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Gregory Paterson

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Walden University 2016

ABSTRACT

Standardized Assessment Results as a Predictor of Student Reading Success in New Brunswick, Canada

by

Gregory David Paterson

M.Ed, University of New Brunswick, 2011B.Ed., University of New Brunswick, 1994

Doctoral Study Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Education

Walden University

August 2016

Abstract

Many Canadian school districts use standardized reading achievement data to support reading instruction. Over 30% of 9th-grade students in the Anglophone School District-South (ASD-S) have not met targets for the English Language Proficiency Assessment (ELPA), a graduation requirement in New Brunswick, Canada. This study compared archival reading scores of 6th-grade students from 2009-2012 with the same students' scores in 9th-grade from 2012-2015, to determine if 6th-grade scores were a predictor of 9th-grade results. Rendering the impact illiteracy plays on society, this study applied the theoretical framework of social theory from Bourdieu's (1977, 1984, 1986) view of social mobility and Turner's (1960) view of contest mobility. A quantitative design employed a regression analysis to determine how standardized reading scores for three cohorts of students in 6th-grade between 2009-2012 compared with the reading achievement test scores as 9th-grade students in 2012-2015. A sample of 1,200 students was selected. A paired samples t test determined which level(s) of reading comprehension (literal, inferential, or critical) presented the most difficulties for students between 2009-2015. Results of the study concluded that 6th-grade overall reading scores were a predictor of 9th-grade overall scores and that inferential and critical levels of reading comprehension were areas of concern. These findings are intended for administrators and District leadership in ASD-S to support the implementation of an intervention year in Grades 7 and 8 to address this problem. This research promotes positive social change by identifying potential pathways for improving adolescent reading skills for New Brunswick youth.

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DEDICATION

This dissertation is dedicated to my wife Tanya Paterson, and my four adorable daughters, Megan, Lydia, Sarah, and Annie who supported me through many sacrificial months of study and celebrated the numerous small milestones along the way; and, to my two loving parents, Clarisse Gamble and David Paterson (March 1, 1935-Februray 28, 2002) who supported my learning journey since childhood and taught me that persistence, dedication, and hard work are fundamental virtues of success.

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Section 1: The Problem

Introduction

Sixth-grade students in New Brunswick, Canada take the Provincial Reading

Comprehension Assessment each year (Provincial Education Plan, 2013). This

assessment is designed to give literacy leaders in the province an overall indication of

student reading proficiency. Students in 9th-grade also take the English Language

Proficiency Assessment (ELPA) each year. This assessment is a reading comprehension

proficiency designed to indicate student literacy competency. Successfully passing this

assessment is a high school graduation requirement.

At the time of this study, students who failed the ELPA in 9th-grade were provided an intervention year in Grade 10 and permitted to retake the ELPA in Grade 11 or 12 (as needed) in order to pass and qualify for graduation. However, it was not known if students' results on the 6th-grade Provincial Reading Assessment serve as a predictor for students' results on the 9th-grade ELPA. Therefore, the purpose of this study was to compare archival standardized reading test scores of 6th-grade students with the same students' standardized reading test scores in 9th-grade to determine if 6th-grade scores are an indicator of the 9th-grade ELPA.

This study used an analysis of the information from individual student reading scores and school composite scores intended to help educational leaders identify where to close the reading comprehension gap in adolescent readers in Anglophone School District-South (ASD-S). This study was also designed to determine if it was justifiable for an intervention program between Grade 7 and 8 to be directed at the education center

level (regional), school level, or for certain profiles of students to better prepare for success with the 9th-grade ELPA. Increasing student expectation of achievement at the middle level and reducing 9th-grade ELPA failure will in turn reduce demand on teaching resources in later grades and better prepare students for success in other literacy based content areas as well as prepare students to meet graduation requirements.

Definition of the Problem

The local problem that prompted this study was identified by comparing assessment results from the Performance for International Student Assessment (PISA) and the Pan Canadian Assessment Program (PCAP) programs. Past results from both assessments showed that Canada overall and New Brunswick in particular are falling behind in reading comprehension compared to other participating Organization for Economic Co-operation and Development (OECD) countries (Conference Board of Canada, 2016). Although there has been an improvement in 9th-grade ELPA reading assessment results in New Brunswick over the last 5 years, higher order thinking comprehension results are still well below target. PISA and PCAP results have both indicated a plateau of reading comprehension for New Brunswick 9th-grade (Program for International Standardized Assessment (2012).

This study specifically focused on a local problem at the Anglophone School District-South (ASD-S): 9th-grade reading scores have not met the provincial target of an overall average of 85% of questions being correctly answered. No formal research or secondary studies have been found to date to determine if results would improve should a response to intervention approach be applied in ASD-S middle schools. There appears to

be a need for supporting student reading comprehension at the early adolescent or middle level. This study looked at archival data from students in 6th-grade and followed the same cohort of student assessment data to 9th-grade to confirm this hypothesis.

Rationale

Evidence of the Problem at the Local Level

The purpose of this study is to compare archival standardized reading test scores of 6th-grade students with the same students' standardized reading test scores in 9th-grade to determine if 6th-grade provincial assessment reading results are a predictor of 9th-grade English Language Proficiency Assessment (ELPA) results. At the time of this study, there was no formal district-wide middle school intervention program designed to help students struggling with reading or writing between the 6th and 9th-grade. There was also no writing assessment with the 6th-grade Provincial Reading Assessment or the 9th-grade ELPA. A middle school intervention program may positively affect the wide variation in ELPA scores.

The rationale for addressing this problem is rooted in New Brunswick standardized reading assessment data. Provincial assessment results indicate that students in New Brunswick continue to not meet the minimum 85% reading comprehension target in their program of study at either the 6th- or 9th-grade levels. From 2012-2015, only nine out of 42 ASD-S high schools have met the provincial reading target. In terms of numbers of students, over 1,642 students in ASD-S out of a possible 5,623 did not meet reading target achievement on the ELPA between 2012-2015. This represents an average of 30% of the 9th-grade student population in ASD-S not meeting appropriate reading

level targets in the Province of New Brunswick over a three-year period. Similarly, over the last three years, results for 6th-grade6th-grade reading assessments were below the 85% target. Specifically for 6th-grade, 2011-2012, 514 (12%) students did not meet provincial reading target; in 2012-2013, 404 (7%) students did not meet provincial reading target; and in 2013-2014 381 (6%) students did not meet provincial reading target (Department of Education and Early Childhood Development, 2014; see Table 1).

Summary of 6th and 9th-grade Students not Meeting Provincial Reading Target of 85% over a 3-Year Period

Table 1

Year	2011-2012	2012-2013	2013-2014
6th-grade	12%	7%	6%
9th-grade	10%	13%	3%

Table 1 shows the total composite scores derived from the combination of literal, inferential, and critical responses. This does not mean that students scored the value presented in all three levels of reading comprehension. Each reading comprehension level is weighted at a different value on the New Brunswick Reading Assessment.

Discussion of the weighting is not under the purview of this study.

My conferences with colleagues in literacy in ASD-S from other education centers also agree that the need for improving adolescent reading has never been so evident. In fact, a number of private interests have formed non-profit agencies to lobby community and government to raise awareness for the need to improve literacy in New Brunswick. Achieve Literacy New Brunswick, Laubach Literacy New Brunswick, and

the Literacy Coalition of New Brunswick Ltd. are some of the more established not-forprofit agencies that exist to improve reading proficiency for New Brunswick residents of all ages.

Evidence of the local problem is that a significant number of students in ASD-S are below New Brunswick provincial reading targets in 6th-grade and in 9th-grade. This problem is highlighted in 9th-grade, as the ELPA is a graduation requirement (Department of Education and Early Childhood Development, 2014). If reading proficiency deficits can be detected and acted upon based on the results of the 6th-grade Provincial Reading Assessment, then ELPA reading results are likely to be positively impacted. This positive impact is also likely to positively influence student expectation for academic success, a key indicator of academic mobility (Bourdieu, 1977, 1984, 1986). There have been no formal studies to date in the province of New Brunswick identifying the trajectory of student reading improvement from 6th-grade to 9th-grade.

Evidence of the Problem from the Professional Literature

The problem of struggling middle school readers is not isolated to New Brunswick alone. The majority of fourth and eighth grade students in U.S. public schools are at or below the basic skill level in reading comprehension (Faggella-Luby & Wardwell, 2011). New Brunswick does not have the scope of challenges that most other jurisdictions have such as second language learners, ethnic diversity, and far-reaching socioeconomic disparity (Beckley, 2015). The absence of these challenges in many ASD-S schools suggests stronger reading assessment results; however, literacy continues to be a front and center issue facing most schools in ASD-S.

Graves, Brandon, Duesbery, McIntosh, and Nicole (2011) found that over 74% of struggling readers identified in third grade were also identified as struggling readers in sixth grade. Hock, Brasseur-Hock, and Deshler (2014) similarly suggested that support for reading proficiency should be across the entire curriculum. Nonetheless, feedback from many teachers in ASD-S has indicated that many are not trained in how to teach struggling readers how to read. If teachers are not skilled in supporting struggling readers, they need to become skilled. Specifically, teachers have a responsibility to teach all students specific strategies for deep reading comprehension particularly in the content areas (Hock et al., 2014). Not supporting struggling readers when the need surfaces is taking an unnecessary risk with students' academic success and future employability. Faggella-Luby and Wardwell (2011) also supported the use of evidence-based instruction for struggling readers during the transitional years (Grades 5 through 8) to mitigate reading challenges and better prepare readers for learning demands in high school.

From a larger context, Vaughn et al. (2012) discovered that children with reading challenges who receive intervention at early levels might always need reading intervention support. In a three-year longitudinal study at the middle level, Vaughan et al. (2012) also discovered this point. Further findings from Vaughn et al. (2012) showed that "students with intractable reading difficulties" were able to maintain reading achievement with their peers after "receiving 50 minutes per day" of direct reading intervention (p. 523). Conversely, children in comparison groups not receiving strategies used in Response to Intervention (RTI) from year to year declined in reading

comprehension. The end result was an overall benefit for children receiving intervention support.

All children with reading difficulties in New Brunswick are not necessarily remedied with RTI in the early grades. My experience as a classroom teacher has shown me that some students demonstrate a continual need for more time on reading assignments, explicit reading support from teachers, additional reading strategies, and differentiated reading instruction in order to maintain typical or average grade level expectations. That notwithstanding, the majority of students can be successful if provided targeted evidence-based balanced literacy support on an as needed basis. Cantrell et al. (2014) supported the use of evidence-based interventions that focus on individual learning needs as a key way to improving reading interventions with students' struggling with reading comprehension.

Definitions

Achievement level: The achievement level on New Brunswick Provincial Reading Assessments are divided into the following categories: below appropriate achievement (BAA) is a total score below 57%; appropriate achievement (AA) is a total score between 58%-85%; and strong achievement (SA) is a score above 85% (Department of Education and Early Childhood Development, 2014).

Contest mobility: The equal opportunity of individuals to attain higher social status because of hard work, skill or ability (Turner, 1960).

Cultural capital theory: Bourdieu's (1986) theory that there are three culturally–bound categories, or states, in which a person can increase social capital: the existence of

either an "embodied state, for example, acts of self-improvement of the mind, and body"; in the "objectified state, the appropriation of capital in material form; for example, money, property, art", etc. or symbolically in the form of skills, knowledge, and talent, and an "institutionalized state, in the form of academic qualifications" (Bourdieu, 1986, p. 243).

Education center: A cluster of K-12 schools located within a district in New Brunswick, Canada. The province of New Brunswick has seven districts: four Anglophone and three Francophone. One district, the Anglophone School District-South (ASD-S), has 72 schools that are organized into three education centers. For the purposes of this study, only schools in the ASD-S with 6th-grade and/or 9th-grade (depending on the schools' grade configurations) were selected from each of the three education centers in this district.

Education Support Teacher-Literacy: A teacher providing co-teaching, intervention, and professional learning in the New Brunswick public school system.

English Language Proficiency Assessment (ELPA): The standardized reading and writing assessment that all 9th-grade students take each year in the Province of New Brunswick. The ELPA is a graduation requirement.

Reading competency: A student's ability to make meaning from text, solve words, read with automaticity, and fluency, make informed predictions, use text features and technology to assist and decode, interpret, and locate information with a variety of text forms, and genres.

Social mobility: The movement of individuals or families through a system of social stratification, class or echelon of society. Teachers may introduce "bias in their grading of student education performance" meaning, that extra points may be awarded for evidence of work other than curriculum; hence, actually rewarding "elite culture-related competences rather than scholastic performance" (Turner, 1960, p. 857). Thus, schools reproduce particular forms of intergenerational social mobility, and stratified outcomes.

Sponsored mobility: The selection of individuals or groups into higher societal levels based on social status, and credentials or norms recognized within said group (Turner, 1960).

Significance

Adult reading skills in Canada are measured on a scale from 1 to 5, with 3 representing a level adequate to manage daily living and employment tasks that require reading skills beyond a basic level (Council of Atlantic Ministers of Education and Training, 2009). The New Brunswick reading target is for students to be functionally literate (i.e., Level 3) by meeting Provincial Reading Standards by end of Grade 8 (Provincial Education Plan, 2013). The provincial target is for 85% of all 9th-grade students to have appropriate achievement in all three levels of reading comprehension: literal, inferential, and critical areas (Provincial Education Plan, 2013).

In 2013, New Brunswick ranked second-to-last in Canada for reading proficiency, based on the Pan Canadian Assessment Program (PCAP) results (Pan Canadian Assessment Program, 2014). Due to these low scores, the provincial reading targets of

85% for literal, inferential, and critical type questions on the ELPA were not met. Only 43% of all students who wrote the assessment met the target of 85%. Of these, 82% scored *appropriate* with literal questions while 69% scored *appropriate* for inferential and critical questions.

This project study is unique because there have been no formal studies or research to date comparing results from the New Brunswick 6th-grade provincial assessment with the New Brunswick 9th-grade ELPA. The historical data sets used in this study statistically confirm which levels of reading comprehension (literal, inferential, or critical) are most problematic for both 6th-grade and 9th-grade students. This research provides a starting point for future research and policy that will prioritize identified levels (literal, inferential, or critical) of reading comprehension that are most in need of intervention support. In turn, the need for a middle school intervention program is evident, an intervention program would improve student reading competency in later grades; hence, improving ELPA results and directly impacting the graduation rate.

The results from this study were designed to help determine if support for middle schools in ASD-S could potentially be useful for students who are struggling with reading comprehension. The literacy intervention program will improve student success; hence, indirectly help students to improve their attendance, and thus reduce grade-level failures. Empirical data from this study will help district, and provincial leaders determine next steps in supporting struggling adolescent readers both locally, and in other districts in the province. This study will result in an intervention program that will

build reading strategies for middle school students so they will be successful with the ELPA province wide.

Guiding Research Questions and Hypotheses

The following research questions were used in this study to determine if 6th-grade reading proficiency scores are in fact a predictor of 9th-grade scores:

RQ1: How do the standardized reading achievement scores for three cohorts of students enrolled in 6th-grade in school years 2009-2012 compare with their standardized reading achievement test scores as 9th graders in school years 2012-2015?

H_{0a}: 6th-grade scores are not a predictor of 9th-grade performance in ASD-S.

H_{1a}: 6th-grade scores are a predictor of 9th-grade performance in ASD-S.

RQ2: Which level(s) of reading comprehension (literal, inferential and critical) was most difficult for students on the 6th-grade Provincial Reading Assessment and the 9th-grade ELPA between the school years of 2009-2015 for students in ASD-S?

H_{0b}: There is no difference among the reading achievement scores by comprehension level for students in 6th-grade and reading achievement scores by level for students in 9th-grade for students in ASD-S.

H_{1b}: There is a difference among the reading achievement scores by comprehension level for 6th-grade and 9th-grade students in terms of level of reading achievement for students in ASD-S between 2009-2014.

RQ3: How do student scores vary among education centers in relation to social economic status indicators of median household income, level of parent education, employment status and parental household demographics?

 H_{0c} : There is no difference among reading achievement scores in relation to social economic status indicators of median household income, level of parent education, employment status and parental household demographics.

 H_{1c} : There is a difference among the reading achievement scores reading achievement scores in relation to social economic status indicators of median household income, level of parent education, employment status and parental household demographics.

Due to the unavailability of individual archival data for household income, parent education level, employment by household, and parental household makeup, RQ3 cannot be part of the analysis for this study. The research question and null and alternative hypothesis were included for future reference should individual socioeconomic data become available and a proper multiple linear regression analysis be possible.

Review of the Literature

Origin of Source

References in this literature review were retrieved from a variety of sources.

Primary peer-reviewed sources were selected from the Walden University Library

Thoreau search engine, which facilitates searching multiple fields of study beyond

education. The Boolean phrases included terms such as standardized assessments,

adolescent reading achievement, social mobility, literacy, international, national, and

New Brunswick. A combination of these terms uncovered a few seminal sources, leading

to my deciding to use a theoretical framework based on Bourdieu (1977, 1984, 1986) and

Turner (1960). Other key sources included Statistics Canada, Employment and Immigration Canada, PISA and OECD sources, and the New Brunswick Health Council (NBHC). The review of current peer reviewed primary sources, current standardized provincial, national and international reading achievement scores, as well as recent data on provincial economies have been synthesized to pinpoint the silent pressures facing New Brunswick's current economic situation. Specifically, this literature review investigates the impact that reading proficiency has on adolescent and adult literacy in the province of New Brunswick.

Sources collected for this review were grouped initially from broad topics commencing with an international assessment perspective. Next, sources from a Canadian or national assessment perspective were discussed. Finally, provincial societal issues leading to specific social mobility issues facing ASD-S were identified. The grouping of the research can be followed in this literature review from broad topics culminating to a very specific problem that this project study aims to address.

The impact literacy plays on economics, education, and culture is a widely studied and examined topic. The literacy rate of a society has been a predictor of economic vitality within societies, especially in industrialized nations like Canada.

Despite the overwhelming confidence Canadians have in valuing literacy as a means to economic recovery (International Reading Association, 2010), many Canadian provinces' students are not performing as well on international testing as they once did (Pan Canadian Assessment Program, 2014). Postsecondary education in Canada is more accessible in the 21st century than in past decades; however, a number of recent studies

have demonstrated that people from disadvantaged socioeconomic backgrounds are at a distinct handicap (Frempong, Ma, and Mensah, 2012, p. 20).

The sources of information for this review were from a variety of current peerreviewed journals, current data from government websites, and theories from books in this field of study, and citations from other media sources. This literature review describes the impact that students' literacy skills play on their reading success at adolescent levels and subsequently the economic impact that literacy plays on New Brunswick as a society. This review applies the theories from Bourdieu (1977, 1984, 1986) and Turner's (1960) research to the present day social, economic and academic situation facing New Brunswick's struggle to compete in an information and knowledgebased global economy. Social, academic, and economic capital are linked to families' academic achievement and occupational attainment. The sociological explanation of the association between children's education success and family background is often referred to as economic, social, and cultural capital as the main components of parental resources (DeGraaf, De Graaf, & Kraaykamp, 2000, p. 93). This review will look at the greater body of literature to examine what measures have been taken to reverse the downward trend for literacy in areas of similar demographic make-up as New Brunswick.

Theoretical Foundation

The theoretical foundation for this study was based on Bourdieu's (1977, 1984, 1986) and Turner's (1960) research on sponsored and contest mobility and cultural capital theory. I specifically used these theories to demonstrate how improving adolescent and adult literacy may create positive social change for New Brunswick,

Canada. The language of contest and sponsored mobility used in Turner's (1960) research was helpful for describing the current situation facing New Brunswick's population and struggling economy. Turner (1960) compared the equal opportunity of individuals to attain higher social status because of hard work, skill or ability to sponsored mobility, stating that the selection of individuals or groups into higher societal levels based on social status and credentials are recognized within said group. Bourdieu's research (1986) on the three states of cultural capital theory, and the application of seminal social research from Turner (1960, p. 856) was used for establishing a theoretical foundation by which New Brunswick's adolescents can attain a higher quality of life through improved skills in reading. The three states Bourdieu (1986) refers to are the embodied state, the objectified stated, and the institutionalized state. The embodied state are acts of self-improvement of the mind and body which can be achieved by learning and intellectual development; the objectified state is the appropriation of capital in material form, for example: money, property, art, etcetera, and the institutionalized state, is manifested in the form of academic qualifications,

My discussion of the application of this social theory starts with a description of the economic impact low literacy has on adolescent academic success and the socioeconomic milieu in ASD-S. By extension, this new proposed theoretical framework describes the influence that high expectations for student reading success by parents and teachers alike may have on student reading success in ASD-S. The power of students' expectation of themselves as successful readers are discussed in light of how reading success can lead to upward social mobility, and positive social change, hence influencing

a number of social variables like truancy, drop-out rate and postsecondary education.

Ultimately, this review focuses on literacy at the middle and upper grades and what initiatives have been successful to build social, economic and academic capital in other jurisdictions. Finally, how students' reading success in New Brunswick is being addressed is examined with respect to national and international standardized assessments.

I applied Turner's (1960) theory to this study by means of a quantitative method to analyze if 6th-grade6th-grade reading assessments are a predictor of 9th-grade ELPA scores. Should this be the case, there will be further analysis of archival student reading scores to determine which level of reading comprehension (literal, inferential or critical) present the most difficulties for students both with the 6th-grade Provincial Reading Assessment and the 9th-grade ELPA between the years of 2009-2015 for students in 36 middle and high schools in ASD-S.

Socioeconomics Defined in Context to Education

In order to understand the impact education plays on socioeconomics in New Brunswick, it is important to understand the scope of literature on this topic as it applies to other industrialized nations. It is imperative to identify the components of socioeconomic status (SES) in societies, as there is a broad range of what describes success in societies (Lindo, 2014). This review considered household income level, employment, education and parental profile as the most prominent and widely accepted indicators of socio-economic success. Research from Lindo (2014, p. 288) supports that SES reported as "parent education, income, occupation or combinations of all of these",

are the more widely accepted indicators of SES. For reasons just stated, the indicators of parent education, income, occupation or a combination of any of these three will be what is referred to when speaking of SES in this study.

For the purposes of this study, the indicators of income level, employment, education and parental profile are referenced in context to the link between SES and New Brunswick residents. Specifically, this literature review investigated prior research on the impact of low reading proficiency on New Brunswick's economy and its influence on upward social mobility.

Economic Status of New Brunswick

New Brunswick is primarily a rural Canadian province with three major cities of modest size and density. The population of New Brunswick has barely doubled since 1914, and is currently around 751,000 residents (NBHC, 2014). New Brunswick previously possessed a vibrant economy fueled by forestry, fishing, agriculture, tourism, mining, shipbuilding and petroleum refining; this predominately skills-based economy has been needing to transition to a more knowledge-based economy over the last 30 years. This evolution in tandem with shifts in global economies has left New Brunswick with one of the highest unemployment and poverty rates in Canada (Citizens for Public Justice, 2012). Similarly, the neighboring province of Nova Scotia has traditional industries, such as fishing and agriculture, which are now being replaced with different industries like manufacturing, tourism and culture related industries" (Van Zoost, 2011, p.86).

New Brunswick has significant employment and employability issues. The compounded effect of many people leaving New Brunswick to find better paying jobs and a significant proportion of New Brunswick residents either still being in school or unable to work has resulted in less than half of the province's residents holding a job (Statistics Canada, 2014). Fewer New Brunswick residents unable to work or obtain work have resulted in less taxes being paid to public coffers (McHardie, 2016). In part, this has resulted in a New Brunswick debt of over 13 billion dollars and has left New Brunswick unable to service its debt in a climate of decreasing revenues. Fiscal audits, as recent as February 2015, have brought stern warnings to New Brunswick's elected party to balance deficit spending and address a debt that is out of control. These factors have resulted in New Brunswick's total spending on education being at the same levels it was over 30 years ago (Statistics Canada, 2014).

Socioeconomic status as indicator of literacy proficiency. Income level, employment, education and parental profile are the predominate indicators of SES (Lindo, 2014). New Brunswick's floundering economy, aging population, and shrinking tax base have placed the province in 9th of 10th place on national reading assessment scores for 9th-grade students (Pan Canadian Assessment Program, 2012). The application of the theoretical frameworks from Turner (1960) and Bourdieu (1986) are used to address the issue of social capital, parental education, income and occupation in this study. The frameworks developed by Turner (1960) and Bourdieu (1986) both emphasize the importance of parental education, income, and occupation. These factors are possible reasons why New Brunswick is in its current poor economic state.

Bourdieu's (1986) framework has two components. One component is called contest mobility, which implies that advantage is awarded to those who earn it. Contest mobility is available to anyone regardless of ethnicity, gender, social status, or language. An example of this component is students competing for strong grades to win scholarships to go to the best universities, and subsequently applying to the best professional schools such as law, medicine, dentistry, pharmacy etc. People engaged in the component of contest mobility would be those who work hard, achieve and earn. Contest mobility is available to all members of society who earn and achieve.

The other component is sponsored mobility. This component sorts people into niches based on social class or membership in an elite group. Sponsored mobility awards membership through social connections, not based on credentials. Membership in sponsored mobility groups is not contingent on skill or ability, but upon being connected to the right people. Bourdieu stated (1986) that these social patterns always exist to some degree and in some measure where the public naturally divides into what is *natural*. In sum, when speaking of social capital in New Brunswick, both contest mobility, and sponsored mobility play a role in the socioeconomic landscape of upward social empowerment in the Province. The challenge for New Brunswick is to have enough people in the Province for social mobility to be forward moving. This has not proven to be easy in an aging province with an exodus of talent leaving New Brunswick to find work elsewhere (Canadian Broadcasting Corporation, 2012).

Tremonte and Willms (2010) found that students from higher SES families' reading skills tend to be high wherever they are, whereas students from lower SES

families' reading skills tend to vary considerably in proficiency and by jurisdiction.

Tramonte and Willms' (2010) conclusions are valid and reliable; however, in practice,

New Brunswick does not have the critical mass of higher echelons of SES with

employable literacy levels to float New Brunswick's economy and move education

forward with enough momentum to sustain the economy in the long term (Beckley,

2015). New Brunswick may not have enough sponsored mobility to sustain its economy,

or enough qualified, literate, and motivated people for contest mobility to sustain New

Brunswick's economy. This suggests that New Brunswick needs more literate people

who are motivated to work and learn to drive upward social mobility (Turner, 1960).

There are far more New Brunswick residents of lower SES reading below a grade 8 level

than there are residents with a higher SES reading above a grade 8 level (Statistics

Canada, 2014).

Continuing on the theme of social capital, further research from Harvey, Slate, Moore, Barnes, and Martinez-Garcia (2013) suggested that academic capital in a society's youth is the same as fiscal investment in economic capital. Proper investment on one end will reap academic rewards, like college readiness and upward social mobility, on the other. Although some individuals are less likely to achieve social capital based on race, ethnicity, gender, age or sexual orientation (Raines, 2006; Webb, Schemata, and Danaher, 2002), New Brunswick is predominately a monoculture with over 96% of its population of white European English or French origin. The remainder of New Brunswick's population is indigenous First Nation and a mix of other nations (Statistics Canada, 2014)

The point being made is that New Brunswick is an anomaly with a majority demographic of white European descendants, yet building social capital has not been translated into academic capital as evidenced from national and international assessments or from the research cited by Harvey et al. (2013). One would surmise from other peer reviewed studies that New Brunswick would actually have a statistical advantage in building social, economic and academic capital compared to other jurisdictions because it does not have to deal with multiple languages, races and cultures. New Brunswick's situation may challenge the theoretical frameworks of Turner (1960) and Bourdieu (1977). This anomaly may be indicating not a gap in social or academic capital in New Brunswick but perhaps a gap in teacher and student expectation, quality of curriculum or academic goal setting from its instructional leaders.

PISA (2012) found that New Brunswick students are proficient on lower levels of literacy competency, but lack the skills of higher order thinking and critical reasoning. It is these higher order skills that many employers need and seek. PISA results indicated that New Brunswick students are either not proficient in critical thinking skills or New Brunswick teachers are not strong with instructing these skills (2012). Further study on the application of this theoretical framework to New Brunswick may confirm this hypothesis.

Socioeconomic status as a predictor of postsecondary education. Not surprisingly, the socioeconomic challenges facing New Brunswick youth appear to limit access to postsecondary education. Fundamentally, financial constraints limit access to postsecondary education regardless of the province or the amount of public subsidy

awarded to postsecondary institutions. Ironically, research from Frempong et al. (2012) identified students in New Brunswick to be 2.19 times more likely to access postsecondary education than students in Ontario or Alberta schools. This may be because work is not readily available in New Brunswick and if students wish to stay, they most certainly need to establish some credentials to qualify for what few jobs that may be obtainable.

The most important variable indicating attendance of a postsecondary institute beyond high school, academics, financial barriers or parental expectation was student expectation. In simple terms, this means that the greatest predictor of a student attending postsecondary education is in fact student expectation of such at an earlier age. Access to higher education appears to be strongly linked to SES. Findings from Murdoch, Kamanzi, and Doray (2011) found that parental education is associated with a higher probability of adolescents enrolling in higher education. Ironically, a mother's occupation is rarely significant as a determinant to adolescents attending postsecondary institutes; however, a mother's level of education has a three-fold influence on postsecondary aspirations for adolescent youth. Therefore, parental expectation of students' continuing education past high school is also very important. In the past, New Brunswick residents have not needed to extend learning past high school to find work. But since the last 3 decades, this has changed. Therefore, the need for students to have a higher expectation of their own academic success and the skills to do well on standardized assessments in New Brunswick has never been so important. It is for this

very reason that building student proficiency by preparing for the ELPA at the middle level is so important.

This is to say that the academic expectation of schools or, the building of academic capital, and the financial support of parents or, the use of economic capital, are contributing factors influencing students in New Brunswick to attend postsecondary institutions. The point to be made from Frempong et al. (2012) that aligns with the theoretical framework of Bourdieu (1977, 1984, 1986) and Turner (1960) is that students who were expected to go to postsecondary education institutes were significantly more likely to attend, showing stronger effects than parent, school or social expectation. Most importantly, Frempong et al. (2012) identified academic pressure and student-teacher relationships also as important school level determinants of attending postsecondary institutions.

Other noteworthy determinants from Frempong et al. (2012) were the pattern of communication between parents and children and family support for learning, rather than money. It is important to highlight that school, student and parent expectation contribute to ensure reading and learning continue past grade 12. The absence of any one of these contributing determinants in a students' life, may have a significant impact on whether New Brunswick improve their education past grade 12.

In summary, the building of social capital through contest mobility in New Brunswick youth needs to improve through stronger social expectations from the parent community, teachers and most importantly, students themselves. Career planning in early, middle and senior grades is part of the New Brunswick curriculum; nonetheless, so

are the expectations of parents and teachers powerful drivers setting a bar of hope for students to transition from school to the New Brunswick labor market.

Literacy Skills as a Predictor of Socioeconomic Status

The Council for the Ministers for Education, Canada (CMEC) have identified literacy skill proficiency on a three level scale, level 1-poor basic, level 2-basic, and level 3-good basic (CMEC, 2009). The New Brunswick end of grade 8 reading target is level 3-good basic. A slightly more extended reading scale used by Statistics Canada (2014) includes level 4, hence; level 1-poor, level 2-weak, level 3-acceptable, level 4-strong.

