2019

A Comparison of Two Language-Supported Instruction Programs for English Language Learners

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Abstract

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Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

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February 2019

Abstract

Despite language differences, English Language Learners (ELLs) in U.S. public schools are assessed by the same standardized tests of English Language Arts (ELA) skills as are their English-speaking peers. ELLs have routinely performed poorly on the New York State ELA standardized assessment. ELLs are a significant portion of the population in New York City public schools; therefore, their continued poor performance puts some of these schools at risk for closure. Guided by Thomas's and Collier's framework for understanding Dual Language Immersion programs, the purpose of this quantitative quasi-experimental, archival study was to determine if significant differences in ELA standardized assessment scores exist for ELLs attending an English as a New Language (ENL) program when compared to those attending a Dual Language (DL) program. A mixed-model ANOVA (N = 24 ELLs tested in 2014, 2015, and 2016) indicated that scores increased significantly during the 3-year period, but there were no significant differences in scores for the ENL program students compared to the DL program students. An ANCOVA (N = 366 ELLs tested in 2016 evenly distributed in each program) showed that, when controlling student disability status, DL program students scored significantly higher than ENL program students. These findings formed the basis of a professional development curriculum designed to guide educators and administrators in the implementation of effective DL programs and teaching strategies to support ELLs' achievement. When supported with research-based programs in their schools, ELLs can achieve more academically, thereby fostering social change over time as more ELLs enter the workforce uniquely qualified to succeed in a diverse, global economy.

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Dedication

I would like to dedicate this doctoral study to my mother, Pura María Velázquez, for her encouragement. There were times when I wanted to quit. She once told me, "I graduated from high school when I was 37 years old, and with that diploma I worked for many years at the Supreme Court of Puerto Rico". My mother's determination to take care of eight children by herself, educate herself, and work professionally inspired me to complete this doctoral degree. Throughout my journey, I was challenged in many ways, but remembering how my mother and other family members overcame their challenges helped me overcome my own.

Acknowledgments

I believe that teachers need to enhance their skills to positively impact the lives of English Language Learners. As an administrator of graduate level programs in bilingual education at St. John's University and the College of Old Westbury in New York, I know the importance of creating quality programs for English Language Learners. In the past 32 years, I have been an advocate for bilingual education and served on many policy committees for New York State. I have coordinated grants to fund programs for teachers who want to become bilingual educators. Through my work, teachers learn the expertise necessary to support English Language Learners. I recognize the challenges that English Language Learners face every day in the classroom and the importance of preparing them to meet the challenges of the future.

I could not have completed this project without the help of Dr. Mogens Jensen. He believed in me. He taught me the skills necessary to write a professional and well-written study. Dr. Jensen, Dr. Li-Ching Hung, Dr. Jose Otaola, and Dr. Andrea Wilson have provided useful recommendations that developed my understanding of this process. I thank them for selflessly contributing their time, effort, and expertise. And to my readers, Douglas Capozzalo and Pamela Kuhens, thank you.

I would also like to thank my brother, Moises Barreto, for his belief in me. He never doubted my ability to complete my doctorate degree. I am very grateful to my son, Anthony López, for his expertise in technology. I am proud to say that Anthony, inspired by my journey, has decided to complete his college degree. To Moises and Anthony, I love you both, and I thank you for always believing in me.

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Introduction

English Language Learners (ELLs) have performed poorly on the New York State English Language Arts (NYS ELA) standardized assessment (National Center for Education Statistics, 2011-2016). Given the sheer numbers of ELLs in New York State (NYS) public schools, educators and administrators are seeking to discover programs and teaching strategies that are associated with improved outcomes on the NYS ELA standardized assessment.

National Legislation

The Elementary and Secondary Education Act of 1965 (20 U.S.C. 6301 et seq.) Reauthorization, known as the Every Student Succeeds Act (ESSA, 2015), passed by Congress on December 10, 2015, and signed by President Barack Obama, has replaced the No Child Left Behind Act of 2001 (NCLB, 2002) as the law of the land for public education in the United States. The new law, however, continues to treat ELLs much like they were treated under the old law. Under NCLB (2002), scores on the NYS ELA exam were reported for ELLs who had lived in the United States for 1 year and 1 day. Under ESSA (2015), NYS ELA exam scores measured after only 1 year of residency in the United States are not counted in the standardized assessment results. However, ELLs are still mandated to take the exam after their first year of residency, which may put them at risk for poor academic performance (Cummins 1999).

When they enter the NYS public-school system, ELLs are routinely placed into classrooms where some sort of language-supported instruction (LSI) is offered (NYSED,

2015). LSI is an umbrella term for any classroom curriculum that pays close attention to the needs of ELLs as they develop English language proficiency (NYSED, 2015). Under the new law, testing policies require ELLs to take English reading assessments after 1 year of attendance in the public-school system (ESSA, 2015). After the second year of residency, the New York State Education Department (NYSED) incorporates ELLs' NYS ELA exam scores in the national assessment (NYSED, 2015). After the third year of residency, NYS ELA exam scores for ELLs are treated in the same manner as those in the mainstream student population (ESSA, 2015).

Current assessment policies and annual testing practices as mandated by Title I of ESSA (2015) and as implemented in NYS are not aligned with the scientific research on how best to assess English language proficiency among ELLs. Research indicates that 3 to 10 years of LSI are required for ELLs to gain the academic language proficiency they need to succeed in a challenging academic curriculum conducted in a second language (Collier & Thomas, 2004; Conger, Hatch, McKinney, Atwell, & Lamb, 2012; Cook, Boals, Wilmes, & Santos, 2008; Cummins, 1984, 1999; Greenberg, 2015; Hakuta, Butler, & Witt, 2000). Cummins (1999) found evidence that ELLs need more time to develop academic language skills than they do social language skills. His seminal research supported a longer time frame in which ELLs develop the language skills they need to perform well on a standardized exam in English. Although ESSA has furthered recognition of the special circumstances of ELLs, the new law still permits ELLs to earn scores that require them to learn in mainstream classes well before they gain academic language proficiency in English. Furthermore, under pressure to show progress on

standardized assessments year after year, administrators and educators are implementing inappropriate tactics, such as teaching test-taking skills (Tulenko, 2001). Standardized assessments measure what students have learned in all their previous grades, not what they are learning in their current grade. Yet, according to Tulenko (2001) preparation threatens to replace the existing curriculum. Teaching to the test threatens a curriculum for ELLs that has been shown to develop the academic language proficiency they need to handle subject matter taught in English.

Under NCLB (2002), ELLs were held to the same standards of assessment as their native English-speaking peers in their first year of residency, when they could not be expected to have the same level of English language proficiency. Results on standardized tests administered in English, therefore, reflected poor performance among ELLs. Congress passed ESSA (2015) in part to address this problem; however, in my view the new law, which came into effect at the beginning of the 2017-2018 school-year, does not address this problem adequately. In response to data demonstrating that ELLs routinely performed poorly on standardized tests, federal lawmakers made minimal changes in the timing of assessments for ELLs but offered no suggestions for the assessment itself. In fact, the new law still does not mandate states to measure ELLs' English language proficiency, apart from a requirement to select target goals for English language proficiency and graduation rates for all students, irrespective of subgroups such as students classified as ELLs (ESSA, 2015).

New York State Assessments. ESSA (2015) sets expectations that ELLs achieve proficiency in ELA at the level of their native English-speaking peers on a standardized

assessment and that they graduate at a similar rate (Klein, 2015). The new law, however, does not specify how states might most effectively support ELLs to succeed in a rigorous curriculum taught in English. The current standardized assessment of the NYSED is the NYS ELA exam. ELLs find it difficult to grasp the concepts that are introduced in this test, according to Irby, B. J., Tong, F., Lara-Alecio, R., Mathes, P. G., Acosta, S., & Guerrero, C. (2010).

The NYSED has identified an assessment of English language proficiency to place students entering NYS public schools in either LSI or the mainstream classroom: the New York State Identification Test for English Language Learners (NYSITELL). The NYSITELL does not consider native language proficiency (NYSED, 2015). The NYSED has offered the Language Assessment Battery (LAB) to measure native language proficiency; however, department staffers have not updated this assessment since 1982. The cloze exam questions, which evaluate ELLs' ability to fill in the blanks in a sentence by selecting the correct answer from a multiple-choice format, are no longer used in New York City public schools (NYSED, 2015). Further, the test does not mirror the rigorous curriculum that ELLs are expected to learn in New York City public schools.

NYS's assessment policies are not aligned with known scientific research about ELLs. Studies have shown that ELLs with a good foundation in their native language develop English language higher order skills such as inferring, evaluating, and analyzing at a quicker pace than do those with no foundation in their native language (Baker, 2000; Cummins, 1991; Krashen, 1991; Terrell, 1991). In such cases, ELLs might join the mainstream classroom after only 1 year of LSI (Cummins, 1991). ELLs enter New York

City public schools, however, with a variety of language proficiency levels. Cummins's (2001) notion of developing cognitive and higher order thinking skills in the native language, for example, is worthy of investigation. If the NYSED is to take advantage of cognitive and higher order thinking skills already developed by ELLs in their native languages to achieve second language proficiency, then it follows that department staffers must identify an appropriate assessment of native language proficiency.

Language-Supported Instruction: Dual Language and English as a New Language. Cummins's (2001) theory of how higher order thinking skills developed in the native language can support second language proficiency has proved seminal. Subsequent to his study, other researchers in the field began to notice that ELLs struggle in the content areas simply because they lack comprehension skills (Brown & Broemmel, 2011). Cummins indicated that ELLs who have strong native language skills could have the ability to transfer those skills to second language acquisition. Brown and Broemmel (2011) cited Cummins when they discovered that ELLs could be successful in a rigorous curriculum when they are able to transfer skills learned from their native language into the second language. ELLs, therefore, may better learn the content areas in their native language than in the second language, and, in learning the content areas, more readily develop the second language as well as cognitive skills (Cummins, 2001).

Soon after Cummins's (2001) groundbreaking study, Thomas and Collier (2002) conducted a study of a range of Dual Language Immersion (DLI) programs attended by Former ELLs with high poverty and low mobility rates in an Oregon district school. Students in a 50-50 DLI program exceeded standards in English reading at the 58th

percentile by the end of Grades 3 to 5 (Thomas & Collier, 2002). Similarly, in a 90-10 DLI program attended by Former ELLs, students outperformed their comparison cohorts, 90-10 transitional bilingual education and 90-10 developmental bilingual education, in English language achievement for Grades 1 to 5 (Thomas & Collier, 2002). Thomas's and Collier's study showed that when ELLs receive content instruction in their native language, they do well in acquiring the second language.

Current regulations and assessment policies in NYS are not aligned with the most recent research about how best to prepare ELLs for college and career in the 21st century. NYSED policy under both NCLB (2002) and ESSA (2015) calls for administering the NYS ELA exam to ELLs after 1 year and 1 day of LSI (NYSED, 2015). Although the NYS ELA exam assumes academic language proficiency necessary to succeed in a challenging academic environment in English, many ELLs are enrolled in LSI when they take the assessment. NYSED's current policy, therefore, seems to be at odds with research findings on best practices for supporting ELLs (Klein, 2015). Assessing ELLs without the academic language proficiency they need to succeed puts them at elevated risk of subsequent poor academic achievement and failure in school. Thus, it is necessary that educators and administrators discover the optimal LSI program and effective teaching strategies to improve ELLs' outcomes on the NYS ELA standardized assessment.

The U.S. Department of Education developed Common Core State Standards (CCSS) in 2012 to guide states in developing a curriculum to produce internationally competitive students (NYSED, 2015). States implemented the CCSS in public schools

across the United States and announced consequences as drastic as closure for failure to improve standardized test scores among students. In an apparent disregard for relevant research at the time, many school administrators who had developed bilingual programs closed those programs and opened English as a New Language (ENL) programs instead (Monahan, 2012). Then, in 2014, when Congress reauthorized the new Part 154, the law mandated services for ELLs, and grants were provided for Dual Language (DL) programs in NYS (NYSED CR Part 154, 2014).

U.S. courts have instituted policies for ELLs based on the 1974 decision *Lau vs. Nicholas* and the ASPIRA Consent Decree which mandated that ELLs be provided bilingual education. The ASPIRA Consent Decree also stipulated that ELLs be provided equal access to all school programs and services offered to non-ELLs (Reyes, 2006). Section 3204 of the education law and Part 154 together encompass the policies for providing services to ELLs in NYS. The law clearly states that all school districts must provide either bilingual education or ENL programs to ELLs. The bilingual program must be research-based with three components: native language and English Language Arts (ELA) instruction, ENL instruction, and content instruction in the native language (ESSA, 2015). The ENL program must provide two components: ELA instruction and content instruction in English using ENL methodologies (ESSA, 2015). Both programs, ENL and DL, are designed to build second language acquisition through content instruction by developing skills such as understanding, speaking, reading, writing, and communicating. Educators introduce content instruction skills, depending on the students' grade level as well as level of proficiency in English. The purpose of this study

was to compare the two programs, specifically to determine if there was a significant difference in the NYS ELA standardized assessment achievement scores for a sample of ELLs attending an ENL program when compared to those scores for a similar sample of ELLs attending a DL program. I also sought to make general conclusions about the influence of LSI program type on standardized assessment achievement scores.

The Local Problem

Poor performance on the NYS ELA exam among ELLs has been widely documented (Monahan, 2012; National Center for Education Statistics, 2011-2013; NYSED, 2009-2017; Uro & Barrio, 2013). Monahan (2012) found that schools with large ELL populations are characterized by low performance on standardized tests and low graduation rates. NYSED policy dictates that if schools do not make progress on standardized tests' results over 3 consecutive years, they may be closed and replaced by new schools (NYSED, 2009-2017). Monahan reported that NYSED officials had identified 123 schools with large ELL populations, many of which were high schools in the Bronx, New York, that were destined to be closed for poor performance on standardized tests (Monahan, 2012). In this study, I addressed the problem of poor performance on the NYS ELA exam among ELLs in New York City public schools by investigating the effectiveness of LSI programs to improve outcomes on a standardized assessment administered in English. I drew my sample from two New York City middle schools. To provide context, therefore, a review of the data for NYS is warranted.

In 2010 New York joined other states in adopting the CCSS. Students across the United States were held to higher standards than in the past. The percentage of ELLs in

Grades 3 through 8 who scored at Level 3 or above in the NYS ELA exam between 2010 and 2017 was significantly lower than for non-ELLs. From 2013 to 2017 when the test was aligned with the CCSS, NYS ELA test scores were the lowest for ELLs and non-ELLs alike. These test results, described in Table 1, represented a new baseline for NYS students.

Table 1.

New York State Statistics for 2010-2017 NYS ELA Exam Results Grades 3-8

NYS ELA outcomes of Levels 3 or 4 for school-year	Grades 3-8 ELLs	Grades 3-8 Non-ELLs
2010	14.3%	55.9%
2011	12.6%	55.7%
2012	11.7%	58.2%
2013	3.2%	33.0%
2014	3.3%	30.6%
2015	3.9%	30.4%
2016	4.0%	40.1%
2017	5.2%	42.6%

Note. New York State English Language Arts (NYS ELA); English Language Learners (ELLs). New York State Department of Education Report. (2009-2017). New York School Report Card. Copyright by the NYSED. Public domain.

Especially during the academic years 2013 to 2017, many schools in NYS showed poor results, as did many schools in several states across the United States, particularly California and Arizona (Leachman, Albares, Masterson, & Wallace, 2016; NYSED,

2009-2017). The schools that persistently had not met NYSED's criteria for students' progress faced drastic consequences such as closure (NYSED, 2009-2017). During 2012, the NYSED established new expectations mandating that all 12th grade students be college-ready by 2015, and as a result, instituted rigorous instructional standards for all students, including ELLs. For teachers and administrators as well, new reforms phased in a rigorous evaluation system along with intensive professional development programs (NYSED, 2009-2017). The NYSED raised proficiency levels on both the mathematics Regents exam and the NYS ELA exam (NYSED, 2009-2017). These assessments were designed to ensure college- and career-readiness by more closely aligning measured skills with the CCSS. Test results declined sharply from 2012 to 2013 (NYSED, 2009-2017) Apparently, more than half the students in NYS were not on a course for college- and career-readiness. This was especially true for ELLs.

There is a need to extract poor results among ELLs on the NYS ELA exam from the data as a whole. ESSA (2015) provides that ELLs, like their native English-speaking peers, must be assessed in the same four ways: three academic factors that include achievement on state standardized tests, and one additional factor such as engagement, work in the classroom, or more school-wide assessments such as safety (Klein, 2015). The new law, however, does not specify how ELLs might be tested differently from their English-speaking peers, despite evidence that ELLs appear to be at a disadvantage in doing well on standardized assessments administered in English.

Rationale

The purpose of the study was to determine if there was a significant difference in the NYS ELA standardized assessment achievement scores for ELLs attending an ENL program when compared to those scores for ELLs attending a DL program. I have also designed the study to make general conclusions about the influence of LSI program type on standardized assessment achievement scores. The study revealed that there was a significant difference in achievement scores for ELLs in the DL program over the ENL program for the academic year 2016 in Grades 6, 7, and 8 at the study sites. This evidence may provide educators and administrators at the study sites with guidance on how best to improve outcomes on the NYS ELA exam among ELLs. I have created a professional development curriculum based on these results. The National Association for Bilingual Education (NABE) has accepted my proposal to present my curriculum at their annual conference scheduled for March 6-9, 2019, at Lake Buena Vista, Florida. The conference theme is "Biliteracy as a Global Imperative: Enriched Education Empowerment, Equity and Excellence."

I plan to make the case to educators that their students may benefit from a specific program of LSI and effective teaching strategies. Participants at annual NABE conferences are influential in the field of public education in the United States and can be instrumental in bringing about the social change necessary to rethink education for ELLs. Educators who are struggling in the classroom to identify the right tools to support ELLs will benefit from this project. The project describes strategies to effectively teach ELLs a

second language. The study contributes to the literature on how best to support ELLs in mastering a rigorous curriculum taught in English.

Research has indicated that ELLs with a good foundation in their native language develop English language higher order skills such as inferring, evaluating, and analyzing at a quicker pace than do those with no foundation in their native language (Baker, 2000; Cummins, 1991, 2000; Skutnabb-Kangas, 2000). Research also indicated that 3 to 10 years of LSI are required for ELLs to gain the cognitive academic language proficiency they need to succeed in a challenging academic curriculum conducted in a second language (Collier & Thomas, 2004; Conger, Hatch, McKinney, Atwell, & Lamb, 2012; Cook, Boals, Wilmes, & Santos, 2008; Cummins, 1984, 1999; Greenberg, 2015; Hakuta, Butler, & Witt, 2000). New federal mandates in Title I of ESSA (2015), however, provide for standardized testing of ELLs by their third year of residency in the United States, when results among ELLs are treated in the same manner as results among the mainstream student population. Under such pressure to prepare their ELLs to perform on standardized tests, educators in the New York City public-school system are ignoring the proven benefits of native language instruction to master academic English (Cummins, 2001). Such policies and pressures appear to be at odds with the current research on both LSI effectiveness and time spent in LSI to support ELLs (Klein, 2015).

This study was designed to contribute to the literature on how best to prepare ELLs to perform on standardized tests administered in English. Results revealed a significant difference in NYS ELA exam achievement scores among ELLs supported by two different types of LSI programs, indicating that performance among ELLs on the

NYS ELA exam is associated with a specific type of LSI program. Educators and administrators need to know which type of LSI program is associated with higher scores for ELLs on the NYS ELA standardized assessment. This study offers scientific evidence that may guide educators and administrators on how to make informed decisions to support ELLs, eliminating misconceptions and identifying the most effective LSI programs as well as teaching strategies that can help ELLs to achieve on the NYS ELA standardized assessment.

Evidence of the Problem at the Local Level

Both study site schools were public middle schools in New York City. As of Spring 2016, the ELL population at Middle School A accounted for 14.3% of the entire student population (NYSED, 2009-2017). The ELL population at Middle School B accounted for 27% of the entire student population (NYSED, 2009-2017). Fifty-five percent of ELLs at the site schools scored at the lowest level (Level 1) on the NYS ELA exam during the 2015-16 school-year (NYSED, 2009-2017). Such poor results were mirrored in all New York City schools from 2014 to 2017 as described in Table 2.

Table 2.

New York City Statistics in 2014-2017 NYS ELA Exam Results Grades 3-8

NYS ELA outcomes of Levels 3 or 4 for school-year	Grades 3-8 ELLs	Grades 3-8 Non-ELLs
2014	3.6%	32.0%
2015	4.4%	33.8%
2016	4.4%	42.1%
2017	5.6%	44.7%

Note. New York State English Language Arts (NYS ELA); English Language Learners (ELLs). New York State Department of Education. (2017). Measuring Student Progress in Grades 3-8 English Language Arts and Mathematics. Retrieved from http://www.nysed.gov/common/nysed/files/2017-3-8-test-results.pdf

Monahan (2012) found that schools with large ELL populations were characterized by low performance on standardized tests and low graduation rates. New York State Education Department policy dictates that if schools do not make progress on standardized tests' results over 3 consecutive years, they may be closed and replaced by new schools (NYSED, 2009-2017). Monahan reported that the NYSED had identified 123 schools with large ELL populations, many of which were high schools in the Bronx, New York, destined to be closed for poor performance on standardized tests.

English Language Learners' poor performance on standardized tests adversely impacts public schools in New York City because 43% of school-age children there communicate in a native language other than English (NYC Department of Education, 2016). ELLs are the fastest growing school-age population in NYS and across the nation.

