of students' writing. The use of writing probes were used to measure students work, and descriptive field notes were interpreted looking for similar and different patterns in the data (Stoicovy et al., 2012).

The basis for each data collection approach and instrument derives from seminal and current research sources on the topic of assessing and teaching writing to struggling students. For example, the instructional strategies for writing, writing needs for special education, writing assessment tools, and professional development for teaching writing for the teacher interview questions (see Appendix B) comes from Kiuhara, Graham, & Hawken (2009). The observation checklist instrument comes from approaches by Simmons et al. (1995) (see Appendix C). The source for the CBM scoring comes from Jewell's (2003) dissertation based on research methods of Fuchs, Fuchs, and Hamlett's (1990) CBM probes using short-duration fluency measurements. These sources have procedural precedence for obtaining the data and information I needed to answer my research questions.

Research Question 1: Teachers' Perceptions of Assessment and Teaching Strategies

For research question 1, the systems for keeping track of data and emerging understandings were field notes and reflective journals. I transcribed the field notes. I am a professional teacher working in SPED for ten years, and there is a potential for professional bias in my assessment of the participants. To avoid bias to the proposed case study design, I minimized my objective opinions by focusing on all data collected that may be acceptable and unacceptable values. The data information from the EQAO scores is appropriate because it is published independently and scientifically collected. The interviews, observations, and CBM were collected in a consistent manner for this case study. I examined four different schools that have a similar course; that is Grade 10 locally-developed English classes. Public data aggregated from the four schools available from the EQAO website were analyzed and compared, and the results were reported and displayed. EQAO keeps names of students who wrote this test confidential.

I obtained permission from the district board research department providing the proposal, timelines, and informed consent forms, and submitted the letters of cooperation to the TDSB. Once the Institutional Review Board gave permission to recruit and collect data in the district including the ability to access any archived data, I contacted the ERRC and principals from the TDSB to conduct research. A letter of introduction and a letter of consent were given to the participants. This data was collected and coded to facilitate analysis which was discussed below. Simmons et al. (1995) study produced categories and themes of effective instruction from the teacher observations in the classroom. Like Simmons et al. (1995), whose study identified categories of effective instruction from teacher observations, I used my categories to determine what effective teaching strategies and assessments were needed.

Research Question 2: Teachers' Perceptions of Special Education Students on the OSSLT

For research question 2, I conducted initial 1-hour scripted in-depth interviews relating to effective instruction and assessment for SPED students writing with four teachers from four comparison schools (purposeful sampling) within the TDSB. The data collected was based on teacher interviews, classroom observations and checklists, and student performance data. According to Weiland and Morrison (2013), teachers given the opportunity to experience implementation and be reflective were more likely to use content and methods in the classroom. Following this review of data, I provided recommendations for possible teaching strategies and professional development. I used multiple data sources such as teacher interviews instruments, classroom and checklist observations, CBM for the students' journal writing, and OSSLT scores. By using teacher interviews, classroom observations, CBM, and student OSSLT scores, my study addressed Creswell's et al. (2007) concern that case studies relied on multiple data

sources. Preferences for this research were interviews with SPED teachers which required interaction.

Research Question 3: Teaching Strategies and Assessment in Higher-Performing Schools Versus Lower- Performing Schools

For research question 3, I used CBM procedures to assess student's dynamic writing skills, to which is consistent with Yang, Richardson, French, and Lehman (2011) who examined students' writing from online course discussions looking at qualitative data postings' content. For the use of this research, I interviewed teachers, observed classrooms, and examined and assessed students writing samples. Ozguc and Cavkaytar (2014) collected qualitative data on teachers' perceptions on instructional strategies, classroom observations, and reflective journals. Yang et al. (2011), and Ozguc (2014) studies were selected because they aligned with the purpose and rational of this research. I modified the procedures to be specific with my research; my analysis was comparing high-scoring schools on the OSSLT and low-scoring schools using student archival written work, teacher interviews, and classroom observations to align more effectively with my research questions and obtain data. The rationale for modifying the procedures was to assess students' cognitive-behavioral learning by using CBM and determine themes for effective teaching strategies. I used a purposeful sampling approach to classify four local high schools as either higher- or lower-performing schools based on SPED students' OSSLT scores.

Research Question 4: Curriculum-Based Measurement Assessment of Students

For research question 4, the measurement system and/or instruments used in my study included teacher interviews on what effective teaching instructional strategies they used for writing, and teacher classroom observations and checklists using a validated teacher-observation protocol (see Appendix C), and CBM to use as an assessment component to the local problem (gap in practice and knowledge). An observation protocol is designed prior to data collection by researchers to take observational field notes (Creswell, 2012). These research-validated tool and instruments were based on previous research published in peer-reviewed journals highlighting writing assessment tools, writing needs for SPED, instructional strategies for writing, and professional development for teaching writing. All elements of this study incorporated trustworthiness and credibility based on peer-reviewed journals with primary research within the last five years, synthesized under themes from the exhaustive literature review that were coded, and all data was collected from the TDSB and EQAO website. Cooper (2010) suggested that synthesis can show greater trustworthy outcomes if it included additional tests of potential impact on the overall synthesis outcomes leading to important findings. The research was selected because it aligned with the purpose and rationale of this study.

Data Analysis

I thematically analyzed the interview data by applying four themes from my literature review: writing assessment tools, writing needs for SPED, instructional strategies for writing, and professional development for teaching writing. Using my field notes from the teacher interviews and classroom observations, I determined which teaching strategies and assessments educators were employing and the frequencies. I transcribed the interviews. I identified the participants using numerical codes to protect their identities. I read the transcripts to identify four themes from the literature review to code and use different colors to distinguish between specific themes. New themes emerged from the analysis of transcripts. The field notes were checked by conferencing with chair advisor for evidence of quality. I analyzed students' writing samples using the CBM scoring tool. This was a secondary analysis of students' work products that were created as part of their coursework. I analyzed the EQAO OSSLT data of the SPED high- and low-performing schools by calculating and reporting the descriptive statistics, such as the mean, median, and standard deviation. In addition, Statistics Solutions did the analysis to avoid personal bias and signed a Confidentiality Agreement.

Research Question 1: Teachers' Perceptions of Assessment and Teaching Strategies

For research question 1, based on a comprehensive review of the literature, a list of empirically validated, "evidence-based practice" assessment and instructional strategies and methods recommended for use with students who struggle to write were generated. From the list, I gathered information from teachers (i.e., those in high- and low-performing high schools) about what writing assessment and instructional practices they reported using (or are not using). The information that is gathered from teachers in high-performing OSSLT schools were useful because teachers in the low-performing OSSLT schools are not using them, then perhaps they should consider adopting the practices conducted in the high-performing schools. I compared the high- and lowperforming schools by analyzing the effective teaching strategies and assessments used by high-performing schools and whether these techniques were being employed in lowperforming schools.

I examined to what extent teachers are knowledgeable about and describing using effective teaching principles and practices as explained in-depth by Archer and Hughes (2011) concerning the research-supported "Six Principles of Effective Instruction" that effective teachers should be employing when teaching students. The principles included (a) optimize engaged time; (b) promote high levels of success; (c) increase content coverage; (d) more time in instructional groups; (e) scaffold instruction; and (f) address different forms of knowledge. I am unsure to what degree these principles are understood and/or being applied by teachers in the four schools; however, it was helpful to see whether more SPED students in higher-performing schools are passing the OSSLT because teachers at these schools reported and/or are observed to be implementing those effective teaching practices as compared to what is reported and observed in the low-performing schools.

Research Question 2: Teachers' Perceptions of Special Education Students on the OSSLT

For research question 2, Graham, Capizzi, Harris, Hebert and Morphy (2014) used demographic questions which included number of years teaching, educational level, and subject area taught. I recorded the courses in my interviews that pertain to Grade 10 locally-developed English classes. Soine and Lumpe (2014), Celik and Vuran (2014), and Simmons et al. (1995) used teacher interviews and classroom observations to determine characteristics of professional development, instructional methods and examinations of explicit teaching used on SPED students. Also, Bock and Erickson (2015) used qualitative interviews, observations, and archival document reviews on instruction and assessment for SPED students writing. In addition, Hough, Hixson, Decker and Bradley-Johnson (2012) used CBM measurement probes with student writing samples to determine pupil writing level and modifications needed for the program. I used these systematic reviews of the research approaches with the analysis of my variables to identify themes.

Research Question 3: Teaching Strategies and Assessment in Higher-Performing Schools Versus Lower- Performing Schools

For research question 3, I examined the similarities and differences of teachers' perceptions and use of teaching strategies with SPED students through educators' initial interview responses. I used descriptive statistics to calculate mean, median and standard deviation between the OSSLT score variables and teaching strategy variables for SPED students in Grade 10. According to Simmons et al. (1995), means and standard deviations were used to compare low-performing schools to regular classrooms to analyze effective teaching instruction. The discrepant cases that did not support my research were included and analyzed to further explore effective teaching strategies and assessment for SPED students writing on the OSSLT.

Research Question 4: Curriculum-Based Measurement Assessment of Students

For research question 4, Amato and Watkins (2011) used CBM probes with SPED students to analyze and measure pupil writing within a time frame modified for SPED

students. Hosp et al. (2016) suggested that CBM can help to analyze student writing through total words written (TWW), words spelled correctly (WSC), and correct writing sequences (CWS). Data was coded and analyzed in order to document and triangulate the understanding and analysis of the statement problem and look at themes to address the research questions and link findings to the original intent of this study. In addition, the data analysis was disclosed in a data summary report, tables and charts, and PowerPoint presentation for the final defense of my study. The project when data was collected was a white paper.

In terms of ethics, I obtained permission from the university and Institutional Review Board and TDSB research department. Once approved, I explained the research project to voluntary participants involved and had consent forms signed. The educators and schools were assigned an identity code to protect their confidentiality. I applied the principles learned in "Protecting Human Research Participants" training course that I completed.

Limitations

Some challenges or barriers that needed to be addressed when conducting this research were (a) TDSB may not grant permission to pursue this study; (b) there could be several limitations in the validity of the techniques to take into consideration during this study; (c) small sample size data that may not give a complete picture that the research could be extrapolated from, and (d) teacher bias limits accuracy and undermines the goal of this research. I peer-debriefed to avoid any research bias and included any discrepant cases. The assumptions were that (a) students are working from a common curriculum;

(b) teachers are licensed and trained in Ontario; (c) teachers receive some form of professional development; and (d) everything is taught in a high school classroom setting.

Data Analysis Results

The purpose of this section was to present the results of the data analysis plan for four sources of data: (a) semistructured interviews with teachers, (b) classroom observations with teachers interacting with students, (c) descriptive statistics on OSSLT SPED student and general student body (GSB) student pass and failure, and (d) student journal responses compared to CBM standards to assess competency level. The data were collected through teacher interviews on their perceptions of teaching strategies and assessments, classroom observations, and a three-minute CBM probe to obtain student narrative writing. The OSSLT scores were used to categorize high- and low-performing schools from the EQAO website (see https://www.eqao.com/). The teacher participants taught Grade 10 locally-developed English classes. This is the method approach that I took to conduct this research.

Once approved by the IRB and TDSB External Research Review Committee (ERRC), I went to the District Board website to determine which high schools offered the Grade 10 locally-developed English classes. I emailed the research information and TDSB ERRC approval letter to principals at the potential schools. Also, I called and visited principals at these schools. ERRC requested an ongoing list of contacted schools, which I provided. In addition, I spoke with the English Program Coordinator at the District Board seeking suggestions for volunteer teacher participants. The coordinator emailed the research letter to 114 TDSB high school English Department Leaders to share with staff.

I personally contacted 26 administrators at 26 schools. The administrators who were interested by the research passed my information along to teachers to voluntarily contact me. I was able to obtain four teachers from four different schools. The reasons certain schools did not participate: Grade 10 locally-developed English was not being offered in the current year or principals and teachers opted not to participate. Teachers at participating schools signed consent forms, while administrators filled out the Letter of Cooperation forms.

Data collection began with teacher interviews. All teachers consented to being audio recorded during these interviews. I used Teacher Interview Questions (see Appendix B) to collect data. I transcribed the interviews. Teacher 1 interview took 30 minutes approximately; conducted at the public library. Teacher 1 interview transcription took five hours approximately. Teacher 2 interview took 30 minutes approximately; conducted in the educator's classroom. Teacher 2 interview transcription took five hours approximately. The Teacher 3 interview took 30 minutes approximately; conducted in the educator's classroom. Teacher 3 minutes approximately; conducted in the educator's classroom. Teacher 3 minutes approximately; conducted in the educator's classroom. Teacher 3 minutes approximately; conducted in the educator's classroom. Teacher 4 interview transcription took five hours approximately. The Teacher 4 interview took 30 minutes approximately; conducted in the teacher's workroom. Teacher 4 interview transcription took five hours approximately.

The teachers and I scheduled a different day for the classroom observation. During observations, I sat in the back of the classrooms using a laptop to take field notes. I used the Teacher Classroom Observation checklist (see Appendix C). Teacher 1 classroom observation took 76 minutes. Teacher 2 classroom observation took 60 minutes. Teacher 3 classroom observation took 76 minutes. Teacher 4 classroom observation took 76 minutes.

The CBM writing journal probe (see Appendix D) was conducted on a different day. Teachers redacted all students' names. I used table charts in the book "ABCs of CBM: A Practice Guide to Curriculum-Based Measurement" by Hosp, Hosp and Howell (2016) to score the students' journal writing. I chose grade score norms for writing in the 50th percentile for the fall season in the categories CWS, WSC and TWW because testing took place in October and November 2017. From student scores, I was able to determine corresponding grade levels for each category. During this process, I emailed administrators to let them know when I would be coming into their schools to collect data.

The data collection took approximately two months. The entire process which includes initial contact with administrators to the final collection of data took four months. Once data collection was complete, I submitted the information to Statistics Solutions to assist with the analysis. Statistics Solutions signed a Confidentiality Agreement (see Appendix G). Statistics Solutions returned results in January of 2018. From the analysis, I was able to add to the literature review. According to Ryan (2014), personal bias can be lowered by having scholars and third parties who have no connection with the participants, interpret the researchers' findings and find other areas to research. The rationale for using Statistics Solutions was to ensure reliability and validity with the qualitative data and by removing any potential personal bias in the analysis and interpretation of the subjective "word data". Clark and Zygmund (2014) compared codes from the data and found similarities and differences which led to additional categories and sub-categories in the research.

Statistics Solutions verified the credibility of the research study's findings using methodological triangulation, which incorporated teacher interviews, classroom observations and student CBM journal scores. The summarized outcomes showed that the most revealing part of this methodology were the similarities and differences between the high- and low-performing schools while observing the teachers' strategies and assessments in the classroom. The research study's findings connected to the conceptual framework that guided this project study. The themes Teacher Modification and Useful Techniques connected to both cognitive-behavioral theory (Graham & Harris, 1989) and cognitive-behavioral based principles of effective teaching (Archer & Hughes, 2011). The themes Teacher Modification, Challenges, Not Adequately Prepared, and Useful Techniques connected to explicit instructional behaviors (Simmons et al., 1995; Swanson, 2001) and principles of effective instruction (Coyne, Kame'enui & Carnine, 2011).

Initially, I will explain the outcomes with a white paper to the Chair, Committee Member and URR. The outcomes will be communicated to the Chair using tables, lists, bar charts, teacher transcripts and field notes through a PowerPoint presentation for the oral defense. Eventually, the outcomes will be presented to the TDSB Research Department, Superintendent, administrators and teachers at the prospective schools. This research may enhance and improve educators teaching strategies and assessments, and SPED students' writing.

I generated the data using the semi-structured interview protocol for teachers (see Appendix B), classroom observations with the use of a classroom observation checklist (see Appendix C), students' journal responses to a CBM writing journal probe, and descriptive statistics on OSSLT scores from the EQAO website. In addition to generating descriptive statistics from the OSSLT scores from the EQAO website, I used the scores to differentiate between high-performing and low-performing schools. I recorded the interview data using an audio recording device and the interview protocol (see Appendix B), the observational data with a classroom observation checklist (see Appendix C), the student narrative responses through a CBM writing journal probe, and descriptive statistical data with an Excel Spreadsheet. I organized the results by research question, with applicable themes and findings under each question.

The results begin with teacher interviews and classroom observations, moving to descriptive statistics on OSSLT, and finally student journal responses. I numbered each teacher according to where their respective school was based on performance, meaning Teacher 1 reflected the highest-performing school, Teacher 2 represented the second highest-performing school, Teacher 3 worked at the second lowest-performing school, and Teacher 4 taught at the lowest-performing school. Since I did not collect any participant demographic information, I will refer to participants using the 3rd person pronouns.

Interview

I organized the themes that emerged from the teacher interview data by research question. The first research question was: *What are district teachers' perceptions and experiences of assessment and teaching strategies used with SPED students to improve their OSSLT writing skills?* There were two themes applied to this research question: (a) Teacher Modification and (b) Challenges.

Theme 1: Teacher modification. Four (100%) teacher participants talked about their perceptions of modifying assessment and teaching strategies to improve SPED students' OSSLT writing skills. During their interviews, teacher participants did not indicate whether these modifications arose from an IEP or not. Teachers noted these modifications were something they adapted to their curriculum and did not discuss whether they learned these strategies from professional development opportunities or not.

One of the biggest strategies teacher participants mentioned was transcribing for students, either by hand or with speech-to-text technology. These modifications help SPED students who have "a challenge with handwriting" because they can speak either to "an educational assistant who does some scribing" or to "the voice tool in Chrome Book" that will scribe the words spoken (Teacher 1). Teacher 1 noted having these two options available to students "would be the biggest modifications" she made in her Grade 10 locally-developed classroom. Teacher 4 commented how she will provide scribing options for her SPED students who have "a huge writing disability" because it makes it easier for them to participate in writing assignments. She talked about how she modified her classroom to accommodate her SPED students' needs and said: Well, sometimes I get peers to help students [with writing], sometimes I get them to do voice, like a speech-to-text; sometimes I get them to go to a quiet environment where they can do speech-to-texts; and sometimes I get them to write sentences and go over their sentences with them, and I conference with them (Teacher 4).

There were multiple options available for Teacher 4's SPED students to help them succeed in classroom writing activities, such as speech-to-text, descriptive feedback, and individual conferencing. Teacher 4 did not indicate why she selected to use one option over another or her reasoning for when to use one option during her interview. There was one teacher who scribed by hand for "one or two" of her students who will not "sit with a pen and paper" long enough to write (Teacher 3). To accommodate those students, she will have them "orally say" what they wish to have written down and she "will scribe" for them (Teacher 3). Teacher 3 noted there were technological programs to support SPED students with their pre-writing skills, like idea generation or paragraph creation. She mentioned:

At times I modified, simplified the assignments for students on the cusp of failing...Graphic templates to organize their ideas before they start to write; paragraphs to put in bubbles, topic sentence, supporting details just like a schematic that actually helps them but we usually do that before then (Teacher 3).

While there are many benefits of these strategies for SPED students, Teacher 1 questioned how these options will benefit students taking the OSSLT. It was unclear

during the interview how the OSSLT test makers would accommodate SPED students who may require scribing options or graphic organization tools.

Another modification teacher participants talked about during the interview was how they worked one-on-one with their SPED students. Casale-Giannola (2012) noted that creating meaningful teacher-student connections was an effective strategy for inclusive SPED students' classroom settings. Three (75%) teacher participants felt it was important to work one-on-one with their students during the classroom, either by moving between students or by setting up time to conference with them individually during free time. One participant mentioned how she preferred to "bounce between student to student" during class time (Teacher 2). She shared that she tries to "work with them (SPED students) one-on-one as much as possible" outside of classroom lectures or discussions (Teacher 2). During her interview, she gave a brief example of how a typical class would look in her classroom. She explained how she would spend time "lectur[ing] them as a class" but would take the time to sit "down with them" and "go over details together one-on-one" (Teacher 2).

One (25%) teacher noted how she would often work one-on-one with her SPED students and model her expectations to her students. By using those strategies with her SPED students, she made sure her students had an example of what she expected from them and had the one-on-one support from her to meet her expectations. She would differentiate and modify materials by highlighting the sentence and paragraph structure she expected her students to follow for the assignment, but would take the time to develop unique writing ideas with her students. She explained how she tries to "float

around" to each student, "sit with" them, and "talk [with them] to generate ideas" about the assignment (Teacher 3). Working one-on-one with her SPED students gives them the support they need to approach an assignment and having an example of what she expects helps her SPED students complete the assignment successfully.

Both Teacher 3 and Teacher 4 noted how important it was to give descriptive feedback to their students. Teacher 3 mentioned she left comments on her SPED students' work to improve their grammar, punctuation, spelling, and sentence structure. She acknowledged her students were able to take care of the mistake if it she pointed it out to them, but had difficulty pinpointing the mistakes without her comments or descriptive feedback. If her students had any questions about her comments or feedback, she would conference with them individually to review and answer their questions. Teacher 4 expressed a similar sentiment regarding sitting "down with them one-on-one when necessary" to "go through it (descriptive feedback) with them [on their] draft." She felt that one-on-one review of a document was ideal with her SPED students because she could address their concerns, answer their questions, and clarify what she was looking for in each section. The need for intensive one-on-one time was a time-consuming modification for Grade 10 locally-developed teachers and was manageable with the additional help of an educational assistant, student teacher, or learning coach. Without those additional resources, teachers were not adequately prepared and equipped to teach SPED students. Table 3 outlined the frequency of participant responses to specific interviews questions that generated the data for the theme *Teacher Modifications*.

Participant	Interview Questions	Frequencies
Teacher 1	WNFSE3*, WNFSE4, WNFSE5, WNFSE6	6
Teacher 2	WNFSE3, WNFSE5, WNFSE6	5
Teacher 3	WNFSE3, WNFSE4, WNFSE6	9
<u>Teacher 4</u> Note $* =$ Writin	WNFSE3, WNFSE4, WNFSE6 g Needs for Special Education	10

Theme 2: Challenges. Four (100%) teacher participants talked about the

Theme "Teacher Modifications" Breakdown (Frequency)

Note. – writing Needs for Special Education

challenges they experienced in teaching and assessing their SPED students in the classroom. Participants faced challenges of getting their SPED students to show up to class, their limited attention span in the classroom, navigating their emotional needs, and evaluating their incomplete work. Teacher 1 elaborated on how SPED student attendance "tends to be the biggest issue" she faced in the classroom because if students are "not in class, we can't help them" prepare for the OSSLT. She explained that students who "are there all the time" end up "bored" because she has to take time away from teaching new reading and writing strategies to "catch up" the students who are not in the classroom consistently (Teacher 1). It creates an issue for her, even with an "educational assistant" who she can direct to assist the students who are all at various levels because of attendance alone (Teacher 1). Teacher 1 did not mention or note any interaction she had with a school administrator regarding her concern about classroom attendance.

Both Teacher 2 and Teacher 3 talked about managing their SPED students' limited attention span. Teacher 2 noted that even though she has five Grade 10 "locallydeveloped" SPED students, "there is a lot of redirecting" her SPED students back to the task or assignment within the classroom. As a result, this "requires more attention" to be vigilant about potential distractions for her SPED students (Teacher 2). She explained that because her SPED students have trouble concentrating and "reading text", they do not "contribute in terms of writing amounts of works or amounts of content" even with additional one-on-one support and direct instruction (Teacher 2). Teacher 3 talked about the challenges she faced in "rotating my activities" because of her "students' attention and focus issues" in the classroom. She shared how getting her students to "actually complete the assignment" was difficult "because they don't sit there" in the classroom (Teacher 3). To overcome the challenge of focusing her students on the classroom assignment, she said that she had to be "flexible" with her SPED students by letting them "take a break, walk to hall, and come back" afterwards (Teacher 3). This created other issues for Teacher 3, who would have to repeat assignment directions and monitor which students were out, instead of focusing on student needs in the classroom.

Teacher 2 shared her struggles with going over her SPED students' work on a line-by-line basis to help identify the areas of improvement for her students. She explained that "I have to go over sentence-by-sentence or word-by-word" with a student, something that she acknowledged was very "laborious" to do with every SPED student she taught (Teacher 3). In addition to spending so much time giving explicit instruction and descriptive feedback, she would "sit down" with a student, talk with her, and she would "write [additional] feedback" to help the student (Teacher 3). She admitted how "overwhelming" it was to do this for every SPED student she had because it was difficult "to work with a student who is so behind" the curriculum standard (Teacher 2).

Teacher 1 acknowledged the challenges she faced with meeting the emotional needs of her SPED students. She explained how sometimes things that "happen[ed] in Science in second period" will emerge in her English class, like "breaking up" or the rumor of "a fight afterschool" (Teacher 1). Teacher 1 said:

So really trying to acknowledge the [students'] emotional needs but at the same time get[ting them] back [on track] where we need to write this email today. So maybe we can work it in that you can write an angry email to your friend, [so they complete the assignment but also] navigate their emotional needs.

By taking the time to incorporate their emotional needs in the assignment, Teacher 1 gave her students the opportunity to acknowledge their emotions in a constructive way. Teacher 3 talked about the complexity of her SPED students' emotional needs because she noticed they had "low confidence" from being "segregated at an early age" from their peers. She wanted her students to feel they could succeed just as much as their peers, but recognized each students' "different needs" and "Individual Education Plans (IEP)" (Teacher 3). When working with SPED students, Teacher 4 admitted "there are all kinds of challenges" because of how the school system defines special education. She explained that "special education could mean high or low functioning intellectual disability," "autistic," or behavioral like "Attention Deficit Hyperactivity Disorder (ADHD)" (Teacher 4). Each of these diagnoses "come with so many diverse [and unique] challenges" that make it difficult for teachers to address the needs of each student.

The first teacher highlighted the challenge she faced when she evaluated and assessed her SPED students' work. Teacher 1 mentioned that she struggled with "how to evaluate their written work" when they complete an assignment. She shared how even when her students complete an assignment, "they really haven't hit the curriculum expectation at all" (Teacher 1). She acknowledged her struggle with "how do you fail" her students "when they've done everything and still haven't hit it" (Teacher 1). She did not want to fail them because she recognized the negative effect it would have on their self-esteem, but also needed her students to recognize "the skill we're trying to hit" with the assignment (Teacher 1). Ruminating between these two options was "a constant struggle" she had with her SPED students. Table 4 outlines the frequency of participants' responses to specific interview questions that yielded the data for the theme called *Challenges*.