The New Brunswick high school graduation requirement is not reflective of the reading level for the greater population of New Brunswick residents who are not in school. Over 48% of New Brunswick residents do not read at a level 3 (Statistics Canada, 2014). In a recent nationwide study in Norway, Canada and the United States, Lundetrae, Gabrielsen, and Mykletun (2010) discovered that the difference between a level 1 and level 3 translated into a threefold likelihood of unemployment in Canada and a fourfold likelihood of unemployment in the USA. By statistical definition, if half of New Brunswick's 751, 000 person population that reads at a level 1 or level 2 were to increase one literacy level that would equate to approximately 93,000 New Brunswick residents transitioning from unemployment to employment. That is to say, if jobs were available to make this transition possible.

A recent survey from Statistics Canada (2014) indicated that a Canadian citizen's income on a 1-4 point literacy scale would double. For example, a person reading at a

level 1 would earn an average annual income of \$20,692 compared to a person reading at level 4, which would earn an annual income of over \$42,000 (see Figure 1).

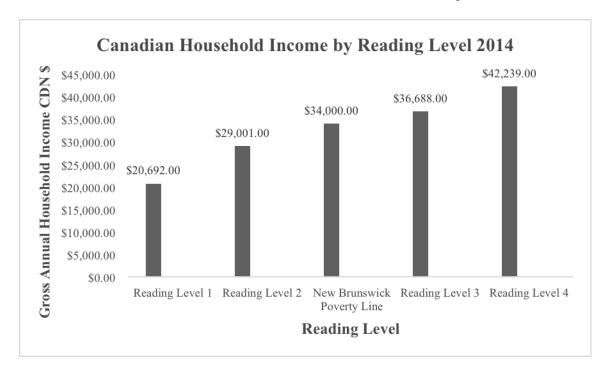


Figure 1. A bar chart showing Canadian household income by reading level. Employment and Social Development Canada. (2012). Indicators of well being in Canada. Retrieved from http://www4.hrsdc.gc.ca/.3ndic.1t.4r@-eng.jsp?iid=31.

New Brunswick has the second lowest average adult reading score in Canada at 46.5% at level 3 or above (51% for adult Anglophone and 37% for adult Francophone) compared to the national average of 51% of Canadians reading at or above level 3 (Employment and Social Development Canada, 2012). Further, the rate of poverty is the percentage of people living below the low income cut off in the population as a whole. The data displayed in Figure 1 are for a family of four in a province with between 100,000-499,000 residents. The annual income for a family of four is slightly below \$34,000 per year. As indicated in Figure 1, this income suggests a reading level of less than 3.

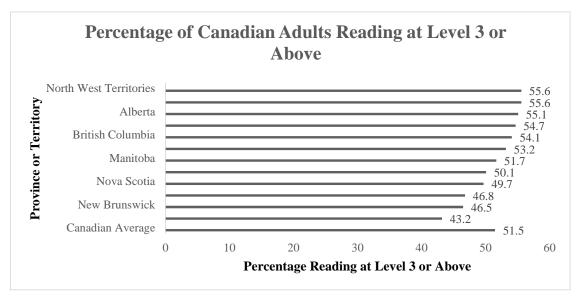


Figure 2. Percentage of Canadian adults reading at level 3 or above in Canada in 2012. Statistics Canada (2014). Focus on Geography Series.

It is evident from Figure 2 that adult illiteracy is an issue country wide in Canada. In reference to the research from De Graaf, De Graaf, and Kraaykamp (2000) poor adult reading results may be a contributing variable to the declining trend of adolescent reading scores on PISA and PCAP assessments. In New Brunswick, low adult literacy scores mirror the low adolescent reading scores on provincial, national and international standardized assessments.

International Assessments as an Indicator of Literacy Proficiency

The Organization for Economic Co-Operation and Development (OECD), the parent organization for the internationally famed Program for International Standard Assessment (PISA) has become a global indicator among industrialized nations as the litmus test for 15-year-old students' competency levels for literacy, mathematics and science. There are 64 participating countries in PISA; however, only 34 of these

countries are members of OECD of which Canada is one (Program for International Standardized Assessment, 2012). PISA has become a widely recognized and credible international standardized assessment tool.

Canada is performing well on PISA compared to other OECD countries specifically, the average reading performance of a Canadian 15 year olds is 523 points, compared to an average of 496 points in other OECD countries (PISA, 2012). However, this is due primarily to the strong results from economically robust provinces like Ontario and Alberta. Looking closer at PISA data reveals that smaller provinces like New Brunswick actually underperform on the OECD average. Volante (2013) discovered that other nearby, smaller and similar provinces like Prince Edward Island and Nova Scotia (otherwise known as Maritime provinces) have lower PISA scores than the national average but have higher graduation rates (PISA, 2012). It could be that a more stagnant Maritime job market forces more students to complete high school and attend postsecondary learning institutions. This in turn helps students stand a better chance of finding postsecondary opportunities. Murdoch et al. (2011) stated that PISA standing is a strong indicator of postsecondary entrance and graduation from high school. New Brunswick students may be below the Canadian average on PISA, but they do tend to attend more post-secondary schools than the average Canadian student (PCAP, 2014).

Volante (2013) found a link between rising PISA scores and countries' productivity levels rising. Alexendar (2014) confirmed this measure stating that an increase of just 25 points on PISA Reading Assessment could translate to Canada doubling its gross domestic product from 1.77 trillion dollars to over 3.40 trillion dollars a year by 2025. In

other words, New Brunswick's literacy issues are having a direct impact on its ability to compete, specifically with manufacturing on national and international levels. The relationship between productivity and a countries literacy level is a positive correlation. This association between improved literacy and increase social mobility is the underlying premise of this review.

Advantages and Disadvantages of PISA Testing for New Brunswick

Twenty-first century global literacy and assessment policies have impacted teaching and learning even in the most rural districts in New Brunswick. The drive for a standardized measure by which provinces and countries can be normalized has created a new education culture that Volante (2013) has coined the 'Olympics of education'. PISA scores are intended to measure skills beyond the classroom that are relevant to everyday life (OECD, 2012) on the other hand, Murdoch et al. (2011) published that grades from schools generally measure the ability to complete demands of school work, unlike the intent behind PISA assessments. The author of this review supports the use of balanced assessments and is in agreement with findings from the Atlantic Provinces Educational Foundation (2001, p. 53) document. This document supports a total assessment program that should be used in appropriate balance with other assessment practices to ensure that students have frequent and varied opportunities to demonstrate learning.

One challenge large-scale testing like PISA could potentially present to more sheltered provinces like New Brunswick is the cultural bias and disadvantage for minority students (Volante, 2013). The minority Francophone and First Nations populations in New Brunswick are distinct cultural groups that may not be well sampled

on PISA formats. This point further extends the theoretical framework of Turner (1960) and Bourdieu (1977, 1984, 1986) and the topic of contest mobility. In other words, one may wonder if PISA is an instrument used and recognized by those with sponsored mobility to create and maintain a divide among the socially mobile and the socially static populations.

As a native New Brunswick resident, I have found that New Brunswick is a very traditional, rural, friendly, neighborly, and slow-to-change part of Canada. It could be said that the Maritime Provinces are a community of communities-one large province that has relied for decades on the skills of families and friends to grow, cultivate, harvest or make a living from the land and natural resources. Nonetheless, New Brunswick is not immune to the economic pressures of a more knowledge-based global economy (Van Zooste, 2011). This impending pressure for New Brunswick to transition from a skills-based economy to an information or knowledge-based economy has left New Brunswick in an educational, social and economic impasse.

The universal pressure for New Brunswick to compete and now perform on a global scale has opened the door for international assessments like PISA and forced policy makers in education to conform to this style of assessment (Murdoch et al., 2011). Van Zoost (2011) stated that the transition of Maritime Provinces like New Brunswick from a skills-based economy to a more knowledge-based global economy has been difficult. On one hand, it could be suggested that PISA only amplifies this awkward transition for New Brunswick and exasperates its hesitation to conform to 21st century learning on a national and global platform. On the other hand, I would suggest PISA has

helped unify, harmonize and align assessment practices for New Brunswick. Once a province where standardized assessments carried little political weight, PISA is now the litmus test by which other provinces can boast effective education policy, strong assessment programs and alignment with 21century proficiency skills for 15- year old adolescents. Although Murdoch et al. (2011) suggested PISA scores could be statistically independent from performance at school, New Brunswick's standardized assessments in 6th and 9th-grades and soon to be 4th-grade are being formatted to be more like PISA. As previously stated, it is now very important in 21st century economies to target a student's understanding and ability to think critically then to prove understanding of specific content.

This change in assessment format has already trickled down to school districts in the form of professional learning in 2015 in ASD-S. This training is to help teachers better prepare assessments in the higher domains of reading comprehension such as inferential and critical types of questions that assess a child's ability to think and show evidence of understanding with a text. Volante (2013) suggested that "large scale testing" like PISA, can lead teachers, particularly in "lower achieving schools" and in communities with low socioeconomic status to focus on "basic reading comprehension skills rather than on critical thinking skills" (p. 170). This may cause a narrowing of the curriculum rather than helping to teach students how to think deeply and more critically. I submit that professional learning in ASD-S is trying to help teachers and policy makers change professional practice by focusing on higher order reasoning skills rather than

what was found by Volante (2013) which was to default to only teaching students' to answer literal forms of questions when responding to texts.

Supporting Literacy at the Middle Level

This literature review supports the need for instructors at all grade levels to be teachers of literacy including teaching struggling readers in content areas in the upper grades. Considerable research supports early balanced literacy intervention for struggling readers, which results in greater impact for reading success long term (Wendt, 2013). On the other hand, providing reading intervention beyond classroom instruction is expensive. Alternatively, struggling readers at the secondary level require the skill to read more complex texts and to communicate socially in meaningful ways in order to be prepared to compete in a global economy (Ritter, 2009). Findings from a recent National Assessment of Educational Progress (NAEP) data indicated that the majority of fourth and eighth grade students in U.S. public schools are at or below the basic skill level in reading comprehension (Faggella-Luby and Wardwell, 2011). The point to be made is the need for teaching children to read remains critical even beyond the primary levels and into the upper grades where necessary.

Children with reading challenges who receive intervention at early levels may always need reading intervention support (Vaughn, 2012). At the middle level, Vaughn also discovered this point in a three-year longitudinal study (2012). In this study, the authors discovered that students with intractable reading difficulties were able to maintain reading achievement with their peers after receiving 50 minutes per day of direct reading intervention. Children in comparison groups not receiving strategies used

in response to intervention (RTI) from year to year, declined in reading comprehension resulting in an overall benefit for children receiving intervention support. I submit that all children with reading difficulties are not necessarily 'remedied' with RTI in early grades. Some students may always need more time on reading assignments, explicit reading support from teachers, additional reading strategies and differentiated reading instruction in order to maintain normal or average grade level expectations.

The second point that needs to be highlighted is the strategies used in RTI need to be teachable skills for all teachers. Gone are the days when a student needed to wait for funding so an intervention teacher could be hired to support a struggling reader for the next 6 weeks. All teachers at all grade levels need to be teachers of literacy (Hock et al., 2014). Specifically, teaching students how to self-correct and navigate through content rich subjects in upper grade levels is critical. This requires intentional and targeted instruction from teachers at each grade.

It is an unwritten rule in education that 2nd-grade ends the time when children learn how to read, to 3rd-grade, when students start to learn from their reading. With more challenging content material in higher grades comes the need for struggling readers to apply different reading strategies. Further, the need for explicit reading instruction from the content area teacher is still needed to complete comprehension level instruction. This point is supported by findings from Lenski (2012) who stated that middle level and high school students typically do not have reading instruction after sixth grade. Further research from Vaughan et al. (2012) would confirm the need for continuous reading instruction at the middle levels to maintain grade target expectations with struggling

readers. In short, what I am proposing is for content area teachers at the middle and upper levels to view themselves as teachers of literacy with specific content as the medium for instruction, and not vice-versa.

Further, robust literacy instruction does not stop at the elementary grades but must continue with some struggling readers in all grades and in many different content areas like science, social studies, and mathematics. Graves et al. (2011) found that over 74% of struggling readers identified in 3rd-grade were also identified as struggling readers in 6th-grade. Nonetheless, not all teachers are trained how to teach struggling readers. This is the point that needs to be made: if teachers are not skilled in supporting struggling readers, they need to become skilled. Not supporting struggling readers when needs surface is gambling with students' academic success and future employability. Findings from Faggella-Luby and Wardwell (2011) also supported the use of evidence-based instruction for struggling readers during the transitional years (grades 5 through 8) to mitigate reading challenges and better prepare readers for learning demands in high school.

If content area teachers were skilled in providing literacy support to struggling readers then a student's literacy instruction more than doubles in a school day. Picture a 60 minute literacy block of English Language Arts, then a 60 minute block of social studies teaching inferential understanding of nonfictional texts like biographies. Next, move to a science class where students are working on an experiment and use procedural writing to complete a lab report. At a teacher meeting, the language arts, science and social studies teachers all collaborate to identify the struggling readers and writers and

create strategies and skill building exercises for targeted support. Literacy is the goal, knowledge and understanding of the content is the outcome.

It is important to conclude this narrative of supporting middle school learners with effective intervention with a gentle reminder that teachers need to have the end in mind to help students become independent successful readers who can think and communicate in a 21st century global economy. Whether teachers are directing students toward higher education such as a profession, previously described as contest mobility, or directing student skills toward a niche like a trade, teachers need to set standards for expectations for postsecondary learning and training. Ultimately, as the stated research has demonstrated from De Graaf et al. (2000), Bourdieu (1977, 1984, 1986) and Turner (1960), the postulated theory of fostering upward social mobility and investing in positive social change in today's readers and at all grade levels will reap dividends for New Brunswick's society as a whole.

Building Teacher Capacity for Literacy Instruction for Adolescent Learners

ASD-S is seeking to employ a holistic approach to supporting literacy for its 74 schools. As stated, New Brunswick schools are performing well below the Canadian average on PCAP and PISA standardized assessments. The indirect impact of illiteracy on New Brunswick's economy has also contributed to its fiscal state of high unemployment, low household income, crippling provincial debt and decreasing population.

ASD-S is well aware of the need to support early readers at the K-2 level.

Additional teachers called Educational Support Teachers for Literacy (EST-L) have been

assigned to the highest priority schools where literacy needs are most evident at these levels. The broader body of research further endorses supporting struggling readers beyond the early elementary grades. One particular area where research is not prevalent is stating who is responsible to support struggling readers beyond the K-2 levels. In the early grades, all the reading needs of students should immediately reflect back to the classroom teacher. As children move to upper grades, the responsibility of who supports non-readers to learn appears to become unclear. Smith (2012) confirmed, "literacy coaching has become an increasingly popular professional development model nationwide" (p. 1). Providing literacy coaching for teachers in cooperation with teachers providing targeted reading could be the approach necessary to hone in on supporting struggling readers and building teacher capacity in the upper grade levels.

To be an effective instructional coach at any level, it is important to approach coaching relationships as a partner rather than as a supervisor. The seven-step model designed by Knight (2011) suggested effective coaches provide choice and voice to their colleagues. By not giving choice and say in what needs to be accomplished an instructional coach is not sharing learning but implying a power position over a colleague. Further, allowing for professional reflection, dialogue, praxis, and reciprocity help a coaching relationship to be collaborative. It is not being suggested that instructional coaches are needed at every level. It is being suggested that in tandem with a targeted reading intervention approach from education support teachers for literacy (EST-L), a coaching element that follows the steps from Knight (2011), dovetail to improve reading skills with students and elevate instructional praxis with teachers. Praxis

in this context is not just referring to professional practice, but to the commitment to helping improve self and others. Smith (1999, 2011) further suggested praxis involves taking personal risk when committing to helping others make wise and prudent practical decisions about how to act in certain situations.

There have also been classroom teacher professional development programs, such as the Interactive Strategies Approach (Smith, 2012), that provided evidence that helping classroom teachers offer individualized reading instruction for their struggling readers resulted in large reading gains for students (Smith, 2012). This research supported my suggestions endorsing a two-pronged strategy at the middle level. First, a targeted reading intervention approach for struggling readers; and second, a supportive capacity building coaching approach to help teachers provide RTI to students at tier 2 and tier 3 levels.

Resource teachers used to be a logical source for tier 2 literacy support; however, with increasing demands of non-readers and more students entering upper grades with complex reading demands, resource teachers are only able to support a few of the most needy students. The need for New Brunswick teachers to take responsibility for each struggling reader in each subject area has never been so imminent. To further exasperate this issue, could be a lack of a particular skill set with teachers more than it is a lack of interest on behalf of teachers to help or support struggling readers. Findings from Smith (2012) suggested that young struggling readers could gain significantly from individualized instruction from the classroom teacher with the help of ongoing consultation by a literacy specialist, resource teacher or a combination of the two.

The remaining students who struggle with reading in middle school and high school are also required to take the highest stakes standardized assessment, the English Language Proficiency Assessment (ELPA) in 9th-grade. The ELPA is a graduation requirement for all New Brunswick students. The ELPA/R is the re-write that students take in 11th and or 12th grade if they failed the ELPA in 9th-grade or the re-write in 11th grade. The 10th grade is designated as in intervention year and there is no ELPA or ELP/R written. Without passing the ELPA or ELPA/R a student in New Brunswick cannot graduate. If a student scores an appropriate rating on the ELPA/R they are determined to be functioning at a level three, or end of Grade 8 proficiency.

Addressing the Need for Adolescent Readers

Students not passing the ELPA are not the sole responsibility of any one particular grade level teacher; but perhaps, a culmination of a number of missed steps from all grade levels from K-9th-grade. The most recent standardized assessment data to the ELPA is a Provincial Reading Assessment given to all students at the end of 6th-grade. This is a reading comprehension assessment comprised of 50 multiple-choice questions derived from the Provincial Reading Achievement Standards. Data from this assessment have been collected for more than 5 years consecutively as well as data from the ELPA. Results from the 6th-grade Provincial Reading Assessment may be a predictor of pending future results on the ELPA. If this were the case, students who are below appropriate on the 6th-grade provincial assessment are candidates for reading intervention in grades seven and eight. This intervention would not guarantee a 100% success rate on the ELPA; however, it may help mitigate students failing the ELPA.

It is important to restate that inserting an interventionist into New Brunswick's middle schools may not fix literacy success rates at the high school level. This review is further suggesting that the professional learning support needed at the middle level must have a unique focus that provides teachers with the skills they need to help children comprehend grade level texts. Moreau (2014) indicated the need for more optimal use of literacy specialist's time is needed to provide professional development and literacy coaching for teachers of adolescents. This research supports the intent of this project to further research teacher capacity for tier 2 supports for struggling adolescent readers at the middle level.

The type of coaching that may be needed in ASD-S is to provide teachers with more education about reading difficulties, classroom strategies and practice. I would further suggest that teachers of adolescents in literacy rich subjects need a skillset that can provide diagnostics and support equivalent tier 2 level of intervention. Literacy specialists can provide more intensive, investigative and problem-solving type work with children who have failed the 6th-grade provincial assessment; nonetheless, this work would be in collaboration with, not in isolation of the classroom teacher.

Conclusion

In recent decades, the Canadian province of New Brunswick has been caught in a national and global trend of transitioning from a skills-based economy to a more knowledge-based economy. This transition has exposed the once hidden issue of literacy within New Brunswick's borders for both adults and students. Surprisingly, despite New Brunswick not having racial, immigration, disparity or language issues, its status as

Canada's only bilingual province has not yielded an economy or a population with significant upward social mobility. The application of this idea has described the economic impact that low literacy has on adolescent academic success and the socioeconomic milieu in ASD-S. As a result, the application of the proposed theoretical framework has described the influence that high expectations for student reading success by parents, teachers, and students' expectation of themselves as successful readers can lead to upward social mobility and positive social change by influencing a number of social variables like truancy, drop-out rate and postsecondary education. Ultimately, this review has focused on literacy at the middle and upper grades and what initiatives have been successful to build social, economic and academic capital in other jurisdictions. Finally, this review discussed how students' reading success in New Brunswick is being addressed with respect to national and international standardized assessments.

Although early literacy intervention is already in place in ASD-S, early intervention is not a vaccine to immunize all readers of all ages against the need for further support at the upper grade levels. Surprisingly, it is in the higher levels of content instruction where weakness in student reading proficiency surface and where teacher's skill to diagnose and support reading issues appear to weaken. To help reverse this declining trend, three specific questions aimed to address adolescent reading issues are:

1) How do the individual standardized reading achievement scores for three cohorts of students enrolled in 6th-grade in 2009-2012 compare with their standardized reading achievement test scores as 9th-graders in 2012-2015?

- 2) Which level(s) of reading comprehension present the most difficulties for students on the 6th-grade Provincial Reading Assessment and the 9th-grade ELPA between the years of 2009-2015 for students in ASD-S?
- 3) How do student scores vary among education centers in relation to social economic status indicators of median household income, level of parent education, employment status and parental household demographics?

Results from this study were derived from archival data over a 6-year period from 2009-2015. A linear regression analysis and a paired samples *t* test will be used to measure changes in the effect of reading comprehension levels. The study is designed to determine if there is statistical evidence to support the need for literacy intervention at the middle grades. In reaction to an analysis of this rich data, the proposed literacy project would provide targeted response to intervention for struggling adolescent middle school readers; ultimately, to positively influence student expectation for academic success. Further, this approach could instil purposeful and professional capacity building to help teachers diagnose, analyze and support tier 2 and tier 3 students' reading concerns in ASD-S classrooms.

In due course, to improve adult literacy proficiency, income, and occupation for New Brunswick's population, educational leaders must support all grade levels to help students develop multiple literacy modalities for twenty-first century skill-sets. Since no formal studies of this nature have been conducted for any grade level in New Brunswick, this study will aim to start investigating the area of 6th and 9th-grades. Further study

would also be helpful to determine similar research questions at the early elementary grades.

Implications

Should the outcomes of this study suggest that 6th-grade reading scores are an indicator of 9th-grade ELPA scores and should it be that specific levels of reading comprehension in 6th-grade continue to present problems in 9th-grade then a number of possible project directions based on these anticipated findings could ensue. For starters, an evaluation report could be submitted to the Department of Education to explain how reading is currently being administered in ASD-S. Specifically, the evaluation report could address the local need to help teachers support struggling readers with tier 2 strategies. Ultimately, the evaluation report would be providing an informal evaluation of the current curriculum and instructional strategies which; in turn, could further support middle school teachers with evidence-based, continual progress monitoring, balanced literacy approaches to instruction.

In addition to an evaluation report, a curriculum plan could similarly provide practitioner based support for teachers. This in part, could include a reading target or goal for a specific grade level for a particular type of reader. A curriculum plan would describe the essential teaching and learning materials necessary, skills, teacher notes, and assessments required to support struggling readers over an 8-10 week period. A curriculum plan could also serve as a type of intervention program that would progress monitor readers and provide teachers with rich data to collaborate and plan during weekly professional learning meetings.

Finally, a curriculum plan could be developed to support literacy teachers in grades 6-12. This module would have specific learning targets to support teachers to cultivate new skills and apply those skills in a job-embedded learning framework. By using a structured outline, timeline, materials, and step-by-step instructions, teachers could develop new skills and strategies to support struggling adolescent readers. The challenge with this approach may be the availability of funds to provide teachers with release time to attend a 3-4 day training module.

Summary

When one reads about the current economic and social state of New Brunswick, it is difficult to not feel a sense of urgency for the greater population and most importantly, the future for students and residents of Canada's picture province. This review has looked at international, national and provincial reading assessments for both students and adults. Longitudinal standardized national and international trend data indicated that New Brunswick has struggled to compete on a national and international platform with reading comprehension. Specifically, New Brunswick's adolescents' continue to not meet provincial reading comprehension target levels. Remarkably, over the last three years nearly 30% of 9th-grade students have not met the minimum reading comprehension targets in ASD-S with the ELPA, a graduation requirement. To that end, it appears that early literacy intervention may not be the vaccine to immunize struggling readers all the way to graduation.

I propose that mobilizing struggling readers requires intentional evidence-based instruction and continuous progress monitoring through all grade levels. This requires

teachers to be able to support all readers at all grade levels with any number of reading issues. Gone are the days when grades K-5 were the grades where children learned how to read and when grades 6-12 were the grades where students learned from their reading. New Brunswick's current and future economy is contingent upon the reading skills of all students. In order to create a culture with upward social mobility a collective urgency must be employed by educators, policy makers, community members and society as a whole to ensure all students have an expectation of success and become literate independent learners motivated to initiate positive social change.

Section 2: The Methodology

Introduction

New Brunswick is Canada's only officially bilingual province. Three New Brunswick school districts are Francophone and four are Anglophone. These Francophone and Anglophone school districts collectively have over 98,900 students, a significant portion of New Brunswick's population of 751,000 people (Summary Statistics, 2014). This study was designed to investigate students in the English-speaking program in the Province of New Brunswick's largest Anglophone school district. This district, ASD-S, is located in southern New Brunswick and had a student population of 23,376 at the time of this study and a teacher population of 1,716 professional adults (Anglophone School District South, 2015).

The study presents an objective examination of comparative data from multiple sets of student reading assessment scores, collected over five school year periods across three education centers in ASD-S, from May 2009-June 2015. Bourdieu (1984) and Turner (1960) suggested that unsuccessful readers struggle to contribute to upward social mobility at the adult level; this study applied Bourdieu and Turner's theories to determine if social mobility is something that can be influenced or enhanced as early as the adolescent years. The mechanism for this determination was an analysis of archival standardized reading data, which validated the need for supporting struggling readers in the middle grades.

This study relied on a bank of reading assessment scores from the Department of Education, New Brunswick, Canada. The study was designed to determine if the 6th-

grade assessment scores are a predictor of 9th-grade ELPA results over a 5-year period.

The specific research questions this study was designed to answer were:

RQ1: How do the standardized reading achievement scores for three cohorts of students enrolled in 6th-grade in 2009-2012 compare with their standardized reading achievement test scores as 9th-graders in 2012-2015 in ASD-S?

H_{0a}: 6th-grade scores are not a predictor of 9th-grade performance in ASD-S.

H_{1a}: 6th-grade scores are a predictor of 9th-grade performance in ASD-S.

RQ2: Which level(s) of reading comprehension was the most difficult for students from each education center both with the 6th-Grade Provincial Reading Assessment and the 9th-grade ELPA between the years of 2009-2015 for students in 36 middle and high schools in ASD-S?

H_{0b}: There is no difference among the reading achievement scores by comprehension level for students in 6th-grade and reading achievement scores by level for students in 9th-grade for students in ASD-S.

H_{1b}: There is a difference among the reading achievement scores by comprehension level for 6th-grade and 9th-grade students in terms of level of reading achievement for students in ASD-S between 2009-2015.

Walden's Institutional Review Board approved this study on September 22, 2015 (IRB; approval #: 09-22-15-0366779). This approval was contingent upon further approval of data use by the Department of Education of the Province of New Brunswick. This approval was granted by the Department of Education on November 30th, 2015 (see Appendix B).

Research Design and Approach

This study used a quantitative design to examine the association between two or more variables using a single linear regression and a paired samples *t* test. A sample of 1,200 students was studied using archival data, gathered by the school district between 2009-2015. The predictor variables in the study are 6th-grade total percentage reading scores and reading scores for comprehension levels from 6th-grade; literal, inferential, and critical categories and the dependent variables are 9th-grade total percentage scores and reading comprehension scores for literal, inferential, and critical levels from 9th-grade.

This study applied the theory of building cultural capital through education by Bourdieu (1977, 1984, 1986) and similarly, the advantages a society receives when improving a climate of contest mobility from its citizens (Turner, 1960). The framework in this study is based on the application of theories from both Bourdieu (1977, 1984, 1986) and Turner (1960) by supporting literacy at the middle and upper grades and what initiatives have been successful to build social, economic, and academic capital in other jurisdictions. Specifically, the application of this theoretical framework described what influence high expectations for student reading success by parents and teachers alike may have on student reading success in ASD-S. The power of students' expectations of themselves as successful readers is discussed in light of how reading success can lead to upward social mobility and positive social change; hence, influencing a number of social variables like truancy, drop-out rate, and postsecondary education.

The study measured the effect each predictor variable (literal, inferential, and critical comprehension scores) in 6th-grade had on a continuous dependent variable of 9th-grade reading performance. In other words, 6th-grade scores explained variances in 9th-grade scores. This analysis determined the effect the three factors of reading comprehension in 6th-grade had on 9th-grade scores while controlling for factors of socioeconomics in each of the 36 schools from the three education centers studied in ASD-S. The unit of analysis for this study was individual students (*N*=1,200), who had an archived record of 6th and 9th-grade reading performance assessments. Demographic profiles of schools and education centers were collected.

Proctor, Moore and Gao (2003) used predictor variables as a mechanism to determine an occurrence at a later date. The occurrence is a criterion variable. In this study, the predictor variables are the 6th-grade Provincial Reading Assessment scores and the criterion variables are the 9th-grade ELPA results. This study examined the relationship among the same cohort of students' predictor variables (6th-grade data set) with the same students' criterion variables three years later when in 9th-grade (9th-grade data set).

Construction of the Data Sets

Two individual data sets were created for this study, a student data set and an education center data set. The student data set was labeled with the indicators of school, student ID and cohort year and includes three variables (literal reading comprehension scores, inferential reading comprehension scores, critical reading comprehension scores), for the same students in both 6th and 9th-grade. The reading assessment scores were

analyzed by two measures: a continuous measure and an ordinal measure. The continuous measure was the percent scored correct. The ordinal measure had three answer ranges:

- BAA (below appropriate or less than 59%),
- AA (appropriate achievement, 60-85% for both 6th and 9th-grade), and
- SA (or strong achievement, between 86% and 100% for both 6th and 9th-grade).

Each of the education centers in ASD-S data set consisted of three separate nonspecific identifiers to ensure anonymity. The education centers were coded by number as 1, 2 or 3. I made a data set of test scores that are on file for students who have completed both 6th and 9th-grade from the middle and high schools from 36 of the 74 schools in ASD-S. Only data available from students in both 6th-grade and 9th-grade were used. Patently, to be included in the analysis, a student had to have on file both reading assessment scores from 6th and 9th-grades.

Setting and Sample

The setting of the study was the ASD-S in southern New Brunswick, Canada. The district has 24,256 students, 1,650 teachers, 72 schools in any given year and 3 education centers each with differing numbers of K-12 schools. The sample was drawn from an existing inventory of student assessment results dating from 2009-2015 for both the 6th-grade Provincial Reading Assessment and the 9th-grade ELPA. Specifically, the sample was developed from a combined total of 36 middle and high schools from the 74 total schools in ASD-S. Individual student achievement test results were kept under the

domain of student/district confidentiality; however, school-based results were made public.

Ordinal scales of assessment results were examined using the following classifications: students achieving below 57% were assigned a measure of BAA (below appropriate achievement), 58%-88% were assigned AA (appropriate achievement) for 6th-grade and 58-85% AA (appropriate achievement) for 9th-grade, and above 88% were assigned SA (strong achievement) and above 85% SA (strong achievement) for 6th and 9th-grades respectively.

The sample size for this study included students from all three ASD-S education centers' middle and high schools from test scores dating back to 2009-2010. The sample size was determined from a sample error formula, which included a 95% confidence interval as one of the criteria (Fowler, 2009).