Between 1989 and 2015 the ELL population in NYS has more than doubled from 2.2 to 4.9 million. It is expected that students in public schools across the United States who speak a language other than English at home will increase 40% by 2030 (Thomas & Collier, 2002). The available data indicate that in 2017 New York City public schools served 237,076 ELLs speaking 160 languages, who, as a group, continue to demonstrate low academic achievement (NYSED, 2017).

A demographic study commissioned by the National Assessment of Educational Progress found that most ELLs in U.S. public schools are Hispanic, up to 85.5% of the ELL population (National Center for Education Statistics, 2013). Not surprisingly, Uro and Barrio (2013) have shown that Hispanic ELLs consistently achieve lower scores than their White classmates on the NYS assessments. Poor performance among ELLs may skew test results on the NYS ELA exam, thus putting entire NYS school districts in jeopardy of being closed. The threat of such dire consequences puts pressure on educators and administrators to discover the most effective LSI programs and teaching strategies to improve outcomes on the NYS ELA exam among ELLs.

Evidence of the Problem from the Professional Literature

Since Congress enacted NCLB (2002), ELLs have been included in standardized achievement exams. The Every Student Succeeds Act (2015) provides for identical exams to assess ELLs as soon as the end of their second year of residency in the United States. According to Menken (2009), however, the NYS ELA exam is inappropriate for ELLs. Irby et al. (2010) determined that the content of the exam includes concepts that are unfamiliar to ELLs who come from other countries.

Menken (2009) also pointed out that bilingual programs are being reduced on account of mandatory standardized assessments for ELLs. Educators across the nation are forced to teach to the test without implementing culturally and linguistically instructional practices designed to develop cognitive academic language (Honigsfeld & Giouroukakis, 2011; Menken, 2006). Honigsfeld and Giouroukakis (2011) affirmed that special attention must be paid to the needs of ELLs. Teaching to the test to prepare ELLs to perform on the standardized assessments may be detrimental. Shohamy (2008) stated that the implementation of mandatory standardized assessments for ELLs affects their learning in a troublesome manner.

According to the Equity and Excellence Commission for Each and Every Child (Equity and Excellence Commission), an advisory committee authorized by Congress under the Federal Advisory Committee Act, teaching to the test is not appropriate for ELLs. The commission has identified how U.S. educators miss-appropriate high stakes testing to target educational reform:

> [T]he schools serving high concentrations of low-income students and students of color are at far higher risk of leaving their students unprepared for work and life in an era of global competition than are their white and middle-class peers. An additional challenge is that reform efforts to date have been poorly targeted. (U.S. Department of Education, 2013, p. 12)

Educators need to consider that test results for ELLs may not indicate the same conclusions as do results from the same test for native English speakers. There are many other elements to consider instead, when determining what ELLs know and what they

need to learn. The curriculum that ELLs study in LSI may be totally different from that which they studied in their native country. Further, it is very likely that ELLs in LSI are not taught what their monolingual counterparts have already learned. ELLs bring a range of academic instructional levels and experiences to school that can affect how quickly they will learn English (Calderon, 2007). They may enter LSI at widely different levels, and such pre-existing differences may enable some of them to exit LSI after a single year, although they may lack proficiency in cognitive academic language. This disparity may adversely impact ELLs' test results. Scholars have found that foreign-born students who arrive in the United States at intermediate or high school levels, for example, may take even longer than their younger counterparts to be successful in English (Huang, Han, & Schnapp, 2012). In their longitudinal study on foreign-born students, Suárez-Orozco et al. (2008) concluded that after as many as 7 years of education in the United States, students had not achieved a level of academic English language proficiency comparable to their native English-speaking peers.

Educators need to understand that language development takes time. Researchers have proven that ELLs with a good foundation in their native language develop English language higher order skills at a quicker pace than do those with no foundation in their native language (Baker, 2000; Cummins, 1991, 2000; Skutnabb-Kangas, 2000). "Ongoing research has produced findings that indicate that academic language proficiency takes as long as 7 years [to achieve]" (Abella, Urrutia, & Shneyderman, 2005, p. 129; see also, Adelman Reyes & Kleyn, 2010; Menken, 2006, 2009). The weight of expert opinion supports the view that 3 to 7 years of LSI are needed to master

academic language (Chamot & O'Malley, 2009; Crawford & Krashen, 2007; Cummins, 1999; Krashen, 1991) while some investigators (Haynes, 2011a; Suárez-Orozco, Suárez-Orozco, & Todorova, 2008) believe that 5 to 10 years are needed. Cummins (2001) found that academic language proficiency in English is necessary for ELLs to achieve academic success. In addition, Menken (2009) found that ELLs are more successful the more time they spend in a language-supported environment.

Herrera and Murry (2011) affirmed that ELLs face psychological challenges on a deep sociocultural level when they enter a new country. These challenges are exacerbated by the ambiguity, anxiety, prejudice, and discrimination they experience. Certainly, such challenges may affect ELLs' academic performance in school. The researchers identified a myriad of challenges, such as adjusting to a new setting, homesickness, separation from family, in addition to not knowing the new language, that make it difficult for ELLs to achieve in school (Herrera & Murry, 2011). Despite these challenges, ELLs are expected to perform as well as their monolingual counterparts, and when ELLs do not perform well on standardized achievement exams, the entire U.S. public-school system suffers.

Poor results for ELLs on the NYS ELA exam from 2006 to 2013 were based on the following scale:

- Level 1 indicates students who are below basic standards.
- Level 2 indicates students who meet basic standards.
- Level 3 indicates students who meet proficiency standards.
- Level 4 indicates students who exceed proficiency standards.

The data show that ELLs did not reach the same levels of achievement as did their monolingual peers. If educators do not educate ELLs appropriately, exploring every avenue, including ELLs' native language proficiency, ELLs will continue to do poorly on NYS standardized exams.

Definition of Terms

English language learners (ELLs): A term that is often used throughout public schools in the United States to identify speakers of other languages who continue to learn content in their native languages as they acquire English language skills (NYSED, 2017).

Language-supported instruction (LSI): An umbrella term for any classroom curriculum that pays close attention to the needs of ELLs to develop English language proficiency. This term usually refers to ESL, and, most recently, ENL or DL programs.

New York state English as a second language achievement test (NYSESLAT): A test that is administered by the NYS public-school system in the spring of every school-year to assesses a student's English proficiency in listening to and speaking and reading in English.

Former ELLs: ELLs who have passed the NYSESLAT and have been placed in mainstream classes (NYSED, 2015). The NYSESLAT is a measure of "annual student improvement in achieving English language proficiency in order for students to ultimately exit LEP/ELL status and move into English mainstream programs" (New York State Education Department, Questar Assessment, Inc., 2014, p. 4).

Long-term ELLs: ELLs who have received LSI in excess of 6 years without acquiring academic language proficiency (New York State Education Department, Questar Assessment, Inc., 2014, p. 4).

English as a new language (ENL): A specific form of LSI taught only in English (the second language) and formerly known as English as a Second Language (ESL) (NYSED, 2016).

Dual language (DL) programs: LSI programs that are taught in two languages, both the native language and English and formerly called bilingual education (Great Schools Partnership, 2013).

Dual language immersion (DLI): LSI programs that continue to develop bilingual/biliterate ELLs together with English Proficient learners in the classroom by focusing on a strong academic program in both English and the native language (Fortune & Christian, 2012).

Basic interpersonal communication skills (BICS): The development of conversational fluency in the second language (Cummins, 1999).

Cognitive academic language proficiency (CALP): The use of language in decontextualized academic situations in the second language (Cummins, 1999).

Cognitive academic language learning approach (CALLA): An approach to education that consists of strategies for scaffolding to teach language through content instruction (Chamot & O'Malley, 2009).

Sheltered instruction observation protocol (SIOP): An approach to education that gives context for students' learning. ELLs find lessons more comprehensible when

teachers provide connections between the lesson topic and lesson activities. This approach has proven successful for ELLs to develop English language skills while learning grade-level content (Vogt & Echevarria, 2007).

Socioeconomic status (SES): A person's position within a social structure with regard to job, salary, education, and domicile (Merriam-Webster's Collegiate Dictionary, 2003). Researchers have identified SES as a factor that can influence academic achievement (Fleming, 2015).

Students with disabilities (SWD): Students with disabilities who are otherwise qualified to meet the same academic requirements and standards as nondisabled students, including an instructor's expectations for students regarding class participation, work standards, attendance, and ability to demonstrate acquired knowledge. SWD are learning with a disability (NYSED, 2009-2017).

Significance of the Study

NYSED's current practices to assess achievement in public schools rely heavily on academic language proficiency as well as academic achievement. Chamot and O'Malley (2009) concluded, however, that academic English proficiency, though necessary for academic achievement, is not necessary for social situations. The authors noted, further, that there is a qualitative difference between social and academic language acquisition. Social language acquisition develops naturally in the native language. Although skills learned in the native language can be used to acquire a second language (Cummins, 2001), academic language instruction in a second language is necessary to master a rigorous curriculum taught in the second language.

The accepted wisdom, then, has been to teach the content areas to ELLs in the second language in order to develop the second language (Chamot & O'Malley, 2009). Research indicates, however, that ELLs struggle in the content areas because they lack comprehension skills, and those who have strong native language skills appear to transfer those skills to second language acquisition to improve comprehension (Brown & Broemmel, 2011; Cummins, 2001; Krashen, 1991; Thomas & Collier, 2002). ELLs are challenged to acquire the second language while simultaneously learning the content areas in that language (Brown & Broemmel, 2011). ELLs may be successful in a rigorous curriculum taught in a second language, when they are able to transfer skills learned from their native language into the second language. ELLs, therefore, may better learn the content areas in their native language than in English, and in learning the content areas, more readily develop the academic language as well as cognitive skills necessary to succeed in a rigorous curriculum taught in English (Cummins, 2001).

Students in New York City public schools speak more than 120 different languages. Cummins observed early on that educators and policy makers have approached this diversity as if it were a problem to fix (Cummins, 2001). By defining the term English Language Learners, educators and administrators have declared a significant portion of the student population in New York City deficient. Cummins (2001) characterized this misconception as "…worry that linguistic, cultural, 'racial' and religious diversity threaten the identity of the host society" (p. 16). If Cummins is correct, then the problem is global in scale. As Cummins points out, "diversity in

education is still dominant in most European and North American countries" (Cummins, 2001, p. 16).

Far from being a problem, multi-lingual students may be a solution for the global economy. Given the proper resources, cultural and linguistic diversity can smooth the transition of U.S. workers to a global workforce capable of filling 21st century jobs and may be a critical ingredient to raise persistently stagnant incomes among the American working class. Cummins (2001) holds up a new educational paradigm for the global economy: "Within Europe, the Foyer program in Belgium which develops children's speaking and literacy abilities in three languages (their mother tongue, Dutch and French) in the primary school most clearly illustrates the benefits of bilingual and trilingual education" (pp. 218-219).

Rather than embracing and nurturing this diversity, the NYSED instituted the CCSS (NYSED, 2009-2017), placing more emphasis on standardized assessments and more pressure on ELLs to learn academic English. ELLs have routinely performed poorly on the NYS ELA exam perhaps because they are at a disadvantage. Evidence suggests that standardized tests are not valid measures of academic content knowledge for ELLs due to linguistic issues (Menken, 2009). Menken (2009) alluded to how wrongly assessing ELLs affects both ELLs' academic performance and schools' standings: (a) Many states had adopted NCLB (2002) regulations that require ELLs' achievement scores to determine academic progress in subject areas with tests written in English, and (b) when students did not perform at proficient levels, educators were sanctioned, and schools were closed. Poor performance among ELLs affected the

integrity of the test and skewed results on which school administrators base their decisions (Solórzano, 2008).

This study is significant because it provides scientific evidence that there is a significant difference in standardized assessment achievement scores for ELLs supported by a DL program when compared to those for ELLs supported by an English-only program. Such evidence may convince educators at the site schools to implement native language art programs for ELLs. Fifty percent of the site schools' ELLs achieved the lowest level (Level 1) on the NYS ELA exam for the 2015-16 school-year (NYSED, 2009-2017). Findings from this study may inform decision making for educators and administrators to ensure that the site schools avoid closure or other drastic consequences over time.

Research Questions and Hypotheses

The *achievement gap* in standardized assessment scores documented among ELLs when compared to their English-speaking peers affects all ethnicities across gender, socioeconomic status (SES) and disability status for students across the country (NEA, 2007, 2008). Fry (2008) observed that low standardized assessment achievement scores is one of many factors that result in poor academic performance among ELLs. High student-teacher ratios in LSI, as well as increased student enrollment overall and SES are associated with poor academic performance among ELLs (Fry, 2008). Lack of academic language proficiency in English, however, has proven to be among the primary factors associated with ELLs' poor performance on standardized assessments (Cummins, 2001; Fortune and Christian, 2012; Fry, 2008; Menken, 2009). LSI is critical to develop the

necessary cognitive language to close the achievement gap for ELLs. To determine if achievement on the NYS ELA standardized assessment for ELLs is associated with LSI program type, specifically ENL or DL, I formulated the following research questions:

Research Question 1: What is the difference in the NYS English Language Arts standardized assessment achievement scores for ELLs attending the English as a New Language program compared to the Dual Language program for 2014, 2015, and 2016?

H_0: There is no significant difference in the NYS English Language Arts standardized assessment achievement scores for ELLs attending the English as a New Language program compared to the Dual Language program for 2014, 2015, and 2016.

H_a: There is a significant difference in the NYS English Language Arts standardized assessment achievement scores for ELLs attending the English as a New Language program compared to the Dual Language program for 2014, 2015, and 2016.

Research Question 2: What is the difference in the NYS English Language Arts standardized assessment achievement scores for ELL students in the English as a New Language program compared to the Dual Language program for 2016 while controlling for students with disabilities (SWD)?

H_0: There is no significant difference in the NYS English Language Arts standardized assessment achievement scores for ELL students in the English as a New Language program compared to the Dual Language program for 2016 while controlling for SWD.

H_a: There is a significant difference in the NYS English Language Arts standardized assessment achievement scores for ELL students in the English as a New

Language program compared to the Dual Language program for 2016 while controlling for SWD.

I analyzed the variables indicated in these questions and hypotheses by using analytic software known as Statistical Package for the Social Sciences (SPSS). The dependent variable was the NYS ELA exam scale scores. The independent variable was the LSI program types, the ENL program or the DL program. To answer the first research question, I conducted a mixed-model ANOVA to focus on significant differences between NYS ELA assessment achievement scores for ELL students in the two different LSI programs over a 3-year period from 2014 through 2016.

To answer the second question, I conducted an ANCOVA while controlling for various factors that influence achievement scores according to Fleming (2011). The ANCOVA specifically controlled for SWD to determine if there was a significant difference in NYS ELA standardized assessment achievement scores for ELLs in the ENL program as compared to the DL program for a single school-year, 2016.

There are many benefits in using scale scores rather than raw scores for the dependent variable, NYS ELA achievement scores. Scale scores are a prudent representation of scores because they eliminate the risk of mixing different scales from either different grade-level tests or different years in which tests were administered. Scale scores are standard measures (theoretically always 0 to 100) across all test results and, thereby, support the validity of test results. Using scale scores also allowed for analysis of data other than scaled Performance Level definitions and score ranges, which are pre-set by the NYSED and do not contain many (or any) of the students in the study's

sample population. I analyzed the NYS ELA exam results in a state that was standard across grade levels and time, untreated with NYSED's specific psychometrics as detailed in NYSED (2015).

Review of the Literature

This section reviews the literature on learning a language. The cognitive process of learning a language is relevant to the study because it illuminates the cognitive language skills that ELLs need to negotiate a challenging academic curriculum taught in a second language. My review of the literature, then, examined the concept of learning a language by (a) discussing the role of cognitive language skills and native language proficiency in the education of ELLs, (b) reviewing the research on the amount of time it takes for ELLs to develop cognitive language skills in English, (c) defining the differences between a native language and a second language, (d) discussing the difference between social language acquisition and academic language acquisition, (e) investigating language learning in the classroom, (f) defining and presenting the most effective LSI program and teaching strategies to improve outcomes among ELLs on standardized assessments administered in English.

The literature pertaining to each of these topics suggested that ELLs and Former ELLs who learn English in Dual Language programs are more likely to develop the level of cognitive English language skills they need to negotiate a challenging academic curriculum than those who learn English in a mono-lingual ESL/ENL program.

Defining ELLs

The literature is not consistent when labeling the population of ELLs. Garcia, Kleifgen, and Falchi (2008) reported that students who are acquiring English language in the United States are defined by numerous labels, including "English learners (ELs), limited English proficient (LEP), English language learners (ELLs), culturally linguistically diverse (CLDs), children with English language communication barriers (CELCBs), English as a second language (ESL), language minority (LM) and bilinguals" (p. 7). Each label has a different connotation. The Federal government uses the term *limited English proficient,* which risks stigmatizing students by focusing on their deficits. Although terms such as *culturally linguistically diverse* and *language minority* students may be more politically correct, they are overly inclusive, incorporating students who are already bilingual. A popular term, *English as a second language*, refers to a subject not to a population. Garcia et al. suggested that the term *English Language Learners* seems to be the most targeted label; however, all students in school are learning English.

The term English Language Learners (ELLs) is often used throughout U.S. public schools to identify speakers of other languages who continue to learn content in their native languages as they acquire English language skills. School districts and state education agencies may use other definitions; however, the definition employed in the federal law NCLB (2002) encompasses students ages three through 21 who (a) speak their native language at home, and (b) are in the process of acquiring English to meet state standards of general education.

The definition of ELLs in NCLB (2002) is focused on students' performance. The authors describe ELLs as learners who struggle in the four language arts: listening, speaking, reading, and writing in English. Their lack of English language skills may keep them from meeting the state's proficiency levels on assessments. Cummins (2001) pointed out that educators view these students as English deficient. He referred to ELLs in U.S. public schools as *multilingual learners* (MLs). For Cummins, MLs are significant resources for American society in the global economy. Cummins (2000) recognized that MLs bring cultural and linguistic experiences to enrich the classroom. Their birthplaces are platforms for learning. Their ability to communicate in more than one language is an asset with a proven benefit in the global economy (Cummins, 2001).

The human capital that students with two languages represent is misused when treated as a deficiency; instead, American educators should recognize the contribution MLs make to the multi-cultural role that the United States plays on the world stage. Indeed, Garcia et al. (2008) contended that schools must provide meaningful education with the end goal of developing multilingual learners who are successful in both English and their native language. Though respectful of the many labels used to refer to this population, I will use the term English Language Learners (ELLs) for this study because policy makers and educators alike in NYS recognize this term.

Theoretical Framework

The theoretical framework for this study was Thomas's and Collier's (2002) study of DLI programs. My study drew on research to prove the theory that some types of LSI programs are more effective than others to improve achievement scores on standardized

assessments in English among ELLs. Thomas and Collier answered the research question relevant for my study, "Which program is better, when extraneous variables (e.g., initial differences between groups) are controlled?" (p. 44). The researchers conducted multiple regression tests and ANCOVAs across eight LSI program types to determine if program type was associated with improved scores on standardized assessments. To control for extraneous variables that may influence achievement on standardized assessments, including (a) home language, (b) native country, (c) native language proficiency, (d) English proficiency, (e) prior time spent in formal schooling, and (f) SES, Thomas and Collier used a blocking technique. Their reasoning for why blocking was beneficial to identify their sample populations with regard to SES was sound. They wrote, "[S]eparate longitudinal analysis of student achievement gains by program type for students of low, mid and high socioeconomic status (SES) achieves results that are quite useful for decision-making, *without directly adjusting*, often inappropriately, the dependent variable for the covariate SES, *as in ANCOVA*" (Thomas & Collier, 2002, p. 44, emphasis added).

My research design was a mixed-model ANOVA of NYS ELA standardized assessment achievement scores for 24 middle school students across three school-years, 2014, 2015, and 2016 to determine if there was a significant difference between scores for ELLs attending two different types of LSI programs: ENL and DL. To control for extraneous variables that may influence achievement on standardized assessments, including (a) past student attainment, (b) SES, (c) school size, (d) location (rural or urban) and (e) school sector (public, private or religious), I matched sample populations

from two separate schools, each school supporting their ELLs with one of two LSI programs, exclusively. I also conducted an ANCOVA analysis to determine if there was a difference in the same scores for ELLs attending the same two different types of LSI programs for a single school-year, 2016, while controlling for SWD.

Thomas and Collier (2002) conducted a quantitative and qualitative longitudinal, experimental research study of the effectiveness of different programs of LSI for Language Minority students (LM). The researchers defined LM students as speaking a language other than English at home. LM students are not necessarily ELLs. Though they speak a language other than English at home, they may not be classified by their local school districts as ELLs. Public schools in the United States, however, routinely offer a variety of services to LM students.

Thomas and Collier (2002) investigated academic achievement among LM students, ELLs and Former ELLs in grades K-12 during a 5-year span. These sample populations came from rural as well as urban sites in the northeast, northwest, south-central and southeast United States. The clear majority of these students spoke Spanish at home. The researchers measured achievement on the English reading portion of standardized exams such as ITBS, CTBS, Stanford 9, and Terra Nova. They also measured achievement on the academic problem-solving portions of these tests across the content areas in literature, math, science, and social studies.

Qualitative data collection entailed the evaluation of the study sites' school districts' reports on bilingual and ESL program teacher's guides and manuals, previous research studies, articles, students' texts, journals written by professionals, and interviews

with staff and supervisors, members of the board, bilingual teachers, principals, and community members. The researchers also collected quantitative data within policy statements from state legislators, including district files, a database for every LM student in the participating school districts, and state and federal databases of students' assessment history, including types of assessments. All such information was linked to an arbitrary ID number given to each student in each of the sample populations and stored in a single database (Thomas & Collier, 2002).