Table 4

Participant	Interview Questions	Frequencies
Teacher 1	WNFSE2*, WNFSE3, WAT2**	5
Teacher 2	WNFSE2, WNFSE4	2
Teacher 3	WNFSE2, WNFSE5	3
Teacher 4	WNFSE2	2

Theme "Challenges" Breakdown (Frequency)

Note. * = Writing Needs for Special Education, ** = Writing Assessment Tools

The second research question was: *What are the differences and/or similarities in teachers' perceptions about SPED students taking the OSSLT in high- and low-performing schools?* There was one theme applicable to answer this research question, *Not Adequately Prepared.*

Theme 1: Not adequately prepared. Teachers talked about their perceptions and experiences of teaching and assessing their SPED students' writing skills. For all four teacher participants, there was a unanimous agreement that they believed their students were not prepared to perform well on the OSSLT. All four teacher participants also talked about how they felt they were not prepared to teach regarding professional development opportunities targeted towards SPED students for writing. The theme of Not Adequately Prepared had two subthemes, (a) For OSSLT and (b) To Teach.

Subtheme 1: For OSSLT. Four (100%) teacher participants talked about how their SPED students were not prepared to perform well on the OSSLT. Two (50%) teacher participants shared their belief that OSSLT was a good evaluation tool for teachers to understand their students' reading and writing skills. One teacher participant explained how for the larger pieces on the OSSLT, it was good to see "what they understand" from the reading and how they "articulate that" in the writing response (Teacher 1). Teacher 1 noted the OSSLT was an appropriate assessment tool for about "70% of the students" because of those reasons, but that it was not a good evaluation tool for SPED students because "it shows they can't" perform at their grade level. She elaborated on her statement and said: You know, they're (SPED students) struggling so much in this area that I don't think the test curtails them to what they know because they have great ideas, but they cannot read and they cannot write. So, the test is useless to them. (Teacher 1)

At the beginning of the year, Teacher 1 assesses their reading and writing level to generate a baseline report of where they started the year to understand how they have improved throughout the year. She explained how for most of her Grade 10 "locally-developed" SPED students, they were reading "around a Grade 2 Level" at the beginning of the year (Teacher 1). With this as a baseline, she recognized her students would "not pass" the OSSLT since they were not adequately prepared to succeed and not on their grade level in terms of reading and writing skills (Teacher 1). She believed if her students had "one-on-one" support from an educational assistant during the test, they may perform better (Teacher 1). While her students may not perform at their grade level, she felt they would perform closer to their grade level with an educational assistant for support.

The other teacher participant noted how OSSLT was "a good way to determine how well they organize content," but acknowledged there could be other evaluation tools for SPED students (Teacher 2). Teacher 1 talked about the potential negative consequences of a special evaluation tool for SPED students when she said:

I see with my Locally Developed kids, especially in Grade 10, [is that] they become very aware of how different they are from all the other kids. So, they realize that the Locally Developed Diploma does not lead anywhere, they see their other friends, even in the Applied and they feel they are different, they are stupid, all of that stuff. So, them not taking the test I think is just another form of we are different then everybody else, and when the whole school shuts down for the test and you're not a part of it.

Three (75%) teacher participants touched on how they believed the OSSLT negatively affected their SPED students' self-esteem because of their failure rate. Teacher 1 recognized how her SPED students' self-esteem went down after the OSSLT because they performed poorly and struggled during the test. Teacher 4 noted how she felt bad for her students because the test "makes them feel bad because they are so low" but understood how valuable the assessment data was for them to get an idea of how they perform compared to certain metrics. Nonetheless, she believed there were other ways to evaluate SPED students without the use of the OSSLT to generate similar assessment data for teachers and administrators. She felt it was "a little unfair" and even "kind of cruel" to test SPED students with the OSSLT because "it's very difficult [to succeed] when they have all these disabilities" (Teacher 4). Teacher 4 perceived the test as cruel because she felt it set SPED students up for failure since "most of my students can't even pass the Grade 3 [evaluation] and here they are in Grade 10." Teacher 3 agreed with Teacher 4's statement regarding "setting them (SPED students) up for failure" on the OSSLT because of the "grade difference" between where they can perform and what they are tested for. She explained:

Grade 10 locally developed covers around a Grade 5 level and the OSSLT I believe from what I gathered over the years, ranges between a Grade 7 to Grade 9 academic level. Their (SPED students) writing is around a Grade 7 expectation and the reading and differential questions are around a Grade 9 academic.

(Teacher 3)

With such a significant difference between where they are currently performing and where they need to perform to succeed on the OSSLT, Teacher 3 noted how difficult it was to try to teach several years' worth of writing and reading skills to SPED students. As a result, she believed it was not only "setting them (SPED students) up for failure" but also unduly burdening Grade 10 "locally-developed" teachers to help minimize this achievement gap between SPED students current and expected performance.

One (25%) teacher participant talked about how SPED students were not "served well with the OSSLT because their level is a little too low" for the testing standards (Teacher 2). Price and Jackson (2015) explained that many SPED students were writing below their grade level, which made it difficult for teachers to adequately prepare these students of standardized testing requirements. Teacher 2 felt students would "benefit with a more prolonged learning" environment like the one available in the ENG2L literacy course. In that environment, SPED students would not have the pressure associated with the OSSLT and would have the time necessary to improve their reading and writing skills. She predicted "it would be a terrible experience" for her SPED students to take the OSSLT because they would not be adequately prepared for the examination from just a Grade 10 "locally-developed" curriculum (Teacher 2). Teacher 2 noted that while "there is a chance I'm going to get them prepared" for the OSSLT, she admitted her students were reluctant "to write and read" a small amount during the

classroom. As a result, she questioned if they would be able to handle the "task asked of them" by the OSSLT evaluation (Teacher 2). Crank (2013) explained that high school students do not write enough in the classroom, which made them ill prepared for writing examinations. Combined with the SPED student achievement gap, SPED students are not prepared to succeed in standardized testing environments (Crank, 2013). For all four participants, they did not "see any of my current [SPED] students passing the test" (Teacher 4). Table 5 outlines the frequency of responses to specific interview questions that supported the creation of the subtheme, For OSSLT.

Table 5

Subtheme "For OSSLT" Breakdown (Frequency)

Participant	Interview Questions	Frequencies
Teacher 1	WAT3*, WAT4, WAT5	4
Teacher 2	WAT3, WAT4, WAT5	3
Teacher 3	WAT3, WAT4, WAT5	4
Teacher 4	WAT3, WAT5	2

Note. * = Writing Assessment Tools

Subtheme 2: To teach. Four (100%) teacher participants talked about how they did not feel they were adequately prepared to teach SPED students reading and writing skills. This connected to either academic professional development opportunities specifically targeted to teaching reading and writing skills for SPED students or the lack of a specific curriculum for Grade 10 locally-developed SPED students. McLaughlin and Overturf (2012) explained how educators need to work together through professional development collaboration to plan instruction and monitor student progress in writing.

Regan et al. (2016) noted this collaboration between educators revising and modifying lessons improved instruction for students with learning disabilities. This solution may help teachers through reciprocal teaching and coaching by identifying best practices across educators for students, especially SPED students (Carter, 2011; Regan et al., 2016). One (25%) teacher participant noted how even though she participated in various professional development opportunities that focused on the OSSLT and English writing strategies, "there's never really been an explicit discussion about special education kids" (Teacher 3).

One teacher participant mentioned how there were not enough professional development courses and workshops directed specifically to teaching SPED students reading and writing skills. She shared that she has "my special education additional qualification course" even though it focused more on "understanding course modification and accommodations" (Teacher 2). Teacher 2 admitted there were "probably some resources that I got that involve different strategies to support special education kids, different strategies to support writing and vice versa" close to a decade ago. As a result, she felt it was important to have "more frequent" academic professional development opportunities for SPED teachers "twice a year, every year or every couple of months" across the territory (Teacher 2).

Teacher 1 noted that even though she teaches a locally-developed course, she does not "have my special education" qualification. As an over two-decade teacher, she admitted that teaching SPED students has been mostly a process of "trial and error" to identify successful strategies to improve OSSLT scores (Teacher 1). Outside of academic professional development needs, Teacher 1 was the only participant to acknowledge the need for professional development courses and workshops targeting SPED student behavioral management in the classroom. Without behavioral management, it was difficult to get students to "focus" on the reading and writing lessons. She stated there were no specific academic professional development opportunities she participated in, outside of participating in a specific initiative targeting student success within the Applied courses. She described this initiative and said:

So, what would happen is teachers of Grade 10 Applied English and Science would get together and they were working with learning coaches and come up with strategies. So we would have to identify a gap, and then we would have to identify a strategy where you were going to use to work on that skill and then we collected data on pass rates and that type of thing. (Teacher 1)

As a locally-developed teacher, she decided to apply the strategies to her SPED classrooms and assess how they worked for those students. Since the locally-developed classrooms do not follow a specific curriculum, she adapted the Grade 10 Applied curriculum to her Grade 10 locally-developed classrooms. She explained that having something "concrete" like the Grade 10 Applied curriculum helped her adjust the curriculum to fit where her SPED students were performing instead of coming up with a new curriculum tailored to SPED classrooms (Teacher 1). Teacher 4 commented on how she develops her own curriculum for Grade 10 locally-developed students because "there is no real curriculum for the level I teach." She noted that in the beginning of each school year she gives her SPED students a diagnostic test to assess their reading and writing level and uses that to guide the curriculum for her students. Table 6 highlighted the frequency of participant's responses to interview questions that generated the data for the subtheme To Teach.

Table 6

Subtheme	"То	Teach"	Breakdown

Participant	Interview Questions	Frequencies
Teacher 1	WNFSE1*, PDFTW1**, PDFTW2, PDFTW3, PDFTW5, PDFTW7	7
Teacher 2	PDFTW1, PDFTW2, PDFTW3, PDFTW5, PDFTW7	6
Teacher 3	PDFTW1, PDFTW2, PDFTW3, PDFTW5, PDFTW7	5
Teacher 4	WNFSE1, PDFTW1, PDFTW2, PDFTW3, PDFTW5, PDFTW7	8

Note. * = Writing Needs for Special Education, ** = Professional Development for Teaching Writing

The third research question was: When it comes to preparing SPED students to take the OSSLT, what differences and/or similarities in assessment and teaching practices exist between higher-performing schools compared with lower-performing schools? There was one theme applicable to answer this research question, Useful Techniques.

Theme 1: Useful techniques. Four (100%) teacher participants talked about the useful techniques they applied in their classroom in three specific ways: (a) For Assessment, (b) For Teaching, and (c) For Writing.

Subtheme 1: For assessment. Teacher participants talked about various techniques they used to assess their SPED students' preparedness for the OSSLT. All four teachers talked about using checklists and rubrics to assess their students' classwork

and homework. The first teacher talked about how using a checklist makes it easier for her students to understand what they need to address in their assignments, which in turn makes it easier for her to evaluate her students. Teacher 1 found that "checklists work really well" because "it's like 'do you have a topic sentence that lists three things; yes or no?'" This gave students "concrete" requirements for their assignments and made it simple to check if students met the criteria on the checklist (Teacher 1). She noted how she will give "partial marks" for things like "using a transition word" or "making sure they haven't listed stuff from their paragraph" (Teacher 1). She admitted that she mostly graded for completion, like checking the assignment for "a, b, c, and d" instead of grading the work against the curriculum standards that SPED students need to meet so they can successfully pass the OSSLT (Teacher 1). In addition to checklists, Teacher 1 provided descriptive feedback to her students as a useful technique to assess her students. She said:

I do give them descriptive feedback on their actual pieces. So, if they hand in a paragraph, I [will] use a lot of highlighters.... So, I will highlight their topic sentence in yellow and I'm like "okay so the three points you want to use are animals, music and video games". So, then we highlight animals in pink. "Where have you said that in your paragraph? Here are the animals in pink. Where have you said this?" So, I do a lot of visuals that way (Teacher 1).

By taking the time to review her students work, she was able to help identify the areas they needed to improve before submitting the final assignment. With these combined techniques, Teacher 1 ensures her students understand what they need to do to receive a good grade and how to improve their work to do better in the future. Using visual techniques like highlighters to help identify topic sentences was another useful technique that helped her SPED students along with reviewing students' work before submission.

Teacher 2 expressed a similar sentiment when she talked about using "rubrics" for a completion grade and provides descriptive "feedback on the content, grammar, grade, [and] clarity" of their assignment. She explained how she evaluates her SPED students' "levels on their own or when I am sitting down with them too, one-on-one" (Teacher 2). Teacher 3 stated that she uses both "rubrics and descriptive feedback" to evaluate her SPED students' writing. She felt it was important to provide "give them immediate feedback" so they can edit and "fix it (their work) in front of me" instead of taking it home to do later (Teacher 3). Mayer (2004) noted that providing feedback to students and giving them goals they understood, with the use of rubrics and checklists, supported student learning.

Similarly, Teacher 4 noted how she "will use a rubric to evaluate a book report" and a checklist to evaluate a paragraph her students wrote to make sure they had the "elements of a paragraph." She mentioned that her students generated what she termed as "success criteria," which she would use to evaluate their work (Teacher 4). She explained that she asked her SPED students about what they thought made a paragraph successful, which she used as the basis of the success criteria. Table 7 outlined the useful assessment techniques noted by each teacher participant during the interview.

List of Useful Assessment Techniques Noted by Teachers 1-4

Participant	Assessment Technique
Teacher 1	Rubrics/Checklists, Descriptive Feedback, Visual Aids/Highlighters, Editing/Reviewing
Teacher 2	Rubrics/Checklists, Descriptive Feedback
Teacher 3	Rubrics/Checklists, Descriptive Feedback, Editing/Reviewing
Teacher 4	Rubrics/Checklists, Success Criteria

Subtheme 2: For teaching. Four (100%) teacher participants talked about useful techniques they used to help their SPED students prepare for the OSSLT. Teacher participants noted several techniques they found useful for teaching, with many of them overlapping across all the participants. Teachers used direct instruction techniques such as, giving examples to their students, modeling expectations for their students, and monitoring their students' progress. Mayer (2004) highlighted direct and guided instruction, using modeling, supported student learning in the classroom. Teacher 1 mentioned how her students thrive when they have a model and example to follow because "using the exemplar" gives her students the "confidence" they need to complete an assignment. She explained how "direct instruction," "exemplars, modeling guided practices, [and] explicit instructions work" for her SPED students (Teacher 1). McLaughlin and Overturf (2012) noted that the use of explicit instruction would help students learn specific writing strategies. In addition to those "top" strategies, she also

used pre-writing strategies like brainstorming and organizing thoughts using word webs and mind maps (Teacher 1). She said:

I find they have to kind of get a lot of stuff out before they can even start writing. So things like Word Webs and getting them to brainstorm maybe in a group and then maybe in partners. The planning, drafting is really important, and I find they eventually get to revising and editing but that's where they spend the least amount of time. So, it's a lot of the pre-stuff with them. (Teacher 1)

Three (75%) teacher participants noted pre-writing activities as useful teaching techniques for their SPED students. By setting aside time for students to brainstorm and organize their ideas about what to write about, teachers noticed they could approach writing larger assignments with a clearer direction. Graham and Sandmel (2011) explained that supportive teaching strategies such as planning and revising written work were effective for students in understanding and modeling the writing process. Teacher 2 shared for her SPED students that she focused on organizing their thoughts because she wanted them to understand how organization was a large piece of writing. By having her SPED students "discuss what ideas they are going to use" and "planning" their writing, they become familiar with taking some time to plan their writing (Teacher 2). Teacher 2 also felt it was valuable for her SPED students to understand the "5 W's (who, what, when, where, and why)" because it may be "something that is going to be used in or something that has to be demonstrated on the Ontario Secondary School Literacy Test (OSSLT)." To prepare her students, she wanted to teach them useful skills that would help them succeed on the OSSLT.

For one teacher, it was important to have her students outline and "talk through topics" before they "start to write" (Teacher 3). She noted that for many of her students, they will "hit a wall" with their writing, so taking the time before writing helps them find a topic they can find information on instead of being 'stuck' in their writing (Teacher 3). She explained how she would have a classroom "discussion to generate ideas" for students, which helped students find topics that interested them and had depth for them to talk about (Teacher 3). Before her students would begin writing, Teacher 3 would give them examples of "good and bad paragraphs" so her students would understand what they needed to model for a successful paragraph. She also conferenced one-on-one with students to monitor their progress as they worked on the assignment. Teacher 3 talked about reviewing vocabulary words with her students. She shared that using "a nonlinguistic representation of the word helps students retain it and understand it" better than normal memorization (Teacher 3). She learned useful techniques to help her SPED students better retain and understand vocabulary terms, especially "more abstract language or words" that would be difficult to grasp without visual aids (Teacher 3).

The fourth teacher talked about the pre-writing process her students went through before even beginning to write an assignment. Teacher 4 outlined how her students would use "mind maps, charts, brainstorming, T-charts, any sort of mind mapping" before drafting the first "rough copy" of their work. She felt pre-writing was a "key teaching strategy" because it was important to "teach people that writing doesn't come necessarily easily," which was why it was "very important to be organized" before sitting down to write (Teacher 4). Grammar was another important aspect of writing to Teacher 4. She mentioned that every day she would "do a small grammar lesson" with her SPED

students (Teacher 4). I summarized the useful teaching techniques that teacher

participants mentioned during their interviews in Table 8.

Table 8

Participant	Teaching Technique
Teacher 1	Direct Instruction, Modeling, Examples, Explicit Instruction, Pre-Writing, Brainstorming, and Organizing Thoughts
Teacher 2	Direct Instruction, Classroom Discussion, Explicit Instruction, Grammar and Vocabulary Lessons, 5 W's, Pre-Writing, and Organizing Thoughts
Teacher 3	Direction Instruction, Classroom Discussion, Conferencing, Explicit Instruction, Grammar and Vocabulary Lessons, Pre-Writing, and Organizing Thoughts
Teacher 4	Grammar and Vocabulary Lessons, Pre-Writing, Brainstorming, and Organizing Thoughts

Subtheme 3: For writing. Four (100%) of teacher participants talked about useful writing techniques they applied in the classroom to help prepare their SPED students for the OSSLT. All four (100%) teacher participants noted the use of journal responses as a beneficial writing technique in the classroom. Crank (2013) identified journal entries as the most acceptable and versatile writing activity for high school students and encouraged teachers to utilize the activity to prepare students for standardized testing. The first teacher thought journal responses was a great opportunity for SPED students to practice summarizing content. Teacher 1 explained how her SPED students "have a hard time figuring out what the main idea is" and writing about that main idea. She shared that she uses a specific chart in her classroom that prompts her students to "identify the character, what the character wants, what's stopping the character from getting what they want, and then what is the result" (Teacher 1). She explained "trying to chunk things" into more manageable pieces helps her SPED students with "reading comprehension," which in turn helped them write a summary of the reading (Teacher 1).

Teachers found that journaling was a successful technique because it gave SPED students an opportunity to summarize content and merge their own voices into that summary. Teacher 2 detailed the rationale of why she perceived it as a good technique for SPED students:

Journal writing, I think, is important because it's a response but it's their own voice. So, on one hand you have stuff where they to write a specific type of response and comment on specific commentary versus specific content versus also just kind of journal writing focusing on developing their own thoughts and their own ideas.

Teacher 3 expressed how merging personal narrative with summary was beneficial for SPED students to demonstrate their ability to "back up their opinion with evidence" from the reading. Teacher 2 hoped her SPED students would be more inclined to write if they realized they could incorporate more of their own voice into their writing. While this may not have the effect she intended, her students learned how to write for different audiences because of the exercise. This was an important writing technique that teacher participants stressed during their interviews. Both Teacher 1 and Teacher 4 talked about writing techniques targeted toward teaching SPED students about the different purposes and audiences of writing. Teacher 1 utilized an email writing strategy to "teach them (her SPED students) how to write an email to a business associate, your coach, a parent, your teacher." She mentioned it was important for her SPED students to understand "how to use language, you know, appropriately" based on "different audiences" (Teacher 1). Teacher 4 shared the value of teaching SPED students how to write for various occasions, "like a resume" or "for publication" instead of informal "everyday" writing.

Two (50%) teacher participants shared using book reports and film reports to "demonstrate [their] understanding of what they've read or what they've watched" (Teacher 2). Teacher 2 felt "at this [grade] level" if a student "can get into detail" then they will "get into meaning" with their report. Teacher 4 explained how her students were "in a book club" where "they all have to write a book report at the end." She shared how they write throughout the book club "about various roles" the characters fulfill and the "key points to the plot," which help them "write a book report on each book" (Teacher 4).

Three (75%) participants noted using the 5-paragraph essay structure to help their SPED students organize their writing. Teacher 1 said:

I would think the most important is one of the ideas of building a 5-paragraph essay or you know, doing a structured essay. I guess that would be maybe short answer stuff but having kind of the beginning, the middle and the end, and helping them organize their thoughts. I find this very challenging, but I do think it's important.

Teacher 2 and 4 commented that the 5-paragraph essay helps SPED students understand how to organize their writing. I presented a list of useful writing techniques that teacher participants mentioned during their interviews in Table 9.

Table 9

List of Useful Writing Techniques Mentioned by Teachers 1-4

Participant	Writing Technique
Teacher 1	Journal Responses, Email Correspondence, Presentations, 5-Paragraph Essay, and Support Opinion with Evidence
Teacher 2	Reports, Journal Responses, 5-Paragraph Essay, Writing with Different Purposes, and Support Opinion with Evidence
Teacher 3	Journal Responses and Support Opinion with Evidence
Teacher 4	Reports, Journal Responses, Writing with Different Purposes, Presentations, and 5-Paragraph Essay

The fourth research question was: *What is the mean, median, and standard deviation of SPED students' writing skills, as measured by CBM assessment probe of samples in their writing journals?* There was no theme applied to this research question as the findings were generated from the descriptive statistical data.

Classroom Observations

I conducted classroom observations with teachers interacting with students across four schools. Each teacher that I observed also participated in the teacher interviews. I organized this section according to teacher participant by outlining each theme and subtheme applicable to each classroom observation. I summarized the applicable themes and subthemes for each research question in Table 10.

Table 10

Research Questions' Applicable Themes and Subthemes

Research Question	Theme	Subtheme
Research Question 1	(a) Teacher Modification and(b) Challenges	
Research Question 2	(a) Not Adequately Prepared	(a) For OSSLT and (b) To Teach
Research Question 3	Useful Techniques	(a) For Assessment, (b) For Teaching, and (c) For Writing
Research Question 4	N/A	N/A

Teacher 1. Teacher 1's classroom observation verified the existence of the themes (a) Teacher Modification, (b) Challenges, and (c) Useful Techniques. Table 11 outlined the behaviors that matched with each theme and applicable subtheme.

Connection Between Observed Behavior and Themes (Teacher 1)

Observed Behavior	Theme and Subtheme
Scribing, Incorporating Student Ideas, Letting Student Choose New Topic, Listening to Music While Working, Independently Work	Teacher Modification
Attendance, Disruption	Challenges
Descriptive Feedback	Useful Techniques – For Assessment
Direct Instruction, Modeling, Classroom Discussion, Explicit Instruction, Monitoring, Conferencing	Useful Techniques – For Teaching
Email Correspondence, Writing with Different Purposes,	Useful Techniques – For Writing

Teacher 2. Teacher 2's classroom observation verified the existence of four

themes: (a) Teacher Modification, (b) Challenges, (c) Not Adequately Prepared, and (d)

Useful Techniques. Table 12 highlighted the connection between each observed behavior and theme.

Observed Behavior	Theme and Subtheme
Redoing Assignment, One-on-One Work	Teacher Modification
Attendance, Complaints	Challenges
N/A	Not Adequately Prepared – For OSSLT
Lack of Additional Help	Not Adequately Prepared – To Teach
Descriptive Feedback	Useful Techniques – For Assessment
Classroom Discussion, Explicit Instruction, Brainstorming, Direct Instruction, Monitoring, Conferencing, Modeling	Useful Techniques – For Teaching
5 W's	Useful Techniques – For Writing

Connection Between Observed Behavior and Themes (Teacher 2)

Teacher 3. Teacher 3's classroom observation verified the existence of four themes: (a) Teacher Modification, (b) Challenges, (c) Not Adequately Prepared, and (d) Useful Techniques. I presented the connection between the observed behaviors and their applicable themes in Table 13.

Observed Behavior	Theme and Subtheme
Extra Time	Teacher Modification
Attendance, Refocusing Student	Challenges
N/A	Not Adequately Prepared – For OSSLT
Lack of Additional Help	Not Adequately Prepared – To Teach
Rubrics/Checklists, Descriptive Feedback	Useful Techniques – For Assessment
Direct Instruction, Classroom Discussion, Modeling, Explicit Instruction, Monitoring, Giving Examples, Word Wall, Conferencing, Brainstorming	Useful Techniques – For Teaching
Journal Responses	Useful Techniques – For Writing

Connection Between Observed Behavior and Themes (Teacher 3)

Teacher 4. Teacher 4's classroom observation verified the existence of three

themes: (a) Teacher Modifications, (b) Challenges, and (c) Useful Techniques. Table 14

outlined the behaviors that matched with each theme and applicable subtheme.

Connection Between	ı Observed	l Behavior	and Themes	(Teacher 4)
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Observed Behavior	Theme and Subtheme
Extra Time, Independent Work, Take Walk/Break	Teacher Modification
Attendance, Refocusing	Challenges
Descriptive Feedback	Useful Techniques – For Assessment
Direct Instruction, Pre-writing, Classroom Discussion, Conferencing, Modeling, Brainstorming, Monitoring, Explicit Instruction	Useful Techniques – For Teaching
Support Opinion with Evidence, Journal Responses	Useful Techniques – For Writing

Descriptive Statistics

I calculated descriptive statistics on OSSLT SPED student and general student body (GSB) student pass and failure over a period of three years for four schools. I organized this section by school.

School 1. School 1 was the highest-performing school I collected data from.

Table 15 highlighted the number of SPED and GSB students who tested on the OSSLT for each year, the number of SPED and GSB students who failed the OSSLT each year, and the percentage of SPED and GSB students who failed the OSSLT each year. Table 15 outlined the average number of SPED and GSB students who took the OSSLT, the average number of SPED and GSB students who failed the OSSLT, and the average percentage of SPED and GSB students who failed the OSSLT, and the average percentage of SPED and GSB students who failed the OSSLT across all three years. I presented the standard deviation of SPED and GSB students who took the OSSLT and

the standard deviation of SPED and GSB students who failed the OSSLT across all three years.