A standard sample size determination formula was used for this study:

$$n = \frac{[\mathbf{z}_{\alpha}]^2 pq}{E^2}$$

Specifically, n equals the number of cases included in the sample $[z_a]^2$ was based on the confidence level, p and q were population parameters that represent the proportion of the population that satisfies some condition (p) and one minus p(q); these estimates minimized error. E^2 was the desired margin of error or, in this case, .05. Using this formula, a sample size of 385, was determined as follows:

Sample size determination formula

$$n = \frac{[\mathbf{z}_{\alpha}]^2 pq}{E^2}$$

$$n=1.96^2(.25)$$

n=384.16

I rounded this number up to 385, as one cannot select a fraction of a person. The number of students selected for each of the three cohorts were rounded to 385 and a contingency of 15 students were added to the calculated sample of 385 for a total of 400 students per center to provide room for addressing any missing data issues that arose in the sample.

The sample was comprised of students that have completed both the 6th-grade and 9th-grade provincial assessments. An equal probability of selection method (EPSEM) was used to ensure that results in the population elements had equal probability of being included in the sample. To ensure this, all identified students with scores from 6th and 9th-grade were listed. Next, a randomly selected start point was chosen from the total list of student scores. Then, student ID's were selected until a total aggregate of 400 students from each cohort year were chosen. The total aggregate sample of 1,200 students from all three education centers in ASD-S was added to the sample. Table 2 displays the total number of students who have written the 6th-grade assessment and the 9th-grade ELPA over a 3-year period. The sample of N=1,200 was drawn from the inventory of anonymous student numbers in Table 2. Random selection was used to create a sample that was representative of the population. With a representative sample, the results can be generalized from the study to the population.

Table 2

Number of Students Writing Assessments by Center, Year, and Grade Level

	Total Writing 6th-grade Assessment			Total Writing 9th-grade ELPA		
Year	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Education Center						
Center A	737	764	761	761	776	682
Center B	915	837	841	816	782	752
Center C	314	273	278	276	264	131
Total Sample	1,966	874	1,880	1,853	1,822	1,565
Total Sample Availability		5,720			5,240	

Instrumentation and Materials

The 6th-grade reading Comprehension Achievement Test and the 9th-grade ELPA were both comprised of 50 multiple-choice questions at the time of this study. Half of the questions were purchased from the Canadian Test Centre (CTC), a national education assessment service that measured essential learnings in mathematics, reading, language and spelling. The questions from the CTC were normed by national standards for the purposes of a standardized test. The norming sample was made up of over 60,000 students from over 300 schools across Canada (Canadian Test Centre, 2015). This stratified random sample included students from every Canadian province, from rural and

urban areas and from public, private and First Nations schools. This wide sample selection ensures a representative Canadian sample.

Middle and high school teachers created the remaining of the questions on the assessments from the New Brunswick Reading Achievement Standards. The CTC provided in person guidance and coaching for teachers to create multiple-choice items over a one week period during summer months in 2009. During the first year of the assessment implementation, the items were field tested for validity then added to the purchased items from CTC to complete the 50-item question assessment. The following year the assessments were administered province wide.

The rationale for purchasing half of the assessment questions and creating half of the questions is to norm student reading proficiency with the other Canadian provinces and to build teacher capacity with item writing. Further, using the Reading Achievement Standards to create items for all three levels of reading comprehension was a rich and professionally rewarding experience for teachers and a guaranteed way to determine New Brunswick reading comprehension achievement level output from students.

The text forms for each assessment were purposefully selected to provide students with a number of continuous and non-continuous fiction and nonfiction texts.

The reading difficulty for the text forms were both at and below the grade level being assessed. The rationale behind multiple text forms is to determine student reading comprehension ability on a broad range of genres, not just one particular text. The variety of genres levels the playing field for students with varying interests and abilities also helping make the assessment fair between genders.

Data Collection and Analysis

The data collection and analysis component of this study was divided into two sections; first, a data collection component that provided descriptive statistics and a symbol for each variable. This information is presented in a table format for reader convenience (Table 3). The second component of this section is a brief discussion of each research question and its corresponding analysis. In this section, the predictor and criterion variables will be identified for each research question as well as the method of analysis that was employed.

Table 3:

Table of Variables Used With Descriptive and Inferential Measures (N=1,200)

	ipuve una injerentiai measures (14–1,200)
Variable Description	
Predictor Variables	Symbol
6th-grade6th-grade reading Scores	6GS
Literal Response 6th-grade	LR6
Inferential Response 6th-grade	IR6
Critical Response 6th-grade	CR6
Criterion Variables	
9th-grade ELPA Scores	9GS
Literal Response 9th-grade	LR9
Inferential Response 9th-grade	IR9
Critical Response 9th-grade	CR9

Data Collection

The archival student assessment scores for this study were retrieved with special permission from the New Brunswick Department of Early Education and Childhood Development. The data use agreement permitting access to this data is located in Appendix B. The data were collected from normed standardized provincial assessments at the Assessment Branch of the Department of Education. This department is the highest governing body of student assessment in the Province of New Brunswick. Archival reading comprehension assessment data were made available from 2009 to 2015.

To secure the data set, special permissions were granted from the Superintendent of ASD-S. ASD-S uses permission forms for researchers requesting access to schools,

documents etc. One such permission form is included in Appendix C. The statistical analysis for each research question was comprised of both descriptive and inferential statistics. Conditions of the IRB certificate were contingent upon approval of data use by the Department of Education of the Province of New Brunswick. See Appendix B for the Data Use Agreement from the Department of Education. The IRB approval number for this study is 09-22-15-0366779.

This study compared the individual scores of 6th-grade Provincial Reading
Assessment results from three combined education centers with the same cohorts of
students after completing the 9th-grade ELPA between 2009-2015. The unit of analysis
(N) for the individual 6th-grade assessment scores was chosen from a total population of
5720 students and 9th-grade assessment scores were chosen from a total population of
5240 total students. One data set combined 400 6th-grade and corresponding 9th-grade
students from all three education centers in ASD-S for the years 2009-2012 and 20122015 respectively, providing a combined total data set of 1200 students for the study.

Data Analysis

The analysis was organized by research question. The predictor variables in this RQ were the 6th-grade scores (X) from 2009-2012. The corresponding criterion variables were 9th-grade scores (Y) from 2012-2015. A simple linear regression was applied to determine if there was a positive or negative relationship between 6th-grade continual scores; (X) or, predictor variable and 9th-grade continuous scores; (Y) or, criterion variable. The linear relationship between 6th and 9th-grade scores was exemplified from the formula:

$$E(Y/X) = \beta_0 + \beta_1 X$$

Where E=Expectation of Y for a given value of X is equal to the Y intercept, or β_0 plus the slope, or $\beta_1 X$. In this single linear regression model it was determined that 6th-grade continuous scores were a predictor of 9th-grade composite scores.

Descriptive statistics such as mean, median, mode, standard deviation and statistical range are provided in the Model Summary for each RQ below which indicated general tendencies in the data (Creswell, 2012). For RQ1, the mean measure determined average reading score for each of the 6th-grade and 9th-grade reading assessments. The median measure determined which reading responses were in the middle for each assessment year for 6th-grade and 9th-grade and for each student in each center for ASD-S. Following, the mode determined which scores were most representative between 6th-grade and 9th-grade assessments by district. The standard deviation determined the variability or dispersion of assessment scores by grade level, and by cohort year. The standard deviation for the 6th-grade cohort years was compared to that of the 9th-grade cohort years by center and by district. The statistical range determined there was a widening of assessment results (from lowest score to highest score) for each cohort year between 6th-grade and 9th-grade for all levels of reading comprehension.

Inferential statistics were used to model the relationship between the predictor variable, 6th-grade reading scores are the criterion variable, 9th-grade achievement scores to see if they meet the assumptions of linearity. Further, inferential statistics modeled if both predictor and criterion variables met conditions for homoscedasticity using scatter plots and normal P-P Plots for regression.

The continuous variables that were analyzed in RQ2 were 6th-grade literal scores with 9th-grade literal scores, 6th-grade inferential scores with 9th-grade inferential scores and finally 6th-grade critical scores with 9th-grade critical scores for the same cohort of students when in 6th-grade from 2009-2012 compared to when they were in 9th-grade between 2012-2015. Finally, a statistical significance or p value of the difference was determined supporting or rejecting the null hypothesis. The criterion for rejecting the null hypothesis was a p value of less than and equal to 0.05.

Descriptive statistics for RQ2 are the mean, median, mode, range and SD. The mean was used to determine which type of question (literal, inferential or critical) was answered most correctly from each cohort in the study. The median determined what the middle score was for each assessment for each year based on the level of reading comprehension question. This provided comparative data among centers in ASD-S and between cohort years. The mode determined the assessment score that appeared the most often by reading comprehension level for each assessment and for each education center in ASD-S.

Inferential statistics employed for RQ2 were normal Q-Q plots by cohort year modelling that no significant outliers were evident that could influence the overall outcome of the analysis. As a point of interest, both a Shaprio-Wilk's test and a Kolmogorov-Smirnov test were applied including outliers and with outliers removed. In both cases normality was realized (See Figures 9-17).

Model Summary RQ1

Table 5 illustrates a linear regression analysis of this research question presenting an \mathbb{R}^2 value, or the percentage of variance in 9th-grade scores that could be predicted by 6th-grade scores. Finally Table 4 illustrated a p value, or, a significance relationship value that indicated the probability of obtaining the observed correlation given the null hypothesis to determine if there was sufficient evidence to reject the null hypothesis.

Table 4

Single Linear Regression Model Results Research Question 1 (n=1200)

9th-grade Assessment Scores	(Y	or Dependent V	Variable)
6th-grade Assessment Scores (X or Predictor Variable)	$2012-2013$ R^2 p	$2013-2014$ R^2 p	$2014-2015$ R^2 p
2010-2011 (<i>n</i> =400) 2011-2012 (<i>n</i> =400) 2012-2013 (<i>n</i> =400)	.580 .000	.690 .000	.673 .000

The R^2 value in the linear regression model in Table 4 indicated the proportion of variance in the dependent variable (Y, or 9th-grade scores) from the predictor variable (X, or 6th-grade scores). From this analysis using the 9th-grade Assessment Scores column, in 2012-2013, R^2 =.580 indicated the predictor variable (6th-grade scores) explained 58% of the variability of the dependent variable of 9th-grade scores. Consequently, R^2 further indicated that 6th-grade scores explained 69% of the variability of 9th-grade scores in 2013-2014 and finally R^2 showed that 67% of the variability was explained in 2014-2015 between 6th and 9th-grade scores.

Results from the analysis in Table 4 demonstrated the statistical significance that 6th-grade reading comprehension scores are a predictor of 9th-grade reading comprehension scores for the same cohorts of students. Conclusions from this analysis would therefore reject the null hypothesis:

H_{0a:} 6th-grade scores are not a predictor of 9th-grade performance in all three combined education centers in ASD-S.

H_{1b}: 6th-grade scores are a predictor of 9th-grade performance in all three combined education centers in *ASD-S*.

Descriptive Statistics

Descriptive statistics, including mean, median, mode, standard deviation and statistical range are provided to indicate general tendencies in the data (Creswell, 2012). For RQ1, the mean measure determined the average reading score for each of the 6th-grade and 9th-grade reading assessment years. The median measure determined which reading responses were in the middle for each assessment year for 6th-grade and 9th-grade and for each student in each center for ASD-S. Following, the mode determined which scores were most representative between 6th-grade and 9th-grade assessments. The standard deviation (SD) displayed the variance or dispersion of assessment scores by cohort year. The SD for the 6th-grade cohort years was compared to the SD for 9th-grade cohort years. The statistical range determined if there was a shortening or widening of assessment results (from lowest score to highest score) for each cohort year between 6th-grade and 9th-grade. Tables 5, 6, and 7 summarize the descriptive statistics for cohort years 2010, 2011, and 2012 respectively.

Table 5

RQ 1 Descriptive Statistics 2010 (n=400)

	6th-grade % Correct	9th-grade % Correct	
Mean	67.0	66.0	
Median	68.0	68.0	
Mode	62.0^{a}	74.0	
Range	80.0	80.0	

a. Multiple modes exist. The smallest value is shown

Table 6

RQ 1 Descriptive Statistics 2011 (n=400)

	6th-grade % Correc	t 9th-grade % Correct	
<i>M</i>	66.0	67.4	
Mdn	70.0	70.0	
Mode	78.0	72.0	
Range	82.0	81.0	

Table 7

RQ 1 Descriptive Statistics 2012 (n=400)

	6th-grade % Correct 9th	n-grade % Correct
M	71.0	66.5
Mdn	74.0	68.0
Mode	76.0	70.0
Range	74.0	70.0

Assumptions for RQ1

A linear regression test was selected to determine the degree of linearity for RQ1. The charts in Figure 7 clearly show strong measures of how well the data points fit on or very near the diagonal line. As such, the relationship between the predictor variable; 6th-grade total reading percent correct, and the criterion variable, 9th-grade total reading percent correct, was linear proving the analysis has not violated the assumption of linearity.

A separate confirmation of normality is the Durbin-Watson measure; the closer a value is to 2, the stronger the measure of normality. For each of the cohort years the Durbin-Watson test indicated a strong measure of normality and a positive relationship between 6th and 9th-grade total reading percent correct for each cohort year.

Another assumption of linear regression was the test for homoscedasticity, which assessed if the variance of the errors was constant or irregular across the points of

observation. In other words, a scatter plot that had points evenly distributed across the predicted value; 6th-grade total percentage scores correct (X-axis) and the residual value, 9th-grade total percentage scores correct (Y-axis), is said to have homoscedasticity. Output confirmed that the assumption of homoscedasticity is met for RQ 1 as the points were relatively evenly spread between the X and Y-axis. For the 2011 graph in Figure 7, the outliers were kept as the data was confirmed to be correct. Further, the P-P plot in Table 8 shows the 2011 cohort to be along the lines or normality even with the outliers Included.

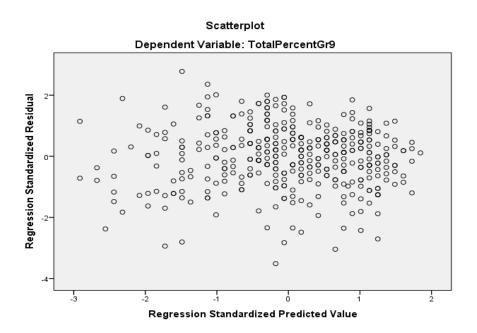


Figure 3. Scatter plot to measure for homoscedasticity for RQ1, 2010.

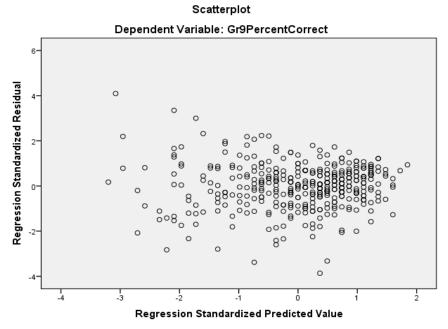


Figure 4. Scatter plot to measure for homoscedasticity for RQ1, 2011.

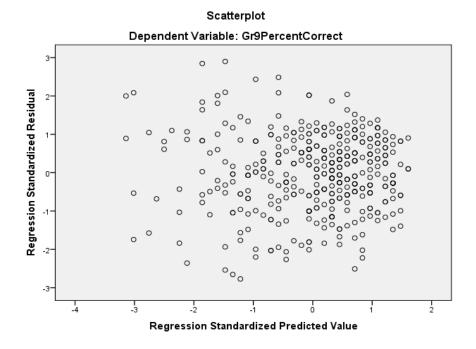


Figure 5. Scatter plot to measure for homoscedasticity for RQ1, 2012.

Normal P-P Plot of Regression Standardized Residual

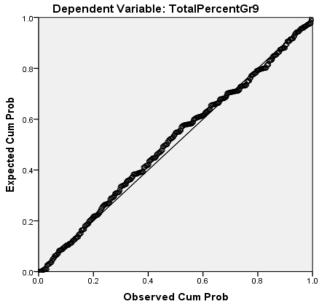


Figure 6. Normal P-P plot of linear regression to determine degree of linearity for RQ1 in 2010. Total percent 6th-grade (observed cum prob, X-axis), total percent 9th-grade (expected cum prob, Y-axis). Durbin-Watson 2.11.

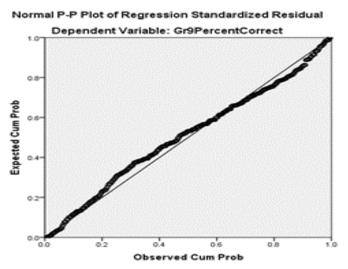


Figure 7. Normal P-P plot of linear regression to determine degree of linearity for RQ1 in 2011. Total percent 6th-grade (observed cum prob, X-axis), total percent 9th-grade (expected cum prob, Y-axis). Durbin-Watson 1.99.

Normal P-P Plot of Regression Standardized Residual

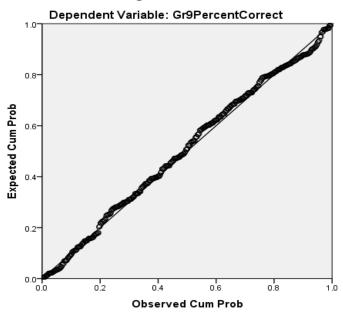


Figure 8. Normal P-P plot of linear regression to determine degree of linearity for RQ1 in 2012. Total percent 6th-grade (observed cum prob X-axis), total percent 9th-grade (expected cum prob, Y-axis). Durbin-Watson 2.01.

Model Summary RQ2

The intent behind RQ2 was to compare student reading comprehension level performance and to determine if there is a difference among reading achievement scores by reading comprehension level between 6th and 9th-grade standardized reading achievement scores. The paired-samples t test was used to determine whether the mean difference between paired observations was statistically different from zero. Pair 1 was the total percentage scores of 6th-grade students compared with total percentage scores of 9th-grade students; pair 2 was literal reading scores of 6th-grade students compared to literal reading scores of 9th-grade students; pair 3, was inferential reading scores of 6thgrade students compared to inferential reading scores of 9th-grade students, and pair 4 was the critical reading scores of 6th-grade students compared to critical reading scores of 9th-grade students. The participants were the same students tested at two time points or under two different conditions on the same dependent variable. To complete this analysis, the paired samples t test was employed to determine which level of reading comprehension presented the most difficulties for students with the 6th-grade Provincial Reading Assessment and the 9th-grade ELPA.

Initial interpretations of the data are shown in Table 8: Paired Samples Statistics N=400. The relevant descriptive statistics shown here display the mean score of individual students within the sample, not a mean score of the aggregate total cohort. These data inform that as a total percentage score, it appears 6th-grade students performed within a percentage point of the 9th-grade ELPA. In short, 6th-grade total

percentage scores were 1% better than 9th-grade total percentage scores (67% \pm 17%) as opposed to 9th-grade total percentage scores (66% \pm 15%) respectively.

Table 8

Paired-Samples Statistics, N=400

	Paired Samples	M	SD	SEM	
Pair 1	TotalPercentGr6	67.0	17.0	.8404	
	TotalPercentGr9	66.0	15.0	.7451	
Pair 2	Literal Gr. 6	65.4	21.7	1.0867	
	Literal Gr. 9	76.9	17.9	.8964	
Pair 3	Inferential Gr. 6	67.9	17.0	.8518	
raii 3	Inferential Gr. 9	67.0	15.9	.7937	
			40.0	0.0=0	
Pair 4	Critical Gr. 6	65.3	19.9	.9978	
	Critical Gr. 9	51.1	19.0	.9504	

The standard error of the mean is a value that indicates the range a student from within the sample of 400 students would fall if selected at random. In this case, the standard error of the mean for 6th-grade total percentage scores is $(67\% \pm .84\%)$ and 9th-grade total percentage scores are $(66\% \pm .74\%)$.

Looking closer at the paired sample statistics for levels of reading comprehension (literal, inferential and critical scores), one can see from Table 9 there was a correlation in student performance between 6th-grade mean literal scores with 9th-grade mean literal scores. Specifically, 9th-grade mean literal scores were 11.5% higher than 6th-grade mean literal scores. This stands to reason that students are improving and developing skills responding to literal questions over time. Conversely, when looking at the critical

level of reading comprehension, 9th-grade scores were 14.2% lower than when the same cohort wrote in 6th-grade, see Table 9 for the Paired Samples Correlations. This is an area of concern for instructional leaders to plan for skill building strategies for adolescent readers between 6th and 9th-grade in the domain of critical reading comprehension strategies. Inferential mean scores between 6th and 9th-grades were virtually equal.

Table 9

Paired Samples Correlations (n=400)

	Paired Samples	Correlation	Sig.
Pair 1	Total % Gr6 & Gr9	.761	.000
Pair 2	Literal Gr. 6 & Literal Gr. 9	.506	.000
Pair 3	Inferential Gr. 6 & Inferential Gr. 9	.723	.000
Pair 4	Critical Gr. 6 & Critical Gr. 9	.402	.000

Below, in Table 10, the *Paired Samples Test 2010* displays the mean difference between 6th and 9th-grade total percent scores, literal, inferential, and critical scores, as well as measures of variability.

Table 10

Paired Samples Test 2010

-	Paired Differences								Sig.
Paired Samples		M	SD	SEM	95% Confidence EM Interval of the				
					Diffe	rence			
					Lower	Upper			
Pair	TotalPercentGr6	.98	11.10	.55	11	2.07	1.766	399	.078
1	TotalPercentGr9								
Pair	Literal Gr. 6	-11.40	19.90	1.0	-13.41	-9.48	-11.50	399	.000
2	Literal Gr. 9								
Pair	Inferential Gr. 6	.86	12.30	.61	35	2.10	1.40	399	.162
3	Inferential Gr. 9								
Pair	Critical Gr. 6	14.20	21.32	1.07	12.10	16.32	13.30	399	.000
4	Critical Gr. 9								

The magnitude of the mean difference and its likely range between total percent 6th and 9th-grades scores showed a difference of .98 (95% CI, -.11 to 2.07) and a *p* value of .078, which is not significant as it is larger than .05. This result indicated that the mean difference between 6th and 9th-grade scores was .98% (6th-grade higher than 9th-grade) and that one can be 95% confident that the true mean range difference lies somewhere between -.11 and 2.07 percentage points.

The power of the paired samples test was evident when drilling deeper into reading comprehension data and looking at 6th and 9th-grade literal scores. The mean difference between 6th and 9th-grade scores was -11.4 (95% CI, -13.41 to -9.48)

percentage points. This was significant as the p value is less than .05. Regardless, there was an 11.4% disparity between 6th and 9th-grade literal scores with 9th-grade cohort outperforming the 6th-grade cohort. The 95% CI was clearly to one side of zero and indicated that this value was statistically significant. Finally, the 9th-grade scores showed a differential increase of 11.4% \pm 1.0 percentage points (mean \pm standard error of mean).

Much like the total percentage scores for 6th and 9th-grade, the inferential scores have little variance. The results indicated the mean difference between 6th and 9th-grade inferential scores were .86% (95% CI, -.35 and 2.10) percentage points. This was not a significant difference as the range falls on either side of zero and the mean difference was less than 1%.

More importantly, critical levels of reading comprehension indicated an increase of 14.2 (95% CI, 1.07 to 12.10) percent stating that 6th-grade critical scores outperformed 9th-grade critical scores. In other words, 6th-grade critical scores show a difference of $14.2\% \pm 1.07$ -% [mean \pm standard error].

Descriptive Statistics

Table 11

RQ 2 Descriptive Statistics 2010

	Total % Correct 6th-grade	Total % Correct 9th-grade	Literal 6th- grade	Literal 9th- grade	Inferential 6th- Grade	Inferential 9th- Grade	Critical 6th- grade	Critical 9th- grade
Sample	400	400	400	400	400	400	400	400
M	67.0	66.0	65.4	76.9	67.9	67.0	65.4	51.2
Mdn	68.0	68.0	64.0	80.0	70.0	70.0	67.0	50.0
Mode	62.0	74.0	64.0	90.0	77.0	73.0	67.0	50.0
SD	16.8	14.9	21.7	17.9	17.0	15.9	20.0	19.0
Range	80.0	80.0	91.0	100	83.0	87.0	89.0	100.0

Table 12

RQ 2 Descriptive Statistics 2011

	Total % Correct 6th-grade	Total % Correct 9th-grade	Literal 6th- grade	Literal 9th- grade	Inferential 6th- Grade	Inferential 9th ⁻ Grade	Critical 6th- grade	Critical 9th- grade
Sample	400	400	400	400	400	400	400	400
M	66.0	67.4	71.5	73.5	67.0	65.8	57.0	66.0
Mdn	70.0	70.0	75.0	80.0	70.0	67.0	60.0	70.0
Mode	78.0	72.0^{a}	75.0	80.0	79.0	70.0	60.0	70.0
SD	16.2	14.6	19.1	16.9	18.1	15.4	18.6	19.5
Range	82.0	81.0	92.0	100.0	89.0	87.0	100.0	90.0

Table 13

RQ 2 Descriptive Statistics 2012

	Total % Correct 6th-grade	Total % Correct 9th-grade	Literal 6th- grade	Literal 9th- grade	Inferential 6th- Grade	Inferential 9th- Grade	Critical 6th- grade	Critical 9th- grade
Sample	400	400	400	400	400	400	400	400
M	71.0	67.0	77.0	76.0	70.3	63.2	69.0	66.0
Mdn	74.0	68.0	80.0	80.0	73.0	67.0	70.0	70.0
Mode	76.0	70.0	90.0	80.0	77.0	70.0	80.0	70.0
SD Range	15.6 74.0	13.4 70.0	19.8 90.0	16.2 80.0	15.1 83.0	15.0 76.0	20.4 100.0	17.2 90.0

Assumptions

There are four assumptions that were addressed before using the paired sample *t* test. It was important to ensure the data collected could be analyzed by this test. The first assumption was the dependent variable, 9th-grade reading comprehension scores by reading level, was measured at the continuous level. This was the case with this analysis, as all student scores were a continuous measure.

The second assumption was that one predictor variable existed that consisted of two categorical groups or matched pairs. In this case, the related groups were 6th-grade student scores being analyzed against the same student score when in 9th-grade at a later date.

The third assumption stated there should have been no significant outliers in the differences between 6th and 9th-grade scores by comprehension level. Figure 9 displayed normal Q-Q plots by cohort year and by reading comprehension level to model that the

third assumption was met and that no significant outliers were evident that could influence the overall outcome of the analysis. As a point of interest, both a Shaprio-Wilk's test and a Kolmogorov-Smirnov test were applied including outliers and with outliers removed. In both cases normality was realized (See Figures 9-17).

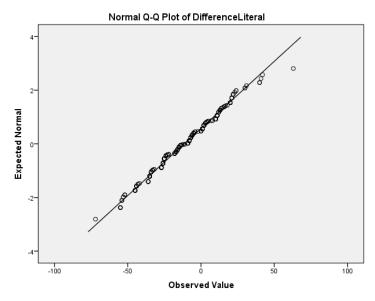


Figure 9. Normal Q-Q plots for paired samples *t test* testing for normality for RQ 2, 2010 literal scores.

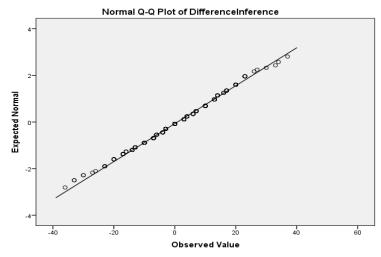


Figure 10. Normal Q-Q plots for paired samples *t test* testing for normality for RQ 2, 2010 inferential scores.

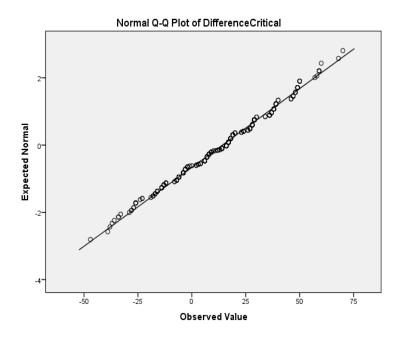


Figure 11. Normal Q-Q plots for paired samples *t test* testing for normality for RQ 2, 2010 critical scores.

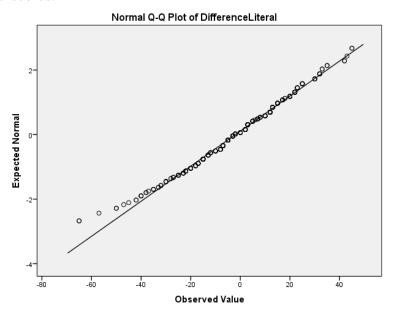


Figure 12. Normal Q-Q plots for paired samples t test testing for normality for RQ2, 2011, literal scores.

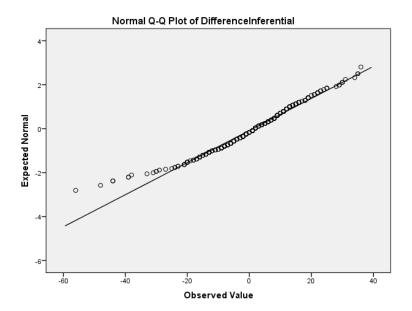


Figure 13. Normal Q-Q plots for paired samples *t test* testing for normality for RQ 2, 2011, inferential scores.

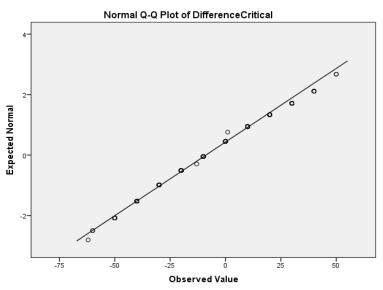


Figure 14. Normal Q-Q plots for paired samples t test testing for normality for RQ 2, 2011, critical scores.

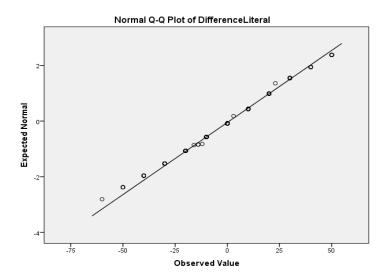


Figure 15. Normal Q-Q plots for paired samples *t test* testing for normality for RQ2, 2012, literal scores.

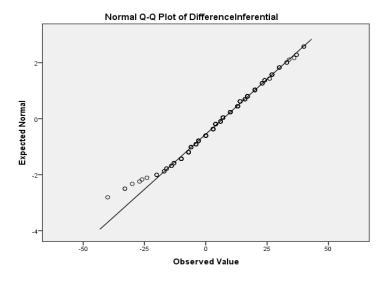


Figure 16. Normal Q-Q plots for paired samples *t test* testing for normality for RQ2 2012, inferential scores.

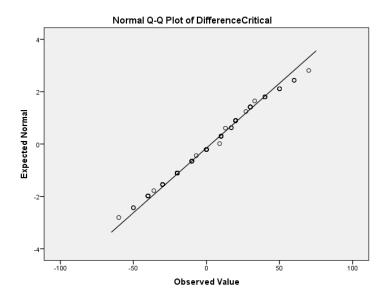


Figure 17. Normal Q-Q plots for paired samples *t test* testing for normality for RQ2, 2012, critical scores.

The fourth assumption assured that the distribution of the difference between 6th and 9th-grade scores (predictor variable X, and criterion variable Y, respectively) should have been approximately normally distributed along the line of normality. There were violations of normality for 2011-Literal, 2011-Inferential, and 2012-Inferential. For each of the identified figures (9-17), the bottom end of the line for normality showed points above the trend line. When these outliers were removed from the data set, the trend line remained the same. Because a paired samples *t* test is quite robust to deviations from normality and because of the richness of the large data sets being analyzed, skewed distributions with outliers were not problematic. In more simple terms, non-normality did not affect the error rate and the paired samples *t* test was robust in this regard.