The study sites were (a) Madawaska School Department in Maine, (b) School Administrative #24 in Maine, (c) Houston Independent School District in Texas, and (d) Grant Community School in Salem, Oregon. The investigation focused on eight program types of LSI to support LM students, ELLs and Former ELLs:

1. 90-10 dual language.
2. 50-50 dual language immersion.
3. 90-10 one-way developmental bilingual education.
4. 50-50 one-way developmental bilingual education.
5. 90-10 transitional bilingual education.
6. 50-50 transitional bilingual education.
7. English as second language (ESL/ENL) taught through content.
8. English mainstream.

During phase one of their analyses, Thomas and Collier (2002) conducted a needs evaluation of three groups of interest for their study: LM students, ELLs, and native English proficient students. During the second phase of analysis, the researchers studied

the academic gains of ELLs who arrived in the United States 3 to 5 years ago. They conducted an analysis of these program types during the third phase, and described an achievement gap closure rate for each year over 10 years for each of the program types. Then they added to the sample size many longitudinal cohorts of similar students whom they could follow to increase sample size and compensate for attrition (a fourth phase of data analysis). In addition, Thomas and Collier used a re-sampling method known as bootstrapping to achieve more generalizable estimates of the long-term impact of all eight program types for LM students.

Thomas and Collier (2002) reported a standardized measure of normal curve equivalents (NCE), an equal-interval scale, as well as percentile rank scales across school districts based on standardized assessments in three areas of achievement: (1) English language, (2) Spanish language, and (3) other subject areas as set forth in Table 3, Table 4 and Table 5.

Table 3.

English Language Achievement Findings

Program type	Sample population: LM	Sample population: ELLs	Sample population: Former ELLs
90-10 dual language			51st NCE/51st percentile
50-50 dual language immersion			58th NCE/58th percentile
90-10 one-way developmental bilingual education			41st NCE/34th percentile
50-50 one-way developmental bilingual education			62nd NCE/72nd percentile
90-10 transitional bilingual education			40th NCE/32nd percentile
50-50 transitional bilingual education			47th NCE/45th percentile
English as second language (ESL/ENL) taught through content		34TH NCE/23rd percentile	
English mainstream	15 NCE/15th percentile	25th NCE/12th percentile	

Note. Language Minority (LM); English Language Learners (ELLs); NCE = normal curve equivalents. Summarized results reported in Thomas, W.P., and Collier, V.P. (2002). *A national study of school effectiveness for language minority students' long-term academic achievement*. Santa Cruz, CA: Center for Research on Education, Diversity and Excellence University of California-Santa Cruz. Retrieved from http://www.thomasandcollier.com/major-research-monographs.html

Table 4.

Spanish Language Achievement Findings

Program type	Sample population: LM
90-10 dual language	58th-65th NCE/64th-76th percentile
50-50 dual language immersion	62nd NCE/71st percentile
90-10 one-way developmental bilingual education	56th-63rd NCE/61st-73rd percentile
50-50 one-way developmental bilingual education	56th-63rd NCE/61st-68th percentile
90-10 transitional bilingual education	60th NCE 61st-68 percentile
50-50 transitional bilingual education	
English as second language (ESL/ENL) taught through content	
English mainstream	

Note. Language Minority (LM); NCE = normal curve equivalents. Summarized results reported in Thomas, W.P., and Collier, V.P. (2002). *A national study of school effectiveness for language minority students' long-term academic achievement*. Santa Cruz, CA: Center for Research on Education, Diversity and Excellence University of California-Santa Cruz. Retrieved from http://www.scholarship.org/uc/item/65j213pt

Table 5.

Achievement in Other Subject Areas Findings

Program type	Sample population: LM
90-10 dual language	59th NCE/59th
50-50 dual language immersion	
90-10 one-way developmental bilingual education	55th NCE/60th percentile
50-50 one-way developmental bilingual education	55th NCE/60th percentile
90-10 transitional bilingual education	55th NCE/60th percentile
50-50 transitional bilingual education	55th NCE/60th percentile
English as second language (ESL/ENL) taught through content	
English mainstream	

Note. Language Minority (LM); NCE = normal curve equivalents. Summarized results reported in Thomas, W.P., and Collier, V.P. (2002). *A national study of school effectiveness for language minority students' long-term academic achievement*. Santa Cruz, CA: Center for Research on Education, Diversity and Excellence University of California-Santa Cruz. Retrieved from http://www.scholarship.org/uc/item/65j213pt

Thomas's and Collier's (2002) results were significant and served as a guide to policy makers at both federal and state levels of government in making programmatic decisions for the education of LM students. The researchers relied on national statistical margins to support their advice to educators as follows: (a) a 4 NCE difference between groups was considered a small but significant difference (*SD* = 0.20); (b) a 5 NCE difference between groups (*SD* = 0.25) was considered actionable; (c) a 6 NCE difference between groups (*SD* = 0.30) was considered a moderately significant difference; and (d) a

10 NCE difference between groups (*SD* = 0.50) was considered very significant (Thomas & Collier, 2002).

Cognitive Language Skills

Cummins (1999) challenged the prevailing wisdom at the time that ELLs should be taught subject area content in the second language. Cummins is well known for his remarkable research in the area of bilingual and second language acquisition. In his seminal study, Cummins (1999) emphasized the difference between two kinds of language proficiency: Basic Interpersonal Communication Skills (BICS) for conversation and Cognitive Academic Language Proficiency (CALP) for academic comprehension. He maintained that teachers who implement instruction with this distinction in mind are in a better position to help ELLs.

In an earlier study, Cummins (1984) addressed two basic questions to assess the native language (L1) proficiency and the second language (L2) acquisition: (a) What are the dimensions of language proficiency, and (b) What are the cross-lingual dimensions of language proficiency? To answer these questions, Cummins organized his research into three sections:

> [The first section] examined the nature of language proficiency and its relationship to academic and cognitive development. Second, the origins of current misconceptions about bilingualism were examined. The third section focused on the aspect of these theoretical positions regarding the nature of language proficiency and its cross-lingual dimensions. (Cummins, 1984, p. 16)

Over the years, Cummins worked closely with some of the most respected theorists on the topic of bilingual education developing high-level English Proficient learners: Terrell, Krashen, Legarreta-Marcaida, and Thonis. In their seminal studies, Krashen and Terrell (1983) and Terrell (1991) coined the term "The Natural Approach" for their theory of second language acquisition in bilingual education. Cummins (1999) incorporated the findings of Krashen and Terrell (1983) and Terrell (1991) as a theoretical framework for his theory of cognitive academic language acquisition that distinguishes between BICS and CALP. Krashen's and Terrell's theory, "The Natural Approach," supports the process of second language acquisition currently taking place in bilingual classrooms across the United States. Their studies described the various stages of second language (L2) acquisition set forth in Table 6.

Table 6.

Examples of the Stages of Second Language Acquisition

Stage of second language acquisition	Student descriptors	Outcomes
Preproduction	Silent	May show interest in graphics
	No English spoken	Nods
	Aimless	Listens intently
	Anxious	Does not join in the class
	Confused	Smiles
Early production	Sounds out words when reading	Speaks
	Articulates proper nouns	Identifies objects
	Barely uses L2	Repeats
	Barely joins in the class	Appears to equate L1 to L2
Speech emergence	Approaches proficiency	Begins to comprehend subject areas
	Willing to make mistakes when speaking L2	Working with new vocabulary
	Exhibits some social ease when speaking L2	Beginning to write in L2
	Begins to speak with another student	Metacognition in L2 begins
Intermediate fluency	Proficient in vocabulary exercises	Participates in reading in class
	Maintains reading and writing skills for longer periods of time	Sentence structure improves in L2
	Reads skillfully in L2	Begins to exhibit higher order language skills in L2
	Depends on L1 to understand subject areas	Readily comprehends subject areas
Advanced fluency	Exhibits critical thinking	Grammar improves in L2
	Interacting with native English-speaking peers	BICS achieved
	Shows decision-making when choosing words correctly in L2	Enjoys reading in L2

Note. Adapted from Terrell. T. D. (1991). The natural approach in bilingual education. In C. Leyba (Ed.), *Schooling and language minority students: A theoretical framework* (pp. 117-146). Retrieved from ERIC database (ED249773) and Krashen, S. D., and Terrell, T. D. (1983). *The natural approach: Language acquisition in the classroom.* Oxford: Pergamon Press.

Krashen's and Terrell's Natural Approach (Krashen & Terrell, 1983; Terrell, 1991) was based on two main principles. First, language is not taught, it is acquired through learning strategies that provide a comprehensible input using low-anxiety settings. Secondly, speech emerges in stages naturally. These stages can be applied to ELLs of every age. For Terrell (1991) Intermediate Fluency and Advanced Fluency were of pivotal importance to literacy development. ELLs have difficulty associating between print and meaning (Herrera & Murry, 2011). To tackle cognitive performance tasks, ELLs have to develop Intermediate Fluency and Advanced Fluency. Only then can ELLs hope to approximate the linguistic skills of their native English-speaking peers (Herrera & Murry, 2011). The stages of language acquisition can take up to 5 to 10 years to complete and can require even more time if an ELL does not already have literacy skills in their native language (Herrera & Murry, 2011; Terrell, 1991).

Cummins's distinction between BICS and CALP (Cummins, 1999) explained the difficulties ELLs face each day at school when they have developed only BICS. According to Esposito and Baker (2013**),** the most difficult task that educators have in the classroom is to address the variety of proficiency levels and learning needs of ELLs**.** Determining how to address those needs is especially difficult when students have not acquired CALP in English, which is necessary to handle the rigorous curriculum mandated by the CCSS. In Dual Language programs, language proficiency in both the native and the second language is more easily discernable.

Cummins (1999) used the metaphor of an iceberg floating in the ocean to explain that ELLs acquire their social communicative skills by interacting with their peers in a

natural way. Skills like listening and speaking, which are developed through interaction with native English-speaking peers, Cummins characterized as easily attainable or above the surface. Skills like reading and writing with cognitive/academic proficiency are more difficult to develop; Cummins described these skills as below the surface (Cummins, 1999). BICS consists of pronunciation, vocabulary and grammar, and is acquired naturally; however, CALP consists of both semantic and functional meaning and is acquired through formal instruction (Cummins, 1999).

Cummins (1999) observed that ELLs need more time to develop cognitive academic language skills than they do to develop social language skills; furthermore, he maintained that BICS are typically acquired at a faster pace than CALP. More salient for my study, however, is Cummins's observation that ELLs with a good foundation in their native language develop English language higher order skills such as inferring, evaluating, and analyzing at a quick pace (Cummins, 1999). Dual Language programs take advantage of ELLs' native language skills to master CALP. When ELLs master CALP, they can manage the academic demands placed upon them when learning the various subject areas as well as taking standardized assessments.

Native Language Proficiency

A recurrent theme in Cummins's research on language proficiency is that ELLs, discouraged from maintaining their native language and culture, are characterized by educators as less able. Activity in the classroom typically pushes them to learn one language and in the case of ELLs, does not support the whole student. For Cummins the message was clear: "[W]hile students may not be physically punished for speaking their

mother tongue in the school (as they previously were in many countries), a strong message is communicated to them that if they want to be accepted by the teacher and the society, they have to renounce any allegiance to their home language and culture" (Cummins, 2001, p. 16).

Some researchers have joined Cummins in decrying an education that would discourage ELLs from using their native language as well as deprive English-speaking students of an opportunity to learn about a foreign culture through its mother tongue (Baker, 2000; Skutnabb-Kangas, 2000). Skutnabb-Kangas (2000) defended Cummins, pointing out that such a missed opportunity is a violation of students' rights to an appropriate education. The goal in the classroom should be to teach the whole child. When teachers build upon their students' experiences, they support all the children in the classroom. When teachers encourage ELLs to remember their parents' and grandparents' stories or songs in their native language, such anecdotes provide teachable moments to enhance the curriculum. Cummins (2001) encouraged educators to provide opportunities in the classroom for ELLs to use all their unique abilities and talents.

Other researchers have joined Cummins to reiterate the importance of bilingual instruction. Baker (2000) found definitively that bilingual education is beneficial for linguistic development in children. The development of two languages during the primary years is crucial because it is then that ELLs are learning to use both languages effectively to learn language arts skills in the second language (Cummins, 2001). Both Cummins (2000, 2001) and Baker (2000) have proved that when children have a good foundation in their native language, they develop solid language arts skills in the second

language. These researchers also analyzed sample populations that had received formal instruction in their native language in their birth country.

Cummins (2001) further found that ELLs can transfer language arts skills from each language to the other. This ability to transfer skills from one language to another interdependently would be possible only in a bilingual or dual-language setting. Both languages complement each other when teachers provide opportunities to use both languages in the classroom. Indeed, Cummins's finding that bilingual students' academic achievement is higher in schools where teachers promote the use of native languages in the classroom "…is not surprising in view of the previous findings that (a) bilingualism confers linguistic advantages on children and (b) abilities in the two languages are significantly related or interdependent" (Cummins, 2001, p. 18).

Cummins (2001) reminded educators how quickly ELLs can lose their native language. Particularly in situations where ELLs are integrated into a community where their native language is not spoken, the classroom may be the only opportunity for them to retain their native language and culture. Cummins recommended that parents and caregivers enforce language policies in the home to give ELLs functional opportunities to speak, read and write in their native tongue. He urged educators to assign class projects to be presented in the native language to foster language awareness and celebrate the native culture (Cummins, 2001). Bilingualism is an intellectual achievement, not a failing to be fixed in the classroom.

Every child brings their native language and culture to school. To ask a child to reject their native language is to reject the child. Cummins (2001) made it clear that the

standard ENL programs offered to ELLs in U.S. public-school classrooms ask students to leave their essence and identity at the door. Educators must value and affirm their students' identities in the classroom. When teachers encourage writings and readings in the native language, they develop both the native language and the second language, simultaneously. The whole world benefits when people value other people for their linguistic and cultural diversity.

Duration of Language-Supported Instruction

Many experts have examined the amount of time it takes for ELLs to develop English language proficiency (Collier & Thomas, 2004; Conger, Hatch, McKinney, Atwell, & Lamb, 2012; Cook, Boals, Wilmes, & Santos, 2008; Cummins, 1984; Greenberg, 2015; Hakuta, Butler, & Witt, 2000). Though researchers may not agree on the exact length of time, they all agree that it takes an ELL within a range of 3 to 10 years, depending on the ELL's educational foundation, to develop a level of English proficiency that approximates a native English speaker.

Greenberg (2015) prepared a report for the United States Institute of Education Sciences under contract with the Regional Educational Laboratory Northwest and administered by Education Northwest entitled "How Long Does It Take English Learner Students in Washington Road Map Districts to Develop English Proficiency?" Greenberg's report examined archival data from seven low-income districts in the Seattle metropolitan area that indicated when ELLs achieved reclassification (Greenberg, 2015). Reclassification is a measure of English proficiency among ELLs in that ELLs are "reclassified" when they score high enough on a state standardized assessment to exit LSI

and enter the mainstream classroom. Although this study did not control for the home language as a factor of English proficiency, Greenberg found the following:

- Girls achieved English proficiency at 3.6 years as compared to boys at 4 years.
- Low-income (eligible for free/reduced-price lunch) students attending Washington Road Map district schools with a high concentration of racial/ethnic populations took less time to be reclassified than did middle-income students.
- Spanish-speaking ELLs took an average of 4.2 years to be reclassified, longer than their Asian counterparts who took an average of 3.4 years.
- Students with learning disabilities took more time to be reclassified than did students without learning disabilities across all native languages represented in the longitudinal study, approximately 5.5 years.

Language is a problem-solving tool. Krashen (1991) recognized the benefits of language learning for all people. He characterized language as a problem-solving tool. Learning a second language, then, is essentially learning a new tool to solve problems, that is, make sense of what is not readily comprehensible. Lessow-Hurley (2013) made the critical observation that language can solve problems on the world stage:

> In the United States, we tend to be linguistically unsophisticated, and our parochial attitudes about multilingualism have hurt us in international trade, national security, and diplomacy. The narrow view we often have about

> multilingualism, along with reactions to increased immigration and population changes, provides a growth medium for language restrictions. (p. 13)

Krashen (1991) noted that second language acquisition is learned in much the same way as first language acquisition. Researchers agree that literacy in L1 is critical for learning L2 (Craig, 2001; Cummins & Ontario Institute for Studies in Education, 1981). Bialystok (2007) indicated that L2 acquisition is highly correlated with facility in L1. Gorman (2012) identified the skills in the native language that are necessary for L2 acquisition: phonological awareness and word recognition skills. Phonological awareness is a metalinguistic skill with which the learner understands the relationship between spoken words and written language (Gorman, 2012). Word recognition skills can be broken down into phonics, or *word attack skills*, and vocabulary. Word attack skills help learners make sense of unknown vocabulary in the context of a passage. If learners have these competencies in L1, learning L2 comes to them more easily (Gorman, 2012).

Jones (2010) investigated whether the use of L1 in the "second language classroom [is] a valuable or damaging resource" (p. 1). The author found that instruction in L1 served as a valuable instrument when developing L2 in the classroom. Jones calculated that when educators permitted students to use their native language in the classroom, proficiency in L2 increased by 50-80%, especially in descriptive and narrative writing.

Weak Languages and Language Differences

A weak language is one in which the learner has little fluency (Bialystok, 2007). Scholarly evidence has suggested that language learners who cannot read in L1 will have significantly greater difficulty learning L2 than those who can read in L1 (Verdugo & Flores, 2007). Because ELLs with a good foundation in L1 skills are more successful in acquiring the L2 language skills, it may be appropriate for ELLs with a weak language (L1) to develop literacy skills in L1 prior to learning L2 (Sweeny & Maso, 2011). El Exámen de Español (The Spanish Exam), for example, is an assessment used by NYS public schools to determine if L1 is a weak language for ELLs. To determine if ELLs are more proficient in Spanish or English, their scores are compared with those on the NYSITELL, an assessment of English language proficiency to place ELLs in either LSI or mainstream classes (NYSED, 2015). These two tests are routinely administered in NYS for initial language proficiency identification purposes only (NYSED, 2015). Exams that measure proficiency in languages other than Spanish are also available upon request from the New York City Department of Education.

Sweeny and Maso (2011) found that ELLs who show an above average level of proficiency in L1 do better when transferring L1 skills to the second language. In fact, the researchers maintained that a proficiency in the mother language is a strong predictor of success in second language acquisition. A student who is weak in literacy skills in L1 needs to develop the requisite metalinguistic and word recognition skills in L1 as a platform for learning L2 (Verdugo & Flores, 2007). By strengthening literacy skills in the native language, ELLs develop cognitive stability in the second language. Although

research has supported the development of Ll before teaching in L2, in most educational settings ELLs who lack a foundation in L1 were taught in L2 (Baker, 2000; Cummins, 2001; Verdugo & Flores, 2007).

Some languages are more complex than others (Bialystok, 2007). English is a combination of Germanic and Romance languages; it has many phonological irregularities and complex spellings. This makes it more difficult to learn than languages such as German and Hebrew, which have fewer irregularities and are more predictable in their phonological structure (Bialystok, 2007). Research has revealed that different cultures have different thought forms that are reflected in their languages (Pae, 2012). If thought forms and linguistic expressions are significantly different between two languages, students from one linguistic community may have greater difficulty learning the language of another linguistic community. Bifuh-Ambe (2009), for example, conducted a case study of a Korean college student who found learning English highly stressful. The study revealed that the structure of English is completely different from that of Korean. The English alphabet is unrelated to the characters of the Korean language. In addition, the study highlighted the highly complex verb tense forms of the English language, which required the subject to think about time in ways that were unfamiliar for her (Bifuh-Ambe, 2009).

BICS and CALP

According to Cummins (1999), language is learned in two separate registers: BICS and CALP. Registers refer to language used in a situation or for a purpose. BICS are vernacular skills, that is, they are learned primarily through verbal interaction with

native language speakers. Used for informal communication, often idiomatic, BICS contains registers of the linguistic community with which the L2 learner interacts socially (Haynes, 2011a). Adolescent learners, for example, will pick up idiomatic grammatical structures, syntaxes, and vocabularies of L2 from their peers. Haynes (2011a) determined that fluency in L2 for BICS can be achieved in approximately 2 years. Other researchers suggested that most ELLs can acquire fluency in L2 for BICS in 2 to 3 years (Diaz-Rico, 2014; Genesee, Lindholm-Leary, Saunders, & Christian, 2006; Ovando, Combs, & Collier, 2011).

Cummins (1999) described fluency in L2 for CALP with a more formal purpose. CALP is necessary for reading and writing not only in an academic setting but also in the workplace. BICS focuses on oral language skills, but CALP is holistic and focuses on reading and writing skills, in addition to oral skills (Cummins, 1999).

CALP skills are literacy skills. They take much longer than BICS to develop. Although fluency in BICS is helpful for learning CALP, certain aspects of BICS, such as idiomatic grammatical structures, can interfere with learning CALP. Because CALP is necessary for both academic and career success, it should be a primary focus of programs for ELLs (Cummins, 1999).

Policies are at odds with research. Education policies reflect no distinction between BICS and CALP; therefore, it stands to reason that policy makers anticipate that ELLs achieve CALP much faster than they do. Educators hear an ELL speaking the second language at a BICS stage in the classroom and may consider them fluent, unaware that the ELL lacks CALP for full fluency (Esposito & Baker, 2013). This mistake can

lead to prescribing and designing inappropriate language-support services for second language mastery. Esposito and Baker (2013) revealed that misinformed policies tend to stigmatize ELLs as slow learners or cognitively disabled.