Table 15

Year	School #	n SPED Tested	n SPED Failed	n GSB Tested	n GSB Failed	% SPED Failed	% GSB Failed
2015	1	42	13	208	35	31	17
2016	1	14	8	46	23	57	50
2017	1	37	13	207	31	35	15
	Mean SD	31 12.19	11.33 2.36	153.67 76.13	29.67 4.99	41	27

Descriptive Statistics (School 1)

School 2. School 2 was the second highest-performing school I collected data from. Table 16 highlighted the number of SPED and GSB students who tested on the OSSLT for each year, the number of SPED and GSB students who failed the OSSLT each year, and the percentage of SPED and GSB students who failed the OSSLT each year. Table 16 outlined the average number of SPED and GSB students who took the OSSLT, the average number of SPED and GSB students who failed the OSSLT, and the average percentage of SPED and GSB students who failed the OSSLT, and the outlined the standard deviation of SPED and GSB students who took the OSSLT and the standard deviation of SPED and GSB students who took the access all three years.

Yea r	School #	n SPED Tested	n SPED Failed	n GSB Tested	n GSB Failed	% SPED Failed	% GSB Failed
201 5	2	63	44	296	94	70	32
201 6	2	37	25	226	70	68	31
0 201 7	2	40	28	254	84	70	33
	Mean SD	46.67 11.61	32.33 8.34	258.67 28.77	82.67 9.84	69	32

Descriptive Statistics (School 2)

School 3. School 3 was the second lowest-performing school I collected data from. Table 17 highlighted the number of SPED and GSB students who tested on the OSSLT for each year, the number of SPED and GSB students who failed the OSSLT each year, and the percentage of SPED and GSB students who failed the OSSLT each year. Table 17 outlined the average number of SPED and GSB students who took the OSSLT, the average number of SPED and GSB students who failed the OSSLT, and the average percentage of SPED and GSB students who failed the OSSLT, and the overage percentage of SPED and GSB students who failed the OSSLT across all three years. I presented the standard deviation of SPED and GSB students who took the OSSLT and the standard deviation of SPED and GSB students who failed the OSSLT across all three years.

Yea r	School #	n SPED Tested	n SPED Failed	n GSB Tested	n GSB Failed	% SPED Failed	% GSB Failed
201 5	3	11	8	11	8	73	73
201 6	3	12	10	13	11	83	85
201 7	3	12	9	14	10	75	71
	Mean SD	11.67 0.47	9.00 0.82	12.67 1.25	9.67 1.25	77	76

Descriptive Statistics (School 3)

School 4. School 4 was the lowest-performing school I collected data from. Table 18 highlighted the number of SPED and GSB students who tested on the OSSLT for each year, the number of SPED and GSB students who failed the OSSLT each year, and the percentage of SPED and GSB students who failed the OSSLT each year. Table 18 outlined the average number of SPED and GSB students who took the OSSLT, the average number of SPED and GSB students who failed the OSSLT, and the average percentage of SPED and GSB students who failed the OSSLT, and the average percentage of SPED and GSB students who failed the OSSLT across all three years. I presented the standard deviation of SPED and GSB students who failed the OSSLT across all three years.

Year	School #	n SPED Tested	n SPED Failed	n GSB Tested	n GSB Failed	% SPED Failed	% GSB Failed
2015	4	1	1	1	1	1	1
2015	4	1	1	1	1	1	1
2016	4	4	4	4	4	1	1
2017	4	4	3	4	3	75	75
	Mean	3.00	2.67	3.00	2.67	92	92
	SD	1.41	1.25	1.41	1.25		

Descriptive Statistics (School 4)

Student Journal Responses

I administered student journal responses that I compared to CBM standards to assess competency level. I collected these students' works to evaluate their levels of correct word sequences (CWS), words correctly spelled (WCS), and total words written (TWW). I selected the CBM because it helped direct instructional decision-making for educators by setting goals for students, and monitoring and evaluating student progress (Jenkins & Terjeson, 2011). As an outside evaluator, Carter (2011) postulated my perspective would improve instruction through reciprocal teaching and coaching opportunities available to teachers by an outside evaluator. To convey the findings, I utilized tables and figures to illustrate and outline the comparative findings.

School 1. I organized the responses based on school to prevent any overlap between responses. School 1 was the highest-performing school I collected data from. Table 19 outlined students' responses to the journal probe with their respective scores for each category. Figure 1 outlined each student's response in a bar chart.

Student	CWS	WSC	TWW
1	12	17	18
2	3	9	18
3	10	13	15
4	28	44	57
5	42	51	57
6	8	16	21
7	18	25	26

Student Journal Response Scores (School 1)

Note: CWS stands for Correct Word Sequences, WSC stands for Words Spelled Correctly, and TWW stands for Total Words Written.

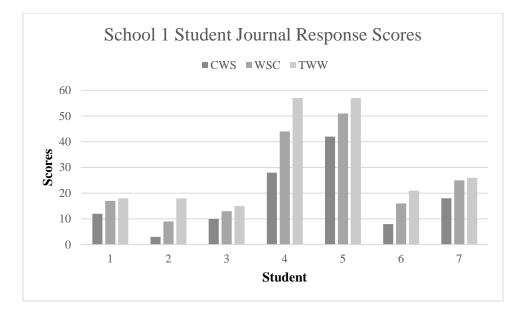


Figure 1. Bar Chart of School 1 Journal Response Scores

The average of CWS across the seven students who participated in the student journal responses at School 1 was 17.29-word sequences. I generated this number by inputting the dataset into an Excel spreadsheet, using the Sum function on the column of CWS and dividing the sum by the number of separate data points, which for this dataset was seven. The standard deviation for CWS across the seven students who participated in the student journal responses at School 1 was 12.52. I calculated the standard deviation by inputting the dataset into an Excel Spreadsheet and using the STDEV.P function on the column of CWS data points. The median for CWS at School 1 was 12. I calculated this by determining which numerical value fell in the middle range, which for this dataset was 12. The average for WSC was 25.00 words spelled correctly, the standard deviation for WSC was 15.03, and the median for TWW was 17.19, and the median was 21.

I calculated the quartiles for the school by utilizing the Excel function and created a box-and-whisker plot to illustrate the findings, shown in Figure 2. The box-andwhisker plot indicates the ranges of where each quartile begins and ends. Beginning at the bottom, the line indicates the beginning and end of the first quartile, the bottom 25 percent of student scores. After the box begins, indicating the start of the second quartile, showing the range of scores that fell between 26 percent to 50 percent until the line drawn within the box. This line separates the two mid ranges of scores, with the responses above the line showing the scores that fell within 51 percent to 75 percent. At the end of the box begins a new line, which indicates the top 25 percent of student scores. Table 20 outlined the quartile scores for all three categories, CWS, WSC, and TWW.

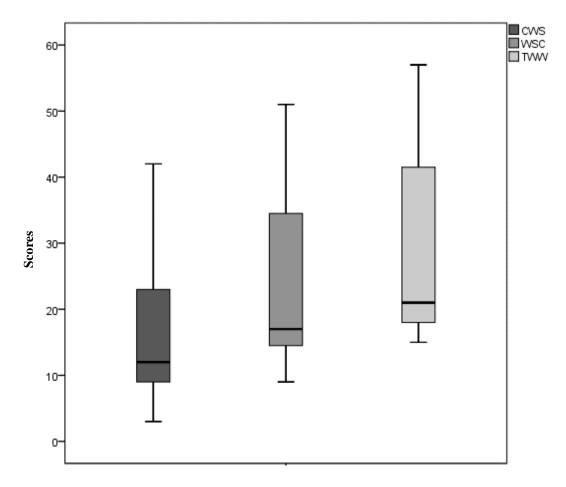


Figure 2. School 1 Box-Whisker Plot.

Table 20

Percentile	CWS	WSC	TWW
25	8.00	13.00	18.00
50	12.00	17.00	21.00
75	28.00	44.00	57.00
100	42.00	51.00	57.00

School 1 Quartile Table (N = 7)

School 2. School 2 was the second highest-performing school I collected data

from. Table 21 will outline students' responses to the journal probe with their respective

scores for each category. Figure 3 outlined each student's response in a bar chart.

Table 21

Student Journal Response Scores (School 2)

Student	CWS	WSC	TWW
1	57	63	65
2	38	55	57
3	9	17	18
4	27	45	47

Note: CWS stands for Correct Word Sequences, WSC stands for Words Spelled Correctly, and TWW stands for Total Words Written.

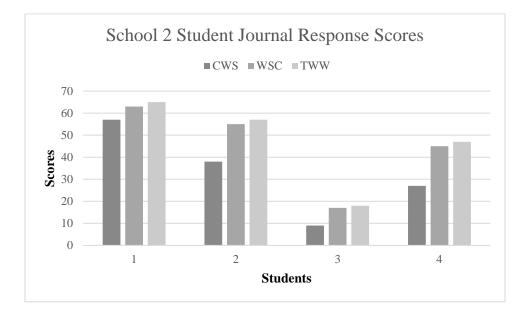


Figure 3. Bar Chart of School 2 Journal Response Scores

The average of CWS across the four students who participated in the student journal responses at School 2 was 32.75-word sequences. I generated this number by inputting the dataset into an Excel spreadsheet, using the Sum function on the column of CWS and dividing the sum by the number of separate data points, which for this dataset was four. The standard deviation for CWS across the four students who participated in the student journal responses at School 2 was 17.41. I calculated the standard deviation by inputting the dataset into an Excel Spreadsheet and using the STDEV.P function on the column of CWS data points. The median for CWS at School 2 was 32.50. I calculated this by determining the middle value of the dataset, which for this dataset was two numbers. I added these two numbers and divided by two to arrive at the accurate median for the dataset. The average for WSC was 45.00 words spelled correctly, the standard deviation for WSC was 17.38, and the median was 50. The average for TWW

was 46.75 words written, the standard deviation for TWW was 17.78, and the median was 52.

I calculated the quartiles for each school by utilizing the Excel function and created a box-whisker plot to illustrate the findings, shown in Figure 4. The box-and-whisker plot indicates the ranges of where each quartile begins and ends. Beginning at the bottom, the line indicates the beginning and end of the first quartile, the bottom 25 percent of student scores. After the box begins, indicating the start of the second quartile, showing the range of scores that fell between 26 percent to 50 percent until the line drawn within the box. This line separates the two mid ranges of scores, with the responses above the line showing the scores that fell within 51 percent to 75 percent. At the end of the box begins a new line, which indicates the top 25 percent of student scores. Table 22 outlined the quartile scores for all three categories, CWS, WSC, and TWW.

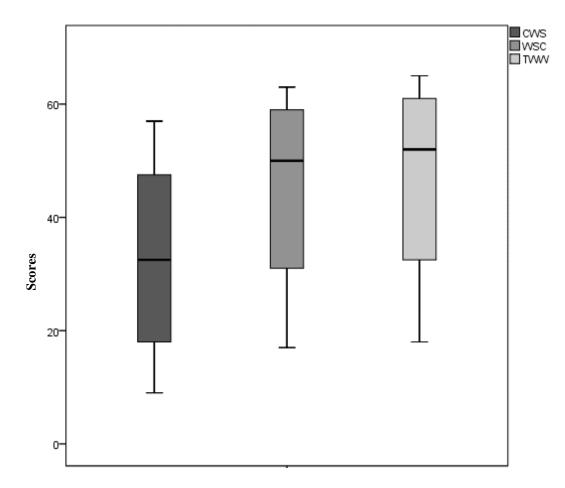


Figure 4. School 2 Box-Whisker Plot

Table 22

Percentile	CWS	WSC	TWW
25	13.50	24.00	25.25
50	32.50	50.00	52.00
75	52.25	61.00	63.00
100	57.00	63.00	65.00

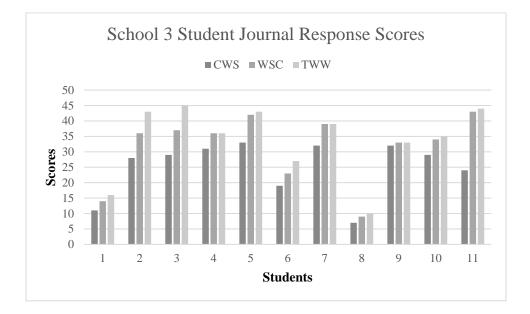
School 3. School 3 was the second lowest-performing school I collected data from. Table 23 will outline students' responses to the journal probe with their respective scores for each category. Figure 5 outlined each student's response in a bar chart.

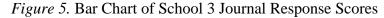
Table 23

Student	CWS	WSC	TWW	
1	11	14	16	
2	28	36	43	
3	29	37	45	
4	31	36	36	
5	33	42	43	
6	19	23	27	
7	32	39	39	
8	7	9	10	
9	32	33	33	
10	29	34	35	
11	24	43	44	

Student Journal Response Scores (School 3)

Note: CWS stands for Correct Word Sequences, WSC stands for Words Spelled Correctly, and TWW stands for Total Words Written.





The average of CWS across the 11 students who participated in the student journal responses at School 3 was 25.00-word sequences. I generated this number by inputting the dataset into an Excel spreadsheet, using the Sum function on the column of CWS and dividing the sum by the number of separate data points, which for this dataset was 11. The standard deviation for CWS across the 11 students who participated in the student journal responses at School 3 was 8.52. I calculated the standard deviation by inputting the dataset into an Excel Spreadsheet and using the STDEV.P function on the column of CWS data points. The median for CWS at School 3 was 29. I calculated this value by determining the middle number of the dataset, which was 29. The average for WSC was 31.45 words spelled correctly, the standard deviation for WSC was 10.71, and the median was 36.00. The average for TWW was 33.73 words written, the standard deviation for TWW was 11.13, and the median was 36.

I calculated the quartiles for each school by utilizing the Excel function and created a box-whisker plot to illustrate the findings, shown in Figure 6. The box-and-whisker plot indicates the ranges of where each quartile begins and ends. Beginning at the bottom, the line indicates the beginning and end of the first quartile, the bottom 25 percent of student scores. After the box begins, indicating the start of the second quartile, showing the range of scores that fell between 26 percent to 50 percent until the line drawn within the box. This line separates the two mid ranges of scores, with the responses above the line showing the scores that fell within 51 percent to 75 percent. At the end of the box begins a new line, which indicates the top 25 percent of student scores. Empty circles beneath the box-and-whisker plot show the outlier scores that fell outside of the bounds of box-and-whisker plot. This means the scores of 19 for both WSC and TWW were outliers in that the scores for all three categories, CWS, WSC, and TWW.

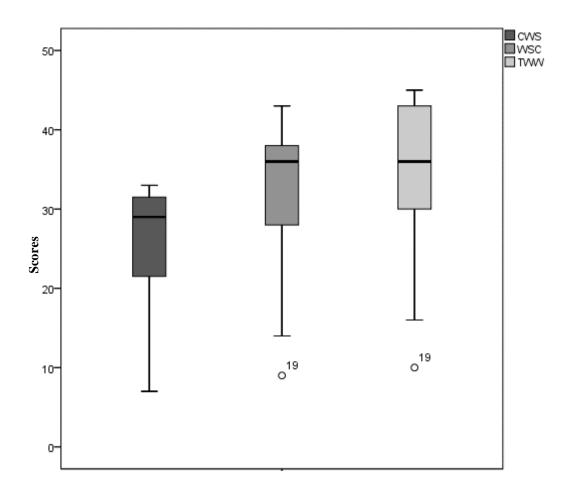


Figure 6. School 3 Box-Whisker Plot

Table 24

Percentile	CWS	WSC	TWW
25	19.00	23.00	27.00
50	29.00	36.00	36.00
75	32.00	39.00	43.00
100	33.00	43.00	45.00

School 4. School 4 was the lowest-performing school I collected data from.

Table 25 will outline students' responses to the journal probe with their respective scores for each category. Figure 7 outlined each student's response in a bar chart.

Table 25

Student Journal Response Scores (School 4)

Student	CWS	WSC	TWW	
1	55	70	72	
2	48	51	51	
3	24	59	70	
4	21	25	25	
5	18	25	30	
6	3	4	6	

Note: CWS stands for Correct Word Sequences, WSC stands for Words Spelled Correctly, and TWW stands for Total Words Written.

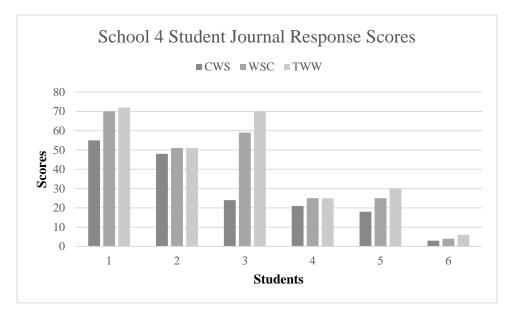


Figure 7. Bar Chart of School 4 Journal Response Scores

The average of CWS across the six students who participated in the student journal responses at School 4 was 28.17-word sequences. I generated this number by

inputting the dataset into an Excel spreadsheet, using the Sum function on the column of CWS and dividing the sum by the number of separate data points, which for this dataset was six. The standard deviation for CWS across the six students who participated in the student journal responses at School 4 was 17.88. I calculated the standard deviation by inputting the dataset into an Excel Spreadsheet and using the STDEV.P function on the column of CWS data points. The median for CWS at School 4 was 22.50. I calculated this by determining the middle value, which for this data set was the average of the middle two numerical values. The average for WSC was 39.00 words spelled correctly, the standard deviation for WSC was 22.81, and the median was 38. The average for TWW was 42.33 words written, the standard deviation for TWW was 24.13, and the median was 40.5.

I calculated the quartiles for each school by utilizing the Excel function and created a box-whisker plot to illustrate the findings, shown in Figure 8. The box-and-whisker plot indicates the ranges of where each quartile begins and ends. Beginning at the bottom, the line indicates the beginning and end of the first quartile, the bottom 25 percent of student scores. After the box begins, indicating the start of the second quartile, showing the range of scores that fell between 26 percent to 50 percent until the line drawn within the box. This line separates the two mid ranges of scores, with the responses above the line showing the scores that fell within 51 percent to 75 percent. At the end of the box begins a new line, which indicates the top 25 percent of student scores. Table 26 outlined the quartile scores for all three categories, CWS, WSC, and TWW.

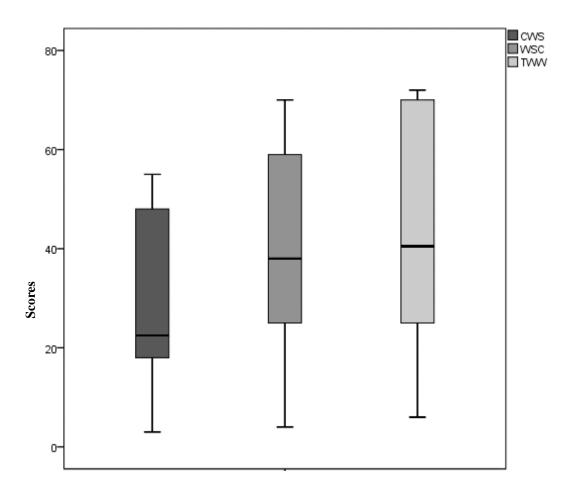


Figure 8. School 4 Box-Whisker Plot

Table 26

School 4	Quartile	Table	(N =	6)
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Percentile	CWS	WSC	TWW
25	14.25	19.75	20.25
50	22.50	38.00	40.50
75	49.75	61.75	70.50
100	55.00	70.00	72.00

Conclusion

In this section I discussed the methodology to collect data and presented the data analysis results. Most of the data analysis discussion focused on the interviews and themes. However, the observations and journals showed how the themes were demonstrated in each teacher's classroom. There were four thematic findings from the qualitative data that answered the first three research questions and the descriptive statistical findings answered the fourth research question. For the first research question, teacher participants talked about their experiences as Grade 10 locally-developed teachers. For all participants, they experienced challenges in getting students to attend class and focus on their coursework. They modified their teaching strategies to accommodate their students' needs in several ways. They provided their students with extra time to submit an assignment, opportunities to redo assignments, breaks throughout their class time, and transcribing options for written assignments. Despite these various accommodations, teacher participants did not speak to whether they perceived an improvement in their SPED students' OSSLT writing skills.

The second research question asked about the differences and similarities in teacher's perceptions of SPED students taking the OSSLT at high-performing and lowperforming schools. Unanimously, all four teacher participants talked about how their SPED students were not adequately prepared to take the OSSLT. Teacher participants noted their students struggled with completing assignments in the classroom with the accommodations and modifications, which made educators believe that in the OSSLT testing environment they would not succeed. Several participants talked about how their students would not benefit from taking the OSSLT because it was grade levels beyond their performance ability. All four teacher participants talked about how they did not feel adequately prepared to teach SPED students the skills they needed to pass the OSSLT.

The third research question talked about the similarities and differences in assessment and teaching practices between higher-performing schools and lowerperforming schools regarding preparing SPED students to take the OSSLT. While teacher participants did not feel their students were adequately prepared for the OSSLT, teachers utilized various assessment, teaching, and writing techniques to help prepare their students for the OSSLT. Every teacher used the assessment technique of rubrics and checklists in their SPED classrooms. Three (75%) out of four teachers, noted descriptive feedback as a useful assessment technique, with Teacher 4 noting the use of student generated Success Criteria. Two (50%) out of four teachers identified editing and reviewing as useful assessment techniques, one from a higher-performing school and the other from a lower-performing school. Based on the four interviews, teachers from higher-performing schools and lower-performing schools used similar assessment techniques.

For useful teaching techniques, organizing thoughts as a pre-writing activity was the only technique that emerged across all four participants. Three (75%) out of four teachers reported using both direct instruction and explicit instruction techniques in their Grade 10 locally-developed classrooms. Direct instruction techniques included modeling and giving examples to students, whereas explicit instruction techniques included reading worksheet instructions or giving step-by-step directions to students. Three (75%) teachers mentioned the use of grammar and vocabulary lessons in their classrooms. While there were variations between teaching strategies across all four teacher participants, there were clear similarities between teachers from higher-performing schools and lower-performing schools.

All four teacher participants used journal responses as a useful writing technique in their Grade 10 locally-developed classrooms. They spoke about how journal responses merged personal narrative with summary, which was valuable in teaching students how to support an opinion with evidence from the test. Three (75%) participants mentioned that journal responses and book reports helped students identify how writing for different audiences and with different purposes changes the way they needed to write. To those three teachers, it was a practical real-world lesson their SPED students needed to learn before graduating from school. Three (75%) teachers talked specifically about supporting opinions with evidence and the value of the 5-paragraph essay for their SPED students. For these participants, the 5-paragraph essay was an effective way for SPED students to demonstrate their organizational skills in writing. Across all four teachers, they used similar writing techniques to help prepare their SPED students for the OSSLT.

The fourth research question asked about the mean, median, and standard deviation of students' journal responses to a probe compared to the CBM standard. I presented these values based on school in the subsection of Student Journal Responses. In Section 3, I will introduce the project, provide a rationale for the project, present an additional review of the literature, and describe the project, the project evaluation plan,

and the project's implications. In Section 4, I will reflect and conclude the research study.

The project will be delivered to educators through a white paper that will incorporate the background of the study, overview of the study and recommendations and conclusions.

Section 3: The Project/Creating A White Paper

Introduction

The project genre is a *Policy Recommendations With Detail* creating a white paper for educators who teach the Grade 10 locally-developed English classes. The requirements of this project include background of policy and problem, summary of analysis and findings, evidence of literature and research, and recommendations. The main goal is policy recommendations and modifications. The problem is that SPED students are not passing the OSSLT, and the findings showed that there is a need for effective teaching strategies and assessments which connect with the conceptual framework. The goal of this project is that more teachers use effective teaching strategies and assessments so that a higher number of students pass the OSSLT.

The presentation of the white paper handouts will relate to effective strategies and assessments to support educators who teach at-risk students for the OSSLT in writing. This presentation would be hosted in the morning or afternoon at a secondary school inviting all teachers who teach or offer the Grade 10 locally-developed English course. The educators from these schools are recommended to bring their strategies and assessments to share with other peers. This white paper will provide teachers at the site with information on how to aid the current SPED failure rate on the standardized test. The presentation will offer educators tools to identify and assess learning levels using CBM. The policy recommendations are:

- There should be an alternative assessment method to the OSSLT.
- Further examination of best practices as they relate to outcomes.

- Further professional development on those best practices.
- Further research opportunities within the board to support overall improvement, that is, more school involvement, more teacher interviews, and more appropriate assessment of SPED students.
- Further research could lead to identification of more appropriate testing methods, benchmarking, and outcome measurement.
- TDSB should strike a task force which may consist of administrators, literacy consultants, SPED consultants and educators to further explore these issues with clear objectives, deadlines and deliverables.
- Further research on the connection between poor student reading comprehension and under-developed vocabulary, and how teachers can note these gaps and the research documents.
- Functional assessment of academic interactions to determine what triggers and maintains consequences for these SPED students' behaviors due to lack of attention, instructional environment, differentiation, and direct instruction.

Rationale

The genre *Policy Recommendations With Detail* is the most effective approach to the white paper because teachers may be more likely to follow policy, which would support educators and students in the long term. The findings of this research study showed the most effective teaching strategies and assessments which educators can use to support SPED students writing for the OSSLT. This study could be used with other boards that may benefit from this through a white paper with recommendations. This may be conducted by a committee at the TDSB or Ministry of Education made up of stakeholders: Literacy and SPED consultants, superintendents, administrators and teachers as the Ministry of Education is consulting with different stakeholders' attention on student assessment for SPED students. The Ministry is responsible for overall curriculum and assessment in Ontario.

This project will connect with the initial problem, research questions and analysis results of this study. OSSLT data results show failure rates among SPED students, therefore, policy recommendations and the white paper will assist Grade 10 SPED English educators. The project should enhance teacher knowledge with respect to low-achieving SPED students in literacy. The teacher interviews, classroom observations and student journal responses examined the implementation of current practices. Based on interviews and observations, there is a need to create an appropriated standardized test for SPED students.

Review of the Literature

The literature review covers policy recommendation with detail genre in the following four themes: writing assessment tools, writing needs for SPED, instructional strategies for writing, and professional development for teaching writing. New themes and subthemes that emerged from the data collection and analysis by Statistics Solutions included: being not adequately prepared for OSSLT and to teach, teacher modification, challenges, useful techniques for assessment, useful techniques for teaching and useful techniques for writing. The Review of the Literature search was conducted through Education Source, ERIC, ProQuest Central, PsychINFO, Google Scholar, ProQuest

Dissertations, Theses Global, and Thoreau with a keyword search using the following terms: policy, teaching strategies, direct and explicit instruction, scaffolding, special needs, literacy, writing assessment, high school, professional development, writing skills, not adequately prepared, OSSLT, teacher modification, useful techniques, challenges, CBM, CBE, RTI, special education, early intervention, monitoring, evaluating, modifying, best practice, decision-making, tracking sheets, Graham, Fuchs, Coyne, writing lessons, writing activities, white paper, theory and practice, and instructional strategies. I narrowed down the search by selecting peer-reviewed journals within the last five years and read abstracts to determine which articles were most relevant to my final research study. When working on the exhaustive and thorough search of the literature, I focused on why and how the information would be used to support my outcomes and findings.