Nonetheless, non-normality was still being reported and outliers were included in the overall analysis.

Finally, the scope of the study was limited to only the data that have been made public from the Department of Education. I think the amount of data made available was enough to determine if the null hypothesis could be accepted or rejected. If this study had been privately funded, other data that could have indicated the impact of socioeconomic status would have contributed to the richness of this study.

Statistical Significance

The significance column (Sig. 2-tailed) indicated a significant value of the paired-samples *t* test. It is important to note that this value did not indicate the importance or strength of the mean difference between 6th and 9th-grade scores but only the likelihood of a mean difference as greater than the sample observed given the null hypotheses being true:

Which level(s) of reading comprehension presented the most difficulties for students both with the 6th-grade Provincial Reading Assessment and the 9th-grade ELPA between the years of 2009-2015 for students in 36 middle and high schools in ASD-S?

The p value derived from Table 11 was the same number found in the Sig. 2-tailed column. P values less than .05 were statistically significant (p < .0005). In this case Table 11 reported a statistically significant differential between 6th and 9th-grade literal scores of 11.4 (95% CI, -13.41 to -9.48) percent, t(399) = -11.50, p < .0005 and for 6th and 9th-grade critical scores: 14.2 (95% CI, 1.07 to 12.10) percent t(399) = 13.3, p < .0005. The importance of the p value in this scenario was that it indicated the probability of obtaining the given t-value if the null hypothesis was correct. A second measure that

can be used to confirm the statistical significance of the literal and critical scores was the measure of Cohen's d, or effect size:

$$d = \frac{M}{SD}$$

Literal effect size
$$d = \frac{-11.4}{19.9} = -1.15$$

Inferential effect size
$$d = \frac{.86}{12.3} = .07$$

Critical effect size
$$d = \frac{14.2}{21.32} = .67$$

Effect sizes from 0.5 to 0.8 were considered medium, above 0.8 are considered large. In this scenario, the Cohen's d effect size was parallel to the result of the significance or p value in that the output for literal and critical scores had large effects. In short, the statistical significance differential between 6th and 9th-grade literal scores of t(399) = -11.50, p < .0005, d = 1.15 and for 6th and 9th-grade critical scores: t(399) = 13.3, p < .0005, d = .67. Descriptive statistics from these analyses are found in Tables 12, 13, and 14.

Summary

In sum, a linear regression established that 6th-grade total percent reading scores were a statistically significant predictor of 9th-grade total percent reading scores comparing the same students over a 3-year period. For the 2012-2013 year, 6th-grade scores accounted for 58% of the explained variability when the same cohort of students wrote the 9th-grade reading assessment. Subsequently, for 2013-2014, 6th-grade reading

scores accounted for 68.8% of the explained variability in 9th-grade reading scores. Finally, for the 2014-2015 cohort, 6th-grade scores accounted for 67.3% of the explained variability in 9th-grade reading scores.

A paired sample *t* test was used to determine if there was a statistically significant mean difference among reading achievement scores by comprehension level for students in 6th-grade and reading achievement scores by level for students in 9th-grade. Outliers were detected in each of the cohort years. Statistical inspection of outlier values using Shaprio-Wilk's did not reveal outliers to be extreme and they were therefore kept in the analysis. Literal scores from 9th-grade students out performed literal scores from the same cohort when in 6th-grade. Interestingly, 6th-grade critical scores out performed 9th-grade critical scores from the same cohort year.

Assumptions, Limitations, Scope, and Delimitations

I assumed that the data analyzed in this study were true and accurate. I assumed that the Government of New Brunswick published trustworthy data for student reading comprehension assessments. To question the authenticity of the assessment data used in this study would be to also question the Assessment and Curriculum Branch with the Department of Education, the Canadian Testing Center for Excellence, the Minister and Deputy Minister of Education for the Province of New Brunswick, without evidence for doing so.

The limitations to this study fell within the scope of the type of data available. If other forms of data such as student postal code, grades, and truancy data had been available, this study could have gone further into describing SES. As it is, no study

comparing student reading comprehension results among 6th and 9th-grade, has ever been completed to the best of my knowledge. Analysis of this data will inform educational leaders and policy makers if a middle level intervention program has merit and why. Ultimately, I anticipated that by improving adolescent reading comprehension there will be a positive impact on high school success rates.

The scope of this study was very specific and with limitations. First, it only looked at reading comprehension results of adolescent students in one district. Because standardized writing data were only available for 9th-grade it was felt not enough information was available to properly address a null hypothesis. Secondly, this study was limited in scope to three distinct locations or three education centers. Nonetheless, students who completed a standardized assessment both in 6th and 9th-grade will be part of the sample making results of this study generalizable to a larger population.

Protection of Participant's Rights

This study looked at provincial reading achievement data from 2009-2015. This information was obtained with special permission from the Deputy Minister of the Department of Education with the Province of New Brunswick. The data was archival and did not reveal any personal information such as student names, grades or schools. No permission forms were required from individual students or schools as no individual student data was identified in this study. Full measures to ensure participant rights were respected.

Walden's Institutional Review Board conditionally approved this study on September 22nd, 2015 (IRB; approval #: 09-22-15-0366779). This approval was

contingent upon further approval of data use by the Department of Education of the Province of New Brunswick. This approval was granted (see Appendix B) by the Department of Education on November 30th, 2015.

Conclusion

This study objectively analyzed comparative data from multiple sets of student reading assessment scores over a period of five school years from three education centers in ASD-S from May 2009-June 2015. Further, the work of Bourdieu (1986) and Turner (1960) has been applied to this final study to build a new framework suggesting the importance improved literacy can have on stimulating upward social mobility in New Brunswick. In short, this study has postulated that social mobility is something that can be influenced or enhanced as early as the adolescent years by using archival standardized reading data to validate the need for supporting struggling readers and improving student, parent and teacher expectations for success in the middle grades.

Results from the robust and extensive standardized reading datasets available in this study provided statistically significant information for ASD-S and for school districts province wide. The results of these data indicated the need to support middle level readers specifically with help in literal and critical levels of reading comprehension.

Inferential levels of comprehension do not show statistical significance (that being 6th-grade inferential scores as a predictor of 9th-grade inferential scores) nonetheless, 9th-grade inferential ELPA results are not meeting Provincial reading targets and so the inferential level of reading comprehension is also an area in need of support.

Section 3: The Project

Introduction

Ninth-grade ELPA reading comprehension scores do not meet proficiency targets in ASD-S. Over the last three years an average of 30% of 9th-grade students did not meet ELPA target. Findings from archival reading comprehension data in ASD-S identified a need for students to improve proficiency; specifically, in literal and critical reading comprehension levels between 6th and 9th-grade. An in-depth analysis of a sample of 1,200 students over a 3-year period, revealed that the identified levels of reading comprehension can be supported with a targeted, skills-based, instructional format by means of a comprehensive, middle level, intervention curriculum plan. Specifically, the paired samples *t* test output from RQ2 revealed an 11.5% decline in student reading comprehension with texts at the critical levels of reading comprehension from 6th-grade to 9th-grade.

This section describes a curriculum plan designed to support adolescent readers with systematic, targeted, and evidence-based skills aimed specifically at the critical levels of reading comprehension. This will provide teachers with a tool to make optimum use of class time to conference with students using targeted reading strategy groups in a balanced literacy framework.

Description and Goals

The project is a purposeful, skills-based, targeted instruction in the area of critical reading comprehension for adolescent readers in ASD-S. In this project, teachers will conference with small groups of students who share similar needs of instruction with comprehension strategies. Students will receive systematic evidence-based explicit

instruction using a continuous progress-monitoring model. The ultimate goal of reading is effective comprehension. Nonetheless, if students are demonstrating signs of weakness in other areas of reading fundamentals such as phonemic awareness, phonics, vocabulary, and fluency, these areas can also be addressed during student-teacher conferencing sessions.

There will be pre- and post-assessments as well as continual progress monitoring during the instructional phase of the program. The Fountas and Pinnell Benchmark Assessment System (2010) is used in every middle school in ASD-S. For the purposes of this curriculum plan, the Fountas and Pinnell Benchmark Assessment System (2010) is the recommended tool for pre-and post-curriculum plan assessment as it is a full analysis screener determining progress in vocabulary, fluency and comprehension. The reading level produced from the Fountas and Pinnell (2010) screener is derived from a combination of core reading skills culminating in a reading level, which includes reading comprehension from literal, inferential, and critical domains.

Ultimately, the New Brunswick Reading Achievement Standards will be used to determine the end of grade skill level for each middle level student because these are the standards that are used to determine the types of questions on the ELPA and what are used to determine progress to the next grade level. This targeted approach was designed to address the overall problem identified in Section 1: adolescent standardized reading assessment results in New Brunswick are not improving, with approximately 30% of students not meeting provincial reading targets. This finding suggested a need for supporting student reading comprehension at the early adolescent or middle level.

The end goal of this project is to help students meet provincial reading comprehension targets from teachers using the Provincial Reading Achievement Standards as an instructional tool in a student-to-teacher conferencing format. Instruction in the area of critical levels of reading comprehension are needed to better equip 9th-grade students to meet achievement targets on the ELPA.

Rationale

I developed a curriculum plan project to address the problem of adolescents not meeting provincial reading comprehension targets in New Brunswick, Canada. This problem was identified by employing a quantitative methodology using a sample size of 1,200 students with archival student reading scores to determine if 6th-grade reading scores are a predictor of 9th-grade reading scores and to determine which level of reading comprehension caused middle level students the most difficulty in 9th-grade. Output from this study provided a clear picture of where the gaps in student skills existed resulting in a curriculum plan that can now be applied to provide targeted instruction at the literal, inferential, and critical levels of reading comprehension for struggling adolescent readers in ASD-S.

An analysis of the data set revealed that critical reading comprehension scores were well below provincial target and presented statistical variability between 6th and 9th-grade reading comprehension scores for all three years in the analysis. RQ1 indicated a strong positive relationship between 6th and 9th-grade total reading comprehension scores. RQ2 investigated further into student scores to look at the three levels of reading comprehension. The results revealed that critical comprehension scores were weak in

6th-grade and more so in 9th-grade for all three years that were analyzed. In two of the three years, there was a statistically significant mean difference in literal scores between 6th and 9th grade as well.

Part of the rationale behind doing a quantitative methodology to investigate this problem was that the results from the analysis in ASD-S are generalizable to the larger New Brunswick population. Therefore, I selected the large data set of 1,200 students using the equal probability of selection method described in Section 2.

The goal of this project was to support teacher instruction to better prepare students to meet provincial targets at all three levels of reading comprehension: literal, inferential, and critical levels. However, due to limited professional learning funds available in ASD-S and New Brunswick as a whole, I anticipated that it would be difficult to finance professional development sessions to coach teachers in how to better instruct reading comprehension strategies. That being said, a curriculum plan that is linked to the New Brunswick Reading Achievement Standards (Department of Education and Early Childhood Development, 2014) would provide teachers with additional tools to use in a job-embedded format that could potentially have greater impact on student learning over the long term.

The rationale behind linking the curriculum plan to the Reading Achievement Standards (Department of Education and Early Childhood Development, 2014) is to support an existing document that teachers are required to work with on a daily basis. The curriculum plan was intended to support the Reading Achievement Standards to be used in a way it was not used previously, as part of a progress-monitoring tool for

continuous improvement in reading comprehension. Further, the rationale behind using the Reading Achievement Standards (Department of Education and Early Childhood Development, 2014) is to bypass the need for teacher buy-in. The curriculum plan will be voluntary. The curriculum plan will help make the Reading Achievement Standards (Department of Education and Early Childhood Development, 2014) more teacher friendly, focused, measurable, and goal oriented for struggling readers using evidence-based skill developed strategies and behaviors. A curriculum plan may become part of a school learning community and help build teacher capacity by providing job-embedded evidence-based skills focused reading instruction for adolescent readers.

The local problem was addressed through the content of the project in two ways. First, current research in the field of supporting struggling adolescent readers was cited throughout the project. The research, a mix of primary and secondary sources, provided an avenue of best practice in the field of reading instruction for adolescents (Cantrell et al., 2014; Faggella-Luby & Wardwell, 2012; Gámez & Lesaux, 2015; Harlacher et al., 2014; Seok & DaCosta, (2014); Solis et al., 2014; Steensel et al. 2012; Vaughn, 2012). Second, the project content has addressed the problem cited in the study by providing step-by-step approaches to identifying reading strategy groups, progress monitoring reading comprehension assessments for teachers, and specific reading target goals for students.

The root of the reading achievement dilemma in New Brunswick may have a number of contributing factors. Primarily, the symptom of below target reading scores must be addressed with a systematic, research based skills focused on a continual

progress monitoring approach to adolescent reading improvement. Although a curriculum plan may not cure all students' reading problems in New Brunswick, it will most certainly provide a structured systematic research based pedagogical framework by which teachers can return to repeatedly to calibrate best teaching methods. After all, the ultimate goal of this curriculum plan is to help student reading comprehension results by improving reading instruction.

Review of the Literature

The research cited in this literature review was retrieved from a variety of sources. Both primary peer reviewed sources and secondary published sources were selected from the Walden University Library Thoreau search. Thoreau connected to a number of different fields of study that extend into a variety of fields beyond education. The Boolean phrases used in the search of this literature review included terms such as response to intervention, struggling adolescent readers, core components of reading, literal and critical reading comprehension, adolescent reading strategies, balanced literacy for adolescents, and oral and silent reading fluency.

The issue of literacy is not a localized problem specific to adolescents in ASD-S or with adults in the Province of New Brunswick. There are pockets of literacy issues within various age groups that directly and indirectly contribute to the employability and lack thereof in Canada and New Brunswick's labor force (Alexander, 2014). On a larger scale, a study from the Toronto Dominion Bank Inc. from Alexander (2014) identified a profound economic impact on the Canadian economy if adult Canadian literacy improved just one level from its current state. This review will look deeper into the issue

of adolescent literacy specifically as a way to mitigate the growing literacy issues with the adult population of New Brunswick.

The scope of this study focused on a cross section of archival standardized reading assessment scores from adolescents in southern New Brunswick, Canada (*N*=1,200). The rationale for choosing this age group is that little current or local research has been conducted where the issues of reading comprehension rest within this demographic and, what specific steps need to be implemented to mobilize reading improvement at the adolescent level in New Brunswick, Canada.

Ultimately, the earlier in life literacy issues can be identified and addressed, the greater the chances of helping mold independent readers who can contribute in a literate society. Sanger, Friedli, Brunken, Snow, and Ritzman (2012) supported the need to identify struggling readers as early as possible in a yearlong study following the implementation of RTI. The later in schooling an RTI model can be applied, the more challenges educators may be presented with. Specifically, Solis, Miciak, Vaughan, and Fletcher (2014) supported this point from a three-year Texas study which found the longer in life students' struggle with reading, the more intensive the intervention support needed to resolve reading issues. Despite intensive early intervention at the K-2 level in ASD-S, reading issues persist well into secondary school with over 30% of 9th-grade students not meeting target on the ELPA as found in this study. Therefore, this study investigated archival reading assessments from 6th and 9th-grade students to help support struggling readers with reading comprehension.

On one hand, the New Brunswick Department of Education and Early Childhood Development is very aware of the literacy needs of all students K-12; on the other hand, the Department is cognizant of the pressing issues of school readiness and the early literacy reading gap of K-2 children (New Brunswick's Literacy Rates, 2014). Specifically, the point from Solis et al. (2014) aligns with this study by highlighting the unresolved adolescent reading issues that end up in middle grades, which create a myriad of issues for both students and teachers alike.

Standardized national and international reading assessment results from PCAP and PISA respectively aim to report on adolescent reading comprehension (Program for International Standardized Assessment, 2012). These assessments in tandem with standardized reading assessment results from the Department of Education in New Brunswick suggest the need for adolescents to improve reading comprehension specifically at the critical, literal and inferential levels (Program for International Standardized Assessment, 2012). In response to this problem, I conducted a quantitative analysis of archival student reading data and determined there was in fact a statistical relationship between 6th-grade and 9th-grade standardized reading comprehension results. Henceforth, linking this research to the specific genre of the larger problem. That being, a quantitative analysis of archival reading scores over a three-year period that determined the statistical relationship between reading performance of adolescents in 6th-grade with the same students reading performance when in 9th-grade. An analysis of this type, which statistically compared reading data from one cohort with the reading data of the same cohort two years later, has yet to be published. In light of the results from

this analysis of this study, a review of the literature determined the steps that can be taken to address the larger problem of literacy to gradually impact social change in the province of New Brunswick.

An extensive review of current literature provided a context demonstrating the broad systemic issues literacy can have on a society; which, when narrowed down, point to a local problem which may be directly impacting the economic potential of ASD-S. The criteria that were used to guide the development of this project were rooted in the research from Bourdieu (1977, 1984, 1986) and Turner (1960). The application of this seminal work to this project is applied with the understanding that improved reading comprehension skills may increase the cultural capacity and upward social mobility of ASD-S students (Bourdieu, 1977) and provide long-term improved contest mobility for New Brunswick residents (Turner, 1960).

This project aimed to provide a type of 'funnel' of information; that being, broad issues related to this topic at the beginning of this literature review that narrow down to a specific study to solve a local problem which is a curriculum plan at the conclusion of this review. The broad topics of this project synthesized the issue of adolescent literacy at a national and international level. By looking at PCAP and PISA scores for Canada this study compared New Brunswick with other OECD countries by looking at where New Brunswick fits within Canada. Then, reading scores from ASD-S were analyzed.

ASD-S is the largest district in New Brunswick, which has yet to meet 9th-grade standardized reading targets since inception. Because the 9th-grade standardized reading

assessment is a function of middle level instruction, this study determined the need to support reading instruction specifically with critical reading levels of comprehension.

The theories that informed the content of this study stemmed from the seminal work of Bourdieu (1977, 1984, 1986) and Turner (1960). That being, theories of social capital are a product of higher learning expectations of parents, teachers and students with increased capacity for individual and intellectual improvement toward building deeper cultural capacity in society. On one side, public school system is tasked with the responsibility to teach literacy to all New Brunswick youth. On the other side, are parents who play a supporting role to help children read daily and expose them to a literacy rich environment to become independent readers. In the middle, are youth from K-12 with a variety of skills, needs, abilities, and learning challenges who are soon entering a 21st century global, knowledge-based, multi-modal economy.

Preparing youth to read is different than preparing youth to be literate, particularly when the target for what defines literacy is evolving and changing so quickly (Leu et al., 2011). Nonetheless, the fundamentals of teaching children the basic reading strategies when reading a section of text should be central to every reader.

Many middle level teachers are now facing the tasks of learning how to teach reading strategies for critical literacy by bridging the gap to help children understand the text and themselves while developing as human beings (Park, 2012). Therein rests the large number of students in ASD-S who are not meeting grade level reading targets. This project aims to address this very issue; to equip teachers with a step-by-step curriculum plan to support struggling adolescent readers to help students meet 9th-grade ELPA

targets while becoming independent readers in a 21st-century knowledge-based global economy.

Extant literature on RTI for adolescent readers has served to provide a solid inventory of primary source peer reviewed articles to support the work of helping struggling readers in ASD-S (Harlacher et al., 2015). This portfolio of research has provided a framework to help align evidence-based balanced literacy instruction with job-embedded teacher training to help improve adolescent reading strategies in all three levels of reading comprehension (literal, inferential and critical), (Sanger et al., 2012).

Findings from the statistical analysis from Section 2 of this study revealed two very salient points: First, 6th-grade standardized reading achievement scores are in fact a predictor of 9th-grade standardized ELPA scores; second, statistical analysis showed both literal and critical levels of reading comprehension are most in need of improvement between 6th and 9th-grades. To that end, these findings provided important information as to which key search terms would best inform an extensive review of current literature to help create a curriculum plan. That being, a search that focuses on research for supporting struggling adolescent readers at the various levels of reading comprehension using a balanced literacy, evidence-based RTI approach.

In addition to the literature that aligns with the statistical findings in this study, the curriculum plan (hence referred to as 'the plan') is providing teachers with the specific tools necessary to address the needs of struggling adolescent readers using a balanced literacy approach. The scope and sequence of the plan is intended to accomplish one fundamental goal; to provide teachers with the resources and structure necessary to

support struggling adolescent readers with evidence-based balanced literacy support using a continual progress monitoring approach.

The beauty of a curriculum plan is the flexibility it affords. The plan can start at any time in the year with any child or group of children. Teachers can use the plan in isolation or in collaboration with colleagues such remedial or content area teachers (Cantrell, 2014). The plan is not expensive and requires little in the way of additional resources. Further, the plan is structured in a step-by-step approach and requires little prior knowledge of literacy theory that makes application of the plan possible for early career teachers (Van Steensel, Oostdan, and Gelderen, 2012). In addition, the plan is intricately aligned with the New Brunswick Reading Achievement Standards; a core instructional tool that teachers should be using on a daily basis for teaching reading comprehension. Finally, the plan is free. Implementation of the plan is not contingent on district financing, teacher release time, professional learning days or guest speakers.

Teacher practitioners may find the accessibility, usability and flexibility of this plan poignant to the learning needs of adolescent readers and pertinent to the job-embedded learning needs of a hectic teaching schedule at the middle school level in ASD-S.

Supporting Adolescent Readers with a Balanced Literacy Approach

This section will highlight current research that supports the balanced literacy approach to this RTI plan by touching on five key areas; oral reading fluency, vocabulary, word study, comprehension and motivation (Martella, Martella, Modderman, Peterson, & Pan, 2013). This and other current research will be used to support the

overarching end goal of improving reading comprehension with the understanding that to accomplish this, the five listed fundamental literacy skills must first be in place.

Oral Reading Fluency

Building strong reading comprehension skills (literal, inferential, and critical) at all grade levels is necessary to meet Provincial ELPA reading targets. Soek and DaCosta (2014) stated that oral reading fluency has been called the *gateway to comprehension*. That being said, the importance of oral and silent reading fluency, prosody, word recognition and vocabulary skills are key to a strong reading foundation which teachers are encouraged to use to inform and adjust instruction when applying a balanced approach to RTI. Gámez, and Lesaux (2015) stated that teachers' use of explicit fluent vocabulary skill is significantly related to students' reading comprehension success.

Oral reading fluency development is foundational to a strong literacy framework. Readers who lack basic letter sounds, vowel and consonant combination sounds are in need of targeted oral reading fluency support. Despite the decline of the teaching of phonemic skills by Cassidy and Ortleib (2012), and with a new focus on reading comprehension, other research is still supporting oral reading fluency as a cornerstone to reading comprehension (Martella et al., 2013). By the middle grades, oral reading fluency should not be an issue; nonetheless, in many middle school classrooms across ASD-S this need is still evident (Seok & DaCosta, 2014). Paige, Rasinski, and Magpuri-Lavell (2012) identified how oral reading fluency is made up of at least two key components: word recognition fluency and prosody. A readers' ability to properly

connect words fluently and with appropriate expression are key to the end goal, which is reading comprehension.

By the time students arrive at the middle level, letter sounds and reading fluency should be a skill students have already mastered when presented with independent and instructional level texts. Further research from Paige et al. (2012) discovered that fewer than 5 minutes per day at the primary level were devoted to oral reading fluency instruction. When students develop a larger vocabulary inventory they can more quickly make inferences required during reading (Demagistri, Richards, & Juric, 2014). By extension, in weeks 3, 4, and 5 of this plan, explicit oral reading fluency, prosody and vocabulary building approaches will be addressed to help teachers with job-embedded strategies in these areas to support adolescent readers.

Salient research that parallels Paige et al. (2012) discovered in a quantitative study that oral reading fluency "rate was most significantly related to silent reading fluency" (Seok & DaCosta, 2014, p. 159). This discovery has opened further discussion on the importance of teachers providing vocabulary rich learning environments, making vocabulary a regular part of instruction, and progress monitoring student reading automaticity with high frequency grade level sight words on a regular basis.

Vocabulary

Eason, Goldberg, Young, Geist, and Cutting (2012) found that vocabulary and word recognition is in fact the strongest predictor of reading comprehension from narrative texts. Therefore, building a word rich vocabulary is key to helping students improve word recognition fluency and therefore comprehension with narrative texts.

Eason at al. (2012) found that building background knowledge is key to helping students comprehend informational texts. Regardless of the text form, a robust bank of diverse vocabulary in adolescent readers enriches oral reading fluency.

Students learning new vocabulary from reading at their independent level relates to higher levels of reading comprehension. Specifically, the act of decoding new words to build vocabulary knowledge fosters higher-level comprehension, which then supports more vocabulary development (Hogan, Bridges, Justice, & Cain, 2011). The importance of building a deep repertoire of sight words and vocabulary, fluency and comprehension are as interdependent as the individual strands of a rope, with each strand fulfilling a very important role; which in turn, is key to developing independent readers.

Establishing proficient fluency of high frequency sight words frees a students working memory allowing for superior cognitive processing hence improving greater reading comprehension (Demagistri, Richards, & Juric, 2014). As important, are teachers need to provide time each day for students to practice building fluency via independent scaffolded silent reading. The curriculum plan will provide an example of a weekly lesson plan to help teachers explicitly teach vocabulary building strategies and implicitly incorporate new vocabulary into content areas of instruction.

Word Study

Rasinski, Samuels, Hiebert, Petscher, and Feller (2011) discovered significant improvements in students' word recognition, reading rate, prosody, and reading comprehension. This was accomplished by providing students with scaffolded silent reading (ScSR), which is an extension of the well-known sustained silent reading (SSR),

but where teachers provide instruction with engaging topics and a post reading conference with the student. The benefits of ScSR are many; including, how teachers can conference with small groups-before, during, and after ScSR activities. Essentially, ScSR is independent silent reading-in or out of school-which allows students to select meaning from print and digital texts (Walker, 2013). During this time, teachers can conference with students in a small group setting needing additional support by meeting face to face with students for more comprehensive assessments. Improving reading word fluency, albeit through ScSR, or with oral reading conferencing will broaden the path to reading comprehension.

In addition to building reading fluency through word study, students may also need more targeted close reading strategies to develop critical reading skills. Springer, Wilson, and Dole (2014) supported the use of close reading strategies to better prepare students for college readiness and to have a better reading comprehension at the critical levels. Specifically, the close reading strategy involves the study of a "short passage of text, with multiple readings, over multiple instructional lessons" (Fisher & Frey, 2014, p. 368). The close reading strategy recommends three separate readings of a particular text:

- 1. To determine the *authors' message*;
- 2. To understand how the text works; and
- 3. To go deeper into the author's message and purpose while *evaluating and analyzing* what the author has written (p. 368).

A similar approach to building word study, reading fluency and comprehension through reading instruction is rooted in the work from Rasinski et al. (2011), whereby

wide and deep reading approaches are used. Wide reading uses a variety of genres and different text forms whereas deep reading fosters reading of the same texts multiple times in order to build oral and silent reading fluency skills through the mastery of word study techniques. There appear to be significant parallels between close and deep reading as well as open and wide reading. Regardless, the outcome of both approaches will provide unique strategies to building reading fluency through word mastery.

Comprehension

Analyses from section 2 of final doctoral study points to the need for improving reading skills in middle schools within ASD-S; specifically, at the critical reading comprehension levels. The curriculum plan will focus on the need for teachers to consider explicit instruction of fundamental basic literacy skills on a daily basis. This shift may expose a potential gap in teachers' skillsets, as many middle school teachers are not as proficient as their elementary counterparts in terms of instructing literacy fundamentals (Leko and Mundy, 2012). Martella et al. (2013) submitted that literacy skills should be taught throughout the adolescent years and suggested that a lack of instruction with complex texts throughout the upper grades may be one such cause for the adolescent reading problem.

The adolescent reading issue is not local to ASD-S. Nearly 50% of ninth grade students in the United States cannot comprehend texts that are assigned to complete routine classwork (Alexandar, 2011). In short, supporting struggling readers is now a shared responsibility with content area teachers and not just with English Language Arts or remedial teachers. In ASD-S, the development of cross-curricular reading tools have

been widely circulated which coach content area teachers with before, during and after reading strategies. Using before-, during-, and after-reading strategies is a great starting point; however, in many classrooms this approach must be in tandem with other skill building strategies from a balanced literacy framework with word work, vocabulary, fluency, and comprehension combined. In fact, a recent study of four middle schools content discourse analyses revealed that only about 20% of instruction was targeted toward language development and not to the development of oral language skills such as grammar, language learning strategies, or instruction in speaking and listening skills (Klingner, Boardman, Eppolito, and Schonewise, 2012).

Hogan et al. (2011) found that reading comprehension is rooted in the fundamental process of decoding text and understanding the language accessed through the act of decoding. In my personal work, I have found that some children are great decoders and can read most texts fluently but when prompted with a comprehension question, the child can recall very little. Approximately 10% of young readers fall into this category, a profile defined by good word reading but poor comprehension (Hogan et al., 2011). It is therefore important to highlight the importance of balancing vocabulary and word study development with the end goal of reading comprehension. Findings from Farnia and Geva (2013) highlighted the importance of focusing on grade level vocabulary and listening comprehension skills especially when working with children who many have a learning disability or are learning English as a second language.

Motivation

As initially stated, the issue of adolescent reading motivation is key to ensuring success of this plan. Reading engagement theory suggests that student motivation is an interrelated combination of what students do, think and feel (Cantrell et al. 2014).

Despite the fact that student reading comprehension strategies may improve during the middle grade years, attitudes toward independent and academic reading decline from fourth grade onward (Vehovec, Zubković, and Reinić, 2014). Beyond providing students in middle grade classrooms with a variety of informational and narrative text selections, research from Cuevas, Russell, and Irving (2012) concluded that independent silent reading with an interactive computer component increased student global reading comprehension compared to students only reading books of their choosing.

Students' independent reading is foundational to high levels of literacy proficiency and academic success (Walker, 2013). It would not be a large step for teachers to shift from SSR to ScSR then to Independent Silent Reading (ISR) if supports, which will be included in this plan, are shared with teams of teachers. Nonetheless, technology availability may be an issue in some schools wishing to use the ISR model, which requires access to computer hardware and, possibly, access to the internet.

The potential for both improved reading comprehension and the development of critical literacies is vastly expanded with the introduction of online literacies. The dividends of student engagement and motivation achieved when introducing electronic mediums and Internet modalities are noteworthy. Leu et al. (2011) found that building

reading skills online to locate and critically evaluate information has led to a fundamental shift in student engagement and student reading comprehension capacity.

Gainer (2013) also supported the use of digital literacies as a tool for adolescent engagement and motivation, in alignment with Leu et al. (2011). Specifically, Gainer suggested media literacies can help students read like writers, and write like readers by exploring a variety of new texts while developing an analytical eye for deeper meaning. Cho (2013) found that if teachers can provide students with the freedom to work through a problem either virtual or real world, then students can become very responsive to their own inquiry and actively explore individualize solutions to unique problems.

Conclusion

The local problem identified in ASD-S rests in adolescents not meeting Provincial reading comprehension targets. A regression analysis determined that the relationship between 6th and 9th grade total reading comprehension scores was linear. A paired-samples *t* test determined a linear relationship between literal and critical levels of reading comprehension; that being, 6th-grade literal and critical reading comprehension scores were a significant predictor of 9th grade literal and critical reading comprehension scores. To that end, if New Brunswick is to turn from a province with significant unemployment and illiteracy its adolescent population must become proficient readers earlier in their schooling and with greater skill in all levels of reading comprehension.