Cummins's (1999) observation that ELLs with a good foundation in their native language develop English language higher order skills at a quick pace is a double-edged sword. ELLs with a good foundation in their native language approximate native English-speaking peers for BICS. It is conceivable, therefore, that an ELL may do well on the NYS ELA exam having acquired fluency in English for BICS without having developed the fluency for CALP necessary to succeed in a demanding curriculum taught in English.

Since the enactment of NCLB (2002), individual teachers have become more aware of their responsibility to provide equal access to learning in the content areas among ELLs and non-ELLs alike. The Equity and Excellence Commission refers to all students in its 2013 report, "To achieve the excellence and equity in education on which our future depends, we need a system of American public education that ensures all students have a real and meaningful opportunity to achieve rigorous college- and career-ready standards" (U.S. Department of Education, 2013, p. 12). ESSA (2015) continues to hold educators accountable. Educators must prove students' academic progress through state-administered exams that assess all students' language achievements at each school in the system (Conderman & Hedin, 2014). In the case of NYS, a school may be placed on a correction action list and monitored very closely by the NYSED for possible closure

if results among its students on state-administered exams were consistently poor (Johnson & Smith, 2011).

By federal mandate, state departments of education are urging educators to instruct with explicit instructional techniques in collaboration with teachers who address the needs of ELLs with a variety of learning abilities (Conderman & Hedin, 2014) to avoid drastic measures such as closure. Blankstein, Noguera, and Kelly (2015) found that state departments of education are thereby motivated to advise teachers with ELLs in their classrooms to shift to a more CALP-oriented approach, rather than allow ELLs to learn English at their own pace, as they do for BICS. Blankstein et al. have indicated, however, that such fear-based threats are counterproductive:

> While many education policies use fear as a means to motivate, e.g., fear that a school will be closed, that a student won't graduate, that a teacher or principal will be fired if test scores don't improve, and so on, something more than fear (and a monitoring of a performance indicator on assessments) is needed to motivate and inspire stakeholders to work together. The importance of getting all stakeholders to appreciate and embrace a common mission, vision, values, and goals cannot be overstated. (p. 123)

Indeed, here is an opportunity for state departments of education to promote a shared vision for ELLs and their native English-speaking peers in mainstream classrooms, rather than issue warnings for poor performance on a standardized test ill-suited to ELLs, who constitute a significant portion of test-takers.

Language in the Classroom

Teachers need to understand that language is both a means of thinking and a mode of communication (Pae, 2012). This concept is fundamental to classroom instruction and can provide the basis of a shared vision for ELLs and their native English-speaking peers in mainstream classrooms. The process of learning L2 is different from that of learning L1. The former is formal while the latter is informal. Learning L2 is time-constrained while learning L1 is not, implying that L1 is learned at the pace of the learner, whereas L2 is learned at the pace demanded by an institution. Under the pressure of time constraints, students are asked to learn a new sound system, grammatical structure, and vocabulary, and some may have to learn a new system of symbols as well.

Learning a new language involves rich complexities, such as code switching and language use in various domains (Young, 1996). Code switching is a strategy that is usually confined to two bilingual speakers who know the same language. It is common practice for bilingual people to speak different languages in different situations. The native language may be spoken at home, for example, while the second language is spoken only at school or on the job. These complexities may also involve the use of street languages that can be amalgams, such as Spanglish or Nuyorican. Such complexities involve social skills necessary to identify members of different linguistic communities and communicate appropriately (Muysken, 2013).

The classroom needs to be organized around these realities. Instruction should be directed at *additive* rather than *subtractive* bilingualism (Francis, 2005), that is, students should be taught to communicate in both languages. English should not supplant the

native tongue; English should supplement it. Indeed, teachers should use the native language as a resource in the classroom.

Teachers need to study language acquisition. Teachers need to understand how a second language is acquired and the difference between learning L1 and L2 (Craig, 2001). They need to organize their classrooms to maximize students' opportunities to read, write, speak, listen, and ultimately to understand L2. Teachers need to challenge their students to think, learn, and communicate in L2, and they need to encourage and support their students in this endeavor. When teachers interact with an ELL, they need to provide the student with input at the student's level of comprehension (Krashen, 1991; Li, Mitchell, & Howard, 2011). When teachers assume a level of understanding either below or beyond the capability of an ELL, they generate anxiety and reduce the student's self-esteem and motivation.

Teaching a second language to ELLs must be approached as if teaching a new culture (McNeil, 2011). A study conducted in Europe, for instance, found that Moroccan immigrants with access to acculturation orientations at young ages acquired the German language better than did Turkish immigrants without access to acculturation orientations (Becker, Klein, & Biedinger, 2013). Learning L2 is part of an acculturation that ELLs may be processing for the long-term. Because language is the primary mode of communication and the most effective tool for learning, it is the door—and barrier—for entry into the culture. Educators, therefore, should conceptualize the classroom as a gateway to a new culture. The mechanism by which one enters the new culture is language, that is, communicative competence in both BICS and CALP (Cummins, 2012).

A number of internal and external factors influence a student's communicative competence. Internal factors include such personal characteristics as intelligence, motivation, and L1 proficiency (Bialystok, 2007; Young, 1996). External factors include SES, the cultural value of education, and school attendance. Educators must carefully consider these factors when teaching ELLs. Such factors dramatically influence ELLs' academic progress (Hill & Chao, 2009), and external factors can influence internal factors. The culture of a school influences academic motivation by providing positive reinforcement for a good attitude towards school, good behavior in school, and high performance (MacNeil, Prater, & Busch, 2009; Nieto & Bode, 2012). Teachers should affirm and celebrate ELLs' native language assets. They should be careful to model appropriate accommodations for ELLs through research-based practices. These precautions can dispel culture-bound myths about ELLs and reveal ELLs as cultural treasures in the classroom (Herrera & Murry, 2011).

The No Child Left Behind Act of 2001 and the Every Student Succeeds Act of 2015 mandated that teachers pay attention to language acquisition in the classroom. In response to the NCLB (2002) mandate, the NYSED not only incorporated the CCSS in its curriculum but also required all policy makers, district administrators, and school educators to develop instructional methods that meet the needs of ELLs. Since 2013, the NYSED has encouraged teachers to teach ELA in L2 while using students' L1 as a resource in the classroom (TESOL International Association, 2013). Since teachers across all subject areas are responsible for students' progress in reading skills for cognitive development in English, reading is considered fundamental (Hopewell,

McLaughlin, & Derby, 2011) for English language learning. Teachers committed to preparing ELLs for academic success and lifelong learning should teach ELLs with explicit instructional techniques to accomplish specific learning outcomes (Stravula, Leonidas, & Koutselini, 2011).

The provisions of ESSA (2015) for assessing ELLs after their third year of residency in the United States suggest that policy makers have high expectations for ELLs' achievement on high stakes assessments. Educators, therefore, find it difficult to address the variety of language proficiency levels among ELLs in their classrooms. The challenges ELLs face in school are enormous hurdles for public-school teachers. Teachers need training to employ culturally responsive instructional methods that promote self-efficacy and rapid learning for ELLs in the subject areas (Boisvert & Rao, 2014).

In a comprehensive issue brief, TESOL International Association (2013) suggested three ways for educators to shift their approach in the classroom to incorporate the CCSS and meet the needs of ELLs, especially in the area of English Language Arts/Literacy. First, educators must incorporate content-rich nonfiction. For example, teachers should tap ELLs' background knowledge of nonfiction texts. They should incorporate ELLs' native language skills to support the new skills ELLs are learning in English, even if that means modifying the grade-level of the nonfiction text to provide comprehensible input necessary to develop English proficiency. Educators should also implement the language proficiency standards to assist ELLs (TESOL International Association, 2013).

Secondly, educators who teach ELLs reading, writing, and speaking should vary the texts they use. ELLs need to be exposed to different kinds of texts to learn the academic language they need to support their work in all the content areas. Their teachers should provide linguistic frameworks in English so that ELLs know how to evidence their work. ELLs need to explicitly learn how to use sources to cite their work, summarize without plagiarizing, and respond to a variety of texts, such as persuasive as well as narrative and argumentative writing. In addition, educators should challenge ELLs in their classrooms to communicate through meaningful dialogue and complex writing (TESOL International Association, 2013).

Thirdly, academic language should be a major focus in the classroom. For example, when teachers challenge ELLs to evaluate a complex text, they must teach them to identify and understand the cognitive language found in the passage. Terms, definitions, and multiple meanings of formerly unfamiliar words should expand ELLs' knowledge of cognates, prefixes, suffixes, and root words (TESOL International Association, 2013).

Relevance is critical for language acquisition. Although the CCSS have increased the rigor of education for Grades K through 12, students at the secondary level continue to do poorly on essays for entrance to city and state colleges. As middle school prepares students for the secondary level, it is not surprising that researchers have found a lack of English proficiency, especially in reading skills, among Grades 6 through 8 (Hernandez, 2011). Hernandez (2011) examined reading support services at middle schools in Los Angeles, California, and found that students achieved a mean score of

66% on the state English proficiency assessment. Luster (2011) referred to students at the secondary level as "the forgotten population of non-proficient English students making up more than 30% of school populations" (p. 71).

To counter this trend, Early and Decosta (2012) have suggested activities for secondary level students, especially for those drafting college admission essays. The authors designed these activities to guide educators in teaching linguistically diverse populations. They encouraged educators to think of writing as a vehicle for students to succeed both academically and professionally, motivating students by incorporating real-world activities, such as drafting college admission essays (Early & Decosta, 2012). Honigsfeld and Giouroukakis (2011), too, advised educators to motivate students by engaging them in personally relevant exercises. The authors implied, however, that ethnic minorities at the secondary level are not able to take full advantage of a rich curriculum due to state mandates. Educators are obligated to use a scripted curriculum composed of language skills, drills, and learning skills to prepare their students for standardized exams. This approach leaves little room for real-world tasks that can motivate students to succeed in college and career. Linguistically diverse students need to understand that when they learn to speak, write, and read English, they are learning skills that will support them socially as well as professionally, opening windows of opportunity for them in their communities (Early & Decosta, 2012).

It is interesting to note that Plymouth State University prepares first-year students in critical thinking strategies through writing. Critical thinking is one of a number of crucial "tools of gathering and evaluating information" (Plymouth State University

Academic Catalog (PSUAC), 2011, p. 63). First-year students attend composition centers where they learn "the importance of reading and writing for inquiry, learning, thinking and communication" (PSUAC, 2011, p. 224). Here and at colleges and universities across the United States, students develop cognitive skills that are necessary for academic and professional success. Reading and writing English is crucial for ELLs to achieve college- and career-readiness in the 21st century.

Language acquisition demands an instructional strategy. Early and Decosta (2012) mentioned that educators should organize their classrooms around efforts to engage children who come from diverse cultures in an English-speaking culture. Teachers should plan a curriculum around developing communicative competence in English. Students need to communicate with each other and with adults in a variety of ways, especially cooperatively. Instructional strategy involves peer tutoring, cooperative learning, using libraries, conducting research, and searching the Internet to gather information. In this way, students can learn conversational as well as academic language skills (Early & Decosta, 2012).

Research has supported this strategic point of view. López (2011) advised, "Educators must focus not only on increasing ELLs' ability with the English language but also on clearly and carefully selecting strategies that will enhance the students' cognitive development and academic language development, simultaneously" (p. 5). Firmender, Reis, and Sweeney (2013) urged educators to plan effective and meaningful strategies to engage all students, ELLs and non-ELLs alike, to enhance their reading and learning skills for academic success.

Researchers have devised various strategies to assist teachers in building academic literacy and cognitive skills among ELLs (Conderman & Hedin, 2014). Conderman and Hedin (2014) found, however, that teachers struggle with the increasing number of ELLs in their classrooms and not enough schools are able to offer their teachers the proper professional development necessary to effectively meet the needs of ELLs. Teachers rely on simple solutions instead. They adopt what they already know about literacy and cognitive development without any knowledge of second language acquisition (Conderman & Hedin, 2014).

Asking questions is an instructional strategy. Youb (2010) found empirical evidence to suggest that simply asking questions of students has a profound effect on learning, especially for Former ELLs in mainstream classes: "There are specific types of teacher questions that can promote ESL students' disposition for learning and language development" (p. 112). Youb identified three different qualities of questions that teachers found particularly powerful when scaffolding learning for Former ELLs in mainstream classrooms. They are (a) coaching questions, (b) facilitating questions, and (c) collaborative questions.

Youb (2010) suggested that teachers include coaching questions in their lesson plans during the first few months of the school-year. Facilitating questions are more supportive towards the middle of the school-year, after both teachers and students have assimilated coaching questions as a natural part of the discourse in the classroom. Collaborative questions, Youb pointed out, are helpful at all times because they

encourage students to share personal experiences, thereby building confidence in the second language (Youb, 2010).

Coaching questions engage students' metacognition skills to monitor their own thinking. When an ELL sees the word *tidy* for the first time, for example, a coaching question may call attention to the surrounding text. To answer, the student must formulate what the author is describing and, thereby, determine the meaning of the word. Coaching questions are used to "guide students toward the instructional and behavioral objectives they have set for themselves. The role of coaching questions was similar to telling, but it allowed students to exert a small degree of ownership through their responses" (Youb, 2010, p. 118).

Youb (2010) found that facilitating questions support academic language development, especially among ELLs. They reveal structures of the English language that facilitate communication with classmates. They invite students' input while exploring new vocabulary in context. Asking facilitating questions makes for a supportive atmosphere in the classroom by encouraging students to elaborate and to enter into dialog with fellow students. This technique builds confidence among ELLs by soliciting students' opinions and validating "students' creative language use" (Youb, 2010, p. 118).

Collaborative questions call on both student and teacher to enter a dialog to share experiences. Cummins (2000) characterized ELLs as rich resources because they bring diverse cultural and linguistic experiences to the discourse in the classroom. Sharing experiences builds confidence among ELLs because both teachers and their English-

speaking peers recognize them for the multi-cultural assets that they intuitively know themselves to be.

Teachers in the mainstream classroom need a set of strategies and tactics at the ready for the benefit of Former ELLs. Of even greater importance, however, ELLs need sufficient time in language-supported programs to achieve CALP. If students are to participate competently in an English-speaking culture, they need to be literate in English. Bialystock (2007) criticized language development programs that focus too much on oral communication and not enough on literacy. Such pedagogy follows from a flawed public policy that presumes that literacy in a second language can be learned in a single year.

Providing English Language Learners with Language-Support Services

Teachers must use different techniques and approaches when teaching ELLs from diverse backgrounds. Freeman and Freeman (2006) stated, "Readers base their predictions on linguistic cues, on their background knowledge, and on the inferences, they make" (p. 55). The linguistic cues that the researchers described are known as sociopsycholinguistic, and such cues are very beneficial for ELLs in the classroom. Only when reading is taught through context, and not in isolation, can ELLs use such strategies to construct meaning from text. Calderon (2007) also mentioned the use of content instruction to develop language. This is scaffolding. Teachers must activate their ELLs' prior knowledge and build on it so that they (ELLs) can create meaning from text. How conveniently learners connect with the content being taught is a function of how meaningful the context is to them. Scaffolding ensures that ELLs are motivated and

actively learning from the curriculum tasks. Teachers must expose ELLs to meaningful, contextualized language that stimulates their (ELLs') cognitive and academic growth.

Finnan-Jones, Murphy, Sinatra, and Parmer (2015) conducted a mixed method study to measure the impact of specific arts-based mathematics instruction on ELLs in Grades 4 and 5. The authors found that ELLs who received arts-based intervention frequently completed the post-test more successfully than they did the pre-test. Similar techniques–ranging from strategic questions and class discussion and debates to art, poetry, and reading aloud—to scaffold a rigorous academic curriculum will likely benefit Former ELLs in mainstream classes (Early & Decosta, 2012).

Quality matters. Calderon, Slavin, and Sánchez (2011) asserted that quality matters in the instructional program developed for ELLs. Teachers should not water down a curriculum, the researchers maintained, because bilingual students are in their classrooms. Proper instruction is the primary ingredient for students' success whether they are ELLs or not. Calderon et al. found that ELLs, especially, benefit from a well-rounded education, highly qualified teachers, and good methods and materials. Just like their monolingual peers, ELLs benefit from high quality, extended instruction in their native language delivered in a socioculturally nurturing environment.

Calderon et al. (2011) discovered that school structures, such as administration, language arts and subject-area content must be related to research and practice if language-supported programs are to be successful. Coleman and Goldenberg (2010), furthermore, discussed models for language-support services that enhance teaching practices in the classroom for ELLs. The authors included entire schools in their study's

sample and provided scenarios to identify specific best practices for teachers of ELLs to incorporate in their classrooms. The Council of the Great City Schools (2009) examined organizational structures including the hiring of teachers and studied how these structures can impact academic achievement among ELLs. The study concluded that successful language-supported programs should have an agreed-upon vision for reform, specifically that educators and administrators district-wide should establish systematic reforms that promote a high level of academic achievement among ELLs (Council of the Great City Schools, 2009).

Dual Language Immersion programs are popular. Among popular models for language-support services that enhance teaching practices in the classroom for ELLs, Fortune and Christian (2012) have identified a movement away from ENL and bilingual programs to Dual Language Immersion (DLI) programs. The philosophy behind DLI programs is to continue to develop bilingual/biliterate ELLs together with English Proficient learners in the classroom by focusing on a strong academic program in both English and the native language. DLI programs foster pride among ELLs in their own heritage as well as respect for both their native culture and the culture of the second language. The principle at work in the DLI model is that developing linguistically and culturally diverse learners leads to higher outcomes in language proficiency, academic achievement, and self-esteem. Fortune and Christian (2012) saw that many schools in New York City have begun to adopt, and many more have found success using, the DLI model for language-support services. Across the United States, DLI programs are growing in popularity (Fortune & Christian, 2012).

Valentino and Reardon (2014) compared two groups in a DLI program based on language: Latino ELLs and Chinese ELLs. The researchers concluded that students who received instruction in both L1 and L2 consistently achieved better outcomes than did those who received instruction in L2 only. Collier and Thomas (2004) conducted a series of longitudinal studies in which they compared academic achievement among ELLs in a variety of language-supported programs, including Transitional ESL programs, Content Based programs, ESL programs, both Early Exit and Late Exit Bilingual programs, and Dual Language programs. The authors concluded that learners who participated in programs where academic content was taught in both the learner's native language and in English achieved better outcomes than did learners who were taught academic content in English only.

Additionally, learners who spent more time in those language-supported programs achieved better outcomes than did learners who spent less time in those programs (Collier & Thomas, 2004). The researchers concluded that in the Early Exit program, ELLs achieved below the norm. In the Late Exit program, however, ELLs in the DLI program scored higher than did those in the English Immersion program. Collier and Thomas (2004) also noticed that both English Proficient learners and ELLs in DLI programs scored above the norm on English reading tests. Their research certainly indicated that students who attended LSI achieved better outcomes than students who did not attend LSI. More to the point, however, those who received instruction in their native language achieved better outcomes than did those who received instruction in English (Collier & Thomas, 2004).

Two years earlier, Thomas and Collier (2002) laid the groundwork for their longitudinal studies. The researchers found that language minority (LM) students participating in Dual Language programs maintained higher academic achievement levels through their last years of high school and experienced lower dropout rates than did those participating in other programs (Thomas & Collier, 2002).

It appeared from these findings that segregated, remedial programs failed to close the achievement gap among ELLs once they were placed in mainstream classes. In fact, Thomas and Collier (2002) observed that the achievement gap grew wider in the ensuing years among ELLs participating in remedial programs. The researchers recommended developmental rather than remedial programs for this sample population (Thomas & Collier, 2002).

A portion of the sample population for Thomas and Collier (2002) was LM students educated in their native country for at least 4 to 5 years before entering U.S. public schools. This group participated in a bilingual program and achieved 34th NCE, equivalent to the 23rd percentile in the English subject areas by the time they reached 11th grade in high school and transitioned into the mainstream classroom. The fact that these students' instruction in the English subject areas was interrupted for 1 to 2 years, is a testament to the strength of bilingual programs. They caught up to their native English-speaking peers in the remaining year before they finished high school (Thomas & Collier, 2002).

Thomas and Collier (2002) also found that quality ESL/ENL programs alone did not close the achievement gap. Native language instruction, however, in tandem with

subject area instruction in the native language, closed the gap by half: "Students who receive at least 5-6 years of dual-language schooling in the United States reach the 50th NCE/50th percentile in L2 by Grade 5 or 6 and maintain that level of performance because they have not lost any years of schooling" (Thomas & Collier, 2002, p. 335).

ELLs who participated in bilingual programs and entered mainstream classes outperformed native English speakers when assessed in reading in both English and Spanish (Thomas & Collier, 2002). The native Spanish speakers performed at 64th NCE while the native English speakers performed at 55th NCE in the lower grades and even lower in Grade 8 at 45th NCE. ELLs who participated in bilingual programs, however, when assessed in English, performed at the same academic levels (64th NCE) as students instructed in English when they reached middle school years, but when they reached high school years, the bilingual students outperformed the students instructed in English (Thomas & Collier, 2002).