Writing Assessment Tools: Not Adequately Prepared for OSSLT

The review of writing assessment tool broadly shows the following CBM writing skills; effectiveness for early intervention, cognitive development, probes, collective journal writing, and finding approaches to measure at-risk students' progress. Jung, McMaster and delMas (2017) stated that CBM is a reliable and beneficial writing assessment tool that measures students writing progress throughout their schooling. The authors suggested intervention by small groups or individualized instruction are both effective strategies to improve overall writing performance. According to Carter (2011), reciprocal teaching and scaffolding has proven to be beneficial with students in literacy by modeling through explicit teaching and feedback. This cognitive approach helps to

monitor student skills learned by clarifying expository text (Carter, 2011). When conducting the CBM probe for my data collection, the students' journal writing was measured through narrative text. Carter (2011) stated that having conversations with educators and observing their classes and collecting students work to assess often improved instruction through reciprocal teaching and coaching.

Regarding CBM, Jenkins and Terjeson (2011) proposed that CBM helps to direct instructional decision-making for educators by goal setting, monitoring, and evaluating student progress. By interviewing and observing teachers' effective teaching strategies and assessments and measuring students' journal writing using means and standard deviations in my research, I was able to recommend strategies that supported and improved student writing. Barnett, Macmann, and Carey (1992) pointed out that improperly identifying, labeling, diagnosing and identifying students on their learning disabilities may have detrimental outcomes to the pupil, and that CBM can be an effective tool of early intervention in the implementation of appropriate curriculum and purposeful objectives for these pupils. The research deals with cognition development and how to assess students through screening, diagnosis, classification, intervention, planning, monitoring, and evaluation (Hawkins, 1979). Through my data collection and analysis of interviews, observations, and CBM by Statistics Solutions, there is always a potential of assessment error. Keller-Margulis, Mercer and Thomas (2015) suggested that CBM student writing samples have significant differences from fall to spring in achievement levels, and CBM is used for measuring the reliability of student growth

allowing for some error in measurement. Ritchey, Coker Jr. and Jackson (2015) added that CBM is a reliable and valid tool that gauges writing over a period of time.

Johnston and Goatley (2014) noted that literacy instruction in combination with best teaching practices for student writing was based on teacher interviews and classroom observations. The authors worked collaboratively with teachers and determined that writing processes were used to improve teaching strategies and student performance. I worked collaboratively with teachers when interviewing and observing their classes, and by having educators administer the CBM probe and collecting students' journal writing. In support of this position, Harris, Graham, Friedlander, and Laud (2013), evidence-based writing instruction through planning, content, revising, editing, modeling, flexibility, collaboration, resources, coaching and feedback had positive outcomes on reading. The authors stated that explicit instruction, SRSD, and interactive learning have an impact on writing development. Categories included narrative and story writing which were used as a CBM writing probe.

Ehren, Deshler, and Graner (2010) suggested writing in secondary school systems should have an extensive approach to monitor, plan, and make decisions on students' progress through content that included listening, speaking, reading, writing skills and strategies. According to Christ and Ardoin (2015), CBM helps to screen and monitor progress but there is still more to investigate. The authors suggested that oral reading and other forms of written expression should be incorporated to support literacy. In my teacher interviews, I was looking for feedback from educators on teaching strategies and assessments. Shinn (2002) stated that CBM are used to evaluate instructional programs

and measure literacy skills to set goals and expectations to modify and revise student IEPs. The measurement identifies at-risk students and is an intervention to explore solutions on instructional planning and to graph outcomes (Shinn, 2002). CBM were used in my study and I was able to measure students writing skills using this instrument.

Goo, Wall, Park and Hosp (2012) discussed how CBM are ways of assessing SPED students writing connected with the curriculum and direct appropriate instruction, decision-making and justify student placement in programs. The CBM is a valid tool that I used when measuring students journal writing levels for my research. The students had three minutes to respond to the writing probe. Norms for writing CBM (Hosp et al., 2016) at Kindergarten to Grade 8 levels for CWS, WSC, and TWW were used as a reference. According to Goo et al. (2012), CBM helps to monitor students' progress by helping with assessment on explicit content skills, modification to IEPs, intervention strategies, and professional development. Lastly, curriculum-based evaluation (CBE) is a decision-making approach to assist educators on determining efficient evaluation and effective instruction, and explain student learning and behavioral problems (Hosp, Hosp, Howell, & Allison, 2014). CBE will be used in conjunction with CBM when analyzing the data collection and determine policy recommendations for SPED students in writing.

CBM and CBE frameworks; can be joined within the RTI framework as part of the assessment and evaluation component to help with screening, identification, diagnosis and formative evaluation for effective intervention. Fuchs and Fuchs (2015) suggested that there are restrictions with LD students' instructional programs due to lack of pupil response. This included: students' difficulty transitioning from primary to intermediate grades; lack of instructional strategies, transfer and comprehension; not explicitly teaching or supporting linguistics and cognitive limitations; and the absence of implementing characteristics that are beneficial in strengthening the program. The authors proposed that school systems fail to produce appropriate intensive instruction which leads to poor student outcomes, and educational professionals mislabeling LD and low-achieving students. Blankenship and Margarella (2014) stated technology gave students a better understanding of content taught and advanced them in their writing. The authors suggested that technology provided student choices, to become more independent, and motivated these pupils in the improvement of their literacy.

According to Fuchs and Fuchs (2015), RTI has three levels: Level 1 is general education, Level 2 is small group instruction, and Level 3 is intensified instruction. The authors recommended the inclusion of transitions from stories to informational and effective instructional programs. This highlighted word-level skills and communication to support comprehension that included evaluation, background knowledge, inference making, strategies to encourage higher levels for text understanding, and the benefit of explicit teaching. Fuchs and Fuchs presented language comprehension (LC) and executive function (EF) linking these terms to instructional skills. The authors suggested interventions to put in place and effective instruction for at-risk students would be having three or four students per group and a larger amount of instructional time and sessions per week. These are some of the ideas that connect CBM and CBE frameworks within RTI for assessment and evaluation. In addition, the dissertation "A Survey of Fifth Grade Writing Teachers on Their Instructional Writing Practices" by Egloff (2013) included a

white paper report of recommendations for teacher instructional strategies in writing based on evidence from the data analysis and frequency chart. This may be helpful as a reference for educators to understand the process for implementing teaching strategies and assessment in writing to learning disabled students.

The new theme and subtheme of being not adequately prepared for OSSLT emerged from the data collection and analysis falling under the theme writing assessment tools that presented OSSLT having limited evaluative applications to general and SPED students. According to Crank (2013), high school students do not write enough and are not prepared in writing, and there is a need for program improvement. Crank stated that 47% of educators did not give a multi-paragraph exercise at least once monthly and more likely gave students a five-paragraph essay. The author indicated teacher participants felt that there were time limitations to prepare students for standardized testing in writing. Crank suggested journal entries are the most accepted writing activity for high school students and encouraged by teachers to prep students for testing. The new theme and subthemes of useful techniques for assessment, teaching and writing from the data collection and analysis developed from the theme writing assessment tools showed different methods to evaluate SPED students. Price and Jackson (2015) stated that student writing is below grade level and criterion-referenced assessments are effective for pupil learning.

Writing Needs for Special Education: Teacher Modification and Challenges

To summarize writing needs for SPED, the articles addressed SPED policies, assessment practices, and student identification. According to Canella-Malone, Konrad

and Pennington (2015), teachers need to be prepared with effective strategies to counter students' intellectual disabilities in writing through explicit instruction, feedback, scribing and assistive technology. Davis and Florian (2004) used a case study to review teaching strategies to recommend future direction in educational policy for all grade levels applying to educators and SPED students. Similar to my case study, I looked at effective teaching and assessment practices that would direct educational policy in SPED to support educators and their students. In addition, the authors indicated that cognitive learning and communication are essential to students with learning disabilities. Comparatively, Graham (2015) discussed how policy for teaching practices and curriculum was developed for SPED students through the perception of high school educators, and the increase of SPED students being identified in the school system. Themes emerged from the 90 minute teacher open-ended interviews in this study which included awareness and support systems for students with LD. From my research study, I was able to obtain perceptions from teacher interviews to direct policy recommendations of effective teaching and assessment strategies, and professional development. Troia and Graham (2016) showed that teachers perceived there was a need for professional development and resources to assess and identify SPED students needs.

Utley (2011) explored SPED teachers' perceptions on teaching strategies and assessments based on surveys where themes emerged to support LD students. Similar to my research study, I interviewed teachers and obtained their perceptions on effective teaching strategies and assessments where new themes were found for decision-making and recommendations of educational policy for SPED. The policy recommendation with detail genre is appropriate for this study because data information was used to gather, analyze and extrapolate from. The approach from the conceptual and theoretical framework will be based on the effective teaching strategies and assessment for special needs students from the theorists which include Graham and Harris (1989), Archer and Hughes (2011), Simmons et al. (1995) and Swanson (2001), and Coyne et al. (2011). The information incorporated teacher interview questions and observations. Based on my results, this supports these theories.

The new theme of teacher modification surfaced from the data collection and analysis under the theme of writing needs for SPED, demonstrated that certain actions helped SPED students learn how to write. Casale-Giannola (2012) collected data on open-ended teacher surveys, classroom observations and consultations of effective strategies for inclusive SPED students' settings. Vuran (2014) indicated that educators should promote interactions among students including pupils with disabilities. The author recommended finding appropriate and relevant literature for SPED students. According to Casale-Giannola, meaningful teacher student connections, real-life basic skills to content, teaching strategies and assessment, active learning, co-teaching, collaboration and planning time between educators strengthened inclusive high school classes. Teacher coaching, knowledge and modification of IEPs, administrative support with student behavior and class sizes also support learning. The author suggested that exit cards with questions to the lesson plan goals is a strategy that helps student identification, learning needs and instructional decision making for teachers. The new theme of challenges from the data collection and analysis under the theme of writing needs for SPED presented that educators need to address obstacles that will hinder students in writing and teachers reaching their instructional goals. Kennedy and Ihle (2012) recommended that general and SPED teachers work collaboratively on instructional strategies to support students with LD. According to Kennedy and Ihle, students with LD may not excel like their peers unless systematic, explicit, direct and scaffold instruction are implemented by educators in the classroom. The authors pointed out LD students have difficulty with word recognition, vocabulary and comprehension and should be clearly instructed through the learning process. Graham and Harris (2013) suggested that general and SPED educators that teach LD students should have knowledge of writing development, create a writing environment and implement evidence-based writing practices to support at-risk students.

Instructional Strategies for Writing: Useful Techniques for Assessment, Teaching and Writing

The review of instructional strategies for writing articles looked at improving the level of SPED students writing skills, sentence structure, comprehension, and reading. McLaughlin and Overturf (2012) discussed how educators need to work together to plan instruction and monitor student progress in writing by building new content knowledge and thematic connections through professional development collaboration. The Common Core State Standards are used to develop partnerships dealing with teacher's best practices which included analysis, reflection and research. Furthermore, the International Reading Association (2012) stated that formative assessment strategies include teacher conversations and class observations, and written responses from students' journals to measure student outcomes. I used this data collection approach in my methodology. The authors suggested that educators modify state standards so students can comprehend the text and have pupils' needs met.

McLaughlin and Overturf (2012) recommended educators use explicit instruction which eventually will alleviate the responsibility of students in employing these learning strategies. While interviewing and observing the teachers' classrooms, I was looking to see what strategies were being implemented including explicit teaching. Allington (2013) suggested that explicit teaching in literacy is not consistent in research and that educators are not communicating how they are delivering this instruction among themselves. The author pointed out that reading comprehension and phonemic recognition for struggling learners is developed through writing. While conducting this research, I was determining if this approach was being used by teachers that taught Grade 10 locally-developed English classes.

Graham and Sandmel (2011) stated that the process of writing is the most widely used and effective method to teach writing and improves the level of students writing. Another effective writing method to support students included explicit teaching strategies for planning, revising, collaboration, and sentence structure (Graham et al., 2011). Also, Akcin (2013) showed that constant time-delay strategy proved to be efficient in the number of trials with SPED students' literacy performance. By interviewing teachers I was looking to see if they were using these effective teaching strategies. Graham and Hebert (2011) examined the effectiveness of writing as an instrument for raising students' literacy through content taught in the classroom and student comprehension. The authors suggested that explicit teaching in text needs reviewing, re-examining, connecting, critiquing, constructing, analyzing, and relevancy. In addition, Fleury et al. (2014) recommended explicit instruction to support SPED students in their writing.

Hebert (2014) pointed out that explicit instruction improved content learning in writing for low-performing LD students which is part of the Common Core State Standards approach. Through my teacher classroom observations, I was able to determine which teachers were using content learning in writing. Graham and Hebert (2011) discovered from their research that the impact of process writing in assessment that supported and improved students' learning included text structure, sentence and summarizing comprehension, spelling and reading. From my observations of the Grade 10 SPED English teachers, I was determining if these approaches were being implemented by educators.

Cutler and Graham (2008) pointed out that process writing increased time spent on student writing and expository text, teacher instruction and professional development. The authors indicated that students who struggle with writing have less probable learning content provided to them in their instruction than pupils that excel in writing (Cutler et al., 2008). By observing the teachers' classrooms, I was able to determine if this applied to my sample participants. Cutler et al. (2008) recommended explicit teaching, writing prompts, planning, revision, organization, teacher conferencing, and professional development to enhance teaching instruction in writing. Spooner et al. (2017) suggested that evidence-based practices for SPED students need to have appropriate standards and integrate teachers' professional input.

Pisha and Coyne (2001) stated that assessment influences instructional strategies in literacy that allows students with LD to plan, set goals, comprehend and have a regular routine. Educators are held accountable for students' learning and it is necessary to implement policy that provides more effective and efficient teaching strategies and assessment. The authors recommended scaffolding and flexibility with appropriate curriculum that includes constructing, monitoring, demonstrating, and communicating with learning. Through my data collection, I was able to determine best practice through patterns and themes found in my research.

The new theme of useful techniques for assessment, for teaching, and for writing surfaced from the data collection and analysis under the theme of instructional strategies for writing, demonstrated that certain approaches support SPED students learning on how to write. According to Kirschner, Sweller and Clark (2006), direct instructional guidance produced more effective cognitive learning in long term retention and problem-solving skills. The authors suggested that content can be taught through scaffolding by teachers modeling and identifying the lesson and encouraging students to work collaboratively. Mayer's (2004) showed that guided instruction by an educator directing, coaching, modeling, providing goals and feedback supported student learning. While interviewing the teachers and observing the classrooms, I determined if any of these instructional strategies were being used in the Grade 10 locally-developed English classes.

Professional Development for Teaching Writing: Not Adequately Prepared to Teach

The articles that I reviewed on professional development for teaching writing are for educators to work on policies to improve teaching skills with SPED students. This includes observations, formal instruction, and assessment. Lefoe, Parrish, Keevers, Ryan and McKenzie (2013) discussed policy to improve teaching practice through professional development of subject areas, and themes that re-occurred for need of planning and training workshops. Similar, to this study, I will use my research results to share and network best practice policies and guidelines with educational leaders through meetings, resources and workshops. Comparatively, the Regan et al. (2016) case study indicated that collaboration of teachers revising and modifying lessons improved instruction for students in writing with learning disabilities. The authors suggested educators observe other teachers' classes and reflect on strategies used in the lesson which included explicit teaching. McClure (2016) suggested that teaching writing should be collaborative between educators to support students. The author recommended instructional strategies that were age-appropriate which included modeling through charts, discussion, and feedback. The data collection in my study observed SPED teachers' classes to determine what effective teaching strategies and assessments are being used in high- and lowperforming schools.

Wall (2008) discussed how interactive writing is used to teach spelling, punctuation, and grammar to LD students, and in conjunction with mini-lessons through workshops and professional development. The authors suggested interactive writing can be used with the collaboration of whole classes or small groups to modify and revise instruction for SPED students. In my study, I will be observing teachers' classrooms to determine if this strategy is being used. Bjorn, Mikko, Koponen, Fuchs, and Fuchs (2016) looked at policy on teacher individualized planning, collaboration of student placement, and modified instruction to support LD students that are required to write standardized testing using RTI through duration, content, and assessment. Professional development to teach student writing and problem-solving needs to be individualized and inclusive so that it will help build pupil confidence (Al-Srour & Al-Oweidi, 2016). When I conducted my teacher interviews, I was able to find out if there was collaboration amongst educators on effective teaching strategies and assessments to support SPED students writing on the OSSLT. Ludlow et al. (2014) suggested that educators share evidence-based practices with their colleagues in professional development settings to enhance teacher learning.

Thuneberg et al. (2014) showed that the white paper in this case study was developed through evidence of common trends used to improve teaching practices in SPED and resolve problems in assessment for students individual learning plans. The authors' policy recommended early intervention for pupils at different levels, teacher professional development on collaboration and evaluation techniques, and student accommodation. The utilization for educational change suggested by these researchers included perception, knowledge, and skills gained and applied. I used the collection of frequencies from this study to implement in my research project for teacher interviews and classroom observations' themes found. Also, the data collection and analysis of written documents idea was used for my interpretation of students' work.

Fuchs, Fuchs and Compton (2010) discussed professional development with English teachers combining vocabulary and reading comprehension with text and connected it to RTI dealing with general educators, small-group tutoring and intensive intervention. According to the authors, intensive intervention is effective and is ideal on multi-component instructional routines, longer periods of teaching with lower student ratio populations, and individualized instruction to meet pupil learning deficits. Fuchs and Fuchs (2010) stated that high schools have on average 10-15 at-risk students in the classroom and would benefit with two to five students to improve and monitor learning comprehension and reduce academic failure. In addition, the authors inferred that educators should determine academic benchmarks for student assessment and evaluation.

Warnock (2005) suggested that there is a need to accommodate SPED students, particularly for those students' disabilities that are mild or unnoticeable. The author's white paper indicates that there is a variation of SPED students learning disabilities, and a need for collaboration of teachers' expertise and specialization in this area to provide higher standards for learning. From the collection of my data and analysis, I was able to develop a white paper to support students with learning difficulties in writing. I will be sharing this study with all stakeholders involved.

The new theme and subtheme of being not adequately prepared to teach came from the data collection and analysis under the theme of professional development for teaching writing showing there is a general lack of resources for teachers to prepare SPED students for writing tests. According to Donne (2012), there is a significant lack of technology training for Kindergarten to grade 12 SPED teachers in educational preparation programs. Donne suggested that SPED students may benefit from software and online exercises that use voice recognition and enlarge text to support student learning accommodations and modifications in literacy through scaffolding instruction.

Project Description

The needed resource included an associated white paper. Existing supports would be the TDSB, superintendent, administrators, teachers and stakeholders. These attendees will learn how to support the needs of at-risk students. Through consent of administrators, the presentation of the white paper will be done on professional development days or in staff meetings. The teachers will be provided with release time. In order to identify teaching strategies and assessment to improve the performance of SPED students there needs to be a connection with the conceptual and theoretical framework, and literature review that will be shown in the presentation.

Potential barriers could be that not all teachers and administrators are on board with this research. The presentation could be considered by teachers as non-applicable. Another barrier could be time constraints; as teachers lack sufficient time due to their workload. Solutions to the barriers would be the white paper as a solution and to advertise as a resource for the classroom to improve student standardized scores.

The role and responsibilities of the student researcher would be author, proposal, descriptive statistics, and presenter. I developed a white paper and will present it to

teachers, and upper-administrative leaders. I will provide opportunities for teacher discussion following the presentation. The timetable and timeframe would be 1 month.

Project Evaluation Plan

The goal of this project is to provide Grade 10 SPED English teachers with information that can be used in the classroom to overcome student deficiencies in writing on the OSSLT. There will be an emphasis on teaching strategies and assessments. Teacher practice modification is effective to improve literacy achievement based on the findings in this study. An exit card can be filled out by educators to provide feedback on the policy recommendations from the white paper.

The justification for using this type of evaluation is that this research is a qualitative case study. Also, the outcomes and goals of this study are recommendations based on data collected and analyzed. Overall, the evaluation goal is to improve effective teaching strategies and assessments to improve student writing skills. The stakeholders would be the TDSB, ERRC, superintendent, administrators, literacy and SPED consultants, teachers and students.

Project Implications

The white paper will be given at the school site to be informative to educators. The possible social change implications are more effective teachers and teaching methods, and higher student scores in writing. The social benefit is improving literacy in groups that have traditionally had low levels. Research study for TDSB, superintendent, administrators, and teachers in the larger context would be more educators that use effective teaching strategies and assessments. For students to achieve higher scores on the OSSLT in writing.

The benefits of this study have social change implications as follows: students may improve in their communication and literacy skills, which lends to their preparation for post-high school and career opportunities. By teachers adopting these strategies and assessments through professional development may allow educators to grow in their field. Overall, this study may lead to more effective teachers and teaching methods, and higher student scores on the OSSLT writing.

Section 3 has included a description of the white paper aligning with the problem and research questions. It included a literature review identifying effective teaching strategies and assessment development, rationale, project description, evaluation plan, and project implications. Section 4 will address the reflections and conclusions of this project. Section 4: Reflections and Conclusions

Project Strengths and Limitations

Section 4 reflects my journey: (a) reporting the project strengths and weaknesses; (b) offering alternative solutions to the project; (c) scholarships, project development and leadership and change; (d) reflection on the importance of the work; and (e) implications, applications, and directions for future research. The potential strength of this project is helping teachers modify and develop classroom practices to assess literacy achievement of SPED students. The project may give teachers the opportunity to collaborate and provide feedback to one another on supporting SPED students writing on the OSSLT.

This projects strengths and limitations may potentially inform ways to improve effective teaching strategies for writing with SPED students. Also, it will identify new themes to explore in future research which might lead to professional development that could improve test scores across the school district. Limitations may include a small sample size and potential teacher bias. The project deliverable of the research would be 1 month to the TDSB.

Recommendations for Alternative Approaches

To address the problem, a white paper with recommendations was written. Alternative solutions would be to provide teachers with tools that are evidence-based teaching strategies. CBM and CBE within RTI may tie into the IEP as a means for possible solutions in professional development. Teachers receiving this training can potentially deliver this service to other educators. A learning coach could create a website for SPED teachers with writing resources to support SPED students on the OSSLT. Additional suggestions would be an online course(s) to support SPED teachers to prepare SPED students on the OSSLT in writing.

Scholarships, Project Development and Leadership and Change

The white paper will be shared with educators. The purpose was to improve SPED student writing scores on the OSSLT. The guidance of my chair and committee member gave me the opportunity to explore questions further through current peerreviewed literature and self-analysis. This study should have a positive impact for educators to identify students' needs and to choose strategies and assessments that support SPED students. The project development from the analysis showed current practices used by SPED teachers to aid SPED students writing level.

Through this research, a leader needs to be driven, constantly obtaining knowledge from scholarly material and face challenges. A leader should find answers to questions to improve current practice and bring social change to support all learners. A leader needs to listen, be open, be supportive, be encouraging and be a risk-taker. What was learned about these processes specific to the research and development of this project was organization, preciseness, objectivity, collaboration, and being open-minded. I learned that through the literature ways to measure and improve writing scores of SPED students and determining how many of these strategies and assessments are being deployed in the TDSB.

Reflection on the Importance of the Work

As an educator of many years, I strive to learn. Through this research process, I have advanced academically and will continue to improve my knowledge as a scholar. I

acquired qualitative research skills through my journey and gained knowledge through peer-reviewed academic journals. This research may improve students' test scores and teachers' training and may persuade the board to be more responsive to students' needs. There is a deficit of TDSB SPED students doing well on the OSSLT, and I expect this white paper will address and potentially remove obstacles faced by at-risk students writing the literacy test. This study may potentially improve students' OSSLT scores in writing. Educators and boards can use these evidence-based strategies and assessments in their instruction and accommodations.

Implications, Applications, and Directions for Future Research

The potential impact for positive social change is to improve student writing scores overall and on the OSSLT, and for students to become more literate and transfer these skills to their lives. The goal is to make implications for social change relevant to the research. The effective instructional practices theoretical framework and empirical implications of my study is based on cognitive-behavioral theory. Theorists include Graham and Harris (1989); Archer and Hughes (2011); Simmons et al. (1995); Swanson (2001); and Coyne, Kame'enui and Carnine (2011).

The methodology selected Grade 10 locally-developed English teachers and Grade 10 locally-developed English students from two high-performing and two lowperforming schools passing the OSSLT. I reviewed the Canadian Association of Research Ethics Boards Information (CAREB; 2017) and completed the National Institutes of Health Web-based training course *Protecting Human Research Participants*. I interviewed and observed educators' classrooms on their effective teaching strategies and assessments. Grade 10 locally-developed English students CBM journal samples were only used for this study. I trained teachers on the CBM process of this activity.

The instruments were checked with the chair, committee member, IRB, and ERRC. I received permission to use and modify a research instrument from Kiuhara et al. (2009) in 2017. The data was thematically analyzed to identify the themes. The OSSLT data was analyzed using software to calculate mean, median and standard deviation. This process allowed for interpretation of effective teaching strategies and assessments. The empirical implications from this study may improve writing for SPED students, and effective teaching strategies and assessments for educators.

Recommendations for Practice and Future Research Alternative Assessment Method to the OSSLT

There should be a standardized tool to assess SPED students. SPED educators need opportunities to network with other SPED teachers regarding assessment, teaching, and writing. In RQ3, while teacher participants did not feel their students were adequately prepared for the OSSLT, teachers utilized various assessment, teaching, and writing techniques to help prepare their students for the literacy test.

Further Examination of Best Practices as They Relate to Outcomes

Teachers should be supported to make the curriculum relevant and practical to students' individualized learning needs. Doyle and Giangreco (2013) stated that curriculum needs to be more practical and diverse to meet students individualized learning goals and outcomes. Indeed, the evidence from RQ1, supports this

recommendation: customized curriculum and approaches to meet students' challenges and needs improves the learning experience.