To accomplish this goal, an 8-week curriculum plan was developed to support teachers with a balanced literacy, evidence-based, and whole language RTI program. This plan is designed to be flexible for both early and late career teachers, be cost

effective, open-ended, yet structured. The step-by-step, week-by-week plan will provide essential skills through explicit instruction in small group settings on a daily and weekly basis. This job-embedded plan will help teachers develop a stronger skillset aligned with the New Brunswick Provincial Reading Achievement Standards that inform instruction using continual progress monitoring of formative assessment methods for oral language fluency, vocabulary development, word studies, reading comprehension and student motivation.

The application of the theoretical foundation from Bourdieu (1984) and Turner (1960) in this study led to the development of this curriculum plan. The goal of the plan will be to initiate an upward contest mobility of New Brunswick's youth as well as build cultural capital within our communities by helping raise the expectation that with the proper teaching and dedication, literacy can be a tool for success instead of an obstacle for improvement.

Project Description

In basic terms, the curriculum plan is an 8-week step-by-step intervention framework designed to help struggling adolescent readers improve their overall reading comprehension. This plan will use the five components of reading (phonemic and phonological awareness, oral reading fluency, vocabulary and reading comprehension), systematically building on oral reading fluency and progressing to appropriate reading comprehension. The plan requires very little in the scope of learning materials with the exception of an inventory or informational and narrative texts, highlighters, small sticky

notes, dry-erase markers, small white boards, a flip chart and a guided reading table. No teacher professional learning is necessary to start.

Potential Resources and Existing Supports

The potential resources required for the implementation of this plan, for the most part, already exist. For example, access to the Internet and a computer would be necessary for teachers to view the Power Point instructions of the 8-week plan. I am already doing this on a bimonthly basis with short 15-minute information videos. This plan would be more extensive, job-embedded and explicit. This medium to facilitate the curriculum plan is not to be confused with a teacher training or professional development project. It is simply a different format that teachers can use to follow the 8-week curriculum plan.

Other existing supports that would be available to facilitate this plan would be a team of colleagues in other districts who may very well adopt the plan to implement in their jurisdictions. This team of colleagues could offer feedback on the plan and give suggestions for improvement before its implementation.

Potential Barriers

There are two potential barriers to the success of the plan: user effectiveness and quality assurance. It would be important that teachers follow the plan and not just skip to whatever parts they want whenever they want. Due to the systematic nature of the curriculum plan, it would be prudent to make certain students are competent in the five components of reading before progressing to the next set of skills outlined in the plan. The second barrier to success is tracking student progress. If teachers do not record a

before and after snapshot of student reading comprehension, there will be no way of telling if the student progressed or not.

The second potential barrier to success is quality assurance. The plan needs to be good. The plan needs to be comprehensive, research based, structured, and manageable for teachers with various knowledge backgrounds. To facilitate quality assurance, I will provide a focus group of teachers to review the plan and provide feedback before its final implementation. The feedback from the focus group would help ensure the plan is realistic, delivered in a way to meet teacher needs and applicable to improving student reading comprehension.

Proposal for Implementation and Timetable

The suggested implementation and timetable of the curriculum plan could include a strategic rollout. To start, the advertising of the plan could be promoted to all middle level teachers via weekly curriculum updates that are sent from the ASD-S's Superintendent. Next, the availability of the plan could be promoted by direct invitation to all middle school ELA and social studies teachers in ASD-S, via a teacher distribution list, used to bring updates to teachers when necessary.

The implementation of the project could take place in a number of different ways. For starters, the plan could be shared using a Power Point. The presentation could have a voice-over and explicit instructions of how to address reading comprehension issues. An electronic invitation could be sent to all middle grade ELA and social studies teachers for them to see and watch at their leisure; that being, the step-by-step job-embedded skill building evidence-based balanced literacy approach to RTI.

Another implementation approach could be to visit professional learning communities in person on a regular basis for a fixed or extended period of time. During these visits, a facilitator could model each week's module. Teams could then discuss next steps on how to diagnose readers, implement strategies, progress monitor learning and assess reading outcomes. This job-embedded approach is ideal for teachers who are tactile learners and those who work best in small group settings. It may also be preferable for beginning teachers, as they will have access to other colleagues to share with and learn from.

A final implementation approach could be to provide summer learning sessions. During the first week of July, ASD-S offers a professional learning week for all teachers in the district. This is a voluntary time for teachers to gather together with colleagues and learn about a particular area of interest to them. This, and all other implementation ideas would cost nothing to the district or to teachers. Most importantly, the implementation suggestions in this final project study found in Appendix A, do not pull teachers from their classrooms during instructional hours and are available for teachers who want to learn more and are motivated to change and improve instructional practice. Delivery of the plan could ostensibly take place as early as May 2016 for online access and July 2016 for face to face during summer professional learning sessions.

Roles and Responsibilities of Student and Others

The roles and responsibilities that students play in this plan are as recipients of explicit instruction within regular class time during the school day. In my opinion, further advancements will take place if students read and write at home every day for 30

minutes; however, this cannot be controlled and will therefore not be a component of the study that builds on this uncontrollable variable.

Student compliance is an assumption this plan takes for granted. It is often the case that struggling readers are also students with behavior issues; the two often go hand in hand. To that end, it is the student's role to comply with the intent of the plan, which is to help make all students independent readers and actively participate in teacher conferences and during explicit lesson instruction.

On a similar note, it is also the role and responsibility for teachers and their administrators to support the implementation of the plan together. If either teacher or administrator are not on board the plan may lack effectiveness. I would further include, with equal weight, the involvement of parental support to ensure a wraparound approach to supporting students with this plan. For starters, students who are below appropriate in their reading goals by end of winter or early spring should be earmarked for additional support. This would require contact with the student and parent from the teacher and the school's administrator stating that an RTI curriculum plan is forthcoming. Next, the student, teacher, parent and administrator are collaborating on the specific reading needs of the student via the curriculum plan. The 8-week curriculum plan will have check in points to update the student, parent and administrator on progress monitoring.

Project Evaluation

Evaluation of the success of the program will take place in two forms. The first method is a classroom based progress monitoring approach which is formative in nature. This weekly to bimonthly learning check will determine effectiveness of instruction and

provide essential data to inform if instruction should continue, change, or if skills need re-teaching. This evaluation is in the form of student achievement using a benchmarking screener such as the Fountas and Pinnell Benchmark Assessment System (2012) priced at \$388.00. A standardized screener will be used to progress monitor student skill development. If student scores are overly weak or strong one may surmise that content from the plan is too easy or too difficult. This may also indicate if the plan's content needs adjusting or, if teachers are not teaching the concepts effectively. It will, therefore, need to be determined if fidelity to the plan was kept. Teachers checking in with the plan at specified intervals and indicating if specific intervention tasks have been completed on a defined schedule will accomplish this.

The second evaluation tool is the 9th-grade ELPA results. This assessment will determine if the plan is having a long-term impact on student reading comprehension results. The results of the ELPA are returned to schools within a few weeks. This allows teachers to track if student progress is on target based on middle level intervention support. If there is little change in the number of students improving their total percentage score, and if the levels of reading comprehension are not moving in an upward direction, then a more targeted approach needs to be applied.

I will be able to determine from the raw data, which schools have the greatest number of below appropriate ELPA results. Then, by collaborating with my Director of Curriculum and the school's principal, we can offer additional support to help teach literal, inferential and critical reading skills to the teacher responsible for these students. This approach would be applied at the 6th-grade level and with the middle school, which

feeds into the high school in question. This systematic approach will be applied throughout ASD-S until Provincial reading targets are met.

Implications Including Social Change

Local Community

The curriculum project is aimed at improving student reading comprehension skills and enhancing instructional practice with middle level teachers. The end goal is to increase adolescent reading skills and decrease failure rate of the 9th-grade ELPA at the same time, as both are mutually dependent. Long term, as more and more adolescents become proficient readers and critical thinkers, increased contest mobility will follow. In other words, a more competitive labor force will evolve from New Brunswick's public schools and improve the social capital of its communities.

The aim of the curriculum plan is to improve reading comprehension with adolescent readers; that being said, cultivating a more literate society is a fundamental approach to positively impacting social change. Saint John, the largest city in ASD-S, is widely known as a city with very high poverty. Providing adolescents in ASD-S with reading skills can help the next generation of New Brunswick residents with greater upward social mobility than the previous generation. By increasing the expectation of adolescent reading success, and supporting every struggling reader, while building strong balanced instruction with teachers, will gradually erode the cycle of poverty that has gripped this part of Canada for generations.

The importance that this curriculum plan will have for students, parents and the community cannot be understated. The age old saying; "give a man a fish, you feed him

for a day, teach a man to fish you feed him for a lifetime", the same can apply with building a community of independent readers. Teaching one to read is teaching one to be self-sufficient, not dependent on social programs but independent and with capacity for cultural capital.

The social impact of developing adolescent readers extends far beyond the skills of reading text. Today's 21st century reader is a critical reader, one who can infer, make predictions, visualize and communicate using a number of different virtual or traditional modalities. This generation of adolescent readers will need to boast a deep inventory of higher-level critical thinking skills and be able to communicate amicably in a team based job market (Program for International Standardized Assessment (2012). In sum, due to the new jobs surfacing with the information based economy, the skills students are learning in ASD-S middle schools are preparing them for 21st century jobs that may not yet exist.

New Brunswick is in the midst of a cultural shift. That being, where the majority of employed residents in New Brunswick are not necessarily able to prepare the next generation to take over the current job market. Quite simply, employment opportunities are at an impasse between an aging demographic and a floundering economic climate. This has a tremendous impact on communities within ASD-S. The need for adolescents to be literate, critical thinking adults has never been so prominent.

Far-Reaching

In the local context, the importance of this work will provide teachers the opportunity to expand their inventory of teaching skills to support students at the middle

level. This step-by-step evidence-based plan of skill building strategies will be useful for early career teachers to help teach middle school students' early literacy skills. The benefits of this plan will extend to when these middle school students arrive in high school and are able to read at or near grade level and have strategies to apply when needing to read texts at their instructional level.

From a national context, this plan was designed to be applicable to other school districts in Canada. ASD-S is not the only school district in Canada whose middle school population is failing to meet provincial reading targets when entering high school. To that end, the curriculum plan was designed for easy use by other schools in other provinces to build teacher capacity and improving student learning.

There are numerous social benefits to cultivating a literate society. The purview of this project is to influence social change one reader at a time, to improve instructional practice one teacher at a time, and to foster cultural capacity in ASD-S one school at a time.

Conclusion

Due to the statistical analysis from this study, it was determined from a robust sample of 1,200 students that a targeted reading intervention program is warranted in middle schools in ASD-S. Specifically, the two areas of reading comprehension; literal and critical levels, showed significant statistical correlations with critical levels of reading comprehension most in need of improvement. It would not be prudent to only provide RTI with literal and critical levels of comprehension in mind while abandoning inferential levels altogether, that is not what is being suggested. Instead, it would be

judicious to apply a balanced literacy framework and a continual progress monitoring approach with students who are below reading target goals to make certain all levels of reading comprehension are on target before writing the 9th-grade ELPA.

To accomplish this task, a comprehensive curriculum plan has been completed in Appendix A and supported by an extensive review of the literature that supports this methodology and theoretical foundation of the plan. The end goal of the plan is twofold:

- To ensure struggling readers are being supported through evidence-based balanced literacy strategies with skill development being tracked using a continual progress monitoring approach.
- 2. For teachers to increase instructional capacity by following a plan that is aligned with the New Brunswick Provincial Reading Achievement Standards that is jobembedded and uses a continual progress monitoring approach.

Ultimately, the litmus test to this plan will be whether or not there are improved 9th-grade ELPA scores across the entire district. This scientific approach to improving reading skills in ASD-S, in tandem with an expectation for success from students, teachers, parents, and the community at large, may impact the building of cultural capital and foster social mobility Province wide.

Section 4: Reflections and Conclusions

Introduction

This section contains a discussion of the strengths of this project study in light of potential limitations that address the issue of struggling adolescent readers in ASD-S. It also includes a discussion of the curriculum plan contained in Appendix A, which was developed as part of addressing a gap in student reading comprehension at the middle level in New Brunswick, Canada's ASD-S school district. This study's results and the curriculum plan could be applied to other school districts seeking to support teacher instruction and struggling readers, so long as valid and reliable data can be used to complete a quantitative analysis of an educational setting. This section concludes with my final reflections as a scholar-practitioner, which includes a discussion of how this study's results can be shared to impact social change and improve contest and social mobility through a literate society.

Project Strengths

This project has provided educators in New Brunswick with data that statistically confirms where the issues of reading comprehension levels are based, as revealed by archival standardized reading assessments for 6th and 9th-grade students in ASD-S. By knowing where the problem is, educational leaders can then take the necessary steps toward solving the problem. Beyond identifying the issues with literacy, this project study also provides a curriculum plan to address the problem in a systematic, evidence-based, progress-monitoring approach.

The issue of poor literacy in New Brunswick is a systemic one. Like all monumental problems, when divided up and broken down into manageable pieces and shared among a lot of skilled people, the problem does not seem so monumental after all, however. When teachers stop working individually to solve the problem and start working together toward a collective goal, the inertia can have a changing effect on a system. And so, the curriculum plan provides three distinct advantages to addressing the problem of resolving the literacy issues within ASD-S.

First, the project study confirmed the problem using a scientific, quantitative methodology. The methodology used archival data from a large sample of 1,200 students over a 3-year period. The depth of the dataset improves the generalization of the findings from this study to larger populations such as those found in other districts that also share reading issues similar to ASD-S.

The second advantage of this project study is its plan for fostering professional learning with middle-level teachers in ASD-S who may not have the training or experience to provide evidence-based reading interventions to adolescent readers. Many teachers in ASD-S's middle schools have shared with me in person that they do not have training in RTI strategies. As a result, the curriculum plan in this project study provides a step-by-step, week-by-week progress-monitoring approach that uses evidence-based practices to support struggling adolescent readers. The curriculum plan in this project study will not cost teachers, ASD-S or the Province of New Brunswick any money. The training of this plan will be provided via an electronic medium or in person, and may

take place either after school or during the district's annual summer learning week in early July.

The long-term result of said collective expectations may help increase student engagement and possibly student reading skills, which may have a positive effect on reading comprehension scores. In turn, this may result in fewer students failing the 9th-grade ELPA and more students meeting PISA and PCAP targets. Ultimately, the better students in ASD-S can read, the higher the probability that students will compete for jobs and extend higher education when they have finished high school. By improving contest mobility, or the probability of succeeding in a competitive job market, there is a greater opportunity to build cultural capacity in a province that has struggled economically and socially for generations.

Recommendations for Remediation of Limitations

The project's limitations in addressing the problem are time, implementation and quality assurance. The curriculum plan will be fairly extensive and will need to be peer reviewed by a team of middle level teachers for content and usability. When completed, the curriculum plan in Appendix A could be shared with teachers as early as the upcoming summer learning week in ASD-S.

The implementation of the curriculum plan must be voluntary in order for teachers to accept it. Nonetheless, the greatest potential benefit of the plan is expected if all teachers with struggling readers collectively follow the plan. In my experience, teachers often resist anything they are made to do but will often try something new if

they are simply provided the option. This is the approach with the curriculum plan: it is optional.

One potential implementation issue with the curriculum plan is how it is used.

Because the curriculum plan is evidence-based and systematic, I advise that teachers follow the plan. The benefits of the plan will be compromised if teachers pick and choose what parts of the plan they want and do not implement other parts of the plan so that the whole plan is not kept intact. Much like a baker only using some ingredients in a recipe and removing others only to discover the recipe failed, so would the dividends of this curriculum plan fail if teachers leave out certain weeks or steps of the plan.

To address these limitations, it will be prudent to collaborate with a few teachers and administrators to develop a comprehensive strategy for implementation once the curriculum plan is drafted. The initial employment of the plan is as important as the plan itself. The plan must be well written, pedagogically sound be professional looking and easy to follow with the end goal to help adolescents become stronger readers. This may have a bearing on when the rollout takes place. Launching the curriculum plan at the right time of year may help teachers use it more than if it were launched at the wrong time of year. Timing is key. Seeking the consultation of teachers and administrators to help map out a deployment of the plan may be helpful as they are the primary stakeholders involved. Most likely, the beginning of a new school year would be a realistic time of year to start such a plan.

An alternative way to address this problem would be to implement a professional development or training curriculum. A training curriculum would be reproducible so that

other instructional leaders in other parts of the Province could facilitate the training. Training of this sort would take about 3 days to complete and would include Power Points and learning materials. This step-by-step training would be aimed at helping teachers learn how to implement evidence-based balanced literacy instruction to struggling readers using a continual progress-monitoring approach.

The target audience for the training curriculum would be early career teachers, teachers new to teaching English Language Arts, resource or remedial teachers or content area teachers looking to become skilled at helping students become better readers in content areas. An alternative to providing the training curriculum in person would be to provide it through distance learning. The Department of Education and Early Childhood Development has a distance-learning interface, whereby all teachers in the Province of New Brunswick can access multimodal training for free and at their own convenience. A training curriculum could very easily be facilitated through such a medium.

Scholarship

I learned that scholarship is a process of integrity and ingenuity that combine to help both myself others make informed decisions to solve problems. I discovered that good scholarship is an art. It is the synthesis of the work of others yet with new elements that prompt creative thinking with reliable and valid results. The information that goes into good scholarship must be authentic, reliable, of quality, and relevant to the problem being addressed. The quality of the data that goes into effective scholarship is directly related to the quality of the output from the scholarships findings.

Good scholarship is not about synthesizing good data. Good scholarship is about asking the right questions, identifying the right problems, and hypothesizing a realistic outcome to larger problem. I learned there are different kinds of scholarship such as primary and secondary sources. One kind of scholarship is not better than the other necessarily, for both serve a particular purpose in the research community.

I learned that quality research is the work of a team, not necessarily the work of an individual. From drafting a problem statement to collecting authentic data, scholarship depends on the theoretical foundations of other's work as much as it depends on the problem by which it seeks to resolve. *Building on the shoulders of giants* is a phrase that I learned that helps me understand that I am only adding a small piece to the pyramid of understanding. I had no idea I knew so little about so much in the field of education.

Project Development and Evaluation

Project development needs to be linked as closely as possible to the needs of teachers. Ideally, project development needs to be job-embedded to meet the wide variety of teaching needs that best serve a target group of professionals. To accomplish this, the curriculum plan developed in this project needs to be accessible to teachers and in a format that is both user-friendly and differentiated to a varied group of professionals. For example, a curriculum plan may be of superior quality, but if it is only available in text format and if there were only 2 copies for hundreds of teachers, the implementation would not realistically have much impact. Experience has shown me that if a curriculum plan is available electronically (e.g., on a shared folder on the District website, through

an online classroom format where teachers can share and ask questions, or in a view-at your-own-leisure format), this appeals to a broader audience with varying skillsets.

I learned that project development should be targeted, structured, and evidence-based. Teachers and students both need to know if a goal was achieved within a specific skill area within a defined period of time. I learned that project development needs an embedded evaluation tool to validate to the user its effectiveness as well as a forum for teachers to share challenges and successes relating to the plan and student learning in general.

Leadership and Change

From my earlier course work in this program, I learned that leadership and change must germinate by changing the culture of an organization. Leadership is influence, not simply a good idea that people will follow. I have learned that leadership is focusing on the one or two things that matter most and the need to utilize the skills of others to mobilize change. The litmus test for effective change is not that my goals are in effect in five years, but that that my goals are being done better than I had originally thought because others are doing them better. Ideally, my commitment to providing follow up support of the plan with teachers needs to be made known at the beginning and proven throughout the employment of the plan during the first few years. Follow through of the plan is key.

Fullan (2012) stated that practice drives theory; an idea echoed by Whittaker's (2013) statement that belief follows practice. System change in a school or organization does not need to take place after everyone believes in the new vision but that people will

believe in a vision after it has been part of their practice. With this curriculum plan, the goal is to implement job-embedded practice as a starting point to influence a systemic change in middle level instruction. If I tried to convince every middle school teacher to believe in a balanced literacy and evidence-based approach to RTI before providing a curriculum plan, I would never have buy-in. Therefore, by introducing the curriculum plan I am influencing practice; in turn, I will be changing belief by changing practice.

Habitually, teachers believe by seeing. Therefore, it is paramount that the curriculum plan is of quality, evidence-based, job-embedded and targeted toward helping adolescents becoming independent readers. If the curriculum plan is job-embedded and is successful in supporting student learning it will invariably have a positive impact on 9th-grade ELPA results district wide.

Analysis of Self as Scholar

As a scholar, I learned that I am merely a debutant in the field of quantitative methodology. I have learned where to go to access resources like SPSS and Laerd Statistics, but by no means am I a statistician. I do, nonetheless, have enough skill to tackle a data set and determine what statistical analysis would produce the best outcome to make a hypothesis. I also know enough to recognize what a genuine study looks like; conversely, I can recognize if a study is lacking authentic data that is valid and reliable. These are all useful skills to have, which, at one time, I did not possess.

I learned that integrity is a critical element in conducting research. Respecting and protecting research subjects and information about people in a study is absolutely necessary. Failure to respect such protocols could jeopardize my professional credentials

indefinitely. Similarly, I realized how precious primary and secondary data is. Collecting and keeping data safe and secure so as to not jeopardize data sources is critical to research in the social sciences. This also aligns with a level of integrity I did not know was necessary to be a researcher. Research data are precious and need to be treated with the utmost respect as I am dealing with a vulnerable group in society, the learning needs of children.

I have come to learn that before I recommend an article to colleagues, I am very conscious to check the credentials of the article source. For example, I automatically check when it was published or written, if it was peer reviewed and if it was a primary or secondary source article. Not all articles are created equal and not all sources are written for the same target audience. To that end, I am now more selective when choosing what kind of research I send to which colleagues. I am also considering in what type of journals I want my work to be published, as this will be my first professional growth goal in 2016 after completing my Ed.D. A few of the more widely published and more familiar journals are the *Journal of Adolescent and Adult Literacy, The Reading Teacher, Educational Research, Phi Delta Kappan*; any of these would be possible avenues for me to share my work for possible publication.

Analysis of Self as Practitioner

As a scholar practitioner, I have come to the realization that I think I need more time working with students so I can apply what I have learned. I have been away from the classroom for 5 years. In that time, I have learned a lot about literacy theory, research best practices, technology in literacy, data and assessment, the changing literacy

landscape as well as quantitative and qualitative methods of research. To that end, I have drafted a curriculum plan that will hopefully be useful for teachers and helpful for students found in Appendix A. It would be a good idea if I were to actually put my curriculum plan in place to see first-hand if the plan is effective.

I am conscientious of doing what is right for struggling readers instead of doing what I think will bring me recognition. I have discovered a lot of temptations to apply for a number of conferences or jobs but the end goal would pull me away from doing what I love most which is to help people. This is the reason I became a teacher, to help people learn and succeed. As a scholar practitioner, my personal ambition is to help people learn and be successful who in turn, will pass that same gift to another struggling learner down the road.

Analysis of Self as Project Developer

At this point in my final doctoral study, I am unable to provide a complete analysis of myself as a project developer. Once I have the curriculum plan well drafted and peer reviewed by colleagues, I will have the opportunity to share the plan in a professional learning forum with other teachers. The plan will first be assessed at this point. Formative feedback from teachers in this forum will be most helpful. This feedback will be used to make changes to the delivery format of the plan and possibly to elements of the plan itself.

I have taken courses in project development in the past but have never actually implemented a curriculum plan. I am enthusiastic and excited to launch the plan and very open to this plan being modified to meet the specific instructional needs of teachers and

learning needs of students. I am interested in providing the plan in person and in an online format. The Department of Education in New Brunswick has an online learning module interface that is free and well serviced. I can use this interface to promote my curriculum plan to support beginning teachers and teachers new to English Language Arts at the middle level. Finally, providing a pre and post teacher response survey would be helpful for determining the degree of effectiveness on student achievement. Further, some data on teacher's perspectives before and after the project to determine how to improve the plan for continuity and possible funding opportunities will be implemented.

The Project's Potential Impact on Social Change

The potential impact on social change will hopefully be noted in a number of ways in ASD-S. The aim of this project will purpose to improve middle level instruction, which, in turn, will impact standardized student reading assessment results. Improved reading achievement for middle level students will translate into a higher probability of a successful high school career. This in turn, may increase ELPA results and indirectly impact high school truancy, increasing postsecondary opportunities and possibly improving job readiness skills for New Brunswick youth.

The application of the theoretical framework underlying this final doctoral study has been said to impact the social milieu of a society by creating upward social mobility for its residents. Upward social mobility is a function of education and one's ability to achieve in a competitive job market. And so, one key outcome of this study may be an increase in the social mobility of New Brunswick's youth hence a direct impact on social change.

There is a direct relationship between a country scoring highly on PISA assessments and the socioeconomic status of that country. Similarly, there is a direct relationship with provinces in Canada that score highly on PCAP assessments and provinces in Canada that are socially and economically robust. By definition, improving New Brunswick's standardized assessment scores on both PISA and PCAP will invariably and indirectly impact social change in the province of New Brunswick.

This study is reproducible and applicable to other districts in the province of New Brunswick. The curriculum plan proposed herein will be made available through online distance learning, through face to face professional learning, and by individual teaching lesson plans that teachers can opt to use if they wish to support struggling readers. Further, this plan may be helpful for other school districts in Canada that are struggling to support adolescent readers at the middle level. The end goal of this study is to positively impact social change; first with ASD-S and New Brunswick, and second, with other school districts struggling to meet minimum reading targets in the middle grades.

Implications, Applications, and Directions for Future Research

On one hand, the importance of this work can be narrowed down to the extra support students will receive through this curriculum plan that they may not otherwise have received in the absence of this study. On the other hand, the importance of this work can be broadened to include thousands of students who will improve their reading skills due to exposure to explicit reading instruction.

I learned that student expectation of success, coupled with teacher and parental expectation, is one of the most powerful indicators of student achievement. I learned that

high expectations from students, parents and teachers would have a significant short and long term impact on New Brunswick's overall literacy achievement.

This project study looked at reading achievement scores at the middle level as a predictor of 9th-grade ELPA results. The implications of this research could extend further in three different ways. First, for students who fail the 9th-grade ELPA, this study could be extended to examine in what areas of reading comprehension these students should receive additional support. This would allow for a targeted intervention year in 10th-grade to better prepare students to write the English Language Proficiency Assessment Re-write (ELPA-R) in grades 11 and 12. Currently, there is no formal, evidence-based targeted approach within ASD-S high schools to systematically support ELPA-R candidates. Second, due to the unavailability of individual archival data for household income, parent education level, employment by household, and parental household makeup, RQ3 could not be part of the analysis for this study. The research question and null and alternative hypothesis were included for future reference should individual socioeconomic data become available and a proper multiple linear regression analysis be possible. Research question 3 states: How do student scores vary among education centers in relation to social economic status indicators of median household income, level of parent education, employment status and parental household demographics?

 H_{0c} : There is no difference among reading achievement scores in relation to social economic status indicators of median household income, level of parent education, employment status and parental household demographics.

H_{1c}: There is a difference among the reading achievement scores in relation to social economic status indicators of median household income, level of parent education, employment status and parental household demographics. The third and final way this study could be extended is to look at the reading data of students in the early elementary grades. New Brunswick is starting a 4th-grade reading comprehension assessment in 2016. This assessment, in tandem with existing 2nd-grade reading comprehension assessment results, could provide a longitudinal data stream. The aim for looking at elementary reading comprehension data would be to ensure students are arriving in 6th-grade as independent readers. To accomplish this, an extended curriculum plan could be implemented in 3rd-grade based on the 2nd-grade Provincial reading results with a midpoint check from the new 4th-grade Provincial Reading Assessment.

The two suggestions for implications for future research would prepare teachers at the upper elementary and high school grades to better support students who are not reading at target. If a literature review of both these levels demonstrates a similar gap in practice as discovered in middle level literacy, an implication for further study would be to offer this type of curriculum plan to other grade levels as well.

The contribution to the field of education from this study is to demonstrate the importance of using data to improve teacher instruction to meet standardized reading targets with adolescent readers. There is no shortage of data in education. That being said, many school districts make important policy decisions with standardized data, but do not necessarily use a statistical methodology to validate the decisions as reliable or generalizable to a larger population. Further, this study has completed an extensive

review of current literature, which examined the use of standardized reading achievement scores as a predictor of adolescent reading performance. A thorough review of the literature has shown that the approach of this study is not a methodology that is widely published; yet the greater problem of adolescents not reading at target appears to be a pervasive problem in many OECD participating countries.

The directions for future research would be to apply the methodology used in this study to help other school districts know what specific reading levels need support in a large sample of student reading data. Results from such analyses would be generalizable to larger populations. An approach such as this would help other school districts provide informed data rich and statistically valid results when drafting policies to support struggling adolescent readers.

Conclusion

The scope and sequence of this project study investigated archival student reading assessment data using a quantitative methodology. The conclusions from this analysis demonstrated a gap in teacher practice at the middle level in ASD-S. The strengths of this project addressed this gap in practice by providing a comprehensive curriculum plan that embraces a balanced literacy progress monitoring approach to RTI at the middle level.

The curriculum plan in this doctoral study will be made available in a number of different formats such as face-to-face learning, online learning and job-embedded training through professional learning communities. The format of the curriculum plan will need to be professional, easily accessible by teachers, easy to follow and specific to student learning needs. A review of this curriculum plan from seasoned teachers and

administrators will ensure the curriculum plan addresses as many potential limitations as possible.

The prospective impact on social change of this study will be measurable and targeted to a specific demographic of society. Ultimately, the goal is to improve the literacy rate of society. To accomplish this, a systematic and targeted approach ensuring adolescents arrive in 9th-grade with strong reading skills at the literal, inferential and critical level is key. This will require a targeted approach from teachers, and an expectation of success from students, parents and teachers alike. By improving adolescent reading ability, teachers are fostering contest mobility or helping students better prepare to be competitive in a global job market hence building social capital in New Brunswick communities.

An extension of this study for future research could include an analysis of high school and elementary schools in ASD-S for archival data is available to conduct a similar analysis for each. Replication of this study could be applied to other jurisdictions as long as the data exists and the proper questions are being asked from its leaders to investigate reading comprehension at the various levels.

The implications, applications, and directions for future research hinge on my drive to take this study to a new level, as a scholar practitioner. By collaborating with other colleagues and researchers, this study could easily be a corner stone in helping other educational settings improve teaching and student learning and bring about increased social mobility with its youth. To facilitate this social change, I will need to continue to review both primary and secondary sources of literature in this field and

share the results of this study by having it published in educational journals. I plan to share this study at the annual conference of the Association of Middle Level Educators in 2016. Further, the abstract for this study has been accepted at the Oxford Research Symposium at Pembrook College, UK to present in August 2016. The curriculum plan in Appendix A is in a format teachers can easily use and implement with struggling readers. The potential for this plan to be successful and impact social change could be far reaching.

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Appendix A: Curriculum Plan

Introduction

The following 8-week curriculum plan is designed to support struggling readers with better reading comprehension. To address the reading comprehension needs identified in the quantitative analysis from ASD-S, this project study supports the five fundamentals to reading comprehension; phonemic awareness, phonics, vocabulary, fluency and reading comprehension. The following curriculum plan provides a day-by-day and week-by-week lesson plan format to support struggling readers using a continual progress monitoring approach to instruction. This approach will do a pre and post assessment to determine strengths and weaknesses in reading comprehension and to further understand where more instruction may be necessary to help a student move toward grade level reading targets.