Notwithstanding their recommendations for Dual Language programs over second language programs, Thomas and Collier (2002) urged educators to design all LSI programs to meet learners' developmental needs, including "linguistic (L1-L2), academic, cognitive, emotional, social, [and] physical" (Thomas & Collier 2002, p. 335). Teachers should challenge students to work cooperatively in the classroom, solving problems around thematic solutions, challenging and engaging students' interests. Writing and reading curricula should feature rich, real-life situations, using students' bilingual skills as a resource in the classroom and avoiding the translation method. This awareness can guide educators to create natural learning classrooms. Because every

child has a mobile device, for example, educators should integrate these devices into the learning environment, teaching language naturally across the curriculum (Thomas & Collier, 2002).

Howard, Sugarman, Christian, Lindholm-Leary, and Rogers (2007) identified several principles to guide administrators in successful planning and implementation of Dual Language programs for ELLs. These guiding principles were (a) assessment and accountability, (b) curriculum, (c) instruction, (d) program structure, (e) family and community, (f) support, and (g) resources. These principles support key components of DLI programs. Family and community engagement, for instance, provide a powerful example for students to take advantage of the program. Many DLI programs offer seminars to parents in the school community on topics such as ESL and foreign language instruction. These seminars foster an appreciation of the adopted culture, as well as practical language skills to support ELLs' parents in their efforts to become productive citizens in their adopted society. Such components share the DLI program's expectations, mission, and vision with the school community, which validates parents' and students' commitment to the program.

Language-supported programs such as the DLI and the transitional-bilingual models have been proven successful. Murphy (2014) conducted a study in a large urban elementary school, where each grade was taught through either the dual-language model or the transitional-bilingual model. The author administered a pre- and post-test on Spanish language proficiency and conducted an ANOVA on the progress that students had made in the native language (Spanish). Murphy compared results for each model and

found that ELLs in the transitional-bilingual program did very well in the areas of the four modalities: listening, speaking, reading, and writing, as well as in word and phoneme recognition. In the area of verbal skills, ELLs in the dual-language program demonstrated a significant increase in proficiency. Both models proved successful (Murphy, 2014).

Educators teach English in students' native languages. More and more educators recognize that teaching in the native language is a component of language-support services for ELLs. Goldenberg (2013) flatly stated that the native language or home language should be used in the classroom as an instructional tool or as a resource. According to Goldenberg, this approach helps ELLs to develop English language proficiency because they are transferring learned vocabulary and skills from their native languages to the second language. Goldenberg also found that instruction in the native language enhances academic language proficiency; however, he made it clear that ELLs need ample occasions to practice the English language through various academic tasks to develop academic language proficiency.

Cummins (2012) offered the critique that though literacy instruction in L1 is necessary for L2 proficiency, the U.S. National Literacy Panel on Language-Minority Children and Youth failed to acknowledge a lack of literacy in L1 among ELLs. Similarly, according to Cummins, several reports submitted by the Programme for International Student Achievement conducted by the Organization for Economic Cooperation and Development did not acknowledge the benefits of bilingual education as a feasible or realistic way to teach ELLs. Cummins warned that this kind of thinking is

not aligned with empirical evidence. He emphasized the importance of integrating print access and literacy skills in the classroom as one way that ELLs could transfer L1 skills to L2 acquisition (Cummins, 2012).

Educators use teaching strategies in both L1 and L2. Moughamian, Rivera, and Francis (2009) suggested the following effective strategies for language-support services on behalf of ELLs: (a) provide scaffolding to accelerate learning, (b) maximize learning time in the classroom, and (c) include research-based teaching strategies. These strategies include varying pronunciation and tone when reading a text, simplifying new terms and new vocabulary, as well as presenting grammar in context. Moughamian et al. also suggested repetition to introduce vocabulary in phrases, then sentences, and then patterns of sentences. In this way, learners learn strategies to use context clues for meaning as they extensively model the teacher's reading and writing. Learners are thereby allowed to make connections to themselves and to the world around them to enhance their knowledge and experiences. Demonstrations, video clips, visuals, graphic organizers, and group instruction serve to further scaffold instruction for the student, as well as differentiate the learning to meet the needs of the learner.

Moughamian et al. (2009) suggested two methods that teachers can use to scaffold both the native language and the second language: The Cognitive Academic Language Learning Approach (CALLA) and the Sheltered Instruction Observation Protocol (SIOP). The CALLA consists of strategies for scaffolding to teach language through content instruction (Chamot & O'Malley, 2009). The SIOP consists of eight

components proven to be successful for ELLs to develop English language skills while learning grade-level content (Vogt & Echevarria, 2007).

The CALLA teaches learning strategies to students. Learners learn content while simultaneously acquiring academic language. Moughamian et al. (2009) maintained that learning strategies develop higher order thinking skills. Such skills include evaluating and synthesizing text, making inferences, and drawing conclusions. Learning strategies also develop metacognitive skills to tackle content and language learning.

The SIOP gives context for students' learning. ELLs find lessons more comprehensible when teachers provide relevant context. Using either receptive listening or reading, speaking, and writing productive language skills, learners make connections between the lesson topic and lesson activities. Teachers scaffold the instruction by speaking clearly, using visuals, emphasizing new vocabulary, and connecting new concepts to learners' already-lived experiences. Peer interaction is also an effective strategy for the SIOP (Moughamian et al., 2009). Educators use the SIOP in the classroom to integrate lesson activities in both the native language and the second language. To attain higher levels of academic achievement among ELLs, the SIOP is gaining popularity in language-support services (Moughamian et al., 2009).

Olsen (2010) supported these strategies. Olsen surveyed 40 secondary school districts in Long Beach, California. The researcher's findings discovered *Long Term ELLs* who received language-support services in excess of 6 years without acquiring academic language proficiency. Olsen recognized that while these students received language-support services, they still fell behind. The districts' administrators recognized

that the situation was a problematic issue for which they were responsible. Olsen made guidelines for the implementation of more effective language-support services for Long Term ELLs, and the districts' administrators accepted Olsen's recommendations. Together, they designed courses that addressed the needs of all ELLs. These new courses made curriculum at the secondary level more comprehensible for learners and more rigorous at the same time, to promote higher academic achievement among ELLs in reading and writing English.

Olsen (2012) assisted in piloting these programs and observed that the districts' educators were working in isolation despite their desire to exchange ideas and information. Teachers teaching ELLs wanted to do a good job, but the resources they needed were not in the classroom. They needed appropriate curricula and formative assessment tools. They needed coaching. Vialpando, Yedlin, Linse, Harrington, and Cannon (2005) addressed this need early on by creating an instructional guide to help educators to access resources that support ELLs in the classroom.

Recent research has tested a plethora of strategies to support how best to teach ELLs. I have presented those strategies that have particular relevance for second language acquisition. Teachers of ELLs in both language-supported programs and mainstream classrooms, however, need coaching to avail themselves of all the guidance the research has to offer (Vialpando et al., 2005).

Implications

This quantitative, quasi-experimental archival study was designed to guide the process of making general conclusions about how to align current NYS regulations and

assessment policies to the most recent research about how best to support ELLs learning CALP in English. The study answered the research questions in the affirmative. Results showed a significant difference in NYS ELA standardized assessment achievement scores for students attending the ENL program when compared to those attending the DL program. The data suggested that native language instruction in bilingual and DL programs develops second language proficiency more effectively than do ENL programs. Such scientific results may guide educators and administrators to make better instructional decisions in support of ELLs, eliminating misconceptions and ineffective teaching strategies that are not helping ELLs to succeed.

To support ELLs, the NYSED made changes on the NYSESLAT, the standardized assessment that qualifies ELLs to exit LSI and join mainstream classes. As of spring of 2015, the NYSED has fully aligned the NYSESLAT to the Common Core Learning Standards (CCLS) and the new Bilingual Common Core Progressions. Prior to spring 2015, the NYSESLAT used Beginning, Intermediate, Advanced, and Proficient to designate Performance Levels on the test. These Performance Levels are now designated much more relevantly for ELLs: Entering, Emerging, Transitioning, Expanding, and Commanding. Furthermore, each of the modalities, speaking, listening, reading, and writing, now has its own subtest, and each is administered in a separate session, one booklet per session. ELLs are asked to respond to written prompts and write short answers to constructed-response questions (NYSED, 2015). In addition, the NYSED has required school districts to provide at least 2 years of transitional services to support Former ELLs when they exit LSI, that is, pass the NYSESLAT and enter mainstream

classes and that these transitional programs be scheduled during the regular school day (NYSED, 2014, 2015).

These NYSED policies are in line with the federal guidelines mandated by ESSA (2015). Indeed, the NYSED had implemented transitional services for Former ELLs since 2014 when the new law called for compliance with this requirement by 2017 (ESSA, 2015). NYS school districts, however, will need to provide training in order for teachers to offer effective transitional programs by that time. The new law also required state education departments to monitor mandated services and many school districts in NYS are expected to comply.

The Every Student Succeeds Act of 2015 has called for more accountability under the CCSS to ensure that all students, including ELLs, will be college- and career-ready. This federal mandate has been a long time in coming. Studies as early as Menken (2006, 2009), Zehr (2007), Shohamy (2008) and Honigsfeld and Giouroukakis (2011) have documented the discontinuance of LSI throughout the United States on account of mandatory standardized assessments for all students, including ELLs. Administrators and educators are motivated to teach to the test, an especially inappropriate method of instruction to support ELLs. Test preparation fails to implement culturally and linguistically instructional practices to develop cognitive academic language. Zehr offered a stark example of discontinued LSI at the Roundy Elementary School in Columbus, Iowa. School administrators had established a daily literacy block for Hispanics who had recently arrived in the lower grades at the school. The program was conducted in both English and Spanish to develop academic vocabulary in both

languages. The principal, Daniel L. Vogeler, confirmed that he was forced to eliminate the literacy block in favor of full English-only instruction programs because NCLB (2002) mandated standardized testing (Zehr, 2007).

It is critical for the NYSED to hold educators and schools accountable for creating programs that will provide ELLs with every possible opportunity to succeed in college and career. To that end, NYS educators and policy makers must agree on appropriate measures to demonstrate that schools are achieving this goal. I plan to share with educators and administrators my recommendations for specific measures to evaluate programs to benefit ELLs by offering a professional development curriculum, participating in professional meetings, and blogging to initiate relevant discussion among NYS educators and administrators with policy makers.

Summary

Research suggests that ELLs with a good foundation in their native language develop English language higher order skills such as inferring, evaluating, and analyzing at a quicker pace than do those with no foundation in their native language (Baker, 2000; Cummins, 1991, 2000; Skutnabb-Kangas, 2000; Thomas & Collier, 2002). Dual Language programs rely on native language proficiency to acquire a second language. This quantitative, quasi-experimental archival study contributed to the extant research to prove that LSI program type is associated with achievement scores on standardized assessments. Specifically, the study's results showed that a DL program supported better outcomes on the NYS ELA exam among ELLs when compared to an ENL program. ELLs are not performing at grade level on the NYS ELA standardized exam (NYSED,

2009-2017), and NYS policies to assess ELLs' academic achievement are not aligned with research on how best to support ELLs. This study's results have potential to produce positive social change.

Section 2 of the study focuses on the methodology used to answer the research questions:

RQ1. What is the difference in the NYS English Language Arts standardized assessment achievement scores for ELLs attending the English as a New Language program compared to the Dual Language program for 2014, 2015, and 2016?

RQ2. What is the difference in the NYS English Language Arts standardized assessment achievement scores for ELL students in the English as a New Language program compared to the Dual Language program for 2016 while controlling for SWD?

In addition, this section also contains a complete quantitative data analysis of the results of the tests conducted to answer the research questions and test the hypotheses. In Section 3, I propose a professional development curriculum and materials (Appendix A) based on the findings of my study. I also present a rationale and review of the literature that supports this project, a plan to evaluate the project, and a discussion of the project's implications. In Section 4, the final section of the study, I state my conclusions and reflect on their implications for social change.

Section 2: The Methodology

This section consists of six parts. In the first part, I discuss the research design I chose. In the second part, I describe the study sites and the study sample population, as well as my role as the researcher. The third part includes an explanation of the data instrument I used along with the reliability and validity statistics for the standardized test. In the fourth part I present the process I employed to obtain the data required to address the research questions, including application for approvals to obtain the data. The fifth part includes a discussion of the limitations of the study and the precautions I took to protect students' information. In the final part I display the results and discuss my analysis of the results.

Research Design and Approach

Given the parameters of my research questions and hypotheses, it was clear that assigning participants to a treatment and a control group was neither feasible nor recommended. Data for the dependent variable of my study, NYS ELA exam scale scores, were archival data. Groups characterized by the independent variable of my study, LSI program type, had already been established. Each site school represented an established group supported by a different LSI program type: one site school used a DL program exclusively and the other site school used an ENL program exclusively. Because of the already established groups, I chose to use a quasi-experimental approach.

For my study, I tested for the assumption of normality on the dependent variable, NYS ELA exam scale scores. The findings of the Kolmogorov-Smirnov test were not statistically significant for 2014, 2015, or 2016 scores ($p > .05$), suggesting that the

assumption of normality was met. The assumption of sphericity was met due to Mauchley's test indicating nonsignificance (p = .167). In addition, I matched the sample groups, one at each site school representing the independent variable—one school employed only the ENL program, and the other school employed only the DL program—to control for factors that are known to influence standardized assessment achievement scores, such as ethnicity, SES, and gender (Fleming, 2011; Thomas & Collier, 2002).

The purpose of this study was to determine if there was a significant difference in the NYS ELA standardized assessment achievement scores for ELLs attending the ENL program when compared to those scores for ELLs attending the DL program and to make general conclusions about the influence of the type of LSI program on standardized assessment achievement scores. I answered two research questions:

RQ1. What is the difference in the NYS English Language Arts standardized assessment achievement scores for ELLs attending the English as a New Language program compared to the Dual Language program for 2014, 2015, and 2016?

RQ2. What is the difference in the NYS English Language Arts standardized assessment achievement scores for ELL students in the English as a New Language program compared to the Dual Language program for 2016 while controlling for SWD?

Setting and Sample

Preliminary analysis in the form of descriptive statistics is important in any study within the field of the social sciences. In my opinion, such analysis serves to remind the

reader that human beings were involved to generate the data and the relationships within the data. Before presenting the results of my hypothesis testing, I will provide a brief overview of the study setting and the two samples of ELLs that I analyzed for the study. I chose the two schools for my study not only because each school exclusively used one of the two LSI programs that I was comparing but also because the two schools were relatively similar in ELL population size, SES, and SWD populations. Furthermore, the SWD population of each school was ample enough to include this subgroup in the study's sample.

The study sites were two urban middle schools located in low-income neighborhoods as defined by the New York School Report Card (NYSED, 2009-2017), which I shall term Middle School A and Middle School B. These schools were ethnically and culturally diverse. Researchers in the field have been consistently careful to examine factors of their sample populations that have appeared to influence academic achievement. Fleming (2011), for example, identified the following factors that influence achievement scores on a standardized assessment: (a) past student attainment, (b) SES, (c) school size, (d) location (rural or urban), and (e) school sector (public, private, or religious). Fleming accounted for past student attainment on a standardized assessment to focus his study's measurement on incremental improvement rather than achievement to date. Students with low SES (e.g., those students who attended a school located in a low-income community) were likely to do poorly academically, were less engaged at school, and were often absent from school (Fleming, 2011). If a school was in the city, students tended to do better academically than did students in schools located in rural

areas, where they were less exposed to innovations and new initiatives (Fleming, 2011). Fleming found that if grouping the sample population does not match for school sector, whether public, private or religious, then data for student attainment separates into three distinct groups, one for each sector. For my study, I selected site schools consisting of students that could be described similarly by the factors identified by Fleming. Furthermore, I matched such factors when grouping the sample population.

Kim and Suárez-Orozco (2015) conducted a study to analyze behavioral engagement. They used the following program measures of effectiveness: (a) school participation; (b) peer, teacher, and school interactions; and (c) cognitive engrossment. Identifying language as a mode of social engagement, the researchers found that ELLs with high English language proficiency attained higher grades for each successive school-year, and ELLs with low initial English language proficiency attained declining grades for each successive school-year (Kim & Suaréz-Orozco, 2015).

Kim and Suaréz-Orozco (2015) identified over 400 respondents from a sample of students born in Central America, China, the Dominican Republic, Haiti, and Mexico. Each student attended one of 50 urban schools in Boston and San Francisco, and each student's average residency in the United States was 4 years (Kim & Suaréz-Orozco, 2015). Although the survey spanned a total of 5 years, the authors relied on results from over 350 students who completed the last 3 years of the survey.

In addition, Fleming (2011) highlighted behavioral engagement as a critical ingredient for effective LSI programs to support ELLs' academic success in the long run because the researcher suspected that behavioral engagement may be associated with

achievement scores on a standardized assessment. It stands to reason that students who have a positive relationship with their teachers may be more motivated to do homework than might students who do not have a positive relationship with their teachers. The study suggested that effective LSI programs should emphasize social structures and community activities to support ELLs.

The following factors identified by Fleming (2011) may have influenced outcomes on the NYS ELA standardized assessment for my sample population: (a) past student attainment, (b) SES, (c) school size, (d) location (rural or urban), and (e) school sector (public, private, or religious.) I have described these factors for my study's sample and setting in Table 7 and Table 8 as well as the accompanying Figure 1 and Figure 2.

Table 7.

Description of Study Sites

Study sites' ELL population size	Middle School A ELLs (n = 99)	Middle School B ELLs (n = 72)
School enrollment*	1,028	325
Socioeconomic status*	88%	92%
Female enrollment	45%	54%
Urban*	100%	100%
Past student attainment (NYS ELA Levels 1 and 2 three study testing years)*	77%	77%
School sector public*	100%	100%
Attendance rate	93%	95%
SWD enrollment	22%	23%
Free/reduced-price lunch enrollment	94%	97%
Home language = Spanish	56%	53%
NYS ELA Levels 1 and 2 (three study testing years)	77%	77%

Note. English Language Learners (ELLs); Students with disabilities (SWD); New York State English Language Arts (NYS ELA). Source: NYC DOE ELA data; percentages are of total enrollment
*(Fleming, 2011)

Table 8.

Description of English Language Learners Populations at Study Sites

ELLs	Middle School A (*n* = 99)	Middle School B (*n* = 72)
Female enrollment	46%	43%
Asian student enrollment	34%	0%
Black student enrollment	2%	0%
Hispanic student enrollment	53%	100%
White student enrollment	10%	0%
SWD enrollment	37%	43%
Free/reduced-price lunch enrollment	98%	97%
Home language = Spanish	52%	100%
NYS ELA Levels 1 and 2 (3 study testing years)	100%	99%

Note. English Language Learners (ELLs); Students with disabilities (SWD); New York State English Language Arts (NYS ELA). Source: NYC DOE ELA data; percentages are of total ELL enrollment.

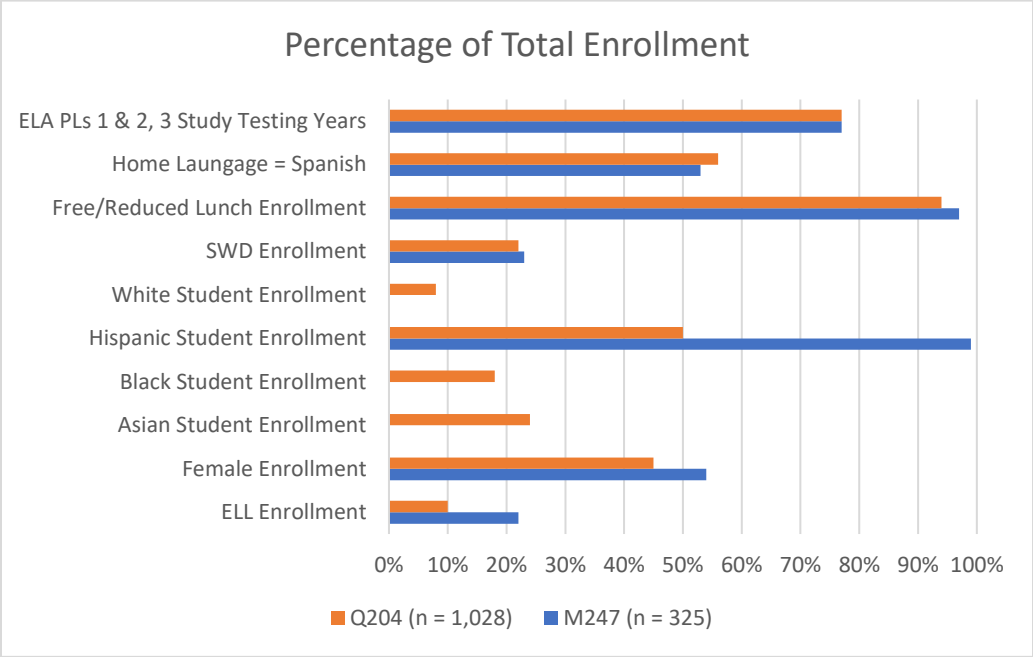

Figure 1. Percentage of total enrollment. English Language Learners (ELLs); Students with disabilities (SWD).