Further Professional Development on Those Best Practices

The district board administrators should provide release time for teachers to develop these assessment and instructional strategies and challenges that educators may employ with SPED students who are writing the OSSLT. Teachers can benefit from training in CBM to measure student's writing grade level. This would better prepare teachers to provide age-appropriate materials.

Further Research Opportunities Within the Board to Support Overall Improvement

Further research should be considered to investigate a larger sample of educators' perceptions from high- and low-performing schools. In RQ2, teacher participants noted their students struggled with completing assignments even with accommodations and modifications. This made educators believe that in the OSSLT testing environment they would not succeed.

Further Research to Identify Appropriate Testing Methods, Benchmarking, and Outcome Measurement

Research that can be explored from the data analysis, such as what transferable skills, can lower-performing schools adopt from higher-performing schools to advance literacy. In RQ3, all teacher participants used journal responses as a useful writing technique in their grade 10 locally-developed classrooms. They spoke about how journal responses merged personal narrative with summary, which was valuable in teaching students how to support an opinion with evidence from the test. This illustrates a more appropriate way to test students.

A TDSB Force to Further Explore the Findings of This Study

Resources or online services created by literacy coaches or specialists to support teachers preparing SPED students on the OSSLT in writing would be beneficial. According to Cooper (2015), learning coaches with educational materials as a resource had a positive effect on professional development for teachers and created a partnership within the school. In RQ2, all teacher participants talked about how they did not feel adequately prepared to teach SPED students the skills they needed to pass the OSSLT. Literacy coaches and additional resources had, in the past, contributed to definitions of more clear objectives and deliverables.

Further Research on the Connection Between Poor Student Reading

Comprehension and Under-Developed Vocabulary

Peer tutoring or an educational staff member to support SPED students learning can be helpful. In RQ1, all teacher participants experienced challenges in getting students to focus on their coursework and attend class.

Functional Assessment of Academic Interactions to Determine What Triggers and Maintains Consequences for SPED Students' Behaviors

Peer tutoring or staff support SPED of students' learning can be helpful. The same evidence from RQ1 supports the recommendation as previously stated.

It is unclear how the Ministry of Education, specifically test makers, will accommodate SPED students in their needs for the OSSLT, and I would recommend that practitioners explore and look at what options are available to support these at-risk students. The study further addressed how to improve SPED student scores on the OSSLT in writing. Further research would include looking at a larger sample of teachers, a standardized test for SPED students, and additional effective strategies and assessments for SPED teachers to support these at-risk students in writing.

Conclusion

The findings of this study showed that there are effective strategies and assessments to improve OSSLT scores. This study investigated SPED students at both high- and low-performing schools, who took the OSSLT, and suggested improvements that could improve students' scores in writing. The study used information provided by the four participating teachers at these local schools through interviews, classroom observations, and student journal responses and OSSLT scores in literacy. The white paper will be accessible to support educators. The social change from this study could lead to educator modification, useful techniques in assessment, teaching and writing to address SPED student challenges on the standardized test. My goal is that this research benefits all educators, students and researchers. The following section identifies the connection between the research questions, the findings and the current literature which supports the findings.

Research Question 1: Teachers' Perceptions of Assessment and Teaching Strategies

Based on Stats Solutions Analysis of interviews (Writing Needs for SPED), teachers placed emphasis generally on teacher modification (Theme 1) techniques which include transcribing, voice tools, scribing, creating a quiet classroom environment, review of written work, conferencing, students orally communicating what they wish to write, pre-writing such as idea development or paragraph structure, graphical organizational tools, one-on-one instruction, descriptive feedback, an educational support assistance, student teacher and learning coach. The analysis showed four out of four (100%) teachers felt that modifying assessment and teaching strategies would improve SPED students' OSSLT writing skills. Further to this, three (75%) of the teachers felt one-on-one instruction supported SPED writing skills. There was a higher frequency of references to "teacher modification" from Teachers 3 and 4 (lower-performing schools).

Based on classroom observations, two (50%) of the teachers allowed students extra time on class work and working independently. Differences include; Teacher 1 scribed, incorporated student ideas, allowed students to choose new topics, and listen to music while working. Teacher 2 allowed students to redo assignments and worked with pupils one-on-one. Teacher 4 allowed students to take walks and breaks when needed.

Based on the Analysis of interviews (Writing Assessment Tools: Writing Needs for SPED), teachers described challenges (Theme 2) such as student attendance, maintaining student engagement and emotional issues, varying degrees of student comprehension, assessing incomplete work, the need for student redirecting, flexibility, student breaks, explicit instruction and descriptive feedback. The analysis showed four (100%) of the educators faced challenges in the classroom with SPED students. There was also a higher frequency of references to "challenges" from Teachers 1 and 3. Based on classroom observations, all teachers had in common the challenge of student attendance. Two (50%) of the educators had to refocus their students. Differences include: Teacher 1 had student disruption, and Teacher 2 had student complaints about the difficulty of work.

The exploratory results for assessment and teaching strategies for SPED students to improve their writing skills on the OSSLT include the following: teachers should be encouraged to modify their techniques primarily by one-on-one instruction and also by strategies specific to the material taught. Extra time and independent work can be incorporated. The educators are challenged because SPED students have more barriers and obstacles in their academic and social lives. Some of the main challenges included inconsistent attendance and lack of student focus.

A tracking sheet should be used to improve school attendance. Also, performance rewards, and peer tutoring or a homework club with an educational staff member to support SPED students learning can be helpful. According to Carrish (2005), specialized sequence tracks and incentive awards improved attendance and completion of educational programs. Teachers should be supported to make the curriculum relevant and practical to students' individualized learning outcomes. Doyle and Giangreco (2013) stated that curriculum needs to be more practical and diverse to meet students individualized learning goals and outcomes.

Research Question 2: Teachers' Perceptions of Special Education Students on the OSSLT

Based on Stats Solutions Analysis of interviews (Writing Assessment Tools), all teachers felt SPED students were not adequately prepared for the OSSLT (Theme 3a) and only half of the educators felt that the standardized test was a good tool for evaluation. Of the participants, three (75%) felt that the test had a negative effect on student selfesteem. There was also a higher frequency of references to "not adequately prepared for OSSLT" from Teachers 1 and 3 at the same level.

Teacher 1 felt that the OSSLT as a tool was appropriate for 70% of the students. This teacher used a baseline diagnostic assessment for student reading and writing and felt that an educational assistant will enhance the student's grade level performance. Teacher 2 felt that other evaluation tools may be more beneficial for testing such as an extended course in literacy. Teachers 3 felt that the level students are currently performing at are significantly lower then what is required for the OSSLT and has a negative effect on students' self-esteem. Teacher 4 felt that the test was unfair and there was need for a standardized assessment tool for SPED students writing. Based on classroom observations, in all cases, it is not possible to determine through observation alone the level of student preparedness for the OSSLT.

Based on the analysis of interviews (Professional Development for Teaching Writing/Writing Needs for SPED), all teachers felt they were not adequately prepared to teach (Theme 3b) SPED students for the standardized test specific to reading and writing due to a lack of focused professional development training for the OSSLT. There was also a higher frequency of references to "not adequately prepared to teach" from Teachers 1 and 4. Teacher 1 reported having to resort to "trial and error" strategies to improve students' OSSLT performance. The educator also identifies the need for SPED behavioral management training.

Teacher 2 felt there was a lack of courses and workshops specific to SPED and a need for more professional development opportunities. Teacher 3 participated in many professional development opportunities for the OSSLT but indicated there was no specific SPED training. Teacher 4 tailored the curriculum to meet SPED students' needs. Based on classroom observations, Teachers 2 and 3 lacked additional support during the observation.

The exploratory results in the differences and/or similarities in teachers' perceptions about SPED students taking the OSSLT in high- and low-performing schools showed that students are not ready for the OSSLT and this test has a negative impact on most SPED students. The educators had different opinions on how to address the underlying issue, notably a standardized SPED test and a separate literacy course. Teachers are not adequately prepared to teach SPED students the OSSLT due to a lack of target courses available to these instructors. Additionally, support staff is recommended for SPED teachers.

A reference library of materials and resources or online services created by literacy coaches or specialists to support teachers preparing SPED students on the OSSLT in writing would be beneficial. According to Cooper (2015), learning coaches with educational materials and as a resource, has a positive effect on professional development for teachers and creates a partnership within the school. Further research should be to investigate a larger sample of educators' perceptions from high- and low-performing schools, and if additional support staff in the classroom is effective for student learning in writing.

Research Question 3: Teaching Strategies and Assessment in Higher-Performing Schools Versus Lower-Performing Schools

Based on the analysis, useful techniques include assessment, teaching and also writing.

Useful techniques for assessment (Theme 4a). All teacher

participants' interviews share a common use of rubrics and checklists to assess students' work. Differences include the following: three (75%) participants used descriptive feedback, and 50% of the participants' used editing and reviewing. Finally, Teacher 1 used visual aids and highlighters, and Teacher 4 used success criteria. Based on classroom observations, four (100%) of the teachers used descriptive feedback. Differences included the fact that Teacher 3 used rubrics and checklists.

Useful techniques teaching (Theme 4b). All the

participants' interviews discussed useful techniques to prepare SPED students for the OSSLT. Also, all participants used pre-writing and organizing thoughts techniques for SPED students. Differences included the observation that three (75%) of the teachers indicated that pre-writing activities are beneficial. Three (75%) of the teachers used direct instruction and explicit instruction, and grammar and vocabulary lessons. Two (50%) of the teacher participants used classroom discussion and brainstorming. Teacher 1 also used modeling and examples, Teacher 2 also used 5W's, and Teacher 3 also used conferencing.

Based on classroom observations, four (100%) of the teachers used direct instruction, modeling, classroom discussion, explicit instruction, monitoring, and

conferencing. Three (75%) of the teachers used brainstorming. Teachers also utilized different strategies compared to one another, with Teacher 3 giving examples and word walls, and Teacher 4 using pre-writing.

Useful techniques for writing (Theme 4c). Four (100%) of the teacher participants' interviews indicated useful writing techniques employed to support SPED students for the OSSLT. Four (100%) of the participants used journal responses. Differences include; three (75%) of the teachers use the 5-paragraph essay and support opinion with evidence. Two (50%) teachers indicated that the 5-paragraph essay supports organization of writing. Two (50%) of the educators communicated that journal responses are an effective technique for SPED students. Two (50%) of the educators indicated that book and film reports were used with SPED students to demonstrate comprehension. Two (50%) used reports, writing with different purposes. Teacher 1 also used email correspondence and presentations.

Based on classroom observations, two (50%) of the teachers used journal responses. Teachers used different strategies, such as Teacher 1 who used email correspondence and writing with different purposes. Comparatively, Teacher 2 used the 5 W's while Teacher 4 used support opinion with evidence.

The exploratory research results showed differences and/or similarities in assessment and teaching practices between higher-performing schools compared with lower schools. Preparing SPED students for the OSSLT included the following: teachers and students benefit from the use of rubrics and checklists as assessment tools, and most of these educators benefit from the use of descriptive feedback. Other beneficial strategies included direct instruction, modeling, classroom discussion, pre-writing and organizing thoughts techniques for OSSLT. The educators differed in specific additional teaching techniques and additional assessment tools. Additional strategies which are beneficial include journal responses, the 5-paragraph essay and support opinion with evidence. The educators differ in specific additional writing techniques.

There should be a standardized tool for all SPED students, and SPED educators can network with other SPED teachers regarding assessment, teaching and writing at the board or in the surrounding district. This networking process can be monthly or on a quarterly basis. Arnold and Reed (2016) stated that tests offered to special needs students are not appropriate and does not represent the student body. Other research that can be explored from the analysis is what transferable techniques, can lower- performing schools adopt from higher-performing schools to advance literacy. Further research would be breaking down the various techniques and determining their effectiveness.

Research Question 4: Curriculum-Based Measurement Assessment of Students

Student journal responses. The School 1 average (mean) of the seven students for CWS was 17.29-word sequences with a standard deviation of 12.52. The School 1 average (mean) for WSC was 25.00 words spelled correctly with a standard deviation of 15.03. The School 1 average (mean) for TWW was 30.29 words written with a standard deviation of 17.19.

The School 2 average (mean) of the four students for CWS was 32.75-word sequences with a standard deviation of 17.41. The School 2 average (mean) for WSC

was 45.00 words spelled correctly with a standard deviation of 17.38. The School 2 average (mean) for TWW was 46.75 words written with a standard deviation of 17.78.

The School 3 average (mean) of the eleven students for CWS was 25.00-word sequences with a standard deviation of 8.52. The School 3 average (mean) for WSC was 31.45 words spelled correctly with a standard deviation of 10.71. The School 3 average (mean) for TWW was 33.73 words written with a standard deviation of 11.13.

The School 4 average (mean) of the six students for CWS was 28.17-word sequences with a standard deviation of 17.88. The School 4 average (mean) for WSC was 39.00 words spelled correctly with a standard deviation of 22.81. The School 4 average (mean) for TWW was 42.33 words written with a standard deviation of 24.13.

The student journal responses data is skewed for School 1 in CWS, WSC and TWW. The results showed that students above the median value have higher than expected performance. School 2 performed as expected. School 3 and 4 performed at a lower level than expected than School 2. School 4 had a wide range of student performances, which included very poor performances as well as high performances relative to the mean.

The sample populations between the four schools are not fixed, therefore, a comparison of the median between the four schools is not informative. Between Schools 2, 3 and 4, there is an increase in standard deviation for CWS. Standard deviations increased as a function of school performance. The analysis of the standard deviations implies a relationship between school performances and standard deviations across measured journal responses; that is standard deviations increases as school performance

decreases. Due to the nature of the student journal response testing, a comparison of the standard deviations between the four schools was not as informative when compared to official OSSLT reports from each of the four schools. As with any study, the results are dependent on sample size; for this case study, the sample size of four participants yielded enough data to suggest some useful answers to the research questions. Nonetheless, a larger sample of student journal responses may have generated more results regarding student performance in the three areas tested.

Based on the analysis that is applicable to this study, the benefits of teachers using this CBM assessment tool will help them determine SPED students' grade level in writing and assessing and evaluating students accordingly. This assessment tool should be used board wide thrice in a school year as a diagnostic feedback for students writing in the fall, winter and spring. Teachers can integrate different strategies using the CBM as a benchmark for students' grade level. Teachers can brainstorm to collaborate on ideas how to support these at-risk students.

Administrators can play a role in coordinating meetings and supporting staff by providing release time for teachers to develop these strategies and challenges that educators may confront with SPED students writing the OSSLT. Suggested meetings should be done with administrators and educators teaching the locally-developed Grade 10 English classes discussing these results and potential strategies and assessments to support these at-risk students. The findings of this research study could be compared to future research conducted in both rural and urban settings to better capture useful strategies to improve SPED students' performance on the OSSLT.

OSSLT scores. Based on the analysis over the last 3 years of School 1 OSSLT average (mean) scores, 41% of SPED students failed as compared to 27% of the general student body. There are a higher percentage of SPED students failing compared to the general student body, 14% difference. The standard deviation showed that the number of SPED students that failed the test at School 1 was 2.36 compared to the general student body was 4.99.

School 2 OSSLT average (mean) scores showed that 69% of SPED students failed as compared to 32% of the general student body. Once again, there are a higher percentage of SPED students failing compared to the general student body, 37% difference. The standard deviation showed that the number of SPED students that failed the test at School 2 was 8.34 compared to the general student body was 9.84.

School 3 OSSLT average (mean) scores showed that 77% of SPED students failed as compared to 76% of the general student body. The standard deviation showed that the number of SPED students that failed the test at School 3 was 0.82 compared to the general student body was 1.25. School 4 OSSLT average (mean) scores showed that 92% of SPED students failed as compared to 92% of the general student body. The standard deviation showed that the number of SPED students that failed the test at School 4 was 1.25 compared to the general student body was 1.25.

For the two low-performing schools, the difference between the SPED students failing compared to the general student body is significant, as both SPED and the general student body has high failure rates. From the average (mean) SPED OSSLT scores, I was able to rank the high- and low-performing schools, which shows that Schools 1 and 2 are the higher-performing schools, and Schools 3 and 4 are the lower-performing schools based on the failure rates. Despite these differences across all four schools' performances, each school shared similarities in the useful techniques for assessment, teaching, and writing. While the descriptive statistical data would indicate a clear separation between the techniques each school implemented, the qualitative findings indicate overlapping techniques across the participants.

To conclude, there are effective strategies and assessments to improve SPED student scores on the OSSLT from this research and to identify and make progress against students' learning disabilities. Kauffman and Badar (2013) stated special needs students are not properly identified, rather under-identified and that educators need to look at the differences of these pupils. These authors suggested the benefits and skills of relevant material can be provided through effective instruction and assessment. There are technologies that must be implemented to support these special needs students. These technologies must address the need to change policies which may eliminate the focus on inclusion and employ intensive interventions and instructional approaches in the school setting. General education does not benefit or meet the needs of SPED students because the curriculum is not specialized or individualized for these at-risk pupils (Kauffman & Badar, 2014).

There is a need to ensure that pre-service training for both SPED teachers and principals focus on these issues in terms of improving their understanding of evidencebased practices in assessment and instructional strategies. The research findings in this study showed that there is a need for effective teaching strategies and assessments because through my observations and what teachers reported demonstrated that assessment and writing instructions were not evidence-based practices in the profession. The research questions connected with the conceptual frameworks of cognitivebehavioral theory (Graham & Harris, 1989), cognitive-behavioral based principles of effective teaching (Archer & Hughes, 2011), explicit instructional behaviors (Simmons, Fuchs, Fuchs, Mathes & Hodge, 1995; Swanson, 2001), and principles of effective instruction (Coyne, Kame'enui & Carnine, 2011). There is a necessity for measurable superior instruction and best practices for formative and pupil progress monitoring. This research allows for educators to plan their time to engage students with learning disabilities who need the support rather than discover later which pupils are not passing the OSSLT. Located in Appendix A is a White Paper. The Project (White Paper) is containing recommendations for policy makers along with useful techniques that emerged from the data analysis.

References

- Akcin, N. (2013). Comparison of two instructional strategies for students with autism to read sight words. *Eurasian Journal of Educational Research*, 51, 85-106. Retrieved from https://www.eric.ed.gov/?id=EJ1059916/
- Allington, R. L. (2013). What really matters when working with struggling readers. *The Reading Teacher*, *66*(7), 520-530. doi:10.1002/TRTR.1154
- Al-Srour, N. H., Al-Ali, S. F., & Al-Oweidi, A. (2016). The impact of teacher training on creative writing and problem-solving using futuristic scenarios for creative problem solving and creative problem solving programs. *Education*, *136*(4), 461-467. Retrieved from https://www.eric.ed.gov/?id=EJ1104171
- Amato, J. M., & Watkins, M. W. (2011). The predictive validity of CBM writing indices for eighth-grade students. *Journal of Special Education*, 44(4), 195-204. doi:10.1177/0022466909333516
- Archer, A. L., & Hughes, C. A. (2011). *Explicit and efficient teaching*. New York, NY: Guilford Publications.
- Arnold, S., & Reed, P. (2016). Reading assessments for students with ASD: A survey of summative reading assessments used in special educational schools in the UK. *Journal of British Journal of Special Education*, 43(2), 122-141. doi:10.1111/1467-8578.12127
- Astleitner, H. (2005). Principles of effective instruction: General standards for teachers and instructional designers. *Journal of Instructional Psychology*, 32(1), 3-8. Retrieved from https://www.projectinnovation.biz/jip.html/

Barnett, D. W., Macmann, G. M., & Carey, K. T. (1992). Early intervention and the assessment of developmental skills: Challenges and directions. *Topics in Early Childhood Special Education*, 12(1), 21-43.
doi:http://dx.doi.org/10.1177/027112149201200101

Bjorn, P. M., Mikko, T. A., Koponen, T. K., Fuchs, L. S., & Fuchs, D. H. (2016). The many faces of special education within RTI frameworks in the United States and Finland. *Learning Disability Quarterly*, *39*(1), 58-66. doi:10.1177/0731948715594787

- Blankenship, M. U., & Margarella, E. E. (2014). Technology and secondary writing: A review of the literature. *Contemporary Educational Technology*, 5(2), 146-160. Retrieved from https://www.files.eric.ed.gov/fulltext/EJ1105503.pdf/
- Bock, A. K., & Erickson, K. A. (2015). The influence of teacher epistemology and practice on student engagement in literacy learning. *Research & Practice for Persons with Severe Disabilities*, 40(2), 138-153.

doi:10.1177/1540796915591987

- Canadian Association of Research Ethics Boards (CAREB; 2017). About CAREB-ACCER. Retrieved from https://www.careb-accer.org/
- Canella-Malone, H. I., Konrad, M., & Pennington, R. C. (2015). Access! Teaching writing skills to students with intellectual disability. *Teaching Exceptional Children*, 47(5), 272-280. doi:10.1177/0040059915580032
- Carrish, S. (2005). Reviving an honors program with specialized sequence tracks. *Honors In Practice*, *1*, 63-77. Retrieved from https://digitalcommons.unl.edu/nchchip/30/

Carter, C. J. (2011). Lessons learned in dreamland: How a small urban charter school overcame start-up woes to increase reading scores 28 percent. *Schools: Studies in Education*, 8(2), 285-310. doi:10.1086/662116

Casale-Giannola, D. (2012). Comparing inclusion in the secondary vocational and academic classrooms: Strengths, needs, and recommendations. *American Secondary Education*, 40(2), 26-42. Retrieved from https://www.centreofexcellence.etsb.qc.ca/files/2015/11/inclusion.pdf/

Celik, S., & Vuran, S. (2014). Comparison of direct instruction and simultaneous prompting procedure on teaching concepts to individuals with intellectual disability. *Education and Training in Autism and Developmental Disabilities*, 49(1), 127-144. Retrieved from https://daddcec.org/Publications/ETADDJournal.aspx/

- Christ, T. J., & Ardoin, S. P. (2015). Commentary on new metrics, measures, and uses for fluency data. *Reading & Writing*, 28(1), 151-157. doi:10.1007/s11145-014-9513-4
- Clark, P., & Zygmunt, E. (2014). A close encounter with personal bias: Pedagogical implications for teach education. *Journal of Negro Education*, 83(2), 147-161. doi:10.7709/jnegroeducation.83.2.0147
- Cooper, H. (2010). *Research synthesis and meta-analysis: A step-by-step approach* (4th Ed.). Thousand Oaks, CA: SAGE Publications, Inc.
- Cooper, L. (2015). Partnering to facilitate teacher professional learning. *Antistasis*, 5(1), 24-27. Retrieved from

https://www.journals.lib.unb.ca/index.php/antistasis/article/viewFile/22857/26617

- Council, M. R., Cartledge, G., Green, D., Barber, M., & Gardner, R. (2016). Reducing risk through a supplementary reading intervention: A case study of first- and second-grade urban students. *Behavioral Disorders*, *41*(4), 241-257. Retrieved from https://eric.ed.gov/?id=EJ1113091
- Coyne, M. D., Kame'enui, E. J., & Carnine, D. W. (2011). *Effective teaching strategies that accommodate diverse learners* (4th ed.). Upper Saddle River, NJ: Pearson.
- Crank, V. (2013). From high school to college: Developing writing skills in the disciplines. *The WAC Journal*, 23(2012), 49-63. Retrieved from https://www.wac.colostate.edu/journal/vol23/crank.pdf/
- Creswell, J. W., Hanson, W. E., Plano Clark, V. L., & Morales, A. (2007). Qualitative research designs: Selection and implementation. *The Counseling Psychologist*, 35(2), 236-264. doi:10.1177/0011000006287390
- Creswell, J. W. (2012). Educational research: Planning, conducting, and evaluating quantitative and qualitative research (4th Ed.). Boston, MA: Pearson, Education, Inc.
- Cutler, L., & Graham, S. (2008). Primary grade writing instruction: A national survey. *Journal of Educational Psychology*, *100*(4), 907-919. doi:10.1037/20012656
- Davis, P., & Florian, L. (2004). Searching the literature on teaching strategies and approaches for pupils with special educational needs: knowledge production and

synthesis. *Journal of Research in Special Educational Needs*, *4*(3), 142-147. doi:10.1111/j.1471-3802.2004.00029.x

- De La Paz, S., & Graham, S. (2002). Explicitly teaching strategies, skills, and knowledge: Writing instruction in middle school classrooms. *Journal of Educational Psychology*, 94(4), 687-698. doi:10.1037//0022-0663.94.4.687
- Del Vicario, C. R. (2016). *The impact of NCLB on students with special needs selfconcept as a result of standardized assessments* (Doctoral dissertation). Retrieved from: ProQuest Dissertations Publishing. (10006512)
- Dixon, F. A., Yssel, N., McConnell, J. M., & Hardin, T. (2014). Differentiated Instruction, professional development, and teacher efficacy. *Journal for the Education of the Gifted*, 37(2), 111-127. doi:10.1177/0162353214529042
- Dombek, J. L., & Otaiba, S. A. (2016). Curriculum-based measurement for beginning writers (K-2). *Intervention in School & Clinic*, 51(5), 276-283. doi:10.1177/1053451215606691
- Donne, V. (2012). Keyboard instruction for students with a disability. *The Clearing House*, 85(5), 201-206. doi:10.1080/00098655.2012.689784
- Doyle, M. B., & Giangreco, M. (2013). Guiding principles for including high school students with intellectual disabilities in general education classes. *American Secondary Education*, 42(1), 57-72. Retrieved from https://www.uvm.edu/~cdci/archives/mgiangre/ASEJ201342.pdf/

Early, J. S., & Saidy, C. (2014). Uncovering substance: Teaching revision in high school classrooms. *International Reading Association*, 58(3), 209-218.
doi:10.1002/jaal.333

Education Quality Accountability Office (EQAO; 2017). *EQAO school district data*. Retrieved from https://www.eqaoweb.eqao.com/eqaoweborgprofile/profile.aspx?_Mident=73&La ng=E

- Elish-Piper, L., Wold, L. S., & Schwingendorf, K. (2014). Scaffolding high school students' reading of complex texts using linked text sets. *International Reading Association*, 57(7), 565-574. doi:10.1002/jaal.292
- Egloff, S. (2013). A survey of fifth grade writing teachers on their instructional writing practices (Doctoral dissertation). Retrieved from ProQuest Dissertations Publishing. (3549846)
- Ehren, B. J., Deshler, D. D., & Graner, P. S. (2010). Using the content literacy continuum as a framework for implementing RTI in secondary schools. *Theory Into Practice*, 49(4), 315-322. doi:10.1080/00405841.2010.510760
- Elliott, S. N., Kurz, A., & Neergaard, L. (2012). Large-scale assessment for educational accountability. In Harris, Graham, & Urdan. APA educational psychology handbook: Vol. 3. Application to learning and teaching. (pp. 111-138).
 Washington, DC: American Psychology Association. doi:10.1037/13275-006