Week 1:

Assessment Screener and Strategy Grouping

Goal for Week 1:

The goal for week 1 is to determine which students are reading at grade level (tier 1), which students are one to two grades below level (tier 2) and finally which students are more than two grades below level (tier 3), using a whole class partial analysis screener *Trash Attack* (Atlantic Canada Reading Assessment Resource Teacher's Guide) on all students and a full analysis running record (Fountas and Pinnell, 2010) on each of

the students who were below appropriate on the whole class partial analysis screener (*Trash Attack*).

For the purposes of this curriculum plan, the first stage will be 6th-grade, which will be used as the level to model the steps and strategies needed to address the reading comprehension needs for struggling adolescent readers. This curriculum plan will start by determining which students are reading below grade level by conducting a whole class reading comprehension screener. The whole class screener is employed to make sure students have not slipped into a level below or above what was previously assumed or predicted from other teachers, assessments or from former formative and summative assessment data. Given the general mix of a standard middle school classroom, some students may be reading above grade level, some reading at grade level and some reading below grade level. This may change from month to month as student skill level can develop quite quickly.

To determine at what grade level a student is reading, administer a whole class 6th-grade reading comprehension partial analysis screener found in Appendix B *Trash*Attack. Any student who scored "below appropriate", is a candidate for a full analysis reading record full analysis screener. Please reference the student exemplars in Appendix B for criteria and examples of strong and appropriate student responses for each of the 5 questions in this whole class screener.

It is important to identify the reading comprehension levels of students by using a full analysis screener, an assessment that determines skills in phonemic and phonological awareness, oral reading fluency, vocabulary and reading comprehension. Students

reading at grade level are categorized as tier 1, students between one and two grade levels below target are tier 2, and students more than two grade levels below target are tier 3 (Harlacher, Marzano, Sanford, Nelson, Walker, retrieved from: www.rtinetwork.org. Please refer to Table 21 to determine the group size and frequency based on student skill level from the whole class screener and partial analysis screener. For the purposes of this curriculum plan, the focus will be on tier 2 readers, that being, students who are reading 1-2 grade levels below target.

Table A1
Size of Groups and Frequency of Intervention and Assessment by Tier.

Tier 2	Tier 3
30 min 3-5 times/week	45-120 min 5 days/week
	across content classes
5-8 Students	1-3 Students
8 weeks	8+ weeks
Group Diagnostic	Individual Assessment
Assessment	
ether, you do alone' method	Use more intensive guided practice 'we do' method
	30 min 3-5 times/week 5-8 Students 8 weeks Group Diagnostic Assessment

Week 2: Building Phonemic Awareness and Phonological Skills

The goal of week 2 is to determine which basic phonemic and phonological sounds students can perform with high frequency consonant and vowel combinations and confirm that basic phonemic and phonic sounds are established. Word meaning, structure, and visual context clues (e.g., word order, roots, affixes, syllables) will be used to solve unknown words and reasonable attempts will be made to decode and comprehend multi-syllabic and content specific words, using high frequency word lists at the students' instructional level.

Week 2-Lesson 1: Introducing Phonemes-Vowel and Consonant Sounds

Lesson Objective: To introduce phonemes and teach students that all English phonemes fall into two categories: vowels sounds and consonant sounds. Students will learn the difference between a short vowel sound and a long vowel sound. Students will demonstrate if they are having any difficulty with either short or long vowel sounds by reading from the vowel phoneme list in Appendix B, Week 2, and Lesson 1.

Materials: Dry erase white board, dry erase marker, paper, and pencil.

Pre-lesson:

- Have students write their first name on a piece of paper (assume this is a name
 with a vowel in it, if not, use your own first name. International students may not
 have a vowel in their first name).
- Ask the students to identify what sounds go together in his or her name. For example the name Greg has three sounds: G/re/g. Each sound in G/re/g is a phoneme. In this case Greg has three phonemes. Phonemes are not syllables.

- Make this point clear. Do this same activity with the student's name. Identify for the student where the vowel sounds are in his or her name.
- Write the 6 vowels on the sheet above where the student placed their name or on the dry erase white board: A/E/I/O/U and sometimes Y. Tell the student that every syllable in the English language has one of these six vowels in it. Identify the vowel in Gr/e/g, and in the student's name as well. Tell the student that every syllable has a vowel in it. Point to the vowel in your name and their name.

Use this opportunity to help the student know that when spelling a word, every syllable must have one of these vowels in it.

• Using either your name or the students names in addition to the students best friends name or favorite candy bar, movie, sport, hobby or food, repeat this prelesson activity to build the students confidence and establish this wonderful linguistic pattern in the English language, e.g. M/a/rs B/a/r, B/a/sk/e/tb/a/ll, F/i/sh/i/ng, P/i/zz/a/.

Lesson: Explain to the students what a phoneme is-the smallest unit of sound that distinguishes one word from another. Tell the students we have 44 phonemes in our language with numerous combinations of different sounds. There are two major categories of phonemic sounds-vowel sounds and consonant sounds.

This lesson will focus on vowel sounds, which are divided into two categories: long vowel and short vowel sounds. Specifically, this lesson will focus on the long vowel sounds most commonly used in the English language.

Use the Examples of Long Vowel Words in Appendix B, Week-2, Lesson 1 to review the word lists with the students by checking off on your teacher copy any words the students cannot pronounce correctly on their own. Model for the student the vowel sound before each category on the vowel word list. Take note of any long vowel sounds the student cannot independently pronounce correctly.

Post lesson: Have the students identify the long vowel sounds on the Long Vowel Sound Post Assessment sheet in Appendix B, Week 2, Lesson 1. Make note of any particular vowel sound the student is not grasping and review.

Week 2-Lesson 2: Short Vowel Sounds

Pre-lesson: Review with the students the 6 vowels and write them on the white board. On a piece of paper write one word with a short vowel sound like 'bed', 'sat', and 'run'. If there is a short vowel sound in the students' name for example 'Greg', write that down too and sound it out for them. Have them repeat the name after you. Tell the student vowel sounds are made when the airflow is unobstructed when the sound is made. Vowels are often referred to as the 'music' or 'movement' of our language.

Lesson: A short vowel sound is always followed by a consonant sound: short vowel + a consonant sound. Remember there are 5 short vowel sounds, one for each of the vowels a, e, i, o, u. A short vowel sound is represented with the vowel and a small smiley face on top of it.

• The short vowel sound for the vowel a is /a/e.g.: r/a/ft. In this word the short vowel sound /a/ is followed by the consonant letter /f/. Any letter with the smiley face on top if it produces a short vowel sound. We will look at words that model

the other short vowel sounds. Please note the spelling principal associated with each short vowel sound: a consonant always follows a short vowel. This spelling principal will be modeled in each of the short vowel sounds.

- The short vowel sound for the vowel e, is /ĕ/ as in d/ĕ/pth also follows the same spelling rule: A short vowel sound followed by a consonant /p/ as in 'depth'.
- The short vowel sound for the letter i, is /ĭ/ as in 'f/ĭ/lm' which follows the same spelling rule: A short vowel sound followed by a consonant /l/ as in 'film'.
- The short vowel sound for o is /ŏ/ as in b/ŏ/mb follows the same spelling rule: A short vowel sound followed by a consonant /m/ as in 'bomb'.
- The short vowel sound for u is /ŭ/ as in p/l/ŭ/n/ge follows the same spelling rule:
 A short vowel sound followed by a consonant /n/ as in 'plunge'.
- Exception-there is also a short vowel sound at the end of a word that makes the /j̄/ sound like in garage, judge, and manage. The short /j̄/ sounds is spelled with /ge/ as in grudge, judge, and plunge.

Post lesson: Group the words with the same short vowel sounds together from this list of words. You will end up with five lists of words; each list will have the same vowel sounds. Remember the five sounds are /ā/ as in raft, /ĕ/ as in depth, /ī/ as in film, /ŏ/ as in bomb, /ŭ/ as in plunge. Refer to Appendix B, week 2, lesson 2 for this grouping activity.

Week 2-Lesson 3: Consonant Sounds

Consonant sounds are made when the airflow from the mouth is cut off either partially or completely when a sound is produced. For example say the word 'bed'. Tell the student to look at your lips when you say the word and notice that the word has two distinct places where the airflow is either slowed down or interrupted when saying b/ed/.

Lesson Objective: Students will identify the 18 most common consonant sounds by providing a word that belongs to the sound.

Pre-lesson: Model for the student that a sound and spelling do not need to be the same to produce the same sound. For example the sound /f/ can be made from the consonant combinations of f, ff, ph, gh, if, ft in the words like fat, cliff, phone, enough, half, and often. Use the students name, favorite sport, candy or movie to further illustrate this rule. Have them practice and praise sincerely for taking the risk and being successful.

Lesson: Provide the students with a consonant letter and have them identify a word that is associated with that letter. Refer to Appendix B, Week 2, and Lesson 3 for a list of consonant sounds and associated examples of words.

Post lesson: Review the 18 most common consonant sounds and provide the student with other examples from the list provided in Appendix B, Week 2, and Lesson 3.

Week 2-Lesson 4: Controlled Vowel Sounds

Lesson Objective: Students will be able to identify and spell sets of words with r-controlled vowels and recognize when a vowel is followed by an r and that it then makes a special sound.

Materials: Dry erase board, different colored dry erase markers for example black and red, a mentor text (a favorite book or text of the students).

Pre Activity: Remember short vowel sounds? Here are some examples to jog our memory: Short vowel sounds like bad, hen, sit, fox and fun. Are there any other short vowel sounds that are your favorites? List them on the white board.

Lesson: Today we will learn what happens to a vowel sound when you add an r after the vowel. Notice what happens to the short vowel sounds from the pre activity when we add an r afterwards; bad becomes bar, hen becomes her, sit becomes sir, fox becomes for and fun becomes fur. We call this concept the Bossy R. There are many different spellings that make the r sound. Today we will look at some to help learn when to follow this reading rule and apply this to proper spelling of r controlled vowels. Review with the student the different ways r controlled vowels change the way a word sounds and is spelled:

Different ways to say and spell the 'er' sound: Burn (ur), sir (ir), her (er), barn (ar), storm (or). Other *r* controlled vowels: barn (ar), bare (are), bore (or), borrow (orr).

Some other uncommon *r* controlled vowels: cork (or), boar (oar), gore (ore), door (oor).

Still more uncommon *r* controlled vowel sounds: bear (ear), care (are), hair (air), here (ere), they're (ey're), their (eir). Using a mentor text (a favorite book or text of the

students) ask students to read one or two sentences from the book and then identify an r controlled vowel from the mentor text. The student can write these words on the dry erase white board in black with the r controlled vowel and the letter r in red like the example at the beginning of this paragraph.

Post lesson: Provide the student with the list of words in Appendix B, Week 2, and Lesson 4. Have the student say the word and identify the letters in the word influenced by r-controlled vowels. This may involve the student underlining a vowel, the letter r and the vowel following the r if necessary like in rare.

Week 2-Lesson 5: Digraphs

Lesson Objective: Students will recognize and learn that two letters combined making one sound is a digraph and what the most common digraphs are.

Materials: Cut out 5 pieces of paper each with a different digraph on it: ch, sh, zh, th, ng, a dry erase board, black and red dry erase markers, a mentor text from the students independent reading inventory.

Pre-lesson: Display the five different digraphs face down on the table in front of the students. Explain that a digraph is two letters that make a different sound, when combined. As you flip over one card, make that sound then give two different examples of each sound, for example ch, makes a /cha/ sound, like in church, or chimney. Notice the /ch/ sound changes from a hard sound like /k/ when followed by a vowel like in sch/o/lar or sch/e/dule. Continue with this until you have completed all four.

Lesson: Using a white board or with a piece of paper, the student is going to make a word with the digraph in it. The digraph does not have to be at the beginning of the word only; it can be in the middle or end of the word as well. For this vocabulary building activity do not focus on words that may be misspelled rather encourage words that have the correct sound underlined in the right place with the new word. You can also make a list while the student makes theirs and you can share where your digraphs are as well.

Post lesson: Have the student refer to a mentor text and read a few sentences out loud. Ask the student to write down any words she or he reads they read with digraphs. Perhaps they can find new digraphs different than the ones you already shared.

Week 3: Fluency

Weekly Objective: At the end of this week, students will be able to read a wide variety of high frequency, grade specific and subject specific sight words with improved automaticity, including subject-specific terminology and words from oral language. The lessons will start with easier familiar texts and progress to more challenging texts. At the end of this week students will progress in 6 areas of fluency: pausing, phrasing, stress, intonation, rate, and integration. Remember to use mentor texts that students are very familiar with and can read with ease, gradually moving to texts in the instructional zone where students will fluently read 90-95% words correct per minute (WCPM). Students will read familiar passages fluently, with appropriate pacing, phrasing and expression, to convey a sense of text to audience. Students may hesitate occasionally with unfamiliar words. Students will be exposed to a variety of genres and text forms to become familiar

with phrasing and expression from different selections of text. Remember to keep a balance between information and narrative texts.

Week 3-Lesson: 1 Pausing

Lesson Objective: Students will be able to respond to punctuation in a text by pausing at the appropriate places and adding the proper voice incline (at question marks) and declines (at periods) and full stop at dashes.

Materials: A mentor text of the student's choice that the student has read multiple times, with a copy of the same text for the teacher to follow along. Using a yellow and red highlighter, cut out a stop sign (red octagon), a yield sign (red triangle with white boarder), an arrow pointing upward, an arrow pointing downward and an exclamation mark, all individually attached to a Popsicle stick.

Pre-lesson: Explain to the student what the signs are for. The stop sign will be held up when the reader is to stop reading completely, the yield sign is to be held up when the reader is to pause at commas, semi-colons and ellipses, the up and down arrows are held up when the reader is to inflect their voice upward or downward where appropriate.

Lesson: With the mentor text provided, highlight all the punctuation marks in the first paragraph of the mentor text. Tell the students you are going to model reading this text and that you want them to pay special attention to each time you follow a pause in the text. Tell students that they have the pauses already highlighted; next, they will highlight the following paragraph as you read again. Give this text to your student. Next, read this paragraph out loud to the student paying special attention to follow the

conventions of punctuation sign. Model for the student what proper pausing looks like. Finally, give them each a highlighter. Have them indicate with the highlighter each time they see where there should be a pause on the text AND where they hear a pause. Make certain as you model this pausing technique that you follow each and every comma, period, exclamation etc.

Post lesson: Students will each read a different paragraph out loud, one at a time. Everyone at the table will have the same text to follow along as well as a red and yellow highlighter. Choose a fairly easy text to read. This activity is not about text complexity but about building proper fluency through pausing. The teacher is to highlight in yellow every time a pausing sign was read properly, and in red, every time one was missed. After each student has read, show the student which signs were followed and which were missed. Allow students to mark on their paragraphs as they follow along where other students have paused properly in yellow and where pauses were missed in red on their own sheets.

Week 3-Lesson: 2 Phrasing

Lesson Objective: Students will be able to put words together in groups to represent meaningful units of language. Phrased reading should sound like oral language, though more formal.

Materials: The sample mentor text that each student is very familiar with and likes very much. Provide a highlighter and pencil or pen for each student.

Pre-lesson: Provide a sample mentor text that the students like very much and can understand what is happening in the story. Pre-highlight in the familiar reading

mentor text letter the word clusters that very frequently go together. For example; <u>once</u> <u>upon a time</u> there lived a... <u>as long as...</u> <u>as far as the eye could see... I don't want to go...</u>

Lesson: During this lesson, students are going to work at linking language, meaning and print structures together. You will be paying special attention to the places in the text where the student is reading word for word and where the student can easily link more than two words together to form a fluent chain of words while also respecting the proper pausing places from yesterday's lesson. Highlight where you hear the chains of words read fluently together that formed a fluent phrase. Make sure you point out to the students after reading where these chains of words were and praise their proper phrasing. Also point out where you hear word-for-word reading. This is where the students are trying to process meaning as they read and therefore slow down. Highlight these words to re-use for vocabulary building in another lesson.

Post lesson: Have students find one or two sentences or even a paragraph they felt had read very well, liked very much or could read with smoothness from their mentor text. With you modelling your sentences first, have them also read their sentences of choice. Make sure you provide feedback on the linking of language, meaning and print together that made this reading successful.

Week 3-Lesson 3: Proper Emphasis

Lesson Objective: Students will be able to place proper emphasis on particular words to reflect meaning as speakers do in oral language.

Materials: Mentor text (usually a narrative with a lot of dialogue that students are very familiar with), highlighters, and white board with dry erase markers, paper and pen or pencils, reader's theater scripts (optional and not included in Appendix B).

Pre-lesson: Provide for the students a sample of a narrative dialogue to follow along with as you model for the students the proper stress in the narrative. Give the students a highlighter to indicate on their copies where proper stressing was placed by the teacher to make the narrative sound as lifelike as possible.

Lesson: Model for the students by reading aloud, a narrative from a story the students are both familiar with and like. Instruct the student to pay particular attention to key words you have previously highlighted in the student copies of the text they are following along with. Highlight words that are followed by a question mark, an exclamation mark, an ellipse, or a dash. Be sure to provide immediate feedback after a student has read a passage of text and followed the proper stress on key words to make the narrative sound lifelike.

Post lesson: Have the students read a narrative from a book of their choice silently for 3-4 minutes. Have them each share one sentence that they will read to the group or to you that models appropriate stress to make the narrative sound lifelike.

Week 3-Lesson: 4 Intonation (expression)

Lesson Objective: Students will be able to vary their voice in tone, pitch, and volume to reflect the meaning of the text.

Materials: A selection of poems at the independent or instructional level for the student (A sample poem is provided in Appendix A, Week 3, and Lesson 4-Intonation). Highlighters, dry-erase board, dry erase markers, paper and pencils/pens.

Pre-lesson: Ask the students to describe their favorite scene from their favorite movie, or their preferred verse from their most loved song. Teach how important it was that the actor or singer placed special emphasis on key words to make the scene or verse attractive to the reader. Point out that tone, pitch, and volume all intertwine together to make for a beautiful sound to the ear. Model for the student your favorite poem, verse, or piece of prose so they can appreciate what beautiful reading sounds like.

Lesson-Point out for the student a verse from the poem that made use of pitch and or tone which added value to the meaning of the poem for the reader. Model for the student how this sounds and have the student repeat after you. Repeat this 2-3 times, switching poems if necessary. The poem, *Television*, by Roald Dahl (Appendix A, Week 3, Lesson 4), makes use of volume by making letters in all capitals. This is a great place to increase the volume of the voice when narrating the poem.

Post lesson-Have the student highlight a favorite verse or two in one or both poems. Let the student practice saying the verse before actually repeating the practiced verse to you. Praise the student's use of tone, pitch and volume in this case.

Week 3-Lesson: 5 Rate

Lesson Objective: Students will be able to read a passage of text with proper pace-not too fast-not too slow. Students will learn to recognize and demonstrate effective rate of reading by using familiar texts.

Materials: Very familiar fairy tales of different reading difficulties that the students like. Make sure there are enough copies for all to follow along. Photocopy portions of the text so you can highlight words that are slowing students overall rate. A cell phone with a recording feature.

Pre-lesson: Point out to the student that it is ok if you have to pause to solve a word in a story or text. The goal is overall rate. Model for the student what proper rate looks like and sounds like using a text the student has read before and is familiar with. Fairy tales are great for this type of teaching.

Lesson: Have the students read one paragraph out loud one at a time. With the photocopied page in front of you, tick or highlight a word or words that are causing the student to read slowly or in a choppy manner. If the student reads too choppily, the text is too hard. Select an easier text for the students to practice. The goal is to practice rate with a text that the student can demonstrate proper speed-not too fast-not too slow. The most challenging part of this lesson is for the teacher to have an inventory of different level texts on hand and to find the 'sweet spot' for each student to read at the proper rate. Once the right level of text is found, it is time for practice, practice, practice and provide extensive positive re-enforcement from the teacher.

Post lesson: Have the student read a paragraph into a cell phone using the recording feature and play back so they can hear how they sound. Have the student reflect on their reading rate and share how they felt their rate was with the selected text.

Week 4: Building Vocabulary-Word Study

Weekly Objective: There are as many different ways to teach word building strategies, as there are words. The lessons provided during this week of supporting struggling adolescent readers is intended to provide lessons that can be further developed if needed. With only one week to cover such a very broad topic, this week of building vocabulary is intend to provide the teacher with structured lessons to support word building activities for adolescents. The six-step approach for learning vocabulary (Marzano, 2004) will focus on introducing and reviewing words.

Week 4-Lesson: 1 Using Word Descriptions

Lesson Objective: Students will learn to use descriptions, associations, characteristics, examples and will provide explanations of new words found in a variety of content specific texts of varying difficulties. Students will learn new words both directly and indirectly.

Materials: Highlighters, index cards, Vocabulary Notebook (See Appendix B, Week 4, Lesson 1), small sticky notes or ways of indicating a new word on a page. A grade level appropriate text from social studies, science, health, or language arts class. Make a copy of the text for the student to mark on or highlight.

Preview one of these texts for 3-4 words that are key to understanding the text that you surmise students may not yet know.

Pre-lesson: Ask students to share if they have ever read a word in a text that they do not understand. Have them share what they do when they read a word in a sentence

they do not understand. Briefly discuss with students (without telling any strategies or information) of what to do when a reader comes to a word they do not understand.

Lesson: Give each student a handout of the text you will be reading to them, highlighter and/or some sticky notes. Tell the students that you are going to read a paragraph from this (science, social studies, health or other story). When the student sees and hears a word that does not look familiar, they are to highlight the word or place a sticky note by it.

- After reading the paragraph, share what words the students highlighted or ear marked.
- Hand out the Vocabulary Notebook sheets from Appendix A, Week 4, Lesson 1.
- In the 'New Word' column students are to fill out the new words highlighted from the text they just read and complete a description, representation and any new information that helps them remember each new word.
- Model an example for the students by filling out the first row on the Vocabulary Notebook for them.
- Place this sheet in a binder to build a vocabulary journal.

Post Lesson: Students will share what new words they added to their vocabulary journals with the other members of the group and to each other. Start to build a word wall next to your meeting area with these new words in alphabetical order.

Week 4-Lesson: 2 Building New Vocabulary

Lesson Objective: To build students' working vocabulary by improving sight word recognition of high frequency sight words.

Materials: Sticky notes for each student, 100 High Frequency Words

Assessment-Individual Record-one for each student (See Appendix A, Week 4, Lesson

2). A text at the student's instructional reading level; that being, a text with 90-95% words comprehended per minute of reading. This can be a narrative, informational or other text form.

Pre-lesson: Tell the students they can read in the text of their choice while you review the high frequency sight word list inventory with each student one on one. While students are reading, they are to put a sticky note beside any word they are not 100% sure of.

Lesson: While students are reading quietly, pull an individual student aside and have them recite the high frequency sight word list from Appendix, A, Week, 4, Lesson 2. Each student should have his or her own sheet. When finished, all students should have been reading for about 20 minutes. Have students transfer any words they marked with sticky notes into their vocabulary notebooks in the 'New Word' column.

Post lesson: Students are to share with the group what words they entered into the 'New Word' column and what their predictions are for a description and representation. Make sure the student also shares what text they are reading with the group to provide a context of the new word.

Week 4-Lesson: 3 Building Words from Common Roots

Lesson Objective: Students will be able to determine the meaning of an unknown word by becoming familiar with frequently used Greek and Latin root words.

Materials: Piece of paper for each student, pencil, Common Roots from Greek and Latin (Appendix A, Week 4, Lesson 4). Highlighter, Vocabulary Notebook, a mentor text of the students choosing.

Pre-lesson: Have students select any paragraph from their mentor text and write down any 10 words from that paragraph on their blank piece of loose leaf.

Lesson: Tell students that about 60% of all English words come from either Greek or Latin origins and are often the English words found in science (astronomy), medicine, (pneumonia) and law (habeas corpus).

- Pass out the two pages of Common Roots from Greek and Latin.
- Have students highlight the words that on their loose leaf that match the common roots from Greek and Latin.
- Have them underline the root in each word on their loose leaf that they copied from their mentor text that also match the common roots found on the Common Roots from Greek and Latin.
- Did students have about 6 of the 10 words from the mentor text that matched the common roots from Greek and Latin?

Post lesson: Share with the group what words were common between the list on their loose leaf and the Common Roots from Greek and Latin list. Consider the following prompts for discussion:

- Did you have more Greek or Latin roots in your words from you mentor text?
- What other words from the Common Roots from Greek and Latin did you find that have a similar meaning? Write these new words in your Vocabulary Journal.

• Share and compare with your group.

Week 4-Lesson: 4 Building Words with Common Prefixes and Suffixes

Lesson Objective: Students will be able to determine the meaning of unknown words by dividing words into syllabic parts that function together to give the whole word a meaning that is familiar to the reader.

Materials: Cut out the prefixes and suffixes found in Appendix A, Week 4, Lesson 4 and write on recipe cards. Write 3-4 words that do not have a suffix or a prefix on recipe cards (total of 6-8 cards) for example agree, counter, honest, obey, able, place, run.

Pre-lesson: Tell students that in this lesson we are going to expand our vocabulary by adding one or two words to the beginning or ending of a word. Here is a list of common sight words (display cards on table with the words agree, counter, honest, obey, able, place, run or others of your choice that will be modified with a prefix or suffix). Today we are going to double the amount of words on the table by adding a letter or two to the beginning or a letter or two to the end of each word.

Lesson: Tell students that a prefix is placed at the beginning of a word and expands the words meaning.

- Nine prefixes account for most of the words with prefixes.
- Add a prefix to one of the words already displayed on the table. For
 example, place the prefix dis in front of the word agree. Ask a student to
 read this new word: disagree.

- Ask the students if there is another word that would be changed with the prefix *dis*. *Dis*honest, *dis*obey, *dis*able, *dis*place are all words that are changed with the prefix *dis*. *Dis* means not or opposite.
- Students can write the new words in their Vocabulary Journals if they
 wish. Continue to place the suffixes you cut out in front of each of the
 vocabulary words on the table.
- Discuss how the prefixes change the meaning of each word.
- Continue this same procedure for suffixes.

Post lesson: Have students place the new words with a prefix or suffix in a different color than the root word on a recipe card. Place alphabetically on the word wall next to your reading station.

Week 4-Lesson: 5 Homophones

Lesson Objective: Students will become familiar with the 20 most commonly confused homophones and when they are used in the proper place as a means of building a stronger working vocabulary.

Materials: Build a cue card list using recipe cards of the following homophones: Affect/effect, than/then, which/witch, here/hear, are/our, by/buy, accept/except, weather/whether, there/they're/their, to/too/two, you're/your, bear/bare, one/won, brake/brake, complement/compliment, aloud/allowed, lie/lay, it's/its, capital/capitol, principle/principal.

Lesson: Students can enter these homophones into their Vocabulary Journals and describe the difference between the homophones in their own words by drawing a picture

to describe each homophone. Students do not need to copy and draw the descriptions and photos for all homophones. Consider this short list of the homophones most commonly mistaken: then/than, affect/effect, which/witch, there/they're/their, to/too/two, aloud/allowed, break/brake.

Post lesson: Using your cue cards, practice with each student describing the homophone. Definitions are not important, descriptions are and in this case, using the right homophone in the correct place and in the right context is key.

Week 5 Building Reading Comprehension Strategies

Weekly Objective: Students will learn to use context clues, use prior knowledge, experiences and knowledge of text forms and text features to verify and adjust predictions while reading. Teachers will teach and students will use before, during and after reading strategies to help build context clues when attacking unfamiliar texts.

Teachers will introduce higher levels of inferential and critical questions when coaching students to build reading comprehension skills. Sample questions will be drawn from the Reading Achievement Standards for each grade level.

Week 5-Lesson: 1 Using Context Clues

Lesson Objective: Students will learn the 5 most common ways context clues can be used to help figure out the meaning of challenging words in a new or challenging text.

Materials: A piece of paper divided into four columns with the following headings from left to right: New Word (column 1), Clues (column 2), My Prediction (column 3), Type of Context Clue (4).

Pre-lesson: Ask the students what a peavey is (chances are they will not know). Then show them this sentence: *The lumberjack used the peavey, a long handle with a hook, to loosen the logs in the log jam.* Ask them again what a peavey is. Chances are they will tell you it is a long handle with a hook used to loosen logs. Tell students that today you will introduce them to 5 common skills that use context clues to determine the meaning of new or challenging words in a text.

Lesson: Describe for the students what each of the methods are for supporting context clues:

- Contrast: The unknown word in a sentence is compared to another word usually with the opposite meaning for example Judy was *exhausted* after the climb, but Tex was rested and wide awake; or, my sister was *apprehensive* about the test, but I felt calm and confident.
- **Suggestion**: The meaning of the *unknown* word is <u>suggested</u> or defined by the other words around it. For example, John would soon contract *hypothermia*, a state of extremely <u>low body temperature</u> after falling in the <u>frigid cold</u> river in early spring.
- **Comparison**: The word is compared with another word or phrase to illustrate the similarities between them; for example, the supervisor sent Helen an email after she was *tardy*, or <u>late for work</u> for the 3rd-time that week.
- **Synonym**: The word is compared to another word with similar meaning; for example, the spring soil was very *fertile*, promising <u>abundant</u> crop.

• **Definition**: The word may be defined in the sentence in which it appears or in a text feature on the same page; for example, the salmon made a *false rise* to the fly, that is, <u>surfaced</u> his nose <u>beside</u> the fly but did not take it.

Post lesson: Cut out the examples from each of the 5 categories above. Have the students place the prompts under the proper category. Or, turn to the student's mentor text and read a page, searching for evidence of any of the 5 context clues evident from the text. Record the new vocabulary in their Vocabulary Journals.

Week 5-Lesson 2: Making Predictions, Before Reading, Activating Prior Knowledge

Lesson Objective: Students will develop strategies to enhance reading comprehension by identifying a purpose for reading and using prior knowledge to predict the important points in a text. Spend approximately 5-10% of reading time with before reading strategies. Building background knowledge and establishing a context for reading is key.

Materials: A sample of an informational text, website, or textbook (science or social studies), Appendix A, Week 5, Lesson 2: Enhancing Comprehension, Anticipation Guide, Predicting and Confirming Chart.

Pre-lesson: Explain to the readers that learning how to set a clear purpose for reading and thinking about what you are about to read will improve a reader's overall reading comprehension. Model using the think-a-loud technique with one of the texts you have selected. To do this, you will think out loud what you see on the page and verbalize any connections you are making between the title of the text, captions, charts, graphs,

headings and subheadings as well as your personal biases and persuasions related to the text that will influence your reading from your personal prior experiences.

Lesson: Provide the students with another informational text form.

- Instruct them to look at the cover, or title, pictures, headings, subtitles etc.
- Prompt the students if they know what the purpose for reading is based on the preliminary cues they have just seen.
- Pass out the Predicting and Confirming Chart.
- Complete the 'Predictions about the Content' column only. Share the predictions with each other and with the group.
- When each student has 2-3 predictions, read the informational text together, pausing for reflection when one of the predicted points from the predictions column is revealed through reading. If the prediction has been confirmed have the students check the 'yes' but wait to complete the 'Explanation' column of why the prediction was confirmed or not until after.

Post lesson: Complete the Explanation column and share if predictions about the content were confirmed or not. If no predictions were confirmed, was the text too difficult? Did the student lack prior knowledge? Do you need to re-model the read-a-loud again? Consider repeating this activity until the students have the majority of their predictions being confirmed. Teachers may use the Anticipation Guide in Appendix A,

Week 5-Lesson 3: During Reading Strategies with Informational Texts

Lesson Objective: To equip adolescent readers with strategies to monitor reading comprehension from informational texts by making connections with text to self, text to

text and text to world. Spend approximately 70-80% of instructional time on reading strategies.