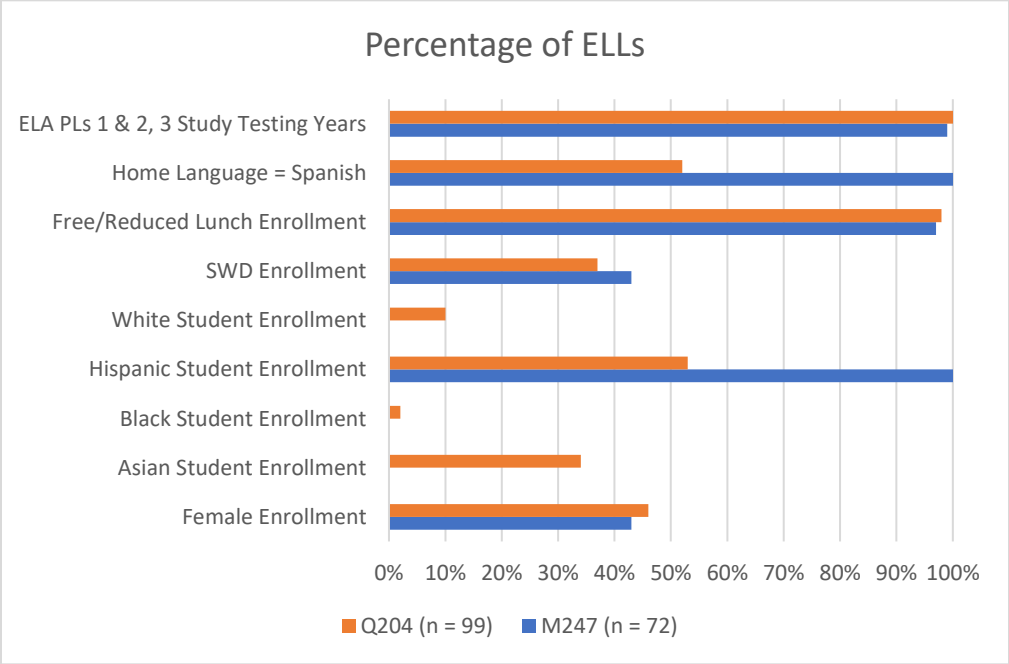

Figure 2. Percentage of English Language Learners (ELLs). Students with disabilities (SWD).

Among these five factors, three are identical for both Middle School A and Middle School B: (a) past student attainment (77% at Levels 1 and 2), (b) location (urban) and (e) school sector (public). One is very similar: (a) SES (measured by free/reduced-price lunch status: 92% and 88%). The similarities that the two site schools share make it possible to make general conclusions about the influence of LSI program type on achievement scores, despite the quasi-experimental approach. If all these factors are considered equal for both schools, then the only relevant difference between them is LSI program type: ENL versus DL. If the data shows a difference in NYS ELA standardized assessment achievement scores between the two schools, then the difference is more likely due to LSI program type than if the two schools were not similar.

The projected size of the sample group was as many as 1,353 students. Students were identified by the LSI program in which they learned English. Each program type was employed exclusively at each of the two site schools. This facilitated classification of participants as ELLs enrolled in a DL program and distinguished them from ELLs enrolled in an ENL program. I followed the protocol listed in Table 9.

Table 9.

Protocol Timeline

First through third weeks	Receive approval from Walden IRB for my study and my plan to obtain data. Receive approval from the NYC DOE Research and Policy Support Group (RPSG) for my Data Request to obtain NYS ELA exam scale scores.
Fourth week	Select sample and control for extraneous variables.
Fifth and sixth weeks	Obtain data for NYS ELA exam scale scores from RPSG.
Seventh and eighth weeks	Prepare spreadsheet of NYS ELA exam results obtained from RPSG. Upload data into SPSS.
Ninth and 10th weeks	Test hypotheses and answer research questions.
11th through 15th weeks	Interpret results and prepare charts.

Note. New York State English Language Arts (NYS ELA); New York City Department of Education (NYC DOE), Walden University Institutional Review Board (Walden IRB).

Setting

Middle School A Study Site. Middle School A is in New York City. Educators at the school have built partnerships with community-based organizations. Youth Police Academy, Zone 126, City Year, St. John's University Gear Up, HANAC Inc., and Jacob Riis Settlement provided the school community with programs and activities including athletic events, parent events, Adult ESL classes, violence prevention programs, college trips, a career day, and community service. Professional development was a high priority among teachers at Middle School A. The school's administrators were committed to use

NYS standardized assessments to adjust curricula and inform instruction. Curricula were aligned with the rigorous demands of the CCLS.

Middle School B Study Site. Middle School B is also in New York City. Like Middle School A, the school was committed to community building through the implementation of inquiry-based work to solicit professionals in the community to create comprehensive advisory structures for teachers, students, and families to thrive in a supportive environment. Teachers also adjusted curricula to meet student needs as indicated by analyses of the NYS ELA standardized assessment data to improve student outcomes in ELA instruction. Administrators have initiated a small-group literacy program, known as "Book Club." English Language Learners in the Advanced range of proficiency, as well as Former ELLs and English Proficient students, were grouped according to independent reading levels. Teachers have collaboratively created curricula in Math, Science, Social Studies, and ELA aligned with the CCLS.

Instructional Programs for ELLs

Middle School A is an ENL school. As of Spring 2016, there were three ENL certified teachers, and one content area Common Branch and TESOL certified teacher at Middle School A. These educators were experienced and highly qualified teachers with Master's Degrees (NYSED, 2009-2017). They taught ELLs identified as Beginner, Intermediate, and Advanced in ENL classes.

Students' results on the NYSESLAT determined their place in ENL classes. Certified ESL teachers taught one ENL class per grade. They also employed a *push-in* model to implement ENL into mainstream classes on the content areas (including special

education classes) to fulfill the required number of minutes as per CR-Part 154 (NYC CEP, 2016a).

School administrators gathered data through standardized exams as well as informal assessments that supported a need for ELLs to improve in the areas of reading and vocabulary comprehension. Administrators worked with teachers across subject areas to infuse their pedagogy with ESL methodologies to address these needs. They invited long-term ELLs to early morning and after school literacy programs. Teachers created portfolios for all ELLs to ensure that students were making progress.

Performance levels on the NYSITELL and the NYSESLAT and grades in class revealed that ELLs were more successful on the listening and speaking modalities than they were on reading and writing modalities (NYC CEP, 2016a). Teachers used ENL strategies and methodologies to scaffold tasks for ELLs, relying on iPads and glossaries to support ELLs and Go Math materials to translate relevant text.

Middle School B is a DL School. As of Spring 2016, there were three bilingual certified teachers, three ENL certified teachers, one Foreign Language teacher, one bilingual content area Common Branch certified teacher, and one content area Common Branch and TESOL certified teacher. These educators were experienced and highly qualified with Master's Degrees (NYSED, 2009-2017).

The school provided an English/Spanish dual-language approach for ELLs across all three grades and across all content areas. Some ELLs as well as non-ELLs received Native Language Arts (NLA), and some non-ELLs received Spanish language arts until they were sufficiently proficient to learn in their native language. ELLs in all three

grades were provided Social Studies instruction in their native language. Students who were still learning English received ENL in addition to dual-language instruction to fulfill the required number of minutes as per CR-Part 154 (NYC CEP, 2016b).

Performance levels on the NYSITELL and the NYSESLAT and grades in class revealed that ELLs in all grades consistently demonstrated the highest levels of proficiency in the speaking, listening, as well as reading comprehension modalities. Such high levels of performance among ELLs at Middle School B may be attributable to the fact that DL programs practice listening and speaking skills in all content areas throughout the school day. Additionally, teachers initiated cooperative learning activities to encourage proficiency in the listening and speaking modalities among all students, especially ELLs. Teachers' interventions through multi-modal ENL support, required as per the requirements of CR-Part 154 (NYC CEP, 2016b), improved proficiency in the reading comprehension modality as compared to the prior year. These efforts included small group and computer-based literacy instruction.

Social Studies was taught in Spanish, the native language of all ELLs at Middle School B. English Language Arts (ELA), science, mathematics, and the arts were taught in English. Teachers relied on ESL supports when appropriate; however, teachers readily provided scaffolds in Spanish when ELLs faltered at the critical thinking required to fully understand the content. The school issued every student a laptop and teachers in math, science, social studies, and ELA utilized SmartBoard technology and Google Docs to support their curricula.

Sample

To answer the first research question, I used a mixed-model ANOVA to assess for differences in achievement scores by LSI program type across the academic years studied, 2014, 2015, and 2016. A mixed-model ANOVA is appropriate when assessing for differences over time and between independent groups, simultaneously (Tabachnick & Fidell, 2013). For this research question, 12 students enrolled in the ENL program and 12 students enrolled in the DL program were included in the comparison. The data showed that there were 12 students in the ENL program who had scores across the three years studied. There were also 12 students in the DL program who had scores across the same three years. The remaining students enrolled in both programs were missing achievement scores for one or more of the 3 years studied and, therefore, were not included in the sample. The final sample size was 24, 12 students from each program.

To address the second research question, I conducted an ANCOVA to examine the difference in achievement scores by LSI program while controlling for SWD. An ANCOVA is an appropriate statistical test when analyzing for differences in a dependent variable between groups (Tabachnick & Fidell, 2013). The dependent variable corresponded to student achievement scores for a single academic year, 2016. The independent variable corresponded to LSI program type. The control variable corresponded to SWD. Certainly, being a student with a disability has an influence on academic achievement. Without identifying a negative impact on academic achievement, students cannot qualify for special education of the kind provided for SWD. Furthermore, there were 88 SWD in the final sample from Middle School B, comprising

48% of the final sample. This was not representative of the portion of SWD in the entire student population at Middle School B, that is, 23%.

A random sample was generated to equalize the demographics between the programs. The sample initially consisted of 1,353 students. I choose 2016 as the target year for this analysis because data for this year was the most recent available. Out of the initial sample, a total of 697 students were removed due to not having a 2016 score, leaving 656 students. Only Hispanics were retained in the sample because all other ethnicities had low frequencies. The sample was reduced to 433 Hispanic students in both programs. Socioeconomic status was another factor that was considered when finalizing the sample size; however, every student in the reduced sample was categorized by free/reduced-price lunch. The sample was further reduced to obtain an equal number of males and females for each program. A random sample of 103 males was selected from the DL program to match the 103 males that remained from the ENL program. A random sample of 80 females was selected from the DL program to match the remaining 80 females in the ENL program. After the reduction and random sampling, the final sample consisted of 183 students in the DL program and 183 students in the ENL program.

My aim was to obtain data for all students who attended ENL programs and DL programs at the study sites during the study's three-year span, 2014 through 2016 inclusive. These schools were ethnically and culturally diverse, and they were chosen for their similarities in overall ELL enrollment regarding ethnic makeup and SES. The number of ELLs in the study's sample population was so close to the actual number of

ELLs at both site schools that there is ample leverage to generalize to the site schools' entire ELL enrollment. When cleaned and examined for anomalies, this sample yielded enough students who met all the criteria for inclusion to provide adequate statistical power (UCSF Clinical and Translational Science Institute, 2016). I conducted two analyses to determine if there was a difference in NYS ELA standardized assessment achievement scores for ELLs in the ENL program when compared to those scores for ELLs in the DL program. Matching the sample populations from the two programs allowed me to make general conclusions about the influence of LSI program type on the achievement scores.

Role of the Researcher

I bring deep knowledge and broad experience to this study. Throughout my career, I have been recognized for bilingual education advocacy on behalf of children. I am very familiar with the ELL student population. My skills in coordinating effective professional development activities for my colleagues are well respected.

While I served as a middle school principal within the NYC DOE under the Office of Accountability in School Improvement, I implemented many initiatives that involved the collection of data. These efforts included the use of diagnostic tools to analyze ELLs' academic progress. In addition, I have designed intervention programs for students based on assessment data. I have also conducted classroom observations to improve instruction. I have consulted with school personnel, guidance counselors, social workers, and other district staff to target students' curriculum needs, and I have organized planning sessions to achieve short- and long-term goals school-wide.

Instrumentation and Materials

The study used a single standardized measure, the NYS ELA exam scale scores. The New York State Education Department partnered with CTB/McGraw-Hill publishing company to develop the NYS ELA exam (NYSED, 2015). In Grades 6 and 8, this standardized assessment consists of multiple-choice, short response, and extended response questions. The seventh-grade assessment consists of multiple-choice, short response, and extended response questions, as well as a paragraph to edit. Students write their short and extended responses directly on the test booklet (NYSED, 2015). The NYS ELA exam is a dependent-referenced test that measures achievement against a predetermined standard of performance, that is, the *dependent*. The NYS ELA exam is used to determine the Performance Levels of all students enrolled in the state educational system, including ELLs.

Instrument Rationale

Terrell (1991) used the Bilingual Education Program Quality Review Instrument, a program evaluation for Grades K through 6, to collect data to answer her research questions. The instrument by which the NYSED assesses ELLs' readiness to succeed in a challenging academic curriculum is the NYS ELA exam. The NYS ELA exam is an achievement-oriented measure administered annually to assess all students in NYS in the subject area of ELA, including ELLs. Results of the NYS ELA exam are characterized as archival data from a standardized assessment. This assessment is administered to all ELLs, regardless of their performance on the NYSESLAT. The NYSESLAT is an annual measure of ELLs' English language proficiency to qualify for entrance into the

mainstream classroom. If the research suggests that ELLs require more than 1 year of LSI to succeed in a challenging academic curriculum taught in a second language; then it is troubling that current assessment policies mandated by the NYSED require ELLs to take the NYS ELA exam after 1 year and 1 day of LSI, whether they have passed the NYSESLAT or not.

Recently, Abedi and Herman (2010) from the University of California at Los Angeles conducted a study entitled "Assessing English Language Learners' Opportunity to Learn Mathematics: Issues and Limitations". Their study is similar to this study in that the researchers addressed the fact that ELLs consistently lag behind their monolingual peers in acquiring academic language, and yet are assessed by the same accountability measure. Abedi and Herman studied a sample from 24 eighth grade classes in the California public-school system, a total population of 602. The authors' research design was an ex-post facto or causal-comparative design. The independent variable for the study was an amalgamation of data from a reading comprehension test, student background information, and a measure of student motivation, in the aggregate defined as Opportunity to Learn (OTL). The dependent variable was the participants' performance on a standardized reading and mathematics test. The researchers' analysis identified normal curve equivalence scores on the OTL using a hierarchical linear model approach, performing the same analysis for ELLs as they performed for non-ELLs (Abedi & Herman, 2010).

I would point to the data collection instrument used by Abedi and Herman (2010) to justify my own decision to use archival data from results of a standardized test, the

NYS ELA exam. I performed a mixed-model ANOVA was used to assess for differences in student achievement by LSI program type across 2014, 2015, and 2016. To address the second research questio, I conducted an ANCOVA to examine the difference in achievement scores between programs while controlling for SWD.

Abedi and Herman (2010) analyzed the results based on three research questions:

1. Is there a relationship between measures of classroom OTL and student performance?
2. Do ELLs and Non-ELLs receive the same level of OTL?
3. What factors may account for differences in OTL and performance for ELLs and Non-ELLs? (p. 735)

The study results showed that "measures of classroom OTL are associated with student performance" (p. 723). Abedi and Herman noted that ELLs' performance was hampered by their lack of English proficiency in that they could not understand teachers' instructions in order to access the OTL. ELLs also struggled to comprehend the topics that were taught during class instruction.

Abedi and Herman (2010) also collected data from teachers and students with a survey, as well as a questionnaire to collect data on students' backgrounds. The researchers analyzed students' performance on a language reading comprehension assessment and an assessment of achievement in Algebra I. They compared the performance of ELLs and non-ELLs using a hierarchical linear model approach. Predictably, the researchers found that ELLs showed lower levels of achievement on the OTL than non-ELLs (Abedi & Herman, 2010).

New York State English Language Arts Exam Reliability and Validity

A quantitative approach to the research question is compatible with obtaining archival data to support the analysis. NYS ELA exam scale scores was the dependent variable for the data analysis. For each student in the study's sample, I compared NYS ELA exam scale scores to the independent variable, that is, the LSI program type.

I obtained scale scores on the NYS ELA exam for ELLs in Grades 6 through 8 of the site schools for the study years 2014, 2015, and 2016. Within the context of this study, the NYS ELA exam is a valid and reliable measure of English language proficiency necessary to navigate the rigorous academic curriculum in the mainstream classroom. The New York State Education Department designed the NYS ELA instrument specifically to measure English literacy in reading and writing. To maintain validity in my study, I used this instrument to evaluate this very measure. The New York State Education Department has tested the NYS ELA exam for accuracy, consistency, and stability of test scores across situations and found the following: "For the total population, the ELA reliability coefficients (Cronbach's alpha) ranged from .88 to .92, and for all subgroups, the reliability coefficients were greater than or equal to .80" (NYSED, 2015, p. 35).

Validity refers to what extent a test assesses what it is intended to assess. The New York State Education Department uses the NYS ELA exam scores to measure in part the criteria for satisfactory students' progress, defined by ESSA (2015) as the levels of achievement in English language arts and mathematics that schools and school districts must prove among their students in order to be in good standing with NYS. Scores are

also used to report specific student-level outcomes that document student performance in the area of ELA as defined by the New York State Education CCSS (NYSED, 2015). Generally, the NYS ELA exam is used for making predictions about students' progress in ELA.

Experts validate a test by accumulating evidence to support the inferences drawn from test scores. In 2010, the NYSED included field test questions in the NYS ELA and mathematics exams for Grades 3 through 8. Such questions do not count towards students' scores and students are not made aware of which questions are field test questions. It is useful to distinguish such evidence in support of two different types of validity: content validity and construct validity.

The content is valid. The NYSED interpreted the NYS ELA test scores and matched the results to the specific NYS standards for ELA. Experts and educators in the ELA field created the test items and defined which specific skills among the CCSS the test content should measure (NYSED, 2015). To verify their work, the educators used a scoring system in various stages (NYSED, 2015) in order to measure how well the content of the instrument assessed what it was intended to assess. During the review process, for example, experts developed and reviewed the scoring rubrics for the constructed-response section. All sections of the exam were reviewed and evaluated by a field educator and an expert in the field of English Language Arts/Literacy (NYSED, 2015).

The construct is valid. Construct (internal structure) validity refers to what the scores on an instrument like the NYS ELA exam may mean and what may be inferred

from them (NYSED, 2015). To determine if the test measured the skills identified by the CCSS, the NYSED conducted a thorough analysis to confirm the requirements of the statistical models. This included assessing the skill items to ensure they fit within the model and measuring the required skills in a single domain. Such tests for unidimensionality in the NYS ELA exam demonstrated that a great majority of the items assessed fit across grades and subjects. The NYS ELA exam's high Q1 statistic showed that the content fit the calibrated scale, and test data were appropriate across subjects and grades (NYSED, 2015). The NYS ELA exam, in particular, has one construct for each item or task; therefore, the scores represent student achievement based on that construct. Another indication of construct validity, known as dimensionality for subgroups of students, is evident. Experts found that differences from the general population apparent among ELLs, SWD, and students needing additional support/accommodations, for example, were similarly reflected in NYS ELA exam results (NYSED, 2015).

Educators also assessed the NYS ELA exam to detect biases. The creators of the test were very careful to give close attention to ethnicity, gender, and socioeconomic status when choosing test items (NYSED, 2015). Pearson's editorial staff reviewed all the materials based on testing policies for unbiased assessment required by the NYSED (NYSED, 2015). In order to establish strong validity, the bias items' construct-irrelevant were minimized to determine if items were free from bias (NYSED, 2015). To ensure the validity and reliability of the NYS ELA exam, an external evaluation process, separate and apart from the NYSED's efforts, determined that the skills measured by the NYS ELA exam met or exceeded the CCSS (NYSED, 2015).

The instrument is specifically structured. The sections of the NYS ELA exam are organized in test booklets as indicated in Table 10.

Table 10.

Grades 3-8 Common Core English Language Arts Tests

Distribution	Test type
Day 1, Book 1	Multiple choice
Day 2, Book 2	Multiple choice and short and extended response
Day 3, Book 3	Short and extended response

Note. The test must be administered over three consecutive days. Table content is from 2014 Grades 3-8 Common Core English Language Arts and Mathematics Tests School Administrator's Manual 5. (2014). Copyright by the NYSED. Public domain
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The NYSED has established a 70-minute testing time each day for Grades 3 and 4 and a 90-minute testing time each day for Grades 5 through 8. These testing times do not include the time it takes for the proctor to hand out materials and read directions. The principal of the school may adjust start times for each grade's session in order to accommodate the needs of staff and space. If any student finishes answering all of the questions before the time ends, they can use the unused time to review their answers. If all test takers complete the questions and finish reviewing their answers before the time ends, the proctor may end the session.

Data Collection and Analysis

The purpose of this study was to determine if there was a significant difference in the NYS ELA standardized assessment achievement scores for students attending an

ENL program when compared to those scores for students attending a DL program. The chosen method of analysis facilitated the process of making general conclusions about the influence of LSI program type on achievement scores during years 2014, 2015, and 2016 for grades 6, 7, and 8 in two NYC DOE public schools.

The study's target population at Middle School A (ENL school) was ELLs in Grades 6 through 8. As of Spring 2016, there were 1,028 students enrolled at the school, 22% of which were SWD. There were 99 ELLs in Grades 6 through 8, which accounted for 19.8% of the entire student population (NYSED, 2009-2017). The target population at Middle School B (DL school) was ELLs in Grades 6 through 8. As of Spring 2016, there were 325 students enrolled at the school, 23% of which were SWD. There were 72 ELLs in Grades 6 through 8, which accounted for 22.2% of the entire student population (NYSED, 2009-2017).

To answer the research questions, I obtained relevant data that had already been collected by the NYC DOE. With the approval of the Walden University Institutional Review Board (Walden IRB) for my study and my plan to obtain data, I submitted a Data Request to the NYC DOE Research and Policy Support Group (RPSG) for NYS ELA exam scale scores of the study's target population.