EQAO. (2007). OSSLT framework. Retrieved from

https://www.eqao.com/en/assessments/OSSLT/assessmentdocs/frameworkOSSLT.pdf/

Ernest, J. M., Thompson, S. E., Heckaman, K. A., Hull, K., & Yates, J. (2011). Effects of social validity of differentiated instruction on student outcomes for special educators. *The Journal of International Association of Special Education*, 12(1), 33-41. Retrieved from https//www.iase.org/

- Fisher, D., & Frey, N. (2011). Implementing RTI in a high school: A case study. *Journal* of Learning Disabilities, 46(2), 99-114. doi:10.1177/0022219411407923
- Fleury, V. P., Hedges, S., Hume, K., Browder, D. M., Thompson, J. L., Fallin, K., El Zein, F., Reutebuch, C. K., & Vaughn, S. (2014). Addressing the academic needs of adolescents with autism spectrum disorder in secondary education. *Remedial & Special Education*, 35(2), 68-79. doi:10.1177/0741932513518823
- Fuchs, D., Fernstrom, P., & Reeder, P. (1992). Vaulting barriers to mainstreaming with curriculum-based measurement and transenvironmental programming. *Preventing School Failure: Alternative Education for Children and Youth, 36*(2), 34-38. doi:10.1080/1045988x

Fuchs, D., & Fuchs, L. S. (2015). Rethinking service delivery for students with significant learning problems: Development and implementing intensive instruction. *Remedial & Special Education*, 36(2), 105-111. doi:10.1177/0741932514558337

- Fuchs, L. S., Fuchs, D., & Compton, D. L. (2010). Rethinking response to intervention at middle and high school. *School Psychology Review*, 39(1), 22-28. Retrieved from https://www.eric.ed.gov/?id=EJ886408
- Fuchs, L. S., Fuchs, D., & Hamlett, C. L. (1989). Monitoring reading growth using student recalls: Effects of two teacher feedback systems. *Journal of Educational Research*, 83(2), 103-111. doi:10.1080/00220671.1989.10885938
- Fuchs, L. S., Fuchs, D., & Hamlett, C. L. (1990). Curriculum-based measurement: A standardized, long-term goal approach to monitoring student progress. *Academic Therapy*, 25(5), 615-632. Retrieved from https://eric.ed.gov/?id=EJ418349/
- Fuchs, D., Fuchs, L. S., & Vaughn, S. (2014). What is intensive instruction and why is it important? *Teaching Exceptional Children*, 46(4), 13-18. doi:10.1177/0040059914522966
- Gabriel, K. F., & Davis, T. M. (2015). Implementation of a writing strategy for students with learning disabilities in a rural setting. *Rural Special Education Quarterly*, 34(4), 40-49. doi:10.1177/875687051503400405
- Gillespie, A., & Graham, S. (2014). A meta-analysis of writing interventions for students with learning disabilities. *Council for Exceptional Children*, 80(4), 454-473.
 doi:10.1177/0014402914527238
- Goo, M., Wall, S., Park, Y., & Hosp, J. (2012). A guide to choosing web-based curriculum-based measurements for the classroom. *Teaching Exceptional Children, 45*(2), 34-40. doi:10.1177/004005991204500204

Government of Ontario. (2016). *Locally developed course enrolment in secondary schools*. Retrieved from https://www.ontario.ca/data/locally-developed-courseenrolment-secondary-schools/

Graham, L. J. (2015). A little learning is a dangerous thing: Factors influencing the increased identification of special educational needs from the perspective of education policy-makers and school practitioners. *International Journal of Disability, Development and Education, 62*(1), 116-132. doi:10.1080/1034912X.2014.955791

- Graham, S., Capizzi, A., Harris, K. R., Hebert, M., & Morphy, P. (2014). Teaching writing to middle school students: A national survey. *Reading & Writing*, 27(6), 1015-1042. doi:10.1007/s11145-013-9495-7
- Graham, S., & Harris, K. R. (1989). Components analysis of cognitive strategy instruction: Effects on learning disabled students' compositions and self-efficacy. *Journal of Educational Psychology*, *81*(3), 353-361. doi:10.1037/0022-0663.81.3.353
- Graham, S., & Harris, K. R. (2005). Writing better: Effective strategies for teaching students with learning difficulties. Baltimore, MD: Paul H. Brookes Publishing Co., Inc.
- Graham, S., & Harris, K. R. (2009). Almost 30 years of writing research: Making sense of it all with the Wrath of Khan. *Learning Disabilities Research & Practice*, 24(2), 58-68. doi:101111/j.1540-5826.2009.01277.x

Graham, S., & Harris, K. R. (2013). Common Core State Standards, writing, and students with LD: Recommendations. *Learning Disabilities Research & Practice*, 28(1), 28-37. doi:10.1111/ldrp.12004

Graham, S., Harris, K. R., Bartlett, B. J., Popadopoulou, E., & Santoro, J. (2016).
Acceptability of adaptations for struggling writers: A national survey with primary-grade teachers. *Learning Disability Quarterly*, *39*(1), 5-16.
doi:10.1177/0731948714554038

- Graham, S., Harris, K. R., & Olinghouse, N. (2007). Addressing executive function problems in writing. In L. Meltzer (Ed.). Executive function in education: From theory to practice. (pp.77-105). New York, NY: Guilford Press.
- Graham, S., & Hebert, M. (2011). Writing to read: A meta-analysis of the impact of writing and writing instruction on reading. *Harvard Educational Review*, 81(4), 710-744. doi:10.17763/haer.81.4.t2k0m13756113566
- Graham, S., Hebert, M., Sandbank, M. P., & Harris, K. R. (2016). Assessing the writing achievement of young struggling writers: Application of generalizability theory. *Learning Disability Quarterly*, *39*(2), 72-82. doi:10.1177/0731948714555019
- Graham, S., & Sandmel, K. (2011). The process writing approach: A meta-analysis. *The Journal of Educational Research*, *104*(6), 396-407.
 doi:10.1080/00220671.2010.488703
- Graham, S., & Santangelo, T. (2014). Does spelling instruction make students better spellers, readers, and writers? A meta-analytic review. *Reading & Writing*, 27(9), 1703-1743. doi:10.1007/s11145-014-9517-0

Grisham, D. L., Yoder, K. K., Smetana, L., Dobler, E., Wolsey, T. D., Lenski, S. J.,

Young, J., Chambers, S., Scales, R. Q., Wold, L. S., Ganske, K., & Scales, W. D. (2014). Are teacher candidates learning what they are taught? Declarative literacy learning in 10 teacher preparation programs. *Teacher Education & Practice*, *27*(1), 168-189. Retrieved from https://rowman.com/page/TEP/

- Grundmeyer, T. (2015). How much content do high school students retain? *American* Secondary Education, 44(1), 62-72. Retrieved from https://eric.ed.gov/?id=EJ1083907
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, 18(1), 59-82. doi:10.1177/1525822X05279903
- Hamman, D., Lechtenberger, D., Griffin-Shirley, N., & Zhou, L. (2013). Beyond exposure to collaboration: Preparing general-education teacher candidates for inclusive practice. *The Teacher Educator*, 48(4), 244-256. doi:10.1080/08878730.2013.796030
- Hancock, D. R., & Algozzine, B. (2011). *Doing case study research: A practical guide for beginning researchers* (2nd ed.). New York, NY: Teachers College Press.
- Hardre, P. L., & Hennessey, M. N. (2013). What they think, what they know, what they do: Rural secondary teachers' motivation beliefs and strategies. *Learning Environments Research*, *16*(3), 411-436. doi:10.1007/s10984-013-9131-0

Harris, K. R., & Graham, S. (2013). "An adjective is a word hanging down from a noun": Learning to write and students with learning disabilities. *Annals of Dyslexia*, 63(1), 65-79. doi:10.1007/s1181-011-0057-x

Harris, K. R., Graham, S., Friedlander, B., & Laud, L. (2013). Bring powerful writing strategies into our classroom. *The Reading Teacher*, 66(7), 538-542.
doi:10.1002/TRTR.1156

- Hawkins, R. P. (1979). The functions of assessment: Implications for selection and development of devices for assessing repertoires in clinical, educational, and other settings. *Journal of Applied Behavior Analysis*, *12*(4), 501-516.
 doi:10.1901/jaba.1979.12-501
- Hebert, M. (2014). The nuances of writing instruction for students with learning disabilities: An introduction to the special issue. *Learning Disabilities: A Contemporary Journal, 12*(1), 1-4. Retrieved from https://www.connection.ebscohost.com/c/articles/97606359/nuances-writing-instruction-students-learning-disabilities-introduction-special-use/
- Hosp, J. L. (2012). Using assessment data to make decisions about teaching and learning. In Harris, Graham, & Urdan. APA educational psychology handbook:
 Vol. 3. Application to learning and teaching. (pp. 87-110). Washington, DC: American Psychology Association. doi:10.1037/13275-005
- Hosp, J. L., Hosp, M. K., Howell, K. W., & Allison, R. (2014). *The ABC's of curriculum*based evaluation: A practical guide to effective decision making. New York, NY: Guilford Press.

- Hosp, M. K., Hosp, J. L., & Howell, K. W. (2016). The ABCs of CBM: A practical guide to curriculum-based measurement (2nd Ed.). New York, NY: Guilford Press.
- Hough, T. M., Hixson, M. D., Decker, D., & Bradley-Johnson, S. (2012). The effectiveness of an explicit instruction writing program for second graders. *Journal of Behavioral Education*, 21(2), 163-174. doi:10.1007/s10864-012-9146-0
- International Reading Association. (2012). *Position statement of formative assessment*. Newark, DE: International Reading Association.
- Jain, P. (2006). *Special education*. Delhi, IN: Pragun Publications. Retrieved from https://www.ebray.com/
- Jenkins, J., & Terjeson, K. J. (2011). Monitoring reading growth: Goal setting, measurement frequency, and methods of evaluation. *Learning Disabilities Research & Practice*, 26(1), 28-35. doi:10.1111/j.1540-5826.2010.00322.x
- Jewell, J. (2003). The utility of CBM writing indices for progress monitoring and intervention (Doctoral dissertation). Retrieved from ProQuest Dissertations Publishing. (3102754)
- Johnston, P., & Goatley, V. (2014). Research making its way into classroom practice. *The Reading Teacher*, 68(4), 245-250. doi:10.1002/trtr.1278
- Jung, P-J., McMaster, K. L., & delMas, R. C. (2017). Effects of early writing intervention delivered within a data-based instruction framework. *Exceptional Children*, 83(3), 281-297. doi:10.1177/0014402916667586

- Karlsen, B., Madden, R., & Gardner, E. F. (1976). The Stanford Diagnostic Reading Test. New York, NY: Harcourt Brace Jovanovich.
- Kauffman, J. M., & Badar, J. (2013). How we might make special education for students with emotional or behavioral disorders less stigmatizing. *Behavioral Disorders*, 39(1), 16-27. doi:10.1177/019874291303900103
- Kauffman, J. M., & Badar, J. (2014). Instruction, not inclusion, should be the central issue in special education: An alternative view from the USA. *Journal of International Special Needs Education*, 17(1), 13-20. doi:10.9782/2159-4341-17.1.13
- Keefe, E. B., & Copeland, S. R. (2011). What is literacy? The power of a definition. *Research & Practice for Persons with Severe Disabilities*, 36(3-4), 92-99.
 Retrieved from https://www.nps.sagepub.com/content/36/3-4/92.abstract/
- Keller-Margulis, M., Mercer, S. H., & Thomas, E. L. (2015). Generalizability theory reliability of written expression curriculum-based measurement in universal screening. *American Psychological Association: School of Psychology Quarterly*, 31(3), 383-392. doi:http://dx.doi.org/10.1037/spq0000126
- Kennedy, M. J., & Ihle, F. M. (2012). The old man and the sea: Navigating the Gulf between special educators and the content area classroom. *Learning Disabilities Research & Practice*, 27(1), 44-54. doi:10.1111/j.1540-5826.2011.00349.x
- Kirschner, P. A., Sweller, J., & Clark, R. E. (2006). Why minimal guidance during instruction does not work: An analysis of the failure of constructivist, discovery,

problem-based, experiential, and inquiry-based teaching. *Educational Psychologist*, *41*(2), 75-86. doi:10.1207/s15326985ep4102_1

- Kiuhara, S. A., Graham, S., & Hawken, L. S. (2009). Teaching writing to high school students: A national survey. *Journal of Educational Psychology*, *101*(1), 136-160. doi:10.1037/a0013097
- Kiuhara, S. A., O'Neil, R. E., Hawken, L. S., & Graham, S. (2012). The effectiveness of teaching 10th-grade students STOP, AIMS, and DARE for planning and drafting persuasive text. *Exceptional Children*, 78(3), 335-355. doi:10.1177/001440291207800305
- Kohl, F. L., McLaughlin, M. J., & Nagle, K. (2006). Alternative achievement standards and assessments: A descriptive investigation of 16 states. *Council for Exceptional Children*, 73(1), 107-123. doi:10.1177/001440290607300106
- Laureate Education. (2017). *Consent forms, letter of cooperation, confidentiality agreement, and information and invitation letter to school principal.* Retrieved from https://www.waldenu.edu/
- Lefoe, G. E., Parrish, D. R., Keevers, L. M., Ryan, Y., & McKenzie, J. (2013). A CLASS Act: The teaching team approach to subject coordination. *Journal of University Teaching & Learning Practice*, 10(3), 1-14. Retrieved from https://www.ro.uow.edu.au/jutlp/vol10/iss3/8/
- Ludlow, B. L., Dieker, L. A., & Powell, S. (2014). How to review a manuscript for teaching exceptional children. *Teaching Exceptional Children*, 46(6), 213-218. doi:10.1177/0040059914538412/

- MacArthur, C. A., & Graham, S. (1987). Learning disabled students' composing under three methods of text production: Handwriting, word processing, and dictation. *The Journal of Special Education*, 21(3), 22-42. doi:10.1177/002246698702100304
- Marston, D., & Magnusson, D. (1985). Implementing curriculum-based measurement in special and regular education settings. *Exceptional Children*, 52(3), 266-276. doi:10.1177/001440298505200307
- Martinussen, R., & Major, A. (2011). Working memory weaknesses in students with ADHD: implications for instruction. *Theory Into Practice*, 50(1), 68-75. doi:10.180/00405841.2011.534943
- Mason, L. H., Harris, K. R., & Graham, S. (2011). Self-regulated strategy development for students with writing difficulties. *Theory Into Practice*, 50(1), 20-27. doi:10.1080/00405841.2011.534922
- Mayer, R. E. (2004). Should there be a three-strikes rule against pure discovery learning?: The Case for Guided Methods of Instruction. *American Psychologist*, 59(1), 14-19. doi:10.10370003-066X.59.1.14
- McClure, E. (2016). Predictable charts: An effective strategy to engage and impact learners. *The Reading Teacher*, 69(5), 505-508. doi:10.1002/trtr.2016.69.issue-5/issuetoc
- McLaughlin, M., & Overturf, B. J. (2012). The Common Core: Insight into the K-5 standards. *The Reading Teacher*, 66(2), 153-164. doi:10.1002/TRTR.01115

- Meltzer, L., & Krishnan, K. (2007). *Executive function difficulties and learning disabilities: Understandings and misunderstandings*. In L. Meltzer (Ed.).
 Executive function in education: From theory to practice. (pp. 216-236). New York, NY: Guilford Press.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco, CA: Jossey-Bass.
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco, CA: Jossey-Bass.
- Nierengarten, G. (2013). Supporting co-teaching teams in high schools: Twenty research based practices. *American Secondary Education*, 42(1), 73-83. Retrieved from https://www.ashland.edu/coe/aboutcollege/american-secondary-education-journal/
- Ozguc, C. S., & Cavkaytar, A. (2014). Teacher use of instructional technology in a special education school for students with intellectual disabilities: A case study. *Turkish Online Journal of Qualitative Inquiry*, *5*(1), 51-65. doi:10.17569/tojqi.14394
- Patton, K. L. S., Reschly, A. L., & Appleton, J. (2014). Curriculum-based measurement as a predictor of performance on a state assessment: Diagnostic efficiency of local norms. *Educational Assessment*, 19(4), 284-301.

doi:10.1080/10627197.2014.964117

Pisha, B., & Coyne, P. (2001). Smart from the start: The promise of universal design for learning. *Remedial & Special Education*, 22(4), 197-203. doi:10.1177/074193250102200402

- Pressley, M., Rankin, J., & Yokoi, L. (1996). A survey of instructional practices of primary teachers nominated as effective in promoting literacy. *The Elementary School Journal*, 96(4), 363-384. doi:10.1086/461834
- Price, J. R., & Jackson, S. C. (2015). Procedures for obtaining and analyzing written samples of school-age children and adolescents. *Language, Speech, and Hearing Services in Schools, 46*(4), 277-293. doi:10.1044/2015_LSHSS-14-0057
- Ramos, K. (2014). Teaching adolescents ELs to write academic-style persuasive essays. *International Reading Association*, 57(8), 655-665. doi:10.1002/jaal.303
- Regan, K. S., Evmenova, A. S., Kurz, L. A., Hughes, M. D., Sacco, D., Ahn, S. Y., MacVittie, N., Good, K., Boykin, A., Schwartzer, J., & Chirinos, D. S. (2016).
 Researchers apply lesson study: A cycle of lesson planning, implementation, and revision. *The Division for Learning Disabilities of the Council for Exceptional Children, 31*(2), 113-122. doi:10.1111/1drp.12101
- Rijlaarsdam, G., Van den Bergh, H., Couzijn, M., Janssen, T., Braaksma, M., Tillema,
 M., Van Steendam, E., & Raedts, M. *Writing*. In Harris, Graham, & Urdan. APA
 educational psychology handbook: Vol. 3. Application to learning and teaching.
 (pp. 189-227). Washington, DC: American Psychology Association.
 doi:10.1037/13275-009
- Ritchey, K. D., Coker Jr., D. L., & Jackson, A. F. (2015). The relationship between early elementary teachers' instructional practices and theoretical orientations and students' growth in writing. *Reading & Writing*, 28(9), 1333-1354.
 doi:http://dx.doi.org/10.1007/s11145-015-9573-0

- Ryan, R. (2014). Peace and conflict review. *Peace Review: A Journal of Social Justice*, 26(4), 510-513. doi:10.1080/10402659.2014.972249
- Shinn, M. R. (2002). Best practices in using curriculum-based measurement in a problem-solving model. *Best Practices in School Psychology*, 4(1), 671-697. Retrieved from https://www.psycnet.apa.org/psycinfo/2006-03715-044/
- Simmons, D. C., Fuchs, L. S., Fuchs, D., Mathes, P., & Hodge, J. P. (1995). Effects of explicit teaching and peer tutoring on the reading achievement of learningdisabled and low performing students in regular classrooms. *Elementary School Journal*, 95(5), 387-408. doi:10.1086/461851
- Simonsen, B., MacSuga-Gage, A. S., Briere III, D. E., Freeman, J., Myers, D., Scott, T. M., & Sugai, G. (2014). Multitiered support framework for teachers' classroommanagement practices: Overview and case study of building the triangle for teachers. *Journal of Positive Behavior Interventions*, *16*(3), 179-190. doi:10.1177/1098300713484062
- Smith, F. (1982). Writing and the writer. New York, NY: Holt, Rinehart and Winston.
- Soine, K. M., & Lumpe, A. (2013). Measuring characteristics of teacher professional development. *Teacher Education*, 18(3), 303-333. doi:10.1080/13664530.2014.911775
- Spear-Swerling, L., & Zibulsky, J. (2014). Making time for literacy: Teacher knowledge and time allocation in instructional planning. *Reading & Writing*, 27(8), 1353-1378. doi:10.1007/s11145-013-9491-y

- Spooner, F., McKissick, B. R., & Knight, V. F. (2017). Establishing the state of affairs for evidence-based practices in students with severe disabilities. *Research & Practice for Persons with Severe Disabilities, 42*(1), 8-18. doi:10.1177/1540796916684896
- Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, CA: SAGE Publications.
- Stecker, P. M., Fuchs, L. S., & Fuchs, D. (2005). Using curriculum-based measurement to improve student achievement: Review of research. *Psychology in the Schools*, 42(8), 795-819. doi:10.1002/pits.20113
- Stoicovy, C. E., Fee, R., & Fee, J. (2012). Culturally responsive instruction leaves no child behind: The story of Juan, a Pacific Island special needs student. *International Journal of Multicultural Education*, 14(1), 1-19.
 doi:10.18251/ijme.v14i1.492
- Suri, H. (2011). Purposeful sampling in qualitative research synthesis. *Qualitative Research Journal*, 11(2), 63-75. Retrieved from https://hdl.handle.net/10536/DRO/DU:30064369/
- Swanson, H. L. (2001). Searching for the best model for instructing students with learning disabilities. *Focus on Exceptional Children*, 34(2), 1-14. Retrieved from https://www.highbeam.com/publications/focus-on-exceptional-children-p106157/
- Thuneberg, H., Hautamaki, J., Ahtiainen, R., Lintuvuori, M., Vainikainen, P., & Hilasvuori, T. (2014). Conceptual change in adopting the nationwide special

educational strategy in Finland. *Journal of Educational Change*, *15*(1), 37-56. doi:10.1007/s10833-013-9213-x

- Tindal, G., & Hasbrouck, J. (1991). Analyzing student writing to develop instructional strategies. *Learning Disabilities Research & Practice*, 6(4), 237-245. Retrieved from https://www.eric.ed.gov/?id=EJ437763/
- Toronto District School Board. (2017). *Course charts*. Retrieved from https://www.tdsb.on.ca/
- Toronto District School Board Choices. (2011-2012). Secondary School Course Selection and Planning Guide. Toronto: Toronto District School Board.
- Troia, G. A., & Olinghouse, N. G. (2013). The common core state standards and evidence
 Based educational practices: The case of writing. *School Psychology Review*,
 42(3), 343-357. Retrieved from https://naspjournals.org/
- Troia, G. A., & Graham, S. (2016). Common core writing and language standards and aligned state assessments: A national survey of teacher beliefs and attitudes.
 Reading & Writing, 29(9), 1719-1743. doi:10.1007/s11145-016-9650-z
- Utley, C. A. (2011). A psychometric investigation of the multicultural and special education survey: An exploratory factor analysis. *Learning Disabilities: A Contemporary Journal, 9*(1), 47-70. Retrieved from https://www.eric.ed.gov/?id=EJ925534/
- Vuran, S. (2014). Stories about children with disabilities: The writing process and the opinions of the storywriters. *Eurasian Journal of Educational Research*, 55, 137-158. doi:10.14689/ejer.2014.55.9

- Wall, H. (2008). Interactive writing beyond the primary grades. *International Reading Association*, 62(2), 149-152. Retrieved from https://www.jstor.org/stable/20203095/
- Warnock, B. (2005). Special schools or not? *Educational Review*, 19(1), 13-17. Retrieved from

https://web.b.ebscohost.com.ezp.waldenulibrary.org/ehost/pdfviewer/pdfviewer?v id=4&sid=c1ae5089-ab52-4e6a-88a1-0299a86352d0%40sessionmgr103/

- Weiland, I. S., & Morrison, J. A. (2013). The integration of environmental education into two elementary preservice science methods courses: A content-based and a method-based approach. *Journal of Science Teacher Education*, 24(6), 1023-1047. doi:10.1007/s10972-013-9336-1
- Weissenburger, J. W. (2003). Comparing the technical adequacy of CBM in written expression across grade levels (Doctoral dissertation). Retrieved from ProQuest Dissertations Publishing. (3078031)
- Wesson, C., Deno, S., Mirkin, P., Maruyama, G., Skiba, R., King, R., & Sevcik, B.
 (1989). A causal analysis of the relationships among ongoing curriculum-based measurement and evaluation, the structure of instruction, and student achievement. *Journal of Special Education*, 22(3), 330-343.
 doi:10.1177/002246698802200304
- Yang, D., Richardson, J. C., French, B. F., & Lehman, J. D. (2011). The development of a content analysis model for assessing students' cognitive learning in

asynchronous online discussions. *Education Technology Research & Development*, *59*(1), 43-70. doi:10.1007/s11423-010-9166-1

- Yazan, B. (2015). Three approaches to case study methods in education: Yin, Merriam, and Stake. *The Qualitative Report*, 20(2), 134-152. Retrieved from https://nsuworks.nova.edu/tqr/vol20/iss2/12/
- Yell, M. L., Shriner, J. G., & Katsiyannis, A. (2006). Individuals with disabilities education improvement act of 2004 and IDEA regulations of 2006: Implications for educators, administrators, and teacher trainers. *Focus on Exceptional Children, 39*(1), 1-24. Retrieved from https://www.eric.ed.gov/?id=EJ754722/
- Yin, R. K. (2002). *Case study research: Design and methods*. Thousand Oaks, CA: SAGE Publications.

Appendix A: The Project

Strategies and Assessments to Support Special Education Students' Writing the Literacy

Test

White Paper Angelo Maniccia June 19, 2018

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Background

Provincial Level

Students with learning disabilities in both general and special education (SPED) classes are performing poorly on the Ontario Secondary School Literacy Test (OSSLT) which is a common problem, and some educators may not know how to teach their students. Educators need to deal with students who struggle to learn to write, and must provide intensive, direct and explicit instruction to modify and adapt to their pupils' educational needs to support best teaching practice (Archer & Hughes, 2011). The number of SPED students failing the OSSLT provincially is 48% compared to the General Student Body (GSB) at 19% (EQAO; 2017).

Local Level

SPED students in the district fail the OSSLT more frequently than non-SPED students, as evidenced by the 2015, 2016, and 2017 data from the Education Quality Accountability Office (EQAO; See Table 1). In this study of four schools in a local district, some educators may not have the necessary strategies or skills to provide students with essential knowledge in literacy. Educators reported that they often feel they do not have the proper training skills to teach students in writing because they did not receive adequate and effective pre- and in-service training in the selection and use of evidence-based writing assessment and instructional strategies (Graham, Harris, Bartlett, Popadopoulou, & Santoro, 2016).