Materials: Select an informational text at the reader's independent level. Make sure there are a number of text features such as charts, graphs, headings/subheadings, or maps on the text. The selection of text does not need to be long. Provide a copy of the text and a highlighter for each student. Consider using Text Connections (Appendix A, Week 5, and Lesson 3). Sample questions at the critical level. Refer to p. 41 of Appendix A.

Pre-lesson: Activate prior knowledge about the text by discussing key features evident in the text with the students. Consider such prompts as: What does this remind you of? What do you think the author's purpose is? What is one thing you think you will learn from reading this text?

Lesson: Have students read the text in its entirety instructing them to use the highlighter to indicate any words that they do not know, or words that help them make sense of the purpose of the text. Observe the students' eyes and movements as they read. Do their eyes maintain focus with the text, do they drift, do their eyes stay fixated on one place for a long time, and do they appear to be inattentive? Complete the first row of Text Connections together and then have the students complete the second row on their own. This lesson may take longer than one session to complete.

Post lesson: Students are to share from the row they completed independently with each other and with the group. Try to help students be clear on the author's purpose and make a clear connection with the text and their life or past experience.

Week 5-Lesson 4: During Reading Strategies with Narrative Texts

Lesson Objective: To equip adolescent readers with strategies to monitor reading comprehension from narrative texts by using the prompts included and the black line master in Appendix A, Week 5 and Lesson 4, Text Connections with Quotes. Spend approximately 70-80% of instructional time on during reading strategies.

Materials: The same narrative text for each student to follow along with and mark on with a highlighter. Sample questions at the critical level. Refer to p. 41 of Appendix A.

Pre-lesson: Model for the student a place in the text that you previously highlighted that helps you picture a character in the story. Fill in the first row of the page-Text Connections with Quotes, Appendix A, Week 5, and Lesson 4.

Lesson: Students are to read the text in its entirety at least once. Using their highlighters they will indicate in the text any clues that may answer the following prompts:

- Does the author keep you interested in this story? How?
- What does the author do to help you picture this character?
- The problem is described by _____. What do you think ____ would say about it? They will then fill in the Text Connections with Quotes (Appendix A, Week 5, and Lesson 4).

Post lesson-Discuss and share as a group. Consolidate the group learning activity by re-stating the author's purpose (to entertain, inform, persuade, describe, explain...).

Review what words were highlighted in the story and what connections were made between the text, the students and their reactions to the text. The prompts selected for this lesson were from the critical level of reading comprehension.

Week 5-Lesson 5: After Reading

Lesson Objective: Students are to solidify and or extend their comprehension of the text(s) by making reflections individually or in a small group that are text to text, text to self or text to world. Spend approximately 10-25% of time on after reading strategies.

Materials: Pull out one of the two texts students read and highlighted from day 4 or day 3 of week 5. A response to reading sheet (Appendix A, week 5, and lesson 5)

Pre-lesson: Complete a reading response sheet prior to the lesson and model for the students how you completed the Reader Response found in Appendix A, Week 5, and Lesson 5. This will set the expectation for the reader what a complete reader response should look like.

Lesson: Students will re-read the text from either day 3 or day 4 or another text of their choice. Allow them to read for as long as you think their reading stamina will allow less a couple of extra minutes. Complete the Reader Response found in Appendix A, Week 5, and Lesson 5.

Post Lesson: Discuss as a small group each student's response to the text they read.

Week 6

Building Self-Correcting Strategies

Weekly Objective: The goal for this week's lesson is for students to learn to self-monitor reading for comprehension and use self-correcting or adjusting strategies e.g., reread, read on, skim/scan, visualizing, re-telling, making connections according to form, purpose, and specific text challenges. Students should know that not every self-correcting or fix-it strategy works in every situation. They should be confident enough to try different strategies until they find one that works. This week of intervention will help build an inventory of strategies students can use when faced with reading a challenging text. The first and most important step is for students to become self-aware of when they first become confused when reading and narrow down the source of their confusion. It is then that the self-correcting strategies in this lesson will support a struggling reader.

Week 6-Lesson 1: Self-Monitoring for Comprehension

Lesson Objective: Students will learn how to self-monitor their understanding of a piece of text and use the re-read/read-on strategy to better understand a challenging text.

Materials: Select an instructional level text from a content area such as social studies or science. Students should have a highlighter, or tiny sticky notes to place on a page to mark the text.

Pre-lesson: Tell the students of the three re-reading strategies used when readers do not understand what they are reading: (a) re-read a sentence or section that is

confusing, (b) go back to where the text last made sense or, (c) read on to see if the text will make sense.

Lesson: Explain what the re-read strategies are, when and where you would use them, why they are important, and when not to use them. Model for the students (using the read-aloud technique) each of the three strategies described in the pre-lesson by using a paragraph or text of your choice. Next, practice together with the students-they do, you support. This may require you to hear each one read individually and may therefore require you to move from desk to desk instead of meeting at a guided reading table. This procedure should be repeated in the near future so students are able to complete this task independently.

Post lesson: Gather the group to a guided reading table and share what each student discovered by using each of the reading fix-it strategies: (a) re-read a sentence or section that is confusing, (b) go back to where the text last made sense or, (c) read on to see if the text will make sense.

Week 6-Lesson: 2 Teaching Text Structure

Lesson Objective: Students will learn to identify the text structure and be able to use a graphic organizer to understand cause/effect, compare/contrast, problem/solution, description/list and sequencing.

Materials: An informational text at the student's instructional level (90-95% WCPM) in a format they can mark on or highlight. Group-Constructed Causes/Effects Frame (Appendix A, Week 6, and Lesson 2) expanded on a large sheet of paper or on a Smart Board to complete as a group.

Pre-lesson: Model for the students using a procedural text, or an informational text the patterns authors use when writing about sequence, cause/effect, and compare/contrast. For example, words like: *if* water cools to 4 °C *then...* or *before* water reaches its greatest density *it must* cool to 4°C, or the typical pattern of germination requires a *fertile seed, proper soil depth, moisture, and ideal temperature*.

Lesson: Display the Group-Constructed Causes/Effects Frame on the Smart

Board and explain that the purpose in this lesson is to identify where in the text the
author used key structures as modeled in the pre-lesson. Read the informational text
together looking first at the larger headings, subheadings, text features etc. making
predictions and activating prior knowledge. Then read the text in its entirety, highlighting
any language that demonstrates cause/effect or before/after, or sequencing of any kind.

Complete Event #1 on the chart together. Check for understanding and complete Event
#2 together if students need more guidance. They can complete Event #2 independently
if they are ready, but do not rush students working independently too soon.

Post lesson: Have students recognize the key words used in the text that demonstrated cause/effect or before/after, or sequencing. Share and discuss how the author used this wording to tell the reader that comparisons were made to inform the reader. Make a note that this is also a good skill to use as writers. Consider using this text to teach expository writing in another lesson.

Week-6, Lesson: 3 Using a Glossary or Dictionary

Lesson Objective: Students will learn to highlight unknown words and how to look them up in a glossary or dictionary.

Materials: A text at the students' instructional level photocopied onto paper so they can highlight key words from a science or social studies textbook; highlighters (2-3 different colors if available), vocabulary journals from week 4, lesson 1, and an intermediate dictionary.

Pre-lesson: Using the photocopied page from an instructional level science or social studies text and using the read-aloud technique, model the first paragraph and highlight a few words that were pre-selected from the glossary in the text that also appear in this paragraph. You may want to use certain colors of highlighters to indicate certain word challenges; for example, yellow indicates a new word that is completely unknown to the reader, green indicates a word that the reader is unsure of and needs confirmation, blue is a word used in a different context and may have a different meaning in this case.

Lesson: Teach the students how to look the highlighted words up using a glossary and the dictionary. You may need to refer to the grapheme and phoneme charts used in week 2, lessons 2, 3, and 4 to illustrate how to look up words that sound different than how they are spelled. Record new words in the vocabulary journal from week 4, lesson 1. Be sure to write a description of the new words.

Post lesson: Student will share one thing they learned about using a dictionary or a glossary by modelling *to the group* how to look up one word they recorded in their vocabulary journals.

Week-6, Lesson: 4 Coding Texts for Comprehension

Lesson Objective: Students will learn how to use specific codes (BK, -, +, I, ?, F) to help them engage with challenging texts and learn to use 2 graphic organisers to help monitor comprehension.

Materials: Code/definition chart (Appendix A, Week 6, and Lesson 4), highlighters or small sticky notes, a photo copied page from an informational text students can mark on or code, a pencil for each student.

Pre-lesson: Display for the students a paragraph you have previously read and coded using the symbols from the code/definition chart in Appendix A, Week 6, and Lesson 4. Tell students that together we are going to use these codes with a new passage of text to help us engage with the text.

Lesson: Read through the code/definition chart together and place this in the binder with their vocabulary journals. Read the instructional level text to the students, pausing after each sentence to see if there are any codes that can be used to confirm understanding or information that students may agree/disagree with, wonder or think in response to this sentence. After completing one paragraph together, ask if they would like to do another paragraph with you or if they would like to code the next paragraph individually. Be patient, this may require you to model a number of paragraphs with the group before they feel comfortable coding on their own.

Post lesson: Students will select one particular code from the coded paragraph that they liked the most. Have them share the response to this code with the group; for

example, if the student coded 'I' for inference next to a sentence or word, they would tell the group; *I think this point the author makes is true/not true because...*.

Week-6, Lesson: 5 Visualizing and Retelling for Comprehension

Lesson Objective: Students will learn to use descriptive language to describe what the author is writing by using the senses of sight, sound, small, and touch and making a personal connection with the narrative. Students will be able to retell the story by referring to the descriptive language they have used to picture the text.

Materials: A narrative short story (or a portion of a longer narrative) with a lot of descriptive detail. This story could be a fantasy, fairy tale, allegory, or fictional narrative. A comic template (Appendix A, Week 6 and lesson 5), pencils and erasers.

Pre-lesson: When selecting a text for the visualizing activity, consider a text with descriptive language and strong verbs and that lends itself to vivid images. Model for the students what the text looks like, sounds like and feels like. Or, the teacher may wish to draw a picture of what the scenery looks like in their minds. Consider pictures like a movie made from a book. If students do not want to draw, then have them describe what the movie looks like for the group. This can be done before the story is read, mid-point or during the story, and after the story is finished.

Lesson: Read a paragraph or descriptive sentence(s) to the group. Consider the following prompts:

- Does the main character remind you of anyone you know?
- Have you ever been to or seen any place that is like the setting of your book?
 Describe for the group.

• If you were in this scene, what would you see, feel, or hear?

Post lesson: Students will share what they have drawn and how this elaborates or extends what they heard from the story. Students who did not draw a picture, can describe what they saw, felt, heard or smelled, as if they were in the story. Have students retell the story from their unique perspectives as if they themselves were standing in the background in the story.

Week 7

Using Text Features for Comprehension

Weekly Objective: Students will learn to use text features (e.g., table of contents, glossary, headings/subheadings, index, sidebars, charts/ diagrams, maps, font) to preview, interpret and locate information available in narrative and informational texts.

Teachers will introduce some of the same texts from week 5 and a sample of new or different texts from a variety of literary genres such as fantasy, fiction, myths, poetry, mysteries and informational texts such as textbooks, instructional texts, *National Geographic*, biographies, newspapers, and reports.

Week 7-Lesson 1: Nonfiction Text Features

Lesson Objective: Students will learn the common text features in nonfiction texts and how these are used to help the reader better understand the text.

Materials: Select two different passages of expository or informational texts at the student's instructional level; one with text features and a different text with the features blanked out leaving white spaces on the page. The first text should have a

number of features such as; charts, graphs, cutaways, illustrations, photographs, labels, headings, subheadings, special print like bold, italics, underlining, or a table of contents.

Pre-lesson: Using the think-a-loud technique and the text with all the features intact, model for the students what you predict the text will be about by only reading the text features. Illustrate how the author communicates important information through these text features and how the main body of the text fills in the details the text features leave out.

Lesson: Read the text with all the features orally together. Stop periodically to make reference to the features. Note for the student connections between the text and the features. Mention that the text features concisely summarize the details found in the paragraphs.

Post lesson: With the other text (the one with all the features removed), read the entire text, orally with the group, pausing to highlight key words found in the text such as: problem/solution, cause/effect, compare/contrast, descriptions/lists, time order or sequences. Consider inserting into the white spaces your own headings/subheadings, a chart to summarize a list, or a timeline to illustrate a sequence. Creatively make your own text features to summarize and add additional details from the text.

Week 7-Lesson 2: Narrative Text Features

Lesson Objective: Students will learn to identify 5 general text features in a narrative text: title, setting, conflict, resolution and conclusion.

Materials: Two short narrative texts with each general text feature as a separate paragraph(s). A lower level fairy tale is often well suited for this activity, sticky notes

and pencil/pen for each student and a student's favorite narrative fictional text from their personal reading inventory.

Pre-lesson: Identify the five general narrative text features and write them on sticky notes. Also list these features on an easel or smart board at your reading center. Tell the students you have pre-read a familiar story; for example, Three Little Pigs, Billy Goat's Gruff and placed a sticky note where you saw evidence of each text feature. Show the student's what you have done and tell them we are going to identify the 5 general text features in this story.

Lesson: Give each student some small, blank, sticky notes and a pencil. As you read through the story orally together, pause at each paragraph to label if a narrative text feature was identified. Write on the sticky note the text feature; for example, setting/conflict/resolution etc. and the descriptor; for example, abandoned wooded area. In short, a sticky note beside a paragraph that describes the stories setting could read: setting/abandoned wooded area, or, conflict/woman vs. eating disorder.

Post lesson: Provide students with more sticky notes. Have them read a page or two from their own narrative texts and do the same activity after reading 1-2 pages.

Students do not need to identify every narrative text feature, but they do need to identify some on their own. Students are to share with the group after completion.

Week 8

Motivation, Post Assessment and Regrouping

Re-administer the Fountas and Pinnell screener to determine reading progress since Week 1. Specifically determine if there has been a measureable improvement in phonemic awareness and phonics, vocabulary, fluency and comprehension at the three different levels of reading comprehension: literal, inferential and critical levels. If no measurable improvement has been noted, re-determine the instructional level of text with that student. This is determined by having the student read aloud an unfamiliar passage of text for one minute. Calculate how many words were attempted but mispronounced, skipped or caused confusion during that minute. Do not include self-corrections as missed words-self-corrections but count as a word read properly. Tally the total words read per minute divided by the total number of errors. Continue this process until the student has achieved between 90-95% of the words read correctly. If students' total words correct per minute (WCPM) is less than 90%, choose an easier level text and try the assessment again. If the student scores between 96-100%, choose a more challenging text and try again. Remember that informational texts are about 1 grade level more difficult than narrative/fictional texts.

Once the teacher has determined the instructional level (90-95% WCPM) make note of the missed pronounced words in the passage and the words the child skipped or did not understand, then build a list of these difficult words in a vocabulary log or journal. Have the student write a description of the missed words, draw a picture beside the word, list an antonym for this word and a definition. Students may wish to work in

pairs for this activity. Spend a few minutes teaching the student how to break down these words and apply the strategies found in week 3 to help build a working vocabulary at this instructional level.

Read the selected passage to the student to model what a fluent reader sounds like. Then, proceed to apply the literal, inferential and critical questions found below from the New Brunswick Reading Achievement Standards based on the text recently read with the student. Keep the success rate of the student in the 80% zone. If you ask 10 questions to the student make sure he or she is successful with at least 8 of the ten questions. Student confidence and engagement with reading comprehension success is key.

Sample Comprehension Questions by Level

(Use for prompting during intervention period)

Literal

- Skim this part to find ___ (information/topic) and tell me about it.
- Summarize what you have learned so far. What key words did you make note of to help you remember?
- Where would you begin to construct a timeline to plot the events in this autobiography?
- Why is ____ (event/action of character) important to the story?
- What message do you think the author is trying to give to the reader?
- What were the main ideas in this selection?

• What did you find out about each of the main ideas?

Inferential

- Describe ____ (character) at the beginning of the story and at the end of the story.
 What do you think caused this change?
- How did the character's strengths/weaknesses affect the sequence of events in the story?
- How would the story be different if the character had acted differently?
- How does the information in this book fit with what you already knew about ____
 (the topic)? What is the same? What is different?
- What does this word mean? What helped you figure that out?
- "The sky's the limit" was used on page__. What does this expression mean? How else could this have been said?
- Show me how you used this key to understand the map.
- Look at this photograph and caption. What information do you learn that adds to the words of the text? How do the text features (e.g., headings, charts, questions) help you understand what you have read

Critical

- Which character is most like you? How?
- How would you have solved the problem?
- What did you already know about this topic? What questions do you still have?
 Where could you find that information?
- Would you recommend this book to someone? Why or why not?

- Does the author keep you interested in this story? How?
- What does the author do to help you picture this character?
- The problem is described by ___ What do you think ___ would say about it?
- Compare these opposing points-of-view. Explain how each author supports their position. Take a stand and explain/defend your point of view.
- What are some examples of how the author used persuasive language in this piece?
- What are some similarities and differences between one form/genre and another? (For example, myths and legends, biography vs. fantasy).

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Appendix B: Supplements to Curriculum Plan

The email granting permission to use the majority of the black line masters found in Appendix B is found in Appendix D. Other resources found in Appendix B are from open sources and are referenced accordingly.

Week 1

At first glance, an empty milk carton may seem like a useless piece of junk, but look again!



by Candace Savage

ou are about to read something disgusting. In just one year, most people throw away about 80 cans full of garbage. Eighty big stinking garbage cans, cram-jammed, packed to the brim.

We're not talking about 80 cans for each family. It's 80 for each member of the family. Eighty garbage cans, placed side by side, would probably cover the floor of your living room.



The next time you go to throw away a piece of paper, think about all the energy it took to make a tree into that sheet of paper.

The things we put in the garbage originally came from the Earth. Every time you throw away a piece of paper, for example, you are throwing away a tiny bit of forest. Maybe it was a twig where a bird liked to sing or a leafy branch that made shade for a wood violet.

Trash Times-Table

To find out how many garbage cans you may have filled in your life, take your age and multiply by 80; or look up the answer on the chart on the next page. You can also use the chart to do a Trash Tally for your parents or friends. How much garbage will you likely create if you live for 80 years?

The Solutions

"Bigger!" "Faster!" and "More!" are not words that we can live by. Our throw-away habits are changing the Earth too much, too quickly. The

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Atlantic Canada Reading Assessment Resource Teacher's Guide Grade 6 (n.d.). Retrieved from

Age	Number of Cans
1	80
5	400
6	480
7	560
8	640
9	720
10	800
11	880
12	960
20	1600
30	2400
40	3200
80	6400

good news is that we don't have to do it anymore.

There are three words that will help us to live in a better way. They are called the "3 Rs": Reduce! Reuse! and Recycle!

Reduce!

Reduce means to buy less and throw less away. The best way to cut down on the amount we waste is to stop buying things we don't need in the first place. This means that we have to pay attention when we go to the store. Packages—the bags, boxes, bubbles, buckets, jars, and tins that things come in—are a big source of waste. If you sorted the garbage in your trash can, about half of it would be packaging. In a year, you may fill 40 garbage cans with packaging alone.

Reuse!

The second-best way to cut down on garbage is as easy as the first. Instead of throwing things out, reuse them.

All kinds of things can be saved and used again—yogurt tubs, jam jars, plastic bags, old rags, gift wrap, buttons, nails, wire, and string. Torn jeans can be mended or cut off to make a pair of shorts. Broken bicycles can be fixed.



2 Trash Attack!

NE

Atlantic Canada Reading Assessment Resource Teacher's Guide Grade 6. (n.d.). Retrieved from

Clothes and toys that you've outgrown can be given to younger friends, or to someone else who needs them. You might even be able to sell them at a yard sale or second-hand store.

Sometimes, in order to reuse things, we have to see them in a new way. At first glance, an empty milk carton may seem like a useless piece of junk, but look again! With a little work, it could become a plant pot or a bird feeder.

Reuse and Win

Hold a contest at school to see who can make the following things out of materials saved from the garbage.



A milk carton can be reused as a bird feeder.

Shop at second-hand stores for silly prizes. Have fun!

- · the best costume
- the most interesting toy
- · the most enjoyable game
- · the most useful item
- the most tuneful musical instrument

Rules for Reducing

DO buy large-sized packages. (One big package makes less garbage than two small ones. It also usually costs less.)

DO shop for quality. Buy things that are made to last.

DO rent or share things you seldom use.

DO buy things "loose" instead of in packages.

DON'T buy things you don't really want or need.

DON'T buy things that can't be fixed.

DON'T buy things that were made to throw away, such as disposable cameras and pens that won't take refills.

DON'T eat in restaurants that use disposable dishes.

DON'T buy anything that has too much packaging.

Trash Attackl 3

Atlantic Canada Reading Assessment Resource Teacher's Guide Grade 6. (n.d.).

Retrieved from

THE GARBAGE GLOSSARY

Recycling: Saving used materials and sending them off to be remade into useful goods.

Reducing: Buying less and throwing less away.

Reusing: Fixing and changing things we already have so that we can use them again.

Recycle!

If you can't leave the garbage at the store and can't use it anymore, then recycle. Recycling is a kind of manufacturing that turns garbage, such as newspapers, aluminum cans, and glass jars, into things we can use.

Thinking about a big problem like garbage sometimes makes us feel very small. "People are throwing things out everywhere, all the time," you may think. "How can one little person change it all?"

But what you do is important. Many people, working together, can make things change. You are not alone. Millions of people, all around the world, are working to keep the Earth green and growing.

Refuse to Make Refuse

Here are some things that you can do to make recycling work.

- If recycling has begun in your community, find out how it works.
 Your friends and neighbours may know. If not, call city hall.
- If there is no recycling where you live, maybe it's time there was. Talk
 to your parents, friends, teachers, and group leaders.
- When you prepare materials for recycling, follow the rules carefully.
 Rinse containers. Remove staples and paper clips from paper. Tie paper with twine, not plastic cord.
- · Look for recycled paper and other products in the store.
- Choose food in paper packages instead of plastic. Egg cartons and cardboard trays are often made from recycled paper.
- · Try not to buy products that cannot be recycled.

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Atlantic Canada Reading Assessment Resource Teacher's Guide Grade 6. (n.d.). Retrieved from

Trash Attack!

By Candace Savage

- 1) What do you think is the main idea of this article? Use information from the text to support your answer. (Literal)
- 2) How does the chart on page 2 help you understand the importance of reducing, reusing and recycling? (Inferential)
- 3) From the article, define the terms reduce, reuse, and recycle. Use the text to give an example for each. (Inferential)
- 4) Based on what you have read in the article, how will you help solve the problem of attacking trash in your neighborhood? (Critical)
- 5) How has the author of 'Trash Attack', Candace Savage, help you understand the importance of being aware of trash in our world? (Critical)

Atlantic Canada Reading Assessment Resource Teacher's Guide Grade 6 (n.d.). Retrieved from:

Trash Attack! Informational (#16)
Early Grade 6

 What do you think is the main idea of this article? Use information from the text to support your answer.

(This question generates more than one level of response.)

Criteria for Appropriate Response

Students identify the main idea of a text (i.e., the problem of the amount of trash and the solution to reduce consumption), providing general textual references to support their responses (e.g., referring to ways people can and must reduce, reuse and recycle).

Student Exemplars (Appropriate)

The main idea is to stop throwing away what can be used "There are three ways that can help us live better Reduce, Recyle and Reuse

They want to reduce most of the trash. It tells us in the story how to stop it and it shows in a tally about how bad it is getting.

The main message is, we are wasteing a lot of our earth's trees. By throwing away paper and not using the three RS.

Criteria for Strong Response

Students identify the main idea of a text (i.e., the problem of the amount of trash and the solution to reduce consumption), providing specific textual references to support their responses (e.g., referring to ways people can and must reduce, reuse and recycle).

Student Exemplars (Strong)

The main idea of this article is that families throw out way too much things instead of using the three R's. Reduce, Reuse and recycle, For example, it says every time we throw something away we are throwing away a piece of the forest.

To get more people to Reduce Reuse Recycle. Buy only the essentials, instead of throwing things out reuse them and recycle things like pop cans and paper.

I think the main idea of this article is to make you realize how much we are throwing out and how much we can use again. For example, "Our throw away habits are changing the Earth too much, too quickly. The good news is that we don't have to do it any more."

Atlantic Canada Reading Assessment Resource Teacher's Guide Grade 6 (n.d.).

Retrieved from:

Do you think the first paragraph is an effective beginning for this article? Explain your answer using details from the text.

(This question generates more than one level of response.)

Criteria for Appropriate Response

Students express a reasonable opinion about the work of an author (i.e., the effectiveness of the beginning), giving obvious textual references and surface reasoning in their explanations.

Note: Students at the appropriate level tend to focus on their experience when reading the article rather than on the author's technique.

Student Exemplars (Appropriate)

I think the first paragraph is an effective beginning for this article because I think it is amazing that we throw out so much good, reuseable stuff. For example "In just one year, most people throw away about 80 cans full of garbage.

I think the first paragraph is effective beginning because it gives people an idea of how much garbage there is in the world and what it does to the invirment.

Criteria for Strong Response

Students express a well-founded opinion about the work of an author (i.e., the effectiveness of the beginning), giving textual references and demonstrating insight in their explanations (e.g., the author intends to create interest).

Student Exemplars (Strong)

Yes I do think the first paragraph is an effective beginning because it says stuff that will catch your eye like "You are about to read something disgusting. I mean who knew that every year you throw away 80 cans of thrash a year.

Yes I think the first paragraph is an effective beginning to this article because right away it tells you exactly what the report is going to be about, in a different yet interesting way "something disgusting" "Eighty big, stinking garbage cans" "people through away".

3. In the illustration at the bottom of page 1, what process is shown on the large sheet of paper?

(This question generates more than one level of response.)

Criteria for Appropriate Response

Students make an obvious interpretation of a text feature (i.e., a diagram), describing literally the illustrated process (e.g., commencing with the tree harvest and ending with people disposing of paper).

Atlantic Canada Reading Assessment Resource Teacher's Guide Grade 6 (n.d.). Retrieved from:

Student Exemplars (Appropriate)

It is shown that you cut down trees make paper and then you buy paper and throw it out

The process is people go to woods, get trees, bring them the mill, make paper and people throw it away.

Criteria for Strong Response

Students make a solid interpretation of a text feature (i.e., a diagram), synthesizing ideas from the text to explain the illustrated process (e.g., commencing with the tree harvest and the use of natural resources and ending with the notion that people should recycle paper rather than dispose of it).

Student Exemplars (Strong)

The process is that people cut down trees and take them to a paper mill and hurt our inviorment to make paper for us and after all that people throw the paper away instead of recycling it.

The diagram is showing the process of paper being made and how much work it took and that trees have to be cut down and then we just throw it out as if it is nothing. We should use the other side to use less and after recycle paper the paper.

From the article, define the terms reduce, reuse, and recycle. Use the text and/or your own ideas to give two examples of each.

(This question generates one level of response.)

Criteria for Response

Students respond accurately to a literal question (i.e., locating definitions in the text for the terms reduce, reuse and recycle), providing two textual examples for each in their responses.

Student Exemplars

Reduce

Definition - Reduce means to buy less and throw less away.

Example 1 - Don't buy 3 or 4 small pop bottles, but 1 big one.

Example 2 – Before you put anything in the trash see if it can be Reused or Recycled that way you won't be throwing a lot away.

Reuse

Definition – Reuse means to use things for different purposes.

Example 1 – After you finish a dip container clean it out and use it to hold berries, or store it in the cupboard with pins or paper clips inside.

Example 2 – When you're done drinking a juice bottle, rince it out and use it as a water bottle instead of throwing it out.

Atlantic Canada Reading Assessment Resource Teacher's Guide Grade 6 (n.d.). Retrieved from:

Recycle

Definition – Recycling is a kind of manufacturing that turns garbage, such as newspapers, aluminum cans, and glass jars, into things we can use.

Example 1 - Plastic bottles can be recycled and made into a sweater

Example 2 – Old newspapers and used paper can be recycled to make new paper.

Reduce

Definition - Reduce means to buy less and throw away less.

Example 1 - Use both sides of paper.

Example 2 - Don't waste your money on stuff you don't need.

Reuse

Definition - Reuse means to make something into something else.

Example 1 - Make a milk carton into a bird feeder.

Example 2 - Make a toilet paper role into a doll

Recycle

Definition - Save used materials and sending them to be remade into useful goods.

Example 1 – You put your use paper in the blue box to be sent off to make cardboard

Example 2 – The superstore has a bin for you to put the use bags to make other stuff

Using the Rules for Reducing chart, write two **Do** rules and two **Don't** rules. Give an example from the text or your own ideas of how you can follow each rule in your life.

(This question generates more than one level of response.)

Criteria for Appropriate Response

Students respond accurately to a literal part of a question (i.e., identifying rules from the chart), providing general examples in their responses.

Note: Students at the appropriate level demonstrate a surface understanding of each rule.

Student Exemplars (Appropriate)

Rule	Example
DO: rent or share things	like costumes
DO: by things loose instead of	like toys
packages	
DON'T: by things you don't really	like junk food
want or need	
DON'T: by things you can't fix	Like glass stuff

Atlantic Canada Reading Assessment Resource Teacher's Guide Grade 6 (n.d.).