Assumptions, Limitations, and Delimitations

I assume that the archival data that I obtained from the RPSG for the sole purpose of my analysis are correct and were recorded accurately. I acknowledge the following additional assumptions within this study:

- All the ELLs included in the study sample were properly identified and placed in LSI.
- All the ELLs included in the study sample received LSI in the form of either the ENL program or the DL program at the study sites.
- All the ELLs included in the study sample selected to answer the first research question participated in LSI in 2014, 2015, and 2016 without interruption.
- All the ELLs included in the study sample were administered the NYS ELA exam for their respective years, for which the NYSED posted all of their scores.

These assumptions served to highlight the following limitations beyond my control that may have appeared during data analysis:

1. Data provided by NYC DOE was not separated by programs.
2. Data did not identify time spent in LSI.
3. Data did not provide Spanish language proficiency of each ELL.
4. Only 12 students from each program had scores for all three years studied, 2014, 2015 and 2016.

No other limitations appeared during data analysis. I understand that the study's findings are applicable to the study's site schools only and cannot be generalized to the broader population of ELLs in New York City.

Delimitations of this study are inherent in the fact that the methodology is quasi-experimental: the data is not primary data, nor is there a control group. The dependent variable, NYS ELA exam scale scores, is included in archival data that have already been

collected by the NYS DOE. Based on my assumptions, however, I am assured that the archive is a single dataset and that it contains the variables and population of interest for my study.

Protection of Participants' Rights

I requested permission from two institutions to conduct this study. I first applied to the Walden IRB to approve my study and my plan to obtain data. Walden IRB issued approval number A00182237 to confirm compliance with Walden University and federal regulations regarding the use of human participants in research. I then submitted a Data Request in accordance with guidelines set forth by the RPSG to obtain NYS ELA exam scale scores.

Protecting students' information is of the utmost importance to me. I encrypted all data obtained from the RPSG, ensured safe data transmission via a secure file transfer protocol, and made every effort to prevent unauthorized access to that data. I will keep all data confidential and secure via password protection on my professional computer for a period of five years, after which time I will destroy all relevant data in a manner approved by ISO Guidelines for Data Sanitization and Disposal. With regards to every aspect of obtaining, storing, and destroying data, I have complied and intend to comply with Walden University's ethical standards as well as U.S. federal regulations.

I have reported only aggregate results of the statistical analyses and will use the results only for this study, as well as for projects, white papers, or professional presentations that may grow out of this study. I plan to discuss the purpose and

significance of the study, as well as specific results, however, with the principal of the site schools and the relevant district administrator.

Data Analysis Results

To address the first research question, I conducted a mixed-model ANOVA to assess for differences in NYS ELA standardized assessment achievement scores between the two independent groups representing LSI program type across the academic years, 2014, 2015, and 2016. Results indicated that scores increased significantly during the 3-year period, but there were no significant differences in scores for the ENL program students compared to the DL program students.

The results of the within-subjects effect of the mixed-model ANOVA (N = 24 ELLs) were statistically significant, $F(2, 44) = 14.97$, $p < .001$, partial $\eta^2 = .405$, suggesting that there were significant differences in achievement across 2014, 2015, and 2016. Post-hoc tests using Tukey comparisons indicated that there were significant differences in student achievement between 2014 and 2015 ($p = .001$; M = 255.83 to 273.04) and between 2014 and 2016 ($p < .001$; M = 255.83 to 276.29). There were not significant differences between 2015 and 2016 ($p = .384$).

The results of the between-subjects effect were not statistically significant, $F(1, 22) = 2.79$, $p = .109$, partial $\eta^2 = .112$, suggesting that there were not significant differences between the LSI program types. The results of the interaction effect (time*LSI program type) were also not statistically significant, $F(1, 22) = 1.87$, $p = .166$, partial $\eta^2 = .078$.

The null hypothesis for the within effect (time) was rejected for the first research question. Also for the first research question, results failed to reject the null hypotheses for both the main effect of program and the interaction effect. Table 11 presents the findings of the mixed-model ANOVA. Table 12 presents the descriptive statistics for student achievement by LSI program type.

Table 11.

Mixed-Model ANOVA for Student Achievement

Variable	*F*	*p*	η^2
Within-subjects effect (2014 vs. 2015 vs. 2016)	14.97	<.001	.405
Between-subjects effect (LSI program type)	2.79	.109	.112
Interaction (time*LSI program type)	1.87	.166	.078

Note. Language-Supported Instruction (LSI).

Table 12.

Descriptive Statistics for Student Achievement by Language-Supported Instruction Program Type

Variable	*n*	*M*	*SD*
NYS ELA scores (2014)			
Dual Language	12	266.08	14.91
English as a New Language	12	245.28	29.52
Total	24	255.83	25.15
NYS ELA scores (2015)			
Dual Language	12	277.67	25.99
English as a New Language	12	268.42	19.50
Total	24	273.04	22.96
NYS ELA scores (2016)			
Dual Language	12	279.08	12.10
English as a New Language	12	273.50	16.48
Total	24	276.29	14.42

Note. New York State English Language Arts (NYS ELA).

To address the second research question, I conducted an ANCOVA to examine the difference in achievement scores between LSI program types while controlling for SWD. The dependent variable corresponded to student achievement scores for a single academic year, 2016. The independent variable corresponded to LSI program type. The control variable corresponded to SWD. Results showed that, when controlling student disability status, DL program students scored significantly higher than ENL program students.

The findings of the ANCOVA (N = 366 ELLs) were statistically significant, $F(1, 363) = 23.50$, $p < .001$, $\eta^2 = .061$, suggesting that there were significant differences in 2016 scores between programs while controlling for SWD. Students in the DL program

scored approximately 8 points higher in comparison to students in the ENL program. The null hypothesis was rejected for the second research question. The findings of the ANCOVA are presented in Table 13. Table 14 presents the marginal means of student achievement while controlling for SWD.

Table 13.

ANCOVA for Student Achievement by Language-Supported Instruction Program Type While Controlling for Students with Disabilities

Variable	*F*	*p*	η^2
LSI program type	23.50	<.001	.061
Students with disabilities	139.61	<.001	.278

Note. Language-Supported Instruction (LSI).

Table 14.

Marginal Means for Student Achievement by Language-Supported Instruction Program Type While Controlling for Students with Disabilities

Variable	*n*	*M*	*SD*
NYS ELA scores (2016)			
Dual Language	183	301.18	1.70
English as a New Language	183	292.83	1.70

Note. New York State English Language Arts (NYS ELA).

Conclusion

English Language Learners in NYS are struggling to keep pace with their native English-speaking peers in a challenging academic curriculum taught in a second language. New York State Education Department regulations and assessment policies

appear to be at odds with scientific research and may predispose ELLs to poor academic achievement and failure in school (see Kline, 2015). I investigated if there was a significant difference in the NYS ELA standardized assessment achievement scores for ELLs attending an ENL program when compared to those scores for ELLs attending a DL program. Results of my study showed a statistically significant difference in the direction predicted by the hypotheses. I look forward to sharing findings with educators and administrators to provide the most effective LSI program and well-researched teaching strategies for improved outcomes on the NYS ELA exam among ELLs. In Section 3 of this study I describe the proposed professional development curriculum and materials (see Appendix A) with which I plan to share the findings of my study with educators and administrators. I also present a rationale and review of the literature that supports this project, a plan to evaluate the project, and a discussion of the project's implications.

Section 3: The Project

The project was based on the findings of this study and offers a professional development curriculum for educators and administrators. I plan to prepare and deliver training presentations at the various educational forums held every year across the United States. One such forum is the annual National Association for Bilingual Education (NABE) conference. I have been a member of NABE for 29 years. At this educational forum, many educators, administrators, practitioners, and researchers meet to present the latest research on bilingual education. They collaborate with policy makers to recommend changes to existing educational policies to promote bilingual/dual-language instruction (NABE, 2018). Among these professionals, I am highly regarded as an expert in the field.

My study revealed the need for educators and policy makers to shift their point of view from a negative to a positive regard for ELLs for the following reasons:

- It takes time to develop second language skills that are adequate to engage in higher order thinking. Showing progress on the NYS ELA exam by the third year of academic instruction is very challenging.
- Teaching in the native language can speed up second language acquisition.
- My study aligns with existing research that shows that ELLs in DL programs do better on standardized assessments than do ELLs in ENL settings (see Murphy, 2014; Thomas & Collier, 2002).
- A well-structured LSI program treats the native language as a resource for the benefit of all students about cultural diversity and higher order thinking skills.

- As confident thinkers in both languages, bilingual students are better equipped to succeed in a global economy.

My project focused on teaching strategies to prepare ELLs to achieve improved outcomes on the NYS ELA standardized assessment. In this section, I present the reasons why my project is relevant, review the related literature, propose a plan to evaluate the project, and discuss the project's implications.

Rationale

Educators are under pressure to bring ELLs' performance on the NYS ELA exam up to par with their English-speaking peers. The federal mandate in Title I of ESSA (2015) requires that ELLs show progress on the NYS ELA exam by their third year of academic instruction. Even in their first year, ELLs are evaluated against the same standards as their English-speaking peers in mainstream classes.

In response to this pressure, educators are seeking the most effective LSI support for ELLs as well as teaching strategies that are associated with improved outcomes on the NYS ELA standardized assessment. Based on my observations, many NYS educators do not use effective teaching strategies to help ELLs achieve on standardized exams. On many occasions I have visited a school during the spring test time and have observed that neither science nor social studies subjects are taught for several months because ELLs, as well as their peers in mainstream classes, are instructed in mathematics and ELA only to prepare them for the standardized tests.

For the past two decades, educators in NYS have spent an extraordinary amount of time in the classroom drilling students on test content and test-taking skills. James

Popham, professor emeritus at the University of California at Los Angeles and academic assessment expert, discussed this topic with John Tulenko in 2001. Popham, a former test maker himself, pointed out that even as far back as the early 1990s the purpose of assessments had shifted from measuring students' achievement to measuring educators' achievement. Students' performance on standardized tests indicated to administrators and policy makers alike how well classroom teachers were teaching (Tulenko, 2001). As a result, educators were under pressure to teach to the test, not only to benefit their own careers but to protect their schools from closure due to their students' poor performance on the tests.

Despite this preoccupation with test taking in the United States, only 14 states require educators to complete a course in standardized assessments (Tulenko, 2001). Tulenko (2001) maintained that educators think they are teaching to the test, but they lack training. They make poor choices. As a principal of a middle school in New York City during the 2000s, I worried that the curriculum did not target the skills students need to perform well on the mathematics and the ELA standardized exams. According to Professor Popham, I was misguided. He made the important distinction that "…tests…measure the kind of conduct, knowledge and skills that children bring to school—not necessarily what they learn at school" (as cited in Tulenko, 2001, p. 1). Standardized assessments measure cumulative progress. In other words, scores do not measure what students are learning in their current grade but what they have learned in all their previous grades. In the current grade, therefore, it is my view that the curriculum should focus on academic instruction and wisdom thinking. Test results point to gaps

that should be filled, not only to achieve on the test but also to succeed in the current grade.

Whether rightly or wrongly, NYS public policy makers use standardized test scores to determine whether a school is in good standing or failing. Students' failure to perform in these high-stakes tests can result in removal of the principal or faculty, and in some cases, wholesale restructuring or closing of a public school to accommodate a charter school (NYSED, 2012). The resulting pressure under which educators as well as superintendents, school district administrators, networks leaders, board members, and community leaders are placed can lead to questionable practices to raise test scores (Tulenko, 2001). Such public policy is misguided (Tulenko, 2001), and it is my deepest hope that my project will educate educators and administrators on the correct teaching strategies and the most effective LSI program to improve outcomes on standardized exams among ELLs.

When I was a district office coordinator during the early 1990s, I introduced an afterschool arts enrichment program for ELLs at a public school in Brooklyn, NY. The principal of the school asked me, "How is this program going to boost my ELA or Math scores?" His question indicated a lack of faith in the innovation, creativity, and wisdom thinking that made up the existing curriculum. Nothing seems to have changed since then.

Popham has identified the price to pay when administrators focus on drilling and test-taking skills:

> …one of the most frightening things about the preoccupation of raising test scores is the message it sends to children about what's important in school. Rather than trying to make the classroom a learning environment where exciting new things are required, the classroom becomes a drill factory, where relentless pressure [and] practice on test items, may raise test scores—but may end up having children hate school. (as cited in Tulenko, 2001, p. 2)

The purpose of my project was to educate teachers, administrators, state board members, and practitioners in the field of bilingual education on the negative effects of test preparation on ELLs. I offer, instead, an innovative program to meet the needs of ELLs, including how to achieve on standardized tests.

Review of the Literature

In Section 1 of this study, I provided an extensive review of the literature on language learning. I focused on the cognitive process of learning a second language and explained how maintaining students' native language is critical to second language acquisition. That discussion began with references to research findings that show that ELLs need to develop cognitive language skills in English to succeed in a rigorous curriculum taught in English (see Cummins, 1984, 1999; Krashen & Terrell, 1983; Terrell, 1991).

In Section 3, I continue that discussion with references to research that shows that ELLs need to develop cognitive language skills in their native language to succeed in a rigorous curriculum taught in English. My further review of the literature revealed that an effective LSI program and researched teaching strategies are associated with improved

outcomes on the NYS ELA standardized assessment for ELLs. I used many and varied search engines to find terms that are more specifically relevant to my study's findings than those search terms I used for the literature review presented in Section 1. Examples are *second language acquisition, negative effects of native language instruction, advantages of native language instruction,* and *native language arts teaching*. I used Walden University Library resources, including ERIC, SAGE and Educational Research, as well as my home library on language learning to conduct these searches. I also consulted journal articles and peer-reviewed texts on bilingual education published by a variety of organizations. My research revealed teaching strategies and an LSI program that have proven successful for ELLs over time.

Effectiveness of Dual Language Programs

DL programs have a positive effect on second language acquisition. My study's findings proved that a sample of ELLs supported by a DL program scored significantly higher on the NYS ELA exam than did a similar sample of ELLs supported by an ENL program (i.e., English language only). These findings are aligned with what researchers have presented on how DL programs provide ELLs with the cognitive language skills they need to succeed in a rigorous curriculum in English, as well as integrate successfully in the global economy (Tedick, Christian, & Fortune, 2011).

In December of 2009, Dr. Diane J. Tedick, an associate professor at the University of Minnesota, made a presentation on the benefits of DLI programs to the Windom School Parent Teacher Organization. She presented her paper in Spanish with simultaneous translation into English. During the following year, Dr. Tedick lectured at

the University of Minnesota on the benefits of DLI programs. She observed that language learning in other than English is critical for American citizens to integrate in a global society (Tedick, 2010). Those who are bicultural and biliterate have a promising future. There is a growing need in the global economy for individuals who speak different languages. Tedick (2010) warned that U.S. public schools should reinforce the English language skills of ELLs while simultaneously developing their native language, when she wrote, "DL programs are the right forum for this [bilingualism] to occur" (p. 1). I concur with Dr. Tedick.

My project focuses on ELLs in NYS public schools and my purpose is to present an LSI program and teaching strategies associated with improved results on the NYS ELA standardized assessment among ELLs. I plan to recommend the implementation of DL programs and the effective teaching strategies that educators employ in DL programs. A reading passage, for example, presents an opportunity for students to pay close attention to details, main idea, problem conflict, personification, and author's purpose and tone. In DL programs, teachers expect ELLs to gain understanding from these contexts, the very same contexts that comprise questions for reading passages on standardized tests. Similarly, ELLs in DL programs are routinely asked to do a quick write to change the ending of a passage, as is expected on standardized tests. These skills are embedded in the DL program curriculum. Teaching strategies that employ the native language effectively in the classroom may lead to improved scores on the NYS ELA standardized assessment among ELLs.

Just as public schools in Minnesota and New York are suffering, public schools in Oregon suffer from low performance on state exams among ELLs. Portland faced many challenges, including a low graduation rate, and now public schools there are offering DL opportunities for all students to succeed regardless of background. Dual Language programs include English-Mandarin Chinese and English-Spanish. Much like New York City public schools, the Portland public schools are struggling to find well trained teachers to provide high quality education. Excellent teachers are a key ingredient for ELLs to receive the best education. Steele, Slater and Bacon (2017) suggested that the commitment to DL instruction among the Oregon school districts and students' Guardians provided the critical support necessary to reach higher academic achievement for all students, including ELLs. Dual Language Immersion can offer public schools an opportunity to support historically underserved students, offering every student an equal playing field to excel and to receive the significant benefits of bilingualism. This is the message I intend to deliver to NABE conference participants and participants in other educational forums across the country: Effective teaching strategies and the most effective LSI program can help ELLs perform better on the NYS ELA standardized exam.

Benefits of Native Language Instruction

Among the researchers who have confirmed that learning in the native language has no negative effect on second language acquisition, Mackey (2014) revealed what happens in the brain when one learns a new language. Referring to brain scans, magnetic resonance imaging (MRI), and electrophysiology, Mackey identified astonishing test

results such as increased memories and high measures of cognitive creativity among students who speak more than one language (Mackey, 2014).

As early as 1979, Cummins (1979, 1981a) made a major contribution to the relevant literature when he introduced Basic Interpersonal Communication Skills (BICS) and Cognitive Academic Language Proficiency (CALP). On many occasions he has been invited as a guest lecturer at NABE conferences. He has made presentations to administrators, policy makers and educators on language development and the benefits of being bilingual. Cummins's work is well supported in the literature and he has networked with researchers as well as administrators and policy makers across the country. His leadership is an inspiration to me as I prepare to present my findings to an audience of administrators, practitioners, and educators. I plan to model Cummins's devoted work in the field of bilingual education and in the same manner promote effective program types such as DL instruction and teaching strategies that can support better results on the NYS ELA standardized exam among ELLs. Participants at the NABE Conference are influential in the field of public education in the United States and can be instrumental in bringing about social change by lobbying policy makers to rethink education for ELLs (NABE, 2018).

Cummins (2001) pointed out that students who speak two or more languages "have an enormous contribution to make to their societies, and to the international global community" (p 3). Researchers have consistently found that when ELLs have a solid foundation in their native language, they readily develop the second language (Baker, 2000; Cummins, 1991; Krashen, 1991; Terrell, 1991; Zergani, 2017). ELLs already

possess the key ingredient to success in second language acquisition: their native language proficiency. This awareness among educators and administrators will logically lead to instructional design and educational policies that respect ELLs and value their contribution not only to their own education but also to the cultural literacy of their society. ELLs bring into the classroom their cultural and linguistic experiences, providing a rich resource for learning. Educators should take advantage of ELLs' linguistic foundations to build a healthy respect among all students for cultural diversity. Instead, I have observed educators treating ELLs in their classrooms as problem students. They see ELLs' native language proficiency as a problem to solve rather than a resource to nurture.

At the dawning of a new Millennium, Cummins (2001) called for a shift among educators and policy makers away from the view that severely underestimates ELLs' capabilities. Cummins concluded that celebrating ELLs' native language proficiency develops leadership and confidence. He encouraged educators to applaud their ELLs' capabilities rather than cure their deficiencies. Far from having a negative effect on the acquisition of the second language, Cummins is confident that teaching in the native language better equips ELLs for college and career in the 21st century.

It is no wonder, then, that the results of this study support previous studies to prove that ELLs in DL programs did better academically than students in ENL settings. In this study, ELLs in the DL program learned the subject areas in both English and Spanish, and they were supported in both languages throughout the process. Results

illustrated that a sample of ELLs in the DL program attained higher scores on the NYS ELA exam than did a sample of ELLs in the English-only program.

ELLs in a Global Society

Nurturing self-efficacy among ELLs not only supports the process of second language acquisition but also benefits society. As confident thinkers in both languages, ELLs are better equipped to succeed in a global society. Well-balanced individuals in both their native culture and their adopted culture can potentially play productive roles on the world stage. Overall, both ELLs and the world in which they live benefit from this shift in viewpoint among educators and policy makers.

Cummins's leadership in the field of language learning made clear the connection between fluency in the native language and second language acquisition. Cummins (2001) broke new ground when he wrote, "When children continue to develop their abilities in two or more languages throughout their primary school years, they gain a deeper understanding of language and how to use it effectively" (p. 2). Cummins also observed that bilingual students "develop more flexibility in their thinking because of processing information through two different languages" (Cummins, 2001, p. 2). Flexible thinking is precisely the strategy that supports test-taking skills. Taught English in an environment that reinforces their native language, ELLs develop higher order thinking skills that become automatic for the learner to apply in whatever situation they may be called upon to problem solve, including answering questions on a standardized test.

Project Description

I intend to use my study's findings to design a professional development curriculum to share with administrators and educators attending the 48th Annual National Association for Bilingual Education Conference to be held at Disney's Coronado Springs Resort in Lake Buena Vista, Florida, on March 7-9, 2019, when the conference theme is "Biliteracy as a Global Imperative: Enriched Education Empowerment, Equity and Excellence." I also plan to make presentations at other educational forums such as Principals' Network conferences organized by the NYSED on a monthly basis and Yearly Staff Development for teachers in NYS public schools.

I want to challenge educators to respond to ELLs' routinely poor test results in a positive way: identify areas where one can promote lifelong learning, and improved test results will follow. Teaching strategies used in DL classrooms can fulfill this promise. My presentation assumes that a standardized assessment, such as the NYS ELA exam, is a diagnostic tool. Test results should inform educators how they might adjust their curricula to address the needs of each student in their classroom, rather than paint a picture of a learner's achievement to date to be compared with other students around the world. To focus a curriculum on drilling test content and practicing test-taking skills to improve test results is unacceptable. Preoccupation with test-taking skills threatens to replace a researched curriculum when educators interrupt the content subjects for several months to focus students' attention on test preparation worksheets. Test results should determine curriculum, not replace it with test-taking skills.