According to the EQAO (2017), 48% (n = 1,204) of SPED students at the Toronto District School Board (TDSB) in Toronto failed to pass the OSSLT as compared to 19% (n = 2,742) for the general student body. Substantially more SPED students failed the OSSLT in 10th grade which is a requirement to graduate from high school. Students are first eligible to take the OSSLT in Grade 10 which consisted of multiple choice, and short and long written answers. Those students that do not pass on the first attempt must rewrite the entire OSSLT in subsequent years. In 2016, 48% (n = 1,198) of SPED students at the TDSB failed to pass the OSSLT as compared to 19% (n = 2,826) for the general student body. In 2015, the comparison was similar, with 48% (n = 1,218) of SPED students at the TDSB failed to pass the OSSLT versus 18% (n = 2,696) in the general student body. This study sought to highlight the most effective teaching strategies in writing and assessment for special needs students in order to pass the OSSLT. This study was grounded in cognitive-behavioral theory to explain the nature of the problem using best practices by educators.

Table 1

Toronto District School Board 10th Grade Special Education (SPED) and General Student Body (GSB) Educational Quality Accountability Office Ontario Secondary School Literacy Test Failure Rates

Year	Total SPED Tested	SPED Failed	Total GSB Test	GSB Failed
2015	2,541	48% (<i>n</i> = 1,218)	14,690	18% (<i>n</i> = 2,696)
2016	2,484	48% (<i>n</i> = 1,198)	14,943	19% (<i>n</i> = 2,826)
2017	2,512	48% (<i>n</i> = 1,204)	14,602	19% (<i>n</i> = 2,742)

Note. Data retrieved from the Education Quality Accountability Office (2017)

Summary of Findings

There were four thematic findings from the qualitative data that answered the first three research questions and the descriptive statistical findings answered the fourth research question. For the first research question, teacher participants talked about their experiences as Grade 10 locally-developed teachers. For all participants, they experienced challenges in getting students to attend class and focus on their coursework. They modified their teaching strategies to accommodate their students' needs in several ways. They provided their students with extra time to submit an assignment, opportunities to redo assignments, breaks throughout their class time, and transcribing options for written assignments. Despite these various accommodations, teacher participants did not speak to whether they perceived an improvement in their SPED students' OSSLT writing skills.

The second research question asked about the differences and similarities in teacher's perceptions of SPED students taking the OSSLT at high-performing and lowperforming schools. Unanimously, all four teacher participants talked about how their SPED students were not adequately prepared to take the OSSLT. Teacher participants noted their students struggled with completing assignments in the classroom with the accommodations and modifications, which made educators, believe that in the OSSLT testing environment they would not succeed. Several participants talked about how their students would not benefit from taking the OSSLT because it was grade levels beyond their performance ability. All four teacher participants talked about how they did not feel adequately prepared to teach SPED students the skills they needed to pass the OSSLT.

The third research question talked about the similarities and differences in assessment and teaching practices between higher-performing schools and lowerperforming schools regarding preparing SPED students to take the OSSLT. While teacher participants did not feel their students were adequately prepared for the OSSLT, teachers utilized various assessment, teaching, and writing techniques to help prepare their students for the OSSLT. Every teacher used the assessment technique of rubrics and checklists in their SPED classrooms. Three (75%) out of four teachers, noted descriptive feedback as a useful assessment technique, with Teacher 4 noting the use of student generated Success Criteria. Two (50%) out of four teachers identified editing and reviewing as useful assessment techniques, one from a higher-performing school and the other from a lower-performing school. Based on the four interviews, teachers from higher-performing schools and lower-performing schools used similar assessment techniques.

For useful teaching techniques, organizing thoughts as a pre-writing activity was the only technique that emerged across all four participants. Three (75%) out of four teachers reported using both direct instruction and explicit instruction techniques in their Grade 10 locally-developed classrooms. Direct instruction techniques included modeling and giving examples to students, whereas explicit instruction techniques included reading worksheet instructions or giving step-by-step directions to students. Three (75%) teachers mentioned the use of grammar and vocabulary lessons in their classrooms. While there were variations between teaching strategies across all four teacher participants, there were clear similarities between teachers from higher-performing schools and lower-performing schools.

All four teacher participants used journal responses as a useful writing technique in their Grade 10 locally-developed classrooms. They spoke about how journal responses merged personal narrative with summary, which was valuable in teaching students how to support an opinion with evidence from the test. Three (75%) participants mentioned that journal responses and book reports helped students identify how writing for different audiences and with different purposes changes the way they needed to write. To those three teachers, it was a practical real-world lesson their SPED students needed to learn before graduating from school. Three (75%) teachers talked specifically about supporting opinions with evidence and the value of the 5-paragraph essay for their SPED students. For these participants, the 5-paragraph essay was an effective way for SPED students to demonstrate their organizational skills in writing. Across all four teachers, they used similar writing techniques to help prepare their SPED students for the OSSLT.

The fourth research question asked about the mean, median, and standard deviation of students' journal responses to a probe compared to the CBM standard. I presented these values based on the school in the subsection of Student Journal Responses. The student journal responses data is skewed for School 1 in Correct Word Sequences (CWS), Words Spelled Correctly (WSC) and Total Words Written (TWW). The results showed that students above the median value have higher than expected performance. School 2 performed as expected. School 3 and 4 performed at a lower level than expected than School 2. School 4 had a wide range of student performances, which included very poor performances as well as high performances relative to the mean.

The sample populations between the four schools are not fixed, therefore, a comparison of the median between the four schools is not informative. Between Schools

2, 3 and 4, there is an increase in standard deviation for CWS. Standard deviations increased as a function of school performance. The analysis of the standard deviations implies a relationship between school performances and standard deviations across measured journal responses; that is standard deviations increased as school performance decreased. Due to the nature of the student journal response testing, a comparison of the standard deviations between the four schools was not as informative when compared to official OSSLT reports from each of the four schools. As with any study, the results are dependent on sample size; for this case study, the sample size of four participants yielded enough data to suggest some useful answers to the research questions. Nonetheless, a larger sample of student journal responses may have generated more results regarding student performance in the three areas tested.

Based on the analysis over the last 3 years of School 1 OSSLT average (mean) scores, 41% of SPED students failed as compared to 27% of the general student body. There are a higher percentage of SPED students failing compared to the general student body, 14% difference. School 2 OSSLT average (mean) scores showed that 69% of SPED students failed as compared to 32% of the general student body. Once again, there are a higher percentage of SPED students failing compared to the general student body, 37% difference.

School 3 OSSLT average (mean) scores showed that 77% of SPED students failed as compared to 76% of the general student body. School 4 OSSLT average (mean) scores showed that 92% of SPED students failed as compared to 92% of the general student body. For the two low-performing schools, the difference between the SPED students failing compared to the general student body is significant, as both SPED and the general student body has high failure rates. From the average (mean) SPED OSSLT scores, I was able to rank the high- and low-performing schools, which showed that Schools 1 and 2 are the higher-performing schools, and Schools 3 and 4 are the lowerperforming schools based on the failure rates.

Review of the Literature

Conceptual Framework

The effective instructional practices conceptual framework of my study was based on cognitive-behavioral theory. According to Graham and Harris (1989), cognitivebehavioral theorists have proposed that there are three major components of effective instruction including strategies, knowledge about the use and significance of those strategies, and self-regulation of strategic knowledge. The research questions require the examination of knowledge, application, and significance of teaching strategies and assessment. Teacher self-regulation comes into play through interviews, observations, and CBM.

The study is grounded on the principles of effective instruction as described by noted learning disability researchers and instructional design experts, Archer and Hughes (2011). Archer and Hughes' work and dissemination of research-validated methods of effective instruction complements the cognitive-behavioral process for writing as described by Graham and Harris (1989). The cognitive-behavioral based principles of effective teaching included the following: have teachers optimize engaged time and/or time on task, promote high levels of success, increase content coverage, have students

spend more time in instructional groups, scaffold instruction, and address different forms of knowledge to pass the OSSLT in reading and writing skills. Due to the limited classroom time, it is essential that teachers engage time to its maximum effect with behaviors on writing. This would include educators staying on topic and avoiding digressions. Harris and Graham (2013) identified five areas that were challenging for learning disability (LD) students in writing which included content, organization, setting goals, application and revision of text due to a lack of evidence-based effective instruction, and time restrictions with explicit teaching in the classroom.

According to Simmons et al. (1995), and Swanson (2001), explicit instructional behaviors included (a) focusing instruction on important content; (b) sequencing skills in a logical manner; (c) breaking down complex skills and strategies of instruction into smaller units; (d) designing organized and concentrated lessons; (e) starting lessons with a clear statement of goals and expectations; (f) reviewing important skills and knowledge before starting instruction; (g) modeling and providing step-by-step demonstrations of lessons; (h) using clear and comprehensive language; (i) providing an acceptable variation of examples and non-examples; (j) giving guided and supportive practice; (k) requiring continual responses; (l) closely observing student behavior and production; (m) providing instant and corrective feedback; (n) delivering a lesson at an active speed; (o) assisting students to structure knowledge; and (p) giving a delivery of cumulative application. The explicit instructional behaviors listed above tied into the intersection between principles of effective teaching and effective teaching strategies for students who struggle to write. According to Mason et al. (2011), effective instruction in writing needs to be modeled, memorized, supported, and independently practiced which is adopted in SRSD. Coyne et al. (2011) extended this research-validated evidence further by showing how effective instructional methods aimed at developing mastery of skills applied and work with SPED students (Simmons et al., 1995). Coyne et al. (2011) acknowledged that writing is a challenge for SPED students due to the complex and inter-related elements of social interaction, and cognitive processes which needs more concrete assistance.

Knowing these strategies of the writing process, the principles of effective instruction supported and assessed student writing. This included planning, drafting, editing/revising, and publishing (Coyne et al., 2011). They further discussed effective instructional practices that related to process writing, text structure and collaboration to evaluate students' success rate in writing. Coyne et al.'s (2011) authoritative text on effective teaching of diverse learners complements Archer and Hughes (2011) work because they connected effective teaching to writing and explicit instruction, and the research fits nicely with the theoretical framework for students who struggle academically.

Writing Assessment Tools: Not Adequately Prepared for OSSLT

The review of writing assessment tool broadly showed the following CBM writing skills; effectiveness for early intervention, cognitive development, probes, collective journal writing, and finding approaches to measure at-risk students' progress. Jung, McMaster and delMas (2017) stated that CBM is a reliable and beneficial writing assessment tool that measures students writing progress throughout their schooling. The

authors suggested intervention by small groups or individualized instruction are both effective strategies to improve overall writing performance. According to Carter (2011), reciprocal teaching and scaffolding has proven to be beneficial with students in literacy by modeling through explicit teaching and feedback. This cognitive approach helps to monitor student skills learned by clarifying expository text (Carter, 2011). When conducting the CBM probe for my data collection, the students' journal writing was measured through narrative text.

By interviewing and observing teachers' effective teaching strategies and assessments and measuring students' journal writing using means and standard deviations in my research, I was able to recommend strategies that supported and improved student writing. Through my data collection and analysis of interviews, observations, and Curriculum-Based measurements (CBM) by Statistics Solutions, there was always a potential of assessment error. Keller-Margulis, Mercer and Thomas (2015) suggested that CBM student writing samples have significant differences from fall to spring in achievement levels, and CBM is used for measuring the reliability of student growth allowing for some error in measurement. Ritchey, Coker, and Jackson (2015) added that CBM is a reliable and valid tool that gauges writing over a period of time.

Johnston and Goatley (2014) noted that literacy instruction in combination with best teaching practice for student writing was based on teacher interviews and classroom observations. The authors worked collaboratively with teachers and determined that writing processes were used to improve teaching strategies and student performance. I worked collaboratively with teachers when interviewing and observing their classes, and by having educators administer the CBM probe and collecting students' journal writing. In support of this position, Harris, Graham, Friedlander, and Laud (2013), evidence-based writing instruction through planning, content, revising, editing, modeling, flexibility, collaboration, resources, coaching and feedback had positive outcomes on reading. The authors stated that explicit instruction, SRSD, and interactive learning have an impact on writing development. Categories included story writing which I used as a CBM writing probe. According to Christ and Ardoin (2015), CBM helps to screen and monitor progress but there is still more to investigate. The authors suggested that oral reading and other forms of written expression should be incorporated to support literacy. In my teacher interviews, I was looking for feedback from educators on teaching strategies and assessments.

The new theme and subtheme of being not adequately prepared for OSSLT emerged from the data collection and analysis falling under the theme writing assessment tools that presented OSSLT having limited evaluative applications to general and SPED students. According to Crank (2013), high school students do not write enough and are not prepared in writing, and there is a need for program improvement. Crank stated that 47% of educators did not give a multi-paragraph exercise at least once monthly and more likely gave students a five-paragraph essay. The author indicated teacher participants felt that there were time limitations to prepare students for standardized testing in writing. Crank suggested journal entries are the most accepted writing activity for high school students and encouraged by teachers to prep students for testing. The new theme and subthemes of useful techniques for assessment, teaching and writing from the data collection and analysis developed from the theme writing assessment tools showed different methods to evaluate SPED students. Price and Jackson (2015) stated that student writing is below grade level and criterion-referenced assessments are effective for pupil learning.

Writing Needs for Special Education: Teacher Modification and Challenges

To summarize writing needs for SPED, the articles addressed SPED policies, assessment practices, and student identification. According to Canella-Malone, Konrad and Pennington (2015), teachers need to be prepared with effective strategies to counter students' intellectual disabilities in writing through explicit instruction, feedback, scribing and assistive technology. Davis and Florian (2004) used a case study to review teaching strategies to recommend future direction in educational policy for all grade levels applying to educators and SPED students. Like my case study, I looked at effective teaching and assessment practices that would direct educational policy in SPED to support educators and their students. In addition, the authors indicated that cognitive learning and communication are essential to students with learning disabilities. Comparatively, Graham (2015) discussed how policy for teaching practices and curriculum was developed for SPED students through the perception of high school educators, and the increase of SPED students being identified in the school system. Themes emerged from the 90-minute teacher open-ended interviews in this study which included awareness and support systems for students with learning disabilities (LD). From my research study, I was able to obtain perceptions from teacher interviews to

direct policy recommendations of effective teaching and assessment strategies, and professional development.

In my research study, I interviewed teachers and obtained their perceptions on effective teaching strategies and assessments where new themes were found for decisionmaking and recommendations of educational policy for SPED. The policy recommendation with detail genre is appropriate for this study because data information was used to gather, analyze and extrapolate from. The approach from the conceptual framework was based on the effective teaching strategies and assessment for special needs students from the theorists which included Graham and Harris (1989), Archer and Hughes (2011), Simmons et al. (1995) and Swanson (2001), and Coyne et al. (2011). The information incorporated teacher interview questions and observations. Based on my results, this supports these theories.

The new theme of teacher modification surfaced from the data collection and analysis under the theme of writing needs for SPED, demonstrated that certain actions helped SPED students learn how to write. Casale-Giannola (2012) collected data on open-ended teacher surveys, classroom observations and consultations of effective strategies for inclusive SPED students' settings. Vuran (2014) indicated that educators should promote interactions among students including pupils with disabilities. The author recommended finding appropriate and relevant literature for SPED students. According to Casale-Giannola (2012), meaningful teacher student connections, real-life basic skills to content, teaching strategies and assessment, active learning, co-teaching, collaboration and planning time between educators strengthened inclusive high school classes. Teacher coaching, knowledge and modification of IEPs, administrative support with student behavior and class sizes also support learning. The author suggested that exit cards with questions to the lesson plan goals is a strategy that helps student identification, learning needs and instructional decision making for teachers.

The new theme of challenges from the data collection and analysis under the theme of writing needs for SPED presented that educators need to address obstacles that will hinder students in writing and teachers reaching their instructional goals. According to Kennedy and Ihle (2012), students with LD may not excel like their peers unless systematic, explicit, direct and scaffold instruction are implemented by educators in the classroom. The authors pointed out LD students have difficulty with word recognition, vocabulary and comprehension and should be clearly instructed through the learning process. Graham and Harris (2013) suggested that general and SPED educators that teach LD students should have knowledge of writing development, create a writing environment and implement evidence-based writing practices to support at-risk students. **Instructional Strategies for Writing: Useful Techniques for Assessment, Teaching and Writing**

The review of instructional strategies for writing articles looked at improving the level of SPED students writing skills, sentence structure, comprehension, and reading. McLaughlin and Overturf (2012) discussed how educators need to work together to plan instruction and monitor student progress in writing by building new content knowledge and thematic connections through professional development collaboration. The Common Core State Standards is used to develop partnerships dealing with teacher's best practices which included analysis, reflection and research. Furthermore, the International Reading Association (2012) stated that formative assessment strategies included teacher conversations and class observations, and written responses from students' journals to measure student outcomes. I used this data collection approach in my methodology. The authors suggested that educators modify state standards so students can comprehend the text and have pupils' needs met.

Allington (2013) suggested that explicit teaching in literacy is not consistent in research and that educators are not communicating how they are delivering this instruction among themselves. The author pointed out that reading comprehension and phonemic recognition for struggling learners is developed through writing. While conducting this research, I determined if this approach was being used by teachers that taught Grade 10 locally-developed English classes.

Graham and Sandmel (2011) stated that the process of writing is the most widely used and effective method to teach writing and improves the level of students writing. Another effective writing method to support students included explicit teaching strategies for planning, revising, collaboration, and sentence structure (Graham et al., 2011). Graham and Hebert (2011) examined the effectiveness of writing as an instrument for raising students' literacy through content taught in the classroom and student comprehension. The authors suggested that explicit teaching in text needs reviewing, reexamining, connecting, critiquing, constructing, analyzing, and relevancy.

The new theme of useful techniques for assessment, for teaching, and for writing surfaced from the data collection and analysis under the theme of instructional strategies for writing, demonstrated that certain approaches support SPED students learning on how to write. According to Kirschner, Sweller and Clark (2006), direct instructional guidance produced more effective cognitive learning in long term retention and problem-solving skills. The authors suggested that content can be taught through scaffolding by teachers modeling and identifying the lesson and encouraging students to work collaboratively. While interviewing the teachers and observing classrooms, I determined if any of these instructional strategies were being used in the Grade 10 locally-developed English classes.

Professional Development for Teaching Writing: Not Adequately Prepared to Teach

The articles that I reviewed on professional development for teaching writing are for educators to work on policies to improve teaching skills with SPED students. This included observations, formal instruction, and assessment. Lefoe, Parrish, Keevers, Ryan and McKenzie (2013) discussed policy to improve teaching practice through professional development of subject areas, and themes that re-occurred for need of planning and training workshops. Similar, to this study, I used my research results to share and network best practice policies and guidelines with educational leaders through meetings, resources and workshops. Comparatively, the Regan et al. (2016) case study indicated that collaboration of teachers revising and modifying lessons improved instruction for students in writing with learning disabilities. The authors suggested educators observe other teachers' classes and reflect on strategies used in the lesson which included explicit teaching. McClure (2016) suggested that teaching writing should be collaborative between educators to support students. The author recommended instructional strategies that were age-appropriate which included modeling through charts, discussion, and feedback. The data collection in my study observed SPED teachers' classes to determine what effective teaching strategies and assessments are being used in high- and lowperforming schools.

Bjorn, Mikko, Koponen, Fuchs, and Fuchs (2016) looked at policy on teacher individualized planning, collaboration of student placement, and modified instruction to support LD students that are required to write standardized testing using RTI through duration, content, and assessment. Professional development to teach student writing and problem-solving needs to be individualized and inclusive so that it will help build pupil confidence (Al-Srour & Al-Oweidi, 2016). When I conducted my teacher interviews, I was able to find out if there was collaboration amongst educators on effective teaching strategies and assessments to support SPED students writing on the OSSLT.

Thuneberg et al. (2014) showed that the white paper in this case study was developed through evidence of common trends used to improve teaching practices in SPED and resolve problems in assessment for students individual learning plans. The authors' policy recommended early intervention for pupils at different levels, teacher professional development on collaboration and evaluation techniques, and student accommodation. The utilization for educational change suggested by these researchers included perception, knowledge, and skills gained and applied. I used the collection of frequencies from this study to implement in my research project for teacher interviews and classroom observations' themes found. Also, the data collection and analysis of written documents idea was used for my interpretation of students' work.

The new theme and subtheme of being not adequately prepared to teach came from the data collection and analysis under the theme of professional development for teaching writing showing there is a general lack of resources for teachers to prepare SPED students for writing tests. According to Donne (2012), there is a significant lack of technology training for Kindergarten to grade 12 SPED teachers in educational preparation programs. Donne (2012) suggested that SPED students may benefit from software and online exercises that use voice recognition and enlarge text to support student learning accommodations and modifications in literacy through scaffolding instruction.

Overview of the Study

Purpose and Rationale

The purpose of this study was to provide educators with effective teaching practices in order to raise SPED students' level of competency in writing. As noted previously, many SPED students in the TDSB failed the OSSLT (EQAO; See Table 1). The magnitude of this issue justifies examining reasons and explanations teachers gave for students' poor performance on the OSSLT as it relates to the assessment and instruction of students who struggle to write effectively. This challenge is echoed by Soine and Lumpe (2013), teachers' perceptions of professional development and classroom observations determined the usage of effective teaching and assessment practices in writing to engage and improve student outcomes. Some students may require more intensive intervention or evidence-based practices to prepare them for the OSSLT.

In order to provide effective intervention using evidence-based instructional strategies, educators need support and professional development to better prepare students for high-stake tests. Teachers need a supportive work environment which includes coaching and feedback, planning time for students IEPs, and continual professional development for writing instruction (Nierengarten, 2013). Also, scaffolding can be beneficial to assess progress of an individual at each level of the process. Hamman, Lechtenberger, Griffin-Shirley, and Zhou (2013) stated cooperating educators used scaffolding that proved to be the most effective when collaborating with student teachers on their activity goals.

This rationale is to provide data that will help educators at the district to make better decisions on effective teaching strategies and assessment in writing for SPED students. I looked at schools offering locally-developed streamed English courses in Grade 10 over the past 3-years that included schools with the highest OSSLT passage rate for SPED students and ones that had the lowest OSSLT passage rate in order to help better understand the results of student scores. This study aimed to identify what factors may account for the similarities and differences in OSSLT outcomes. Initial exploratory interviews with educators at different high schools in the district helped reveal what research-based teaching strategies and methods for teaching literacy are being implemented. The examination was to conduct direct observations of what evidencebased, effective teaching strategies and/or methods teachers are implementing when working with SPED students who struggle with their writing skills, and review and score district 10th graders' journal writing samples using CBM. The ultimate goal of this qualitative case study was to provide information to the school board, administrators and other educators to help understand how to improve student writing skills and hopefully increase test scores across the school district.

Design

A qualitative case-study design was used in my research. A case study design explores a process or record of research in which detailed consideration is given to the development of a particular person, group or situation over a period of time (Creswell, 2012). Hancock and Algozzine (2011) defined case studies as possessing the following characteristics: (a) individuals or a group, particular situations; (b) time bounded; (c) exploratory; (d) in-depth and descriptive. In my research, a case study is the most appropriate method based on the literature review and research questions.

Merriam (1998) noted that qualitative research for a case study may contribute to social change by getting individuals descriptive perceptions and interpretations of a situation being studied. Yazan (2015) pointed out that Stake, Yin, and Merriam used interviews, observations, and archival records when collecting data for qualitative case study research. The approach I am taking with my study of the local problem aligns with and is based on the recommendation by Stake, Yin, and Merriam because I interviewed and observed teachers, and analyzed archived writing samples of students with specific learning disabilities.

Participants

The criteria I used to select voluntary participants were as follows: Grade 10 certified educators who teach locally-developed English classes for SPED students and are provincially qualified. Purposeful sampling was used to choose the participants. Also, Grade 10 locally-developed English students (CBM journal writing samples only from 1 writing probe/5 minutes to administer and 3 minutes to write). I coached teachers on the process of this activity. The student participants were grouped based on whether they attended a high or low performing OSSLT school, and taking the test for the first time in Grade 10. A pass was a score of 50 or above, and a fail was a score of 49 or below. This was measured by teacher interviews and observations, CBM, and OSSLT archival data. The schools mean scores on the OSSLT was categorized as highperforming and low-performing. High-performing schools were defined as having a range of 31-100% SPED students' scores on the OSSLT, and low-performing schools were defined as having a range of 0-23% SPED students' scores based on four local schools (EQAO; See Table 2). I looked at the difference between high-performing and low-performing schools.

Table 27

Four Local Schools at the Toronto District School Board 10th Grade Special Education (SPED) and General Student Body (GSB) Educational Quality Accountability Office Ontario Secondary School Literacy Test Failure Rates: Schools #1 and #2 High-Performing, and Schools #3 and #4 Low-Performing

Year	School #	Total SPED Tested	SPED Failed	Total GSB Tested	GSB Failed
2017	1	42	31% (<i>n</i> = 13)	208	17% (<i>n</i> = 35)
2016	1	14	57% (<i>n</i> = 8)	46	50% (<i>n</i> = 23)
2015	1	37	35% (<i>n</i> = 13)	207	15% (<i>n</i> = 31)
2017	2	63	70% (<i>n</i> = 44)	296	32% (<i>n</i> = 94)
2016	2	37	68% (<i>n</i> = 25)	226	31% (<i>n</i> = 70)
2015	2	40	70% (<i>n</i> = 28)	254	33% (<i>n</i> = 84)
2017	3	11	73% (<i>n</i> = 8)	11	73% (<i>n</i> = 8)
2016	3	12	83% (<i>n</i> = 10)	13	85% (<i>n</i> = 11)
2015	3	12	75% (<i>n</i> = 9)	14	71% (<i>n</i> = 10)
2017	4	1	100% (<i>n</i> = 1)	1	100% (<i>n</i> = 1)
2016	4	4	100% (<i>n</i> = 4)	4	100% (<i>n</i> = 4)
2015	4	4	75% (<i>n</i> = 3)	4	75% (<i>n</i> = 3)

Note. Data retrieved from the Education Quality Accountability Office (2017)

Research Questions

To answer the research questions, I used teacher interviews, classroom observation and checklists, student archival work, and OSSLT scores. My study addressed the potential reasons students with disabilities are not performing well on the OSSLT in writing. This research aimed to support and provide at-risk students with specially designed instruction.

Research Question 1: What are district teachers' perceptions and experiences of assessment and teaching strategies used with SPED students to improve their OSSLT writing skills?

Research Question 2: What are the differences and/or similarities in teachers' perceptions about SPED students taking the OSSLT in high- and low-performing schools?

Research Question 3: When it comes to preparing SPED students to take the OSSLT, what differences and/or similarities in assessment and teaching practices exist between higher-performing schools compared with lower-performing schools?