Retrieved from:

Week 2 Lesson 1-Long Vowel Sounds Page 1

	115000 - 1000 -	COST MARKET MARK COLLEGE		
	With the Lon	g "A" Sound		
acom	alien	brave	change	
face	fatal	flaky	game	
graze	hesitate	inflate	name	
place	rate	state	vibrate	
	With the Long	"Al" Sound	201	
aid	bail	bait	braid	
chain	drain	fail	frail	
gait	hail	jail	maintain	
maid	nail	plain	quail	
raid	sail	sprain	strait	
trail	trait	wail	vain	
	With the Long	"AY" Sound		
away	always	betray	clay	
day	dismay	display	decay	
delay	essay	fray	hay	
lay	may	pay	play	
portray	pray	ray	relay	
say	slay	spray	stay	
stray	sway	tray	way	
	With the Lon	g "E" Sound	4.0	
be	complete	even	he	
.me	she	these	we	

Week 2 Lesson 1-Long Vowel Sounds Page 2

	With the Long	g "EA" Sound	2/
beam	beast	cheat	clean
deal	dream	east	eat
feast	flea	gleam	heal
lead	leak	meal	mean
meat	near	read	scream
sea	seal	seam	shear
squeal	steal	streak	stream
teal	tweak	veal	weak
wheat	year	yeast	zeal
200	With the Lon	g "EE" Sound	
bee	beep	bleed	cheek
creek	creep	deep	eel
feed	feel	free	green
heel	keep	meek	need
peek	peep	peer	queen
reed	screen	sheen	sheep
sheet	sleek	steed	steel
steep	street	sweep	sweet
tee	teen	tree	tweet
weed	week	weep	wheel
	With the Lon	g "El" Sound	
eight	freight	reign	sheik

Week 2 Lesson 1-Long Vowel Sounds Page 3

13	Mith the Las	ng "I" Sound	
SPERMITTAGE STATE	SOVERSTANDARY.	The second secon	5,50765
behind	confide	deride	drive
final	find	fire	high
idea	island	kind	light
like	might	rite	side
size	time	while	white
200	With the Lon	g "IE" Sound	
died	dried	lie	lied
pie	tie	tied	tried
	With the Long "I"	Sound Using "Y"	2
by	bye	cry	dry
fly	fry	my	pry
rye	shy	sly	try
	With the Lon	g "O" Sound	
also	both	close	cold
follow	go	gold	grow
home	most	old	note
over	own	snow	
	With the Long "O"	Sound Using "OA"	
boar	boast	boat	cloak
coach	coal	coast	float
foam	goal	goat	grown
oak	roar	roast	throat

Week 2 Lesson 1-Long Vowel Sounds Page 4

	With the Laws HOL	Cound Holor #OF!	
	with the Long "O"	Sound Using "OE"	y
doe	foe	oboe	toe
	With the Lo	ng "U" Sound	
amuse	cute	duet	fluid
fluke	frugal	fume	huge
music	prune	ruby	spruce
tuba	tulip	truth	ukulele
unicom	unique	use	utensil
With	the Long "UY" Sound	Using Other Vowel Con	nbos
beauty	blue	bruise	canoe
do	eye	flew	fruit
juice	knew	new	proof
prove	route	shampoo	soup
stew	threw	through	two
view	who	youth	200

Week 2 lesson 2-Short Vowel Sounds

Place the words below in five separate columns. Each column of words should have the same short vowel sounds.

jam	ill	fed	tell	tan	sit
odd	cup	cot	fill	ten	cut
not	neck	jug	fish	pond	man
sun	van	bill	dog	but	will
pin	pal	end	fun	log	send

Retrieved from:

Week 2 Lesson 3-Consonant Sounds

Sound #	Sound	Graphemes	Examples
1	/b/	b, bb	bug, bubble
2	/d/	d, dd, ed	dad, add, milled
3	/f/	f, ff, ph, gh, lf, ft	fat, cliff, phone, enough, half, often
4	/g/	g, gg, gh,gu,gue	gun, egg, ghost, guest, prologue
5	/h/	h, wh	hop, who
6	/j/	j, ge, g, dge, di, gg	jam, wage, giraffe, edge, soldier, exaggerate
7	/k/	k, c, ch, cc, lk, qu ,q(u), ck, x	kit, cat, chris, accent, folk, bouquet, queen, rack, box
8	/1/	1, 11	live, well
9	/m/	m, mm, mb, mn, lm	man, summer, comb, column, palm
10	/n/	n, nn,kn, gn, pn	net, funny, know, gnat, pneumonic
11	/p/	p, pp	pin, dippy
12	/r/	r, rr, wr, rh	run, carrot, wrench, rhyme
13	/s/	s, ss, c, sc, ps, st, ce, se	sit, less, circle, scene, psycho, listen, pace, course
14	/t/	t, tt, th, ed	tip, matter, thomas, ripped
15	/v/	v, f, ph, ve	vine, of, stephen, five
16	/w/	w, wh, u, o	wit, why, quick, choir
17	/y/	y, i, j	yes, onion, hallelujah
18	/z/	Z, ZZ, S, SS, X, Ze, Se	zed, buzz, his, scissors, xylophone, craze

Week 2, Lesson 4-Controlled Vowel Sounds

Sound#	Sound	Graphemes	Examples
34	/ã/	air, are, ear, ere, eir, ayer	chair, dare, pear, where, their, prayer
35	/ä/	a, ar, au, er, ear	math, jar, laugh, sergeant, heart
36	/û/	ir, er, ur, ear, or, our, yr	bird, term, burn, pearl, word, journey, myrtle
37	/ô/	aw, a, or, oor, ore, oar, our, augh, ar, ough, au	paw, ball, fork, poor, fore, board, four, taught, war, bought, sauce
38	/ēə/	ear, eer, ere, ier	ear, steer, here, tier
39	/üə/	ure, our	cure, tourist

https://www.google.ca/search?hl=en&authuser=0&site=imghp&tbm=isch&source=hp&biw=1440&bih=775&q=short+and+long+vowel+sounds&oq=short+and+long+vowel+sounds&gs_l=img.3..0l5j0i30l5.4472.11384.0.11546.31.16.2.13.13.0.1263.2678.10j4j7-1.15.0....0...1ac.1.64.img..1.30.2741...0i8i30.WbAYARmW4m8

Week 2, Lesson 5-Digraphs

Sound#	Sound	Graphemes	Examples
40	/zh/	s, si, z	treasure, division, azure
41	/ch/	ch, tch, tu, ti, te	chip, watch, future, action, righteous
42	/sh/	sh, ce, s, ci, si, ch, sci, ti	sham, ocean, sure, special, pension, machine, conscience, station
43	/th/	th(voiced), th(unvoiced)	thongs, leather
44	/ng/	ng, n, ngue	ring, pink, tongue

Retrieved from:

Week 3, Lesson 4

Stopping by Woods on a Snowy Evening by Robert Frost

Whose woods these are I think I know. His house is in the village, though; He will not see me stopping here To watch his woods fill up with snow.

My little horse must think it queer To stop without a farmhouse near Between the woods and frozen lake The darkest evening of the year.

He gives his harness bells a shake To ask if there is some mistake. The only other sounds the sweep Of easy wind and downy flake.

The woods are lovely, dark, and deep, But I have promises to keep, And miles to go before I sleep, And miles to go before I sleep.

Frost (1923)

Television-By Roald Dahl

The most important thing we've learned,
So far as children are concerned,
Is never, NEVER, NEVER let
Them near your television set -Or better still, just don't install
The idiotic thing at all.
In almost every house we've been,
We've watched them gaping at the screen.
They loll and slop and lounge about,
And stare until their eyes pop out.
(Last week in someone's place we saw
A dozen eyeballs on the floor.)
They sit and stare and stare and sit
Until they're hypnotised by it,
Until they're absolutely drunk

With all that shocking ghastly junk.

Oh yes, we know it keeps them still,

They don't climb out the window sill,

They never fight or kick or punch,

They leave you free to cook the lunch

And wash the dishes in the sink --

But did you ever stop to think,

To wonder just exactly what

This does to your beloved tot?

IT ROTS THE SENSE IN THE HEAD!

IT KILLS IMAGINATION DEAD!

IT CLOGS AND CLUTTERS UP THE MIND!

IT MAKES A CHILD SO DULL AND BLIND

HE CAN NO LONGER UNDERSTAND

A FANTASY, A FAIRYLAND!

HIS BRAIN BECOMES AS SOFT AS CHEESE!

HIS POWERS OF THINKING RUST AND FREEZE!

HE CANNOT THINK -- HE ONLY SEES!

'All right!' you'll cry. 'All right!' you'll say,

'But if we take the set away,

What shall we do to entertain

Our darling children? Please explain!'

We'll answer this by asking you,

'What used the darling ones to do?

'How used they keep themselves contented

Before this monster was invented?'

Have you forgotten? Don't you know?

We'll say it very loud and slow:

THEY ... USED ... TO ... READ! They'd READ and READ,

AND READ and READ, and then proceed

To READ some more. Great Scott! Gadzooks!

One half their lives was reading books!

The nursery shelves held books galore!

Books cluttered up the nursery floor!

And in the bedroom, by the bed,

More books were waiting to be read!

Such wondrous, fine, fantastic tales

Of dragons, gypsies, queens, and whales

And treasure isles, and distant shores

Where smugglers rowed with muffled oars,

And pirates wearing purple pants,

And sailing ships and elephants,

And cannibals crouching 'round the pot,

Stirring away at something hot.

(It smells so good, what can it be? Good gracious, it's Penelope.) The younger ones had Beatrix Potter With Mr. Tod, the dirty rotter, And Squirrel Nutkin, Pigling Bland, And Mrs. Tiggy-Winkle and-Just How The Camel Got His Hump, And How the Monkey Lost His Rump, And Mr. Toad, and bless my soul, There's Mr. Rat and Mr. Mole-Oh, books, what books they used to know, Those children living long ago! So please, oh please, we beg, we pray, Go throw your TV set away, And in its place you can install A lovely bookshelf on the wall. Then fill the shelves with lots of books, Ignoring all the dirty looks, The screams and yells, the bites and kicks, And children hitting you with sticks-Fear not, because we promise you That, in about a week or two Of having nothing else to do, They'll now begin to feel the need Of having something to read. And once they start -- oh boy, oh boy! You watch the slowly growing joy That fills their hearts. They'll grow so keen They'll wonder what they'd ever seen In that ridiculous machine, That nauseating, foul, unclean, Repulsive television screen! And later, each and every kid Will love you more for what you did.

Dahl (2007)

Week 4, Lesson 1-Vocabulary Notebook

Vocabulary Notebook							
Name:	3	Date:					
Grade: Class	•	Block/Period:					
New word	Description (in my own words)	Representation (pictures/diagrams)	New Information				
0.4		~					
	5/4						
			88 03.				

Adapted from: Marzano, R. J. (2004). Building background knowledge for academic achievement. Alexandria, VA: Association for Supervision and Curriculum Development.

Week 4, Lesson 2-High Frequency Sight Word Lists 1, 2, and 3

100 High Frequency Words Assessment-Individual Record

Name			Grade Date		
Directions: Use high substitutions. Calcula are attending.	frequency word list. Ask the s late number of known words. I	tudent to read Evaluate subst	d each word. Check () accur itutions to determine features	ate responses to which stud	and note ents
List 1	✓or write substitution	List 2	✓or write substitution	List 3	✓or write substitution
than		have	1	over	
about		there		ride	
back	775	any		don't	
after		into		said	3
ľm		just		that	
been		little		one	
big		make	8	with	
came		before		five	
away		two		their	Tu Tu
your		four	2 SE	what	
who		mother		but	
when		where		here	
them		very		going	
because		could		our	
from		were		three	
Subtotal		Subtotal		Subtotal	

Total	number	of	known	words:	

Week 4, Lesson 2-High Frequency Sight Word Lists 4 and 5

100 High Frequency Words Assessment-Individual Record continued

List 4	✓or write substitution
want	1 74 S (C) 3 2 C (S) 3 C (S) 3 C (S)
able	1000000
bad	
give	
today	
week	
something	
bus	
year	
can't	
tell	
across	
world	1 12 W
cat	
take	
dad	
hide	W
almost	
dog	
anything	
home	
down	
become	
end	
behind	
fish	2000 - 2000 1000 - 1000
why	
car	
Subtotal	

List 5	
books	10.83(5)(10.65(5)
good	
help	
city	5992
write	
top	
room	
under	
fast	
hill	1
know	
use	
let	
place	10 10 10 10 10 10 10 10 10 10 10 10 10 1
sleep	
love	
much	2
stay	
name	
new	
paper	
rain	
door	
fun	
sky	
both	
time	
	5

Total number of known words:	Total	number	of known	n words:			
------------------------------	-------	--------	----------	----------	--	--	--

Common Roots from Greek and Latin

		Com	mon Root	s from Greek and Latin
	Root	From	Meaning	Examples Containing the Root
1. a	ero	Greek	air	aerodynamics, aeroplane, aerobics
2. a	gri	Latin	field	agrarian, agriculture
_	qua	Latin	water	aquamarine, aquarium, aquatic
	stro	Greek	star	astrology, astronaut, astronomical, astronomy
5. a	ud	Latin	hear	audience, audio, audiovisual, audition, auditorium
	io	Greek	life	biochemistry, biography, biology, biopsy, biosphere
7. c	ар	Latin	head	capital, captain
	hrono	Greek	time	chronic, chronicle, chronological, chronometer,
9. c	yclo	Greek	circle, ring	bicycle, cycle, cyclone, recycle, tricycle
	lent	Latin	tooth	dentist
11. d	lict	Latin	speak, tell	contradict, dictate, dictator, diction, predict, verdict
-	loct	Latin	teach	doctor, doctrine, document, indoctrinate
	act	Latin	make, do	facsimile, factory, manufacture
	lect, flex	Latin	bend	deflect, flexible, reflect, reflection, reflex
	orm	Latin	shape	form, formal, reform, transform, uniform
	gen	Greek	race, birth	gender, genealogy, generate, generation, genocide,
54	eo	Greek	earth	geography, geology, geometry, geophysics
-	raph	Greek	write	autograph, biography, graphite, paragraph
	rat	Latin	please	congratulate, grateful, gratify, ingrate, ungrateful
-	iomo	Greek	same	homogeneous, homogenized, homonym, homophone
	ydr/hydro	Greek	water	dehydrate, hydroelectric, hydrogen, hydroplane
_	iber	Latin	free	liberal, liberate, liberty
_	ocus	Latin	place	allocate, dislocate, locate, location
	og	Greek	word	apology, dialogue, eulogy, logo, monologue, prologue
25. 1		Latin	light	illuminate, luminance, luminescent, luminous
	nagnus	Latin	great	magnificent, magnify, magnitude
	nanu	Latin	hand	manipulate, manual, manufacture, manuscript
-	nare	Latin	ocean, sea	marina, marine, mariner, maritime, submarine
-	neter	Greek	measure	barometer, centimeter, diameter, thermometer
	nechan	Greek	machine	mechanic, mechanism, mechanize
	nini	Latin	little, small	mini, minimal, minimize, minimum, minor, minus
	nit,miss	Latin	send	missile, mission, submit, remit, transmit
-	nobil	Latin	move	automobile, mobile, mobilize
-	nort	Latin	death	immortal, mortal, mortician, mortuary
-	nat	Latin	born	natal, nation, native, nativity
	10V	Latin	new	innovate, nova, novel, novelty, novice
	onym	Greek	name	anonymous, antonym, synonym, pseudonym

Week 4, Lesson 3-Common Roots from Greek and Latin p. 2

/3	Root	From	Meaning	Examples Containing the Root
38.	opt	Greek	eye	optic, optician, optical, optometrist
39.	opt	Latin	best	optimal, optimist, optimize, optimum,
40.	path	Greek	disease, feel	empathy, pathetic, pathology, sympathy
41.	peď	Latin	foot	biped, pedal, pedestal, pedestrian
42.	pend	Latin	hang	appendage, depend, pendant, suspend
43.	phobia	Greek	fear	arachnophobia, claustrophobia, phobia
44.	phon	Greek	sound	microphone, phonics, symphony, telephone
45.	photo	Greek	light	photogenic, photograph, photosynthesis
46.	phil	Greek	love	philanthropist, philharmonic, philosophy
47.	poli	Greek	city	cosmopolitan, metropolis, police
48.	port	Latin	carry	export, import, portable, porter, reporter, transport
49.	press	Latin	press	depression, impress, pressure, repress
50.	psych	Greek	mind, soul	psyche, psychiatrist, psychology, psychopath
51.	rupt	Latin	break	bankrupt, corrupt, disrupt, erupt, interrupt, rupture
52.	san	Latin	health	insanity, sane, sanitarium, sanitary, sanitation
53.	saur	Greek	lizard	brontosaurus, dinosaur, stegosaurus
54.	scope	Greek	see	microscope, periscope, stethoscope, telescope
55.	sci	Latin	know	conscience, conscious, science
56.	scribe, script	Latin	write	describe, manuscript, prescribe, scribble, transcript
57.	sect	Latin	cut	bisect, dissect, intersect, section, sector
58.	sens	Latin	fcel	sensation, sensible, sensitive, sensory, sentimental
59.	sign	Latin	mark	insignia, signal, signature, significant
60.	soph	Greek	wise	philosopher, sophisticated, sophomore
61.	spect	Latin	see	inspect, spectacle, spectator
62.	struct	Latin	build, form	construct, construction, destruction, structure
63.	terra	Latin	land	terrace, terrain, territory
64.	therm	Greek	heat	thermal, thermos, thermometer, thermostat
65.	tract	Latin	pull, drag	extract, traction, tractor
66.	urb	Latin	city	suburb, suburban, urban, urbane
67.	vac	Latin	empty	evacuate, vacant, vacate, vacuum
68.	var	Latin	different	invariable, variant, variety, various
69.	vid/vis	Latin	see	evidence, video, visible, vision
70.	volv	Latin	turn	evolve, revolution, revolve

Words from other languages often form the roots of many English words. About 60% of all English words have Latin or Greek origins.

Week 5-Lesson: 1 Using Context Clues

Type of Context Clue (Guideline for Teacher)

Contrast	Suggestion/Implication	Comparison	Synonym	Definition
The word is	The meaning is	The word is	The word is	The word is
compared	suggested by the other	compared	compared to	usually
with some	words.	with another	another	defined in
other word,		word or	word with	the sentence
usually as		phrase to	similar	in which it
an antonym		illustrate the	meaning.	appears.
or phrase		similarities		
with		between them.		
opposite				
meaning.				

Type of Context Clue

Contrast	Suggestion/Implication	Comparison	Synonym	Definition

Week 5-Lesson 2: Making Predictions, Before Reading, Activating Prior Knowledge

Enhancing Comprehension

Enhancing Comprehension (Select only 1 or 2 from each section.)	Enhancing Comprehension (Select only 1 or 2 from each section.)		
Before Reading Phase: 5-10%	Before Reading Phase: 5-10%		
set a clear purpose for reading think about what you know about the topic make a prediction discuss the title scan through the text to identify unknown words ask someone, or look up any unknown words start a KWL chart or other graphic organizer	set a clear purpose for reading think about what you know about the topic make a prediction discuss the title scan through the text to identify unknown words ask someone, or look up any unknown words start a KWL chart or other graphic organizer		
During Reading Phase: 70-80%	During Reading Phase: 70-80%		
stop and check your understanding at least three times on a page identify more unknown words stop and ask yourself questions about the passage highlight or underline the confusing parts reread, if needed use imagery or visualization make new predictions generate questions as you read clarify those unknown words read some sections aloud to someone	stop and check your understanding at least three times on a page identify more unknown words stop and ask yourself questions about the passage highlight or underline the confusing parts reread, if needed use imagery or visualization make new predictions generate questions as you read clarify those unknown words read some sections aloud to someone		
After Reading Phase: 10-25%	After Reading Phase: 10-25%		
have a conversation about what you read with someone forminutes reread parts that were confusing use resources to define still unknown words connect what you read to your own experience, other texts, and/or to the world summarize what you have read on a graphic organizer list the sequence of events on a paper using one sentence, write the main idea	have a conversation about what you read with someone forminutes reread parts that were confusing use resources to define still unknown words connect what you read to your own experience, other texts, and/or to the world summarize what you have read on a graphic organizer list the sequence of events on a paper using one sentence, write the main idea		

Week 5-Lesson 2: Making Predictions, Before Reading, Activating Prior Knowledge

Anticipation Guide					
Name:	*	Date:			
Grade: Class	: Block/Per	iod:			
		-			
Read the statement	s below and decide if you agree or disa	agree.			
Before Instruction A = Agree D = Disagree	Statement	After Instruction A = Agree D = Disagree			
33		165			
50	22				
v/	\$5 \$1				
TX.	187	30			

Week 5-Lesson 2: Making Predictions, Before Reading, Activating Prior Knowledge (Continued)

Pro	licting and Confirming Chart
Name:	Date:
Grade: Class	Block/Period:
Topic:	
	redictions about what you will learn before you read. As y her your predictions were confirmed. Then explain using text.

Predictions About the Content (what I think I will learn)	Confirmed by the Text		Explanation (why my prediction was confirmed, or not confirmed)
	Yes	No	
=	Yes	No	
	Yes	No	16 82
	Yes	No	21
	Yes	No	95

Week 5, Lesson 3-During Reading with Informational Texts

	- 8	Text Connections	S	
		Date: Block/Period:		
Use this chart to				
ts		tt	tre	
Text-to-self Connections Connections between the text and your personal experiences.		Text-to-text Connections Connections with other material you have read.	Text-to-world Connections Connections to what you already know about the world – your background knowledge.	
ts				
ts			23	
tt				
tt				

Week 5, Lesson 4-During Reading Narrative Texts

Text Connections with Quotes		
Name:		Date:
Grade: Class:		
Reading Selection:		
Text Statement/Quotes	Page #	My Response
		81
10		
		Will I was a supply of the sup
		ě

Week 5, Lesson 5-After Reading Response

Reading Response		
Name: Date:	Title:	
MX CX TWO-		
Who is the intended audience?		
Write a one paragraph reflection , by choosing relevant details that support your main idea.	one of the following sentence starters. Make sure you include	
I noticed	If I were	
I wonder	The central issue(s) is (are)	
I was reminded of	One consequence of could be	
I think	If, then	
I'm surprised that	I'm not sure	
I realize	Although it seems	

 $Retrieved\ from:\ https://portal.nbed.nb.ca/sites/district08/middleLA/default.aspx$

Week 6, Lesson 2-Teaching Text Structure

Group-Constru	cted Causes/Effects Frame
Students:	Date:
Grade: Class:	Block/Period:
Topic:	
Event #1	
Happened because:	
Consequence:	
Event #2	
Happened because:	
Consequence:	

Week 6, Lesson 4-Text Coding Strategies

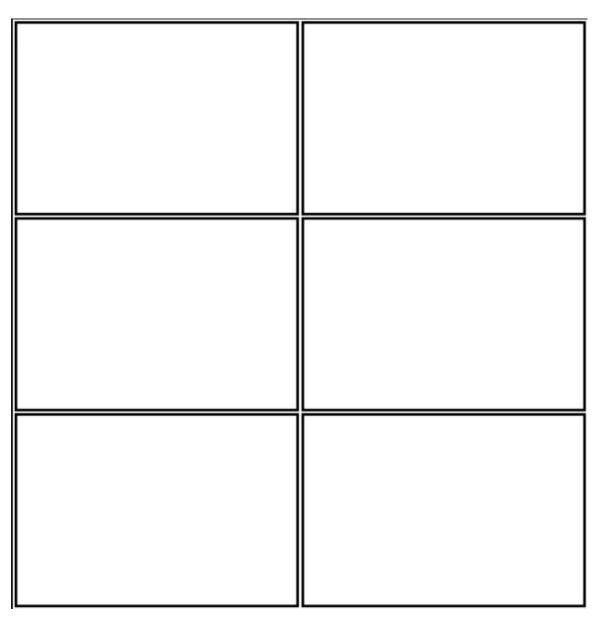
Code	Definition	While reading, the student makes a connection:
BK	Background Knowledge	with his/her existing background knowledge Prompt: This reminds me of
+	Agrees with the author	with something he/she agrees with or finds interesting. Prompt: I agree with the author on this or, I really like this part
_	Disagrees with the author	with something he/she disagrees with or finds negative. Prompt: I do not agree with the author on this or, I did not like this part
I	Inference	with various parts of the text and his/her own knowledge. Prompt: I think
?	Question	and creates a question (written or oral) about the content. Prompt: I wonder What if?
F	Fix-it	that does not make sense and realizes that he/she needs to use a fix-it strategy to repair the misunderstanding.

Week 6-Fix-it Strategies Bookmark

Fix-it Strategies Bookmark

Name:	Date:
Fix	-It Strategies
I can do these t	things to understand what
+	Reread a sentence or a section that is confusing.
+	Go back to where the text made sense.
→	Read on to see if it makes sense.
贝 ①	Adjust my rate: Slow down or speed up.
compare/contrast sequencing cause/effect	Notice the structure of the text.
//_	Break an unknown word into parts, sound out each part, then blend the parts together.
	Highlight any unknown words and then look them up in the dictionary/glossary.
\$	Make a link with what I already know (background knowledge). BK
	Ask myself a question about the reading and try to answer it.
1	Use any pictures in the text.
③	Visualize what is happening.
(4) E	Retell what I have read.
	Ask a teacher or another student for help.

Week 6, Lesson 5-Visualizing Narrative Texts

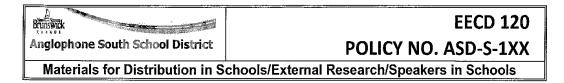


Appendix B: Permission Letters

Educational Research

- 1. Requests for permission to carry out research in the District shall be submitted to the Superintendent of Schools to be reviewed by the Director of Curriculum and Instruction. The Superintendent may grant approval, or refer the proposal to an external source for appraisal.
- 2. Requests are to be submitted no later than six weeks before the desired starting date of any study.
- 3. All requests shall contain a duly completed and official ethics review form, a detailed description of the research proposal, and copies of all parental consent forms and covering letters along with drafts of all questionnaires, interview schedules, etc.
- 4. All external researchers must submit an acceptable criminal record check and sign off on Provincial Policy 701 Policy for the Protection of Pupils as per the ASD-S Volunteer Policy.
- 5. Permission may be granted provided the research does not:
 - a. invade the privacy of participants
 - b. cause any psychological harm

Page 2 of 4



- c. interfere with the educational welfare of participants
- d. infringe on the rights of participants.
- 6. The district shall not incur any costs as a result of an external study.
- 7. The Superintendent has the right to monitor, or have monitored, on-going projects. In exceptional cases, permission to conduct the research may be withdrawn before a study is completed.
- 8. Staff, student and parent participation in research shall be voluntary. There shall be no inducement to participate in research and there shall be appropriate alternatives so that no one shall feel obligated to participate in the research.
- 9. Participation in research shall be considered only if parent and/or subject consent forms are signed and if a letter explaining the research in lay terms is distributed with the consent form.
- 10. Staff, parents and/or subjects shall be notified in the covering letter explaining the research that a copy or summary of the findings shall be made available to them upon request.
- 11. Staff, parents and/or subjects shall be informed of the right to withdraw from participation in the research at any time during the process.
- 12. In the publication of the research findings, identities of individuals participating in the research shall be kept strictly confidential.
- 13. A summary of the research and its findings shall be sent to the Superintendent within a reasonable time of the research being completed.
- 14. The School District requests acknowledgement in any publications emanating from studies that take place within the School District.



DATA SHARING AGREEMENT (the "Agreement")

THIS AGREEMENT made as of the 30th day of November, 2015,

BETWEEN

DEPARTMENT OF EDUCATION AND EARLY CHILDHOOD DEVELOPMENT (Assessment and Evaluation Branch)

Place 2000, 250 King Street P.O. Box 6000

Fredericton, New Brunswick E3B 5H1

(hereinafter the "Assessment and Evaluation Branch")

- and -

GREGORY PATERSON (ASD-S)

127 King Street East

Saint John, New Brunswick E2L 1G8

Whereas:

The Department of Education and Early Childhood Development and Gregory Paterson are mutually desirous of cooperating in the secure sharing of aggregate student achievement scores from 2009-2015;

And Whereas:

The Department of Education and Early Childhood Development and Gregory Paterson are mutually desirous of establishing a Data Sharing Agreement:

Now Therefore, It is Mutually Agreed That:

Accountability:

Gregory Paterson is responsible for information under his control, including any information disclosed to third parties for handling or administrative purposes.

Information will not be used or disclosed by Gregory Paterson for purposes other than those for which it was collected, except with the consent of the individual(s) or as required or permitted by law.

Information to be provided: EECD will provide to Gregory Paterson the following information to undertake thesis work at Walden University (Minnesota) in the area of standardized assessment results as a predictor of student reading success in New Brunswick:

- De-identified secondary assessment data scores from 2009-2015, more specifically:
 - a. Grade 7 Reading Comprehension Assessments (2010-2012)
 - b. Grade 9 English Language Proficiency Assessments



AGREEMENT FOR THE RELEASE OF PERSONAL INFORMATION

- Reading Component (2012-2014)

All data will be de-identified by the Assessment and Evaluation Branch prior to sharing with Gregory Paterson.

The above information will be shared with Gregory Paterson by November 24th, 2015

Purpose for which the information will be used: The information will be used to establish comparison between grade 7 results and the same cohort on the grade 9 ELPA to see if students are improving in their literacy – cohort analysis on reading.

Relevant RTIPPA section (if applicable): Although no personal information will be disclosed, the principles outlined in the Right to Information and Protection of Privacy Act shall be adhered to.

Terms of Agreement:

This Agreement comes into effect as of November 19th, 2015 and will terminate on December 30th, 2015.

Conditions:

This data will be handled in accordance with the Right to Information and Protection of Privacy Act. Specifically, the following requirements will be met:

- the data files will be kept in a secure and confidential location.
 Only designated qualified personnel will have access to the data. The data must be stored on a password-protected computer drive or in a locked file cabinet;
- Gregory Paterson will not use the data and any related information provided by the Assessment and Evaluation Branch for any purpose(s) other than those named above, unless a subsequent agreement is made with Gregory Paterson in writing:
- the data will only be accessed by designated employees who require access in order to fulfill the above-stated purpose(s);
- any employee granted access to the data will be required to execute a written undertaking promising to abide by the conditions of this Agreement. The Undertakings will be maintained by Gregory Paterson;
- if any employee having access to the data ceases to be employed by Gregory Paterson, any new employee shall follow the process described above before receiving access to the data:



AGREEMENT FOR THE RELEASE OF PERSONAL INFORMATION

- Gregory Paterson is responsible for maintaining the security and confidentiality of all information provided by the Assessment and Evaluation Branch. Gregory Paterson will take adequate measures to safeguard the information he holds both in electronic and paper format, including a password protected environment for electronic files and a locked cabinet for paper files; and
- By December 30, 2016 all information provided by the Assessment and Evaluation Branch will be destroyed.

There shall be no further disclosure of any information except as provided for in this agreement or with the written authorization of the Department of Education and Early Childhood Development.

Breach of Agreement: The agreement with Gregory Paterson will be terminated, effective immediately, via written notice to the Gregory Paterson should he or any of his employees violate the conditions of this agreement or the Right to Information and Protection of Privacy Act, with respect to the handling and use of the data and any information provided by the Assessment and Evaluation Branch.

Notice:

Communications regarding notice of breach or termination of this agreement will be undertaken by Sandra MacKinnon, Director of Assessment and Evaluation. Inquiries regarding safeguarding of information can be directed to the Policy and Planning Division at 453-3090.

[signatures on following page]

Brunswick

AGREEMENT FOR THE RELEASE OF PERSONAL INFORMATION

Signatures:	1. Gregory D. Paterson Ed.D. Candidate
	being duly authorized to sign this agreement hereby agree to ensure complete compliance with the terms and conditions stated in this Agreement.
	Signature: Bullaterry
	Signed by: on Jan 29/16
	Title:
	Signature:
89	Signed by: SAND AN MACKING ON Jan 15/2016.
	For the Department of Education and Early Childhood Development
	Title: Director, Assessment & Evaluation
	Branch

Appendix D: Permission to Use Materials



Fo ■ Paterson, Gregory (ASD-S)

1 You replied to this message on 16/03/2016 8:40 PM.

Hello Greg,
Thank you for contacting me and wanting to use some of my materials in your final project. Please go ahead and use the pages mentioned in your email. I am pleased you are finding the material helpful. All the best in your ventures, and good for you for doing a doctorate. It is a lot of work! Kind regards,

From: "Gregory Paterson (ASD-S)" < Gregory.Paterson@nbed.nb.ca

To: dreithaug@shaw.ca Sent: Tuesday, March 15, 2016 5:50:49 AM Subject: Request for Permission

Dear Ms. Reithaug:

I am a middle level literacy coordinator working with 27 schools in southern New Brunswick. Kimberly Bauer introduced me to your work at our Provincial Literacy Team meeting last fall.

I have read your two publications Supporting Adolescent Readers and Three Tier of Instruction and Intervention for Reading. I have found both resources to be very helpful in my work.

1 am also a doctoral candidate in the final stages of completing my thesis. I would like to use and reference some of the black line masters from Supporting Adolescent Readers in my final project study. I am asking for your written permission to use the following:

- Vocabulary Notebook
- Common Roots from Greek and Latin
- Text Connections
- · Text Connections with Quotes
- Group-Constructed Causes/Effects Frame
- Fix-it Strategies Book Mark
- Visualizing Narrative Texts

I would be more than happy to discuss my work and the results of my study if you are interested.

Thank you for your consideration.