Craig Jerald, former Senior Editor at *Education Week* and president of Break the Curve Consulting, is a thought leader in education. His article, "Teach to the Test? Just Say No," made the critical distinction that educators should determine when and how to teach to the test when designing curriculum in compliance with federal standards. Jerald asked the question, does teaching to the test necessarily mean dumbing down the curriculum? Perhaps aligning the classroom curriculum to the current CCSS is acceptable, even helpful to students as lifelong learners. In his article, Jerald relied upon academic assessment expert, James Popham, to explain the difference between educators' use of strategy versus tactics when teaching to the test. If the educator provides a wealth of information around a topic presumably covered in the test, then they are strategically taking advantage of teaching moments related to the test. If, however, the educator presents simulated test questions specifically related to a topic presumably covered in the test, then they are practicing test-taking tactics that can rarely be applied in real-life situations.

Such narrow instruction may miss the mark altogether, as the specific questions covered in class may not appear on the test. Similarly, some educators drill their students with vocabulary words they think will appear on the test, a tactic that does not pay off if those words do not appear on the test. Teaching strategies, rather than such tactics, enrich a student's vocabulary so that they are prepared for whatever words appear on the test. Teaching strategies have a long-term effect for lifelong learners.

Anna Uhl Chamot has written extensively on learning strategies and she emphasizes that when effective strategies become automatic responses, learners can

apply them to whatever setting or situation is appropriate (Chamot & O'Malley, 2009). Dual Language programs for ELLs teach such strategies by presenting content in both the native language and the second language. When students comprehend a concept in two languages, they are exposed to the underlying strategy with which their mind has comprehended that concept. This process repeats itself again and again when learning in two languages simultaneously. With repeated exposure, such strategies become automatic for the learner; so, they can apply them readily in whatever situation they may be called upon to problem solve, including sitting for a standardized test.

The View that Teaching to the Test May Not be Counterproductive

Greatschools.org made this judgment about test content: "If teaching content standards is considered teaching to the test, [then] it may not be such a bad thing" ("What's So Bad", 2016). Specifically, this respected online newsletter identified the following content standards that qualify test preparation as acceptable curriculum:

- becoming familiar with text and format,
- learning time management,
- following directions,
- determining which answer needs to be eliminated,
- embedding test strategies into the daily lessons,
- demonstrating comprehension of a reading passage,
- deriving meaning of words from context,
- identifying facts where needed to draw conclusions, and

- tackling analytical skills required in professional life. ("What's So Bad", 2016)

These are useful skills for lifelong learners. For educators and practitioners who work with ELLs, these skills sound familiar; indeed, they support how ELLs learn English. Once they learn these skills, ELLs will use these skills in real-life situations automatically.

Project Evaluation Plan

At the end of each presentation, I will ask participants to complete and submit an evaluation sheet to receive feedback. I intend to follow up with each participant via email. My email will provide a link for the participant to post comments and feedback where all participants can respond and share their thoughts. A blog or online forum is a natural extension of such an evaluation technique, stimulating a lively and informed discussion among practitioners in the field of bilingual education. A blog has huge potential as a platform for exchanging ideas. It is a convenient platform on which to model best practices as well as to give or receive feedback. It is a vehicle for coaching that can reach a wider audience than those who attend an NABE conference. I will moderate and respond to all comments with the goal of developing a community of learners, providing abstracts of relevant research, and referring participants to the latest research on relevant topics. This project evaluation plan has the potential to reveal implications, applications, and directions for future research.

Project Implications

My study's results can serve as a tool to help me eliminate certain misconceptions of native language instruction in the classroom. Some educators believe that teaching ELLs the content area subjects in the native language interferes with development of the second language. They claim that any use of the native language slows down the process of second language acquisition. Relevant research clearly contradicts this belief. Collier and Thomas (2004), Hatch, McKinney, Atwell, and Lamb (2012), Cook, Boals, Wilmes, and Santos (2008), Cummins (1984, 1999), Greenberg (2015), and Hakuta, Butler, and Witt (2000) have gathered evidence in study after study that ELLs transfer cognitive skills learned in their native language to the second language, thereby speeding up second language acquisition. Contrary to the misconception that ELLs who spend time learning in their native language will not be prepared to do well on high-stakes tests, the transference that Cummins (2001) and Chamot and O'Malley (2009) have identified enables ELLs to complete rigorous academic tasks in the second language. ELLs who gain comprehension in their native language master skills that may prove useful in answering questions on standardized tests administered in the second language. Results of my study are aligned with these findings in that a sample of ELLs supported by a DL program did better on the standardized NYS ELA test than did a sample of ELLs supported by an English-only program.

Such support for achievement among ELLs taking high-stakes tests, however, may never overcome the negative effects of test preparation practices. Obvious problems arise when the standardized test is not aligned with the CCSS on which the curriculum is

built. Pressured to perform well on standardized tests, students are dismayed when the test includes content or skills that were not part of their curriculum. In any case, test preparation and ineffective teaching strategies take time away from the established curriculum. Howard Everson, professor of psychometrics at Fordham University, identified specific difficulties with non-aligned standardized tests:

> Many of the large-scale assessments are too far removed from curriculum and instruction. They don't provide enough information back to the classroom. And the state agencies are not quite sure how to deal with the problem. (as cited in "What's So Bad", 2016, p. 3)

Some administrators are considering measures beyond the test to assess their schools. In the Charlotte-Mecklenburg school district of North Carolina, administrators are looking at qualitative measures such as attendance, writing assessments, and literacy-building activities across the curriculum, as well as test scores (quantitative measures) to see how schools and students are performing ("What's So Bad", 2016).

Having examined the findings of my study, I am convinced that educating educators about a revolutionary way to view ELLs' struggle for second language acquisition will ease the pressure to teach to the test. Beginning with the educators and administrators at my study's site schools, I plan to present how effective teaching strategies can promote achievement on the NYS ELA standardized exams among ELLs. Dual Language programs are necessarily balanced with rigorous tasks and researched teaching skills that expose the learner to strategies that can be applied to problem solving on standardized tests. An example of such a strategy is coming back to a passage and

reading it again for better comprehension. Other teaching strategies routinely used in DL programs, such as discovering the author's purpose as context for the meaning of unfamiliar phrases as well as identifying prefix, root word and suffix to determine the meaning of unfamiliar words, are also useful test-taking skills.

This revolutionary way to view ELLs' struggle for second language acquisition will find a welcome audience among members of the NABE because it has implications for educational reform. Michel (2017) maintained that educational reform in the United States today should focus on the integration of practical knowledge into the core curriculum. In today's global economy, what knowledge is better suited to transfer from the classroom to the workplace than language? ELLs possess a valuable asset: biliteracy. By the time ELLs enter the workforce, they have matured in two cultures and are uniquely qualified to succeed in the global economy.

Countries around the world support their students as multilingual, global citizens; the United States should do the same. Improved literacy in the native language among ELLs may reform education for English-speaking students as well. Biliteracy is an asset of DL programs that can be leveraged by all students as well as their parents and the entire community in which the school is located.

In Section 4, I will discuss my project's strengths and limitations, alluding to alternative approaches, and reflect on the relevant scholarship and its useful applications, as well as the importance of the work to my own development as a researcher. Finally, I will discuss the potential for social change and suggest directions for future research.

Section 4: Reflections and Conclusions

As a middle school principal in New York City and an adjunct professor, I became aware of the needs of ELLs in NYS public schools. I found myself struggling to identify the best programs for my students and the best teaching strategies for my teachers. I consulted the relevant research and realized that native language instruction is a strong starting point for both subject area content learning and second language development in the classroom (see Cummins, 1991, 1999, 2000, 2001; Krashen & Terrell, 1983; Terrell, 1991; Thomas & Collier, 2002). Nationally well-known professors, who have written extensively on bilingual education, led courses I took at Brooklyn College and New York City College. I learned to value the cultural and linguistic differences of diverse learners. I know that there are factors beyond educators' control that affect learning outcomes, such as poverty and underserved schools in neighborhoods with high crime rates. I am aware that many students live without positive role models and many teachers live in fear of shooters on campus. Regardless of these social problems—perhaps because of them—educators have a responsibility to instill in their students the motivation they need to become productive citizens.

Particularly in the case of ELLs, educators are obliged to provide them with the most effective program to develop the cognitive skills they need to succeed in a global economy (Tedick, 2010; Tulenko, 2001). I agree with Cummins that policy makers in the United States should put in place the necessary policies to mirror other countries where all students are encouraged to become multilingual (see Cummins, 2012, 2014). I envision bringing my deep knowledge and experience to bear as I develop my

presentation for the NABE conference. My plan is to instill in educators, administrators, and practitioners in the field of bilingual education an acute awareness of the benefits of DL programs for ELLs and to advocate for DL program implementation across the United States.

Project Strengths and Limitations

The NABE is a nonprofit national professional organization composed of 5,000 members, many of whom were ELLs themselves. Members include educators, guardians, paraprofessionals, administrators, professors, advocates and researchers from across the United States (NABE, 2018). The NABE advocates for ELLs through affiliates and sister organizations in 18 states that collaborate with government agencies to resolve issues regarding state and federal mandates. The mission of this national organization is to defend the rights of bilingual and multilingual learners as they strive for equity and exceptional education (NABE, 2018). The NABE respects cultural and linguistic diversity and recognizes the value of the native language. The NABE Board of Directors takes their advocacy work seriously and wields strong influence over the creation of policies and recommended research. With a focus on pedagogy, board members promote professional development for NABE members and ensure that affiliates at the state level provide professional development at their regional meetings and local conferences throughout the year.

I am confident that a presentation made before a powerful organization such as the NABE can influence policy. Educators gather at NABE conferences to learn best practices to assist ELLs in the classroom. Administrators have their own forums to

discuss programmatic issues to better incorporate best practices at the schools they supervise. NABE publishes the *Bilingual Research Journal* dedicated to sharing the latest research in the field. The journal is a forum for the exchange of ideas and is free of charge to all NABE members (NABE, 2018).

Natural disasters, such as Hurricane María in the U.S. Virgin Islands and Puerto Rico, have recently forced parents and caregivers to relocate to the United States, sending their children to U.S. public schools. Educators throughout the nation are increasingly aware of the need for research-based teaching strategies to support second language acquisition (NABE, 2018). Because the NABE conference is an annual affair, a successful presentation in 2019 may provide an opportunity for me to present at the NABE conference in subsequent years. I plan to prepare and present a professional development curriculum at the various educational forums held annually across the United States.

Project limitations include budgetary constraints. Educators must travel across the country to attend the NABE conference, which means that relatively few from each NYS school attend the conference, based on my experience. A principal may send a small delegation and pay for their expenses from a limited professional development budget. When I was principal of a middle school in New York City, I routinely sent the instructional coach, one bilingual compliance teacher, and one assistant principal. Upon their return, I asked the attendees to train their colleagues. In my estimation, that model of professional development worked, and I would suggest that principals across the country do the same.

If the opportunity materializes, I may present my professional development curriculum to local school districts. Limitations exist in this setting as well. School administrators would have to coordinate training for their teachers where time and funds permit. Teachers are routinely paid for their time spent after school to attend a training session, whether or not the session is held at their school. It is also customary to pay teachers for preparation time, both before and after training (NYC DOE, 2014). Teachers may not use the preparatory period provided during the school day for this purpose because the time is already reserved for test marking and mandatory training sessions relevant for their current curriculum.

Recommendations for Alternative Approaches

Alternatives to presenting a professional development curriculum at NABE conferences and related educational forums are many and varied. Among my recommendations for alternative approaches to this project would be to continue my own research. It is my firm belief that only education can bring about educational reform. Policy makers should embrace research as a model for making policy. They may discover for themselves the most effective LSI program and teaching strategies associated with improved outcomes on standardized tests among ELLs.

Scholarship, Project Development, and Leadership and Change

DL programs are becoming popular in U.S. public schools, and implementation of these programs is proving successful for both ELLs and their English-speaking peers (Fortune & Christian, 2012). When the U.S. Department of Education first mandated that public schools show higher performance scores on the ELA assessments, traditional

bilingual programs were discontinued by administrators in many schools (Fortune & Christian, 2012). Administrators began to implement innovative DL programs promoting bilingualism with a cross-cultural approach. In 2000, Richard Riley, then the education secretary, reported that there was a total of 260 DL programs in U.S. public schools (Wilson, 2011). He called for an increase of that total to 1,000 by the end of 2005. Riley said, "We need to invest in these kinds of programs," adding "In an international economy, knowledge, and knowledge of language, is power" (as cited in Wilson, 2011, p. 1).

By 2016, the scholarship on DL programs so impressed Chancellor Carmen Fariña of the NYC DOE that she extended an invitation to submit proposals for the implementation of new DL programs in the New York City public schools ("Chancellor Fariña Announces", 2016). She announced an initiative to start 40 DL programs in Manhattan, Queens, Brooklyn, the Bronx, and Staten Island ("Chancellor Fariña Announces", 2016). Designed to boost ELLs' performance on NYS standardized tests, Chancellor Fariña's efforts were aligned with current research showing that linguistically and culturally proficient learners enjoy academic achievement in both languages (Fortune & Christian, 2012). The goal of the DL program is to introduce a new culture to both ELLs and their English-speaking peers. English speakers should learn about ELLs' native culture as much as ELLs learn about American culture. Parents of ELLs, too, become active participants in their children's education when the native language is maintained in school, according to researchers (Fortune & Christian, 2012).

In the wake of Chancellor Fariña's initiative, monies allocated by the NYS legislature were diverted to school districts with DL programs and administrators were motivated to implement such programs at their schools. New DL programs in languages other than English-Spanish have been implemented, such as Urdu and Mandarin Chinese. Schools have received additional allocations to fund these programs and to provide professional development for both educators and administrators. Sixty-eight new DL programs have opened since Chancellor Fariña extended her invitation, supporting both ELLs and English proficient students. New York City Mayor Bill de Blasio has been particularly vocal about this new initiative. In a 2016 press conference, he stated,

> We are a City of immigrants that is stronger because of our different cultures and languages…. This bilingual expansion will provide thousands more students with high-quality programs and sends a clear message that we welcome all families in our school system. ("Chancellor Fariña Announces", 2016)

The new chancellor, Richard A. Carranza, began his tenure in New York City on March 5, 2018. The Mayor and Ms. Fariña are confident that he will continue to expand DL programs to benefit all students in New York City public schools ("Chancellor Carranza Announces", 2018). The operation of these new programs has benefitted ELLs on their way to long-term success.

If I had the opportunity that former Chancellor Fariña did to remake New York City public schools, I would continue her legacy. Specifically, I would provide funds for the professional development of teachers and administrators in DL instruction to benefit all students, not ELLs alone. Educators in New York City have implemented DL

program, including the first Albanian-English DL program in the Bronx, bringing the total DL programs in New York City to 200 (“Chancellor Carranza Announces,” 2018). Now educators in New York City must get the professional development they need to correctly implement these DL programs. To develop my project, I identified the lack of college-level courses in DL instruction and academic assessments. At present, teachers earning a master’s degree in Bilingual Education are offered only one course in academic assessments and a single teaching methods course. This is not enough. The lack of resources at the college-level leaves teachers without innovative teaching strategies in the classroom.

I believe that education is a journey. I have worked all my life in a challenging, inner-city environment where innovation is desperately needed. I served as a school leader from 1986 to 2012 in the same community where I grew up and attended school. My community was described as an area of low SES. The crime rate was persistently high, and I witnessed violence that seriously affected members of my community.

Over the years, my role in my community has changed from leader to mentor to remain effective in specific situations. Goleman (2009) has challenged me to respect and value every individual with whom I make contact. My mission is to provide opportunities for each person to contribute to social change, whether in their neighborhood or in their workplace. I have learned to listen to teachers, staff, parents, and students. Research has shown that these individuals provide good insights as to how an organization should be run (Deal & Paterson, 2009; Goleman, 2009; Kouzes & Posner, 2008).

Love is necessary. The job can drain anyone; one needs to love to be a leader. Teachers, students, and parents need to know that a caring environment is provided, and that they are special to the organization. It is essential to model, to demonstrate, to coach teachers in efficiency and effectiveness (Kouzes & Posner, 2008). I am an Idealist as Kouzes and Posner use the term, trying to meet everyone's needs. Every day I feel it is my responsibility to be supportive and to do the best job possible for my students and for my entire community in any given situation.

My vision needs to be shared in various forums for it to have an effect. I am confident that my project will lead to further research that will contribute to the literature on effective instructional practices for ELLs. The professional development curriculum I envision is designed to enhance teachers' skills and provide training on new initiatives for the benefit of both school and community. Perhaps my project will lead to invitations from educators and administrators to provide professional development seminars across the country. I trust that my recommendations have the potential to prepare ELLs for the 21st century by developing their bicultural, biliterate and bilingual talents to become future leaders of the United States in a global society.

Reflections on the Importance of the Work

Remaining free of bias while conducting this study presented a great challenge for me. As a practitioner in the field or bilingual education with a passion for the plight of ELLs, I have had to separate my opinions from the evidence I discovered in my research. Maintaining objectivity became my passion. Because English is not my first language,

scholarly writing was a challenge for me, as well. The wealth of well written research I read helped me to improve my skills in both reading and writing.

Reading many journals, books, and articles, interpreting that information, and then thinking critically about how ELLs acquire a second language has increased my knowledge in the field of bilingual education. I have improved my skills as a researcher, reader, data analyzer and critical thinker. I have had a rewarding experience completing this study and look forward to sharing my findings to make a difference in the world.

Throughout my career, I have created effective programs for ELLs, including DL and ENL programs in both middle school and K-5. As a principal, I created instructional academies within my school to serve ELLs. Throughout the school day, these valuable students traveled in groups separated by language proficiency levels, to bilingual content area teachers for NLA, ELA, Mathematics, Science, Social Studies and talent classes. Teachers of the academy were experts in their content subject area and fully bilingual. Teachers were supervised, and feedback was often shared. The academy was well equipped with SmartBoards and students had laptops on which to do their own research. The academy was well respected among all the students at the school. Once a month the academy sponsored an assembly where students shared their native culture in their native language. Educators from other school districts often came to visit my school to gather useful resources for their own programs.

Routinely gathering data from the students, I was curious early in my career as to which LSI program type might best serve ELLs. I began to attend plenary sessions sponsored by NYS bilingual education associations and NYS TESOL conferences as well

as NABE conferences across the country to learn from thought leaders, such as Krashen, Cummins, Collier, Thomas, Baker, and Baca. These scholars taught me to think critically about social problems affecting ELLs' education. Early in the 1980s I was fascinated by their findings in the areas of bilingualism and second language acquisition. I developed many questions which led to my own research and the successful completion of this study. As a scholar I learned the importance of utilizing intuitive thinking and examining many possible answers to my questions.

Bruner (1960) resonated with me when he defined analytic thinking as re-evaluating conclusions using different analyses. His idea of intuitive thinking has led me in my own study to design my research questions and hypotheses specifically to explore my intuition. Doctoral course work at Walden University has prepared me to examine this phenomenon and to carefully bring my professional experience into my research of bilingual education. I had the opportunity to exchange ideas and share my thinking with scholars inside the university as well as in diverse fields outside the university. I welcome the opportunity to demonstrate the value of the native language to educators and administrators across the country. I will strive to impress upon them how crucial it is to implement productive teaching strategies and the most effective LSI program not only to improve outcomes on standardized assessments among ELLs but also to help make ELLs successful in the global economy.

Implications, Applications, and Directions for Future Research

Social Change

Walden University's mission promotes social change and my project is aligned with that mission. ELLs need to be educated properly to successfully undertake a rigorous curriculum in English. Educational reform is the kind of social change that can effectively support ELLs. There has been a history of educational reform in the United States. President Jimmy Carter established the Department of Education in 1979 to convince Congress to allocate millions of tax dollars for educational reform (Eckman, 2017). According to Eckman (2017) return on this investment has not met expectations: U.S. students are ranked in the 31st position among students from around the world with regard to academic performance. Aaron Michel, co-founder and CEO of Path Source, an innovative career exploration solution for students, agreed with Eckman's assessment. Michel (2017) was concerned that the educational reform debate includes positions on everything from public versus charter schools to the cost of college, CCSS, and STEM education. The central reform necessary for U.S. public education, according to Michel, is the integration of practical knowledge into the core curriculum, knowledge that can be transferred to the workplace. Educational reform in the United States at present appears to focus on preparing students for college, not career. ELLs possess a valuable asset in that they are bilingual when they graduate college. By the time ELLs enter the workforce, they have matured in two cultures and developed a biliteracy that uniquely qualifies them to succeed in the global economy.

My goal is to achieve excellence in education. I have an experiential knowledge of bilingual education and an intuitive understanding of the second language acquisition process. I am a powerful ambassador for social change in NYS. I aim to convince administrators and educators that ELLs need a well-structured DL program that values the native language. I intend to share my deep understanding of how ELLs can best tackle a rigorous curriculum in English and maintain and improve literacy in their native language.

Directions for Future Research

There will always be a need for future research on effective programs to help ELLs excel. I strongly recommend future research on the negative effects of high-stakes test preparation among ELLs as well as their English-speaking peers. Most importantly, I recommend future research on programs that promote second language learning by maintaining the native language. The phenomenon of higher order thinking skills transferred from the native language to the second language deserves further research. English Language Learners in DL programs experience this phenomenon routinely and, thereby, develop strategies that may prove effective in taking standardized tests. Finally, as my study's findings show that a sample of ELLs supported by a DL program did better on the standardized NYS ELA exam than did a similar sample of ELLs supported by an English-only program, I would recommend a longitudinal