Research Question 4: What is the mean, median, and standard deviation of SPED students' writing skills, as measured by CBM assessment probe of samples in their writing journals?

Data Collection

Types of data sources that were used to address the proposed research questions are (a) OSSLT descriptive statistics related to student and school participant variables, which were provided off the EQAO website (EQAO; See Table 1); (b) teacher openended interviews on educators' perceptions of teaching strategies, which were audiotaped at the school and transcribed. The modified teacher interview questionnaire was based on an approach by Kiuhara, Graham, and Hawken (2009); (c) Classroom observations taking field notes and using a teacher-observation checklist protocol approach by Simmons et al. (1995); and (d) students' journals as they compared to CBM practices, and OSSLT scores (years 2015, 2016, 2017) were used to categorize high- and low-performing schools. I collected CBM writing journal narrative samples, 5 minutes to administer from point of instruction and 3 minutes to student completion. I coached teachers but not delivering the CBM writing probe to Grade 10 locally-developed English students. Students' names were redacted by teachers before submitting to researcher. Non-participating students' data were not included in this study. Early and Saidy (2014) and Ernest et al. (2011) supported the use of student journal writing samples to determine what types of effective instruction improved pupil success and test scores; and (e) descriptive statistical data related to CBM scoring of students writing journals.

Recommendations

The project genre is a *Policy Recommendations With Detail*, creating a white paper for educators who teach Grade 10 locally-developed English classes. The main goal is policy recommendations and modifications. The problem is that SPED students are not passing the OSSLT, and these findings showed that there is a need for effective teaching strategies and assessments which connects with the conceptual framework. The goal of this project is that more teachers use effective teaching strategies and assessments so that a higher number of students pass the OSSLT.

Recommendations for Practice and Future Research

Alternative Assessment Method to the OSSLT

There should be a standardized tool to assess SPED students. SPED educators need opportunities to network with other SPED teachers regarding assessment, teaching,

and writing. In RQ3, while teacher participants did not feel their students were adequately prepared for the OSSLT, teachers utilized various assessment, teaching, and writing techniques to help prepare their students for the literacy test.

Further Examination of Best Practices as They Relate to Outcomes

Teachers should be supported to make the curriculum relevant and practical to students' individualized learning needs. Doyle and Giangreco (2013) stated that curriculum needs to be more practical and diverse to meet students individualized learning goals and outcomes. Indeed, the evidence from RQ1, supports this recommendation: customized curriculum and approaches to meet students' challenges and needs improved the learning experience.

Further Professional Development on Those Best Practices

The district board administrators should provide release time for teachers to develop these assessment and instructional strategies and challenges that educators may employ with SPED students who are writing the OSSLT. Teachers can benefit from training in CBM to measure student's writing grade level. This would better prepare teachers to provide age-appropriate materials.

Further Research Opportunities Within the Board to Support Overall Improvement

Further research should be considered to investigate a larger sample of educators' perceptions from high- and low-performing schools. In RQ2, teacher participants noted their students struggled with completing assignments even with accommodations and modifications. This made educators believe that in the OSSLT testing environment they would not succeed.

Further Research to Identify Appropriate Testing Methods, Benchmarking, and Outcome Measurement

Research that can be explored from the data analysis, such as what transferable skills can lower-performing schools adopt from higher-performing schools to advance literacy. In RQ3, all teacher participants used journal responses as a useful writing technique in their grade 10 locally-developed classrooms. They spoke about how journal responses merged personal narrative with summary, which was valuable in teaching students how to support an opinion with evidence from the test. This illustrates a more appropriate way to test students.

A TDSB Force to Further Explore the Findings of This Study

Resources or online services created by literacy coaches or specialists to support teachers preparing SPED students on the OSSLT in writing would be beneficial. According to Cooper (2015), learning coaches with educational materials as a resource, has a positive effect on professional development for teachers and creates a partnership within the school. In RQ2, all teacher participants talked about how they did not feel adequately prepared to teach SPED students the skills they needed to pass the OSSLT. Literacy coaches and additional resources had, in the past, contributed to definitions of more clear objectives and deliverables.

Further Research on the Connection Between Poor Student Reading

Comprehension and Under-Developed Vocabulary

Peer tutoring or an educational staff member to support SPED students learning can be helpful. In RQ1, all teacher participants experienced challenges in getting students to focus on their coursework and attend class.

Functional Assessment of Academic Interactions to Determine What Triggers and Maintains Consequences for SPED Students' Behaviors

Peer tutoring or staff support SPED of students' learning can be helpful. The same evidence from RQ1 supports the recommendation as previously stated.

To address the problem, recommendations will be made to answer the research questions. The white paper will relate to effective strategies and assessments to support educators who teach at-risk students for the OSSLT in writing. Alternative solutions would be to provide teachers with tools that are evidence-based teaching strategies.

Conclusion

The findings of this study showed that there are effective strategies and assessments to improve OSSLT scores. This study investigated SPED students at both high- and low-performing schools, who took the OSSLT, and suggested improvements that could improve students' scores in writing. The study used information provided by the four participating teachers at these local schools through interviews, classroom observations, and student journal responses and OSSLT scores in literacy. The white paper will be accessible to support educators. The social change from this study could lead to educator modification, useful techniques in assessment, teaching and writing to address SPED student challenges on the standardized test. My goal is that this research benefits all educators, students and researchers.

These research questions are connected with the current literature review. The exploratory results for assessment and teaching strategies for SPED students to improve their writing skills on the OSSLT included the following: teachers should be encouraged to modify their techniques primarily by one-on-one instruction and also by strategies specific to the material taught. Extra time and independent work can be incorporated. The educators are challenged because SPED students have more barriers and obstacles in their academic and social lives. Some of the main challenges included inconsistent attendance and lack of student focus.

The exploratory results in the differences and/or similarities in teachers' perceptions about SPED students taking the OSSLT in high- and low-performing schools showed that students are not ready for the OSSLT and this test has a negative impact on most SPED students. The educators had different opinions on how to address the underlying issue, notably a standardized SPED test and a separate literacy course. Teachers are not adequately prepared to teach SPED students the OSSLT due to a lack of target courses available to these instructors. Additionally, support staff is recommended for SPED teachers.

The exploratory research results showed differences and/or similarities in assessment and teaching practices between higher-performing schools compared with lower schools. Preparing SPED students for the OSSLT included the following: teachers and students benefited from the use of rubrics and checklists as assessment tools, and most of these educators benefit from the use of descriptive feedback. Other beneficial strategies included direct instruction, modeling, classroom discussion, pre-writing and organizing thoughts techniques for the OSSLT. The educators differed in specific additional teaching techniques and additional assessment tools. Additional strategies which are beneficial included journal responses, the 5-paragraph essay and support opinion with evidence. The educators differ in specific additional writing techniques.

Based on the analysis that is applicable to this study, the benefits of teachers using this CBM assessment tool will help them determine SPED students' grade level in writing and assessing and evaluating students accordingly. This assessment tool should be used board-wide thrice in a school year as a diagnostic feedback for students' writing in the fall, winter and spring. Teachers can integrate different strategies using the CBM as a benchmark for students' grade level. Teachers can brainstorm to collaborate on ideas how to support these at-risk students.

Despite these differences across all four schools', each school shared similarities in the useful techniques for assessment, teaching, and writing. While the descriptive statistical data would indicate a clear separation between the techniques each school implemented, the qualitative findings indicate overlapping techniques across the participants.

To conclude, there are effective strategies and assessments to improve SPED student scores on the OSSLT from this research and to identify and make progress against students' learning disabilities. Kauffman and Badar (2013) stated special needs students are not properly identified, rather under-identified and that educators need to look at the differences of these pupils. These authors suggested the benefits and skills of relevant material can be provided through effective instruction and assessment. There are technologies that must be implemented to support these special needs students. These technologies must address the need to change policies which may eliminate the focus on inclusion and employ intensive interventions and instructional approaches in the school setting. General education does not benefit or meet the needs of SPED students because the curriculum is not specialized or individualized for these at-risk pupils (Kauffman & Badar, 2014).

There is a need to ensure that pre-service training for both SPED teachers and principals focus on these issues in terms of improving their understanding of evidencebased practices in assessment and instructional strategies. The research findings in this study showed that there is a need for effective teaching strategies and assessments because through my observations and what teachers reported demonstrated that assessment and writing instructions were not evidence-based practices in the profession. The research questions connected with the conceptual frameworks of cognitivebehavioral theory (Graham & Harris, 1989), cognitive-behavioral based principles of effective teaching (Archer & Hughes, 2011), explicit instructional behaviors (Simmons, Fuchs, Fuchs, Mathes & Hodge, 1995; Swanson, 2001), and principles of effective instruction (Coyne, Kame'enui & Carnine, 2011). There is a necessity for measurable superior instruction and best practices for formative and pupil progress monitoring. This research allows for educators to plan their time to engage students with learning disabilities who need the support rather than discover later which pupils are not passing the OSSLT.

References

- Allington, R. L. (2013). What really matters when working with struggling readers. *The Reading Teacher*, 66(7), 520-530. doi:10.1002/TRTR.1154
- Al-Srour, N. H., Al-Ali, S. F., & Al-Oweidi, A. (2016). The impact of teacher training on creative writing and problem-solving using futuristic scenarios for creative problem solving and creative problem solving programs. *Education*, *136*(4), 461-467. Retrieved from https://www.eric.ed.gov/?id=EJ1104171
- Archer, A. L., & Hughes, C. A. (2011). *Explicit and efficient teaching*. New York, NY: Guilford Publications.
- Arnold, S., & Reed, P. (2016). Reading assessments for students with ASD: A survey of summative reading assessments used in special educational schools in the UK. *Journal of British Journal of Special Education*, *43*(2), 122-141. doi:10.1111/1467-8578.12127
- Bjorn, P. M., Mikko, T. A., Koponen, T. K., Fuchs, L. S., & Fuchs, D. H. (2016). The many faces of special education within RTI frameworks in the United States and Finland. *Learning Disability Quarterly*, 39(1), 58-66. doi:10.1177/0731948715594787
- Canella-Malone, H. I., Konrad, M., & Pennington, R. C. (2015). Access! Teaching writing skills to students with intellectual disability. *Teaching Exceptional Children*, 47(5), 272-280. doi:10.1177/0040059915580032
- Carrish, S. (2005). Reviving an honors program with specialized sequence tracks. *Honors in Practice*, *1*, 63-77. Retrieved from https://digitalcommons.unl.edu/nchchip/30/

Carter, C. J. (2011). Lessons learned in dreamland: How a small urban charter school overcame start-up woes to increase reading scores 28 percent. *Schools: Studies in Education*, 8(2), 285-310. doi:10.1086/662116

Casale-Giannola, D. (2012). Comparing inclusion in the secondary vocational and academic classrooms: Strengths, needs, and recommendations. *American Secondary Education*, 40(2), 26-42. Retrieved from https://www.centreofexcellence.etsb.qc.ca/files/2015/11/inclusion.pdf/

- Christ, T. J., & Ardoin, S. P. (2015). Commentary on new metrics, measures, and uses for fluency data. *Reading & Writing*, 28(1), 151-157. doi:10.1007/s11145-014-9513-4
- Cooper, L. (2015). Partnering to facilitate teacher professional learning. *Antistasis*, 5(1), 24-27. Retrieved from

https://www.journals.lib.unb.ca/index.php/antistasis/article/viewFile/22857/26617

- Council, M. R., Cartledge, G., Green, D., Barber, M., & Gardner, R. (2016). Reducing risk through a supplementary reading intervention: A case study of first- and second-grade urban students. *Behavioral Disorders, 41*(4), 241-257. Retrieved from https://eric.ed.gov/?id=EJ1113091
- Coyne, M. D., Kame'enui, E. J., & Carnine, D. W. (2011). *Effective teaching strategies that accommodate diverse learners* (4th Ed.). Upper Saddle River, NJ: Pearson.

- Crank, V. (2013). From high school to college: Developing writing skills in the disciplines. *The WAC Journal*, 23(2012), 49-63. Retrieved from https://www.wac.colostate.edu/journal/vol23/crank.pdf/
- Creswell, J. W. (2012). Educational research: Planning, conducting, and evaluating quantitative and qualitative research (4th Ed.). Boston, MA: Pearson, Education, Inc.
- Davis, P., & Florian, L. (2004). Searching the literature on teaching strategies and approaches for pupils with special educational needs: knowledge production and synthesis. *Journal of Research in Special Educational Needs*, 4(3), 142-147. doi:10.1111/j.1471-3802.2004.00029.x
- Donne, V. (2012). Keyboard instruction for students with a disability. *The Clearing House*, 85(5), 201-206. doi:10.1080/00098655.2012.689784
- Doyle, M. B., & Giangreco, M. (2013). Guiding principles for including high school students with intellectual disabilities in general education classes. *American Secondary Education*, 42(1), 57-72. Retrieved from https://www.uvm.edu/~cdci/archives/mgiangre/ASEJ201342.pdf/
- Early, J. S., & Saidy, C. (2014). Uncovering substance: Teaching revision in high school classrooms. *International Reading Association*, 58(3), 209-218.
 doi:10.1002/jaal.333
- Education Quality Accountability Office (EQAO; 2017). *EQAO school district data*. Retrieved from

https://www.eqaoweb.eqao.com/eqaoweborgprofile/profile.aspx?_Mident=73&La ng=E/

- Ernest, J. M., Thompson, S. E., Heckaman, K. A., Hull, K., & Yates, J. (2011). Effects of social validity of differentiated instruction on student outcomes for special educators. *The Journal of International Association of Special Education, 12*(1), 33-41. Retrieved from https//www.iase.org/
- Graham, L. J. (2015). A little learning is a dangerous thing: Factors influencing the increased identification of special educational needs from the perspective of education policy makers and school practitioners. *International Journal of Disability, Development and Education, 62*(1), 116-132. doi:10.1080/1034912X.2014.955791
- Graham, S., & Harris, K. R. (1989). Components analysis of cognitive strategy instruction: Effects on learning disabled students' compositions and self-efficacy. *Journal of Educational Psychology*, *81*(3), 353-361. doi:10.1037/0022-0663.81.3.353
- Graham, S., & Harris, K. R. (2013). Common Core State Standards, writing, and students with LD: Recommendations. *Learning Disabilities Research & Practice*, 28(1), 28-37. doi:10.1111/ldrp.12004

Graham, S., Harris, K. R., Bartlett, B. J., Popadopoulou, E., & Santoro, J. (2016).
Acceptability of adaptations for struggling writers: A national survey with primary-grade teachers. *Learning Disability Quarterly*, *39*(1), 5-16.
doi:10.1177/0731948714554038

- Graham, S., & Hebert, M. (2011). Writing to read: A meta-analysis of the impact of writing and writing instruction on reading. *Harvard Educational Review*, 81(4), 710-744. doi:10.17763/haer.81.4.t2k0m13756113566
- Graham, S., Hebert, M., Sandbank, M. P., & Harris, K. R. (2016). Assessing the writing achievement of young struggling writers: Application of generalizability theory. *Learning Disability Quarterly*, 39(2), 72-82. doi:10.1177/0731948714555019
- Graham, S., & Sandmel, K. (2011). The process writing approach: A meta-analysis. *The Journal of Educational Research*, 104(6), 396-407. doi:10.1080/00220671.2010.488703
- Hamman, D., Lechtenberger, D., Griffin-Shirley, N., & Zhou, L. (2013). Beyond exposure to collaboration: Preparing general-education teacher candidates for inclusive practice. *The Teacher Educator*, 48(4), 244-256. doi:10.1080/08878730.2013.796030
- Hancock, D. R., & Algozzine, B. (2011). *Doing case study research: A practical guide for beginning researchers* (2nd Ed.). New York, NY: Teachers College Press.
- Harris, K. R., & Graham, S. (2013). "An adjective is a word hanging down from a noun": Learning to write and students with learning disabilities. *Annals of Dyslexia*, 63(1), 65-79. doi:10.1007/s1181-011-0057-x
- Harris, K. R., Graham, S., Friedlander, B., & Laud, L. (2013). Bring powerful writing strategies into our classroom. *The Reading Teacher*, 66(7), 538-542.
 doi:10.1002/TRTR.1156

- Hosp, M. K., Hosp, J. L., & Howell, K. W. (2016). The ABCs of CBM: A practical guide to curriculum-based measurement (2nd Ed.). New York, NY: Guilford Press.
- International Reading Association. (2012). *Position statement of formative assessment*. Newark, DE: International Reading Association.
- Jenkins, J., & Terjeson, K. J. (2011). Monitoring reading growth: Goal setting, measurement frequency, and methods of evaluation. *Learning Disabilities Research & Practice*, 26(1), 28-35. doi:10.1111/j.1540-5826.2010.00322.x
- Johnston, P., & Goatley, V. (2014). Research making its way into classroom practice. *The Reading Teacher*, 68(4), 245-250. doi:10.1002/trtr.1278
- Jung, P-J., McMaster, K. L., & delMas, R. C. (2017). Effects of early writing intervention delivered within a data-based instruction framework. *Exceptional Children*, 83(3), 281-297. doi:10.1177/0014402916667586
- Kauffman, J. M., & Badar, J. (2013). How we might make special education for students with emotional or behavioral disorders less stigmatizing. *Behavioral Disorders*, 39(1), 16-27. doi:10.1177/019874291303900103
- Kauffman, J. M., & Badar, J. (2014). Instruction, not inclusion, should be the central issue in special education: An alternative view from the USA. *Journal of International Special Needs Education*, 17(1), 13-20. doi:10.9782/2159-4341-17.1.13
- Keller-Margulis, M., Mercer, S. H., & Thomas, E. L. (2015). Generalizability theory reliability of written expression curriculum-based measurement in universal

screening. American Psychological Association: School of Psychology Quarterly, 31(3), 383-392. doi:http://dx.doi.org/10.1037/spq0000126

- Kennedy, M. J., & Ihle, F. M. (2012). The old man and the sea: Navigating the Gulf between special educators and the content area classroom. *Learning Disabilities Research & Practice*, 27(1), 44-54. doi:10.1111/j.1540-5826.2011.00349.x
- Kirschner, P. A., Sweller, J., & Clark, R. E. (2006). Why minimal guidance during instruction does not work: An analysis of the failure of constructivist, discovery, problem-based, experiential, and inquiry-based teaching. *Educational Psychologist*, *41*(2), 75-86. doi: 10.1207/s15326985ep4102_1
- Kiuhara, S. A., Graham, S., & Hawken, L. S. (2009). Teaching writing to high school students: A national survey. *Journal of Educational Psychology*, *101*(1), 136-160. doi:10.1037/a0013097
- Lefoe, G. E., Parrish, D. R., Keevers, L. M., Ryan, Y., & McKenzie, J. (2013). A CLASS Act: The teaching team approach to subject coordination. *Journal of University Teaching & Learning Practice*, 10(3), 1-14. Retrieved from https://www.ro.uow.edu.au/jutlp/vol10/iss3/8/
- Mason, L. H., Harris, K. R., & Graham, S. (2011). Self-regulated strategy development for students with writing difficulties. *Theory Into Practice*, 50(1), 20-27. doi:10.1080/00405841.2011.534922
- McClure, E. (2016). Predictable charts: An effective strategy to engage and impact learners. *The Reading Teacher*, 69(5), 505-508. doi:10.1002/trtr.2016.69.issue-5/issuetoc

- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco, CA: Jossey-Bass.
- Nierengarten, G. (2013). Supporting co-teaching teams in high schools: Twenty research based practices. *American Secondary Education*, 42(1), 73-83. Retrieved from https://www.ashland.edu/coe/aboutcollege/american-secondary-education-journal/
- Patton, K. L. S., Reschly, A. L., & Appleton, J. (2014). Curriculum-based measurement as a predictor of performance on a state assessment: Diagnostic efficiency of local norms. *Educational Assessment*, 19(4), 284-301. doi:10.1080/10627197.2014.964117
- Price, J. R., & Jackson, S. C. (2015). Procedures for obtaining and analyzing written samples of school-age children and adolescents. *Language, Speech, and Hearing Services in Schools*, 46(4), 277-293. doi:10.1044/2015_LSHSS-14-0057
- Regan, K. S., Evmenova, A. S., Kurz, L. A., Hughes, M. D., Sacco, D., Ahn, S. Y., MacVittie, N., Good, K., Boykin, A., Schwartzer, J., & Chirinos, D. S. (2016).
 Researchers apply lesson study: A cycle of lesson planning, implementation, and revision. *The Division for Learning Disabilities of the Council for Exceptional Children, 31*(2), 113-122. doi:10.1111/1drp.12101
- Ritchey, K. D., Coker Jr., D. L., & Jackson, A. F. (2015). The relationship between early elementary teachers' instructional practices and theoretical orientations and students' growth in writing. *Reading & Writing*, 28(9), 1333-1354.
 doi:http://dx.doi.org/10.1007/s11145-015-9573-0

- Simmons, D. C., Fuchs, L. S., Fuchs, D., Mathes, P., & Hodge, J. P. (1995). Effects of explicit teaching and peer tutoring on the reading achievement of learningdisabled and low performing students in regular classrooms. *Elementary School Journal*, 95(5), 387-408. doi:10.1086/461851
- Simonsen, B., MacSuga-Gage, A. S., Briere III, D. E., Freeman, J., Myers, D., Scott, T. M., & Sugai, G. (2014). Multitiered support framework for teachers' classroommanagement practices: Overview and case study of building the triangle for teachers. *Journal of Positive Behavior Interventions*, 16(3), 179-190. doi:10.1177/1098300713484062

Soine, K. M., & Lumpe, A. (2013). Measuring characteristics of teacher professional development. *Teacher Education*, 18(3), 303-333. doi:10.1080/13664530.2014.911775

- Stake, R. E. (1995). The art of case study research. Thousand Oaks, CA: SAGE Publications.
- Stoicovy, C. E., Fee, R., & Fee, J. (2012). Culturally responsive instruction leaves no child behind: The story of Juan, a Pacific Island special needs student. *International Journal of Multicultural Education*, 14(1), 1-19.
 doi:10.18251/ijme.v14i1.492
- Swanson, H. L. (2001). Searching for the best model for instructing students with learning disabilities. *Focus on Exceptional Children*, 34(2), 1-14. Retrieved from https://www.highbeam.com/publications/focus-on-exceptional-children-p106157/

- Thuneberg, H., Hautamaki, J., Ahtiainen, R., Lintuvuori, M., Vainikainen, P., &
 Hilasvuori, T. (2014). Conceptual change in adopting the nationwide special
 educational strategy in Finland. *Journal of Educational Change*, *15*(1), 37-56.
 doi:10.1007/s10833-013-9213-x
- Vuran, S. (2014). Stories about children with disabilities: The writing process and the opinions of the storywriters. *Eurasian Journal of Educational Research*, 55, 137-158. doi:10.14689/ejer.2014.55.9
- Yazan, B. (2015). Three approaches to case study methods in education: Yin, Merriam, and Stake. *The Qualitative Report*, 20(2), 134-152. Retrieved from https://nsuworks.nova.edu/tqr/vol20/iss2/12/

Appendix B: Teacher Interview Questions

Instructional Strategies for Writing

- What types of writing activities do you use with students in the class? Please provide some examples. Examples include book reports, business letters, copying text, completing worksheets, email correspondence, journal entries, personal narratives, persuasive essays, poems, PowerPoint presentations, research papers, short answer responses on homework, short stories, written responses to material read, 5-paragraph essays, and portfolios.
- 2. Of this list above, which do you think are key writing activities?
- 3. Which do you think are the most important?
- 4. What type of teaching strategies in writing do you use with students in your class? Please provide some examples. Examples include planning, drafting, revising, editing, establishing specific goals, collaboration, prewriting activities, organization, self-monitoring strategies to monitor writing performance (e.g. rubrics or checklists), direct instruction (modeling, guided practice, reviewing), explicit instruction, and teaching grammar.
- 5. Of this list above, which do you think are key teaching strategies?
- 6. Which do you think are the most important?
- 7. How do you apply evidence-based writing practices? Please provide some examples?

Writing Needs for Special Education

- 1. How do you use the curriculum to teach writing in your class? Please provide some examples?
- 2. What do you see are the needs or challenges with special education students? Please provide some examples?
- 3. How do you modify your teaching to meet the needs of individual students with writing? Please provide some examples?
- 4. How do you conference with students about their writing? Please provide some examples?
- 5. Do you have stronger writers help struggling writers? How? Please provide some examples?
- 6. How do you accommodate the special learning needs of students writing? Please provide some examples?

Writing Assessment Tools

- 1. In what ways do you use writing to evaluate your students? Please provide some examples?
- 2. How do you evaluate students' written work? Please provide some examples?
- 3. How well prepared do you think your students will be to write the OSSLT based on your current assessment of their writing skills? Please provide some examples?

- 4. Do you think the OSSLT is a good way to evaluate students writing? Please provide some examples?
- 5. There are debates amongst educators about the appropriateness of the OSSLT for SPED students. What do you think?

Professional Development for Teaching Writing

- 1. What professional training do you have to teach writing? Please provide some examples?
- 2. What training/professional development for teachers do you believe needs to be more effective with SPED students? Please provide some examples?
- 3. Do you have the opportunity to meet with other staff members at your school to track student writing progress? Please provide some examples?
- 4. Do you meet with other staff members at your school to participate in schoolbased professional learning activities in the English curriculum (plan lessons, discuss instructional strategies and materials)? Please provide some examples?
- 5. What support or resources do you get from your local school, District or Ministry of Education? Please provide some examples?
- 6. How often did you use the student portfolio to instruct and assess the majority of your students? Please provide some examples?
- 7. What type of professional development activities (e.g. courses, workshops, conferences, PLCs) have you taken related to English instructional strategies preparing special needs students to write the OSSLT?

[I used similar questions from Kiuhara, Graham, & Hawken (2009)]

Appendix C: Teacher Classroom Observations

Observation (field notes) of how Strategies are being used by Teachers in the

Classroom

Strategies	Evidence	Questions
	(What did observation look and sound like)	(Questions
you should		
		ask how to
		implement this
		strategy in a
		school setting)

a)

Direct and explicit instruction

b)

Independent writing

Management

d)

Monitoring/Supervising

e)

Assigning or giving instructions

f)

Goal/Objective for lesson

Modeling

h)

Explaining/Discussing

i)

Questioning/Checking for student understanding

j)

Repetition

Listening/Waiting for student response

Feedback

k)

[I used similar observations from Simmons, Fuchs, Fuchs, Mathes, & Hodge (1995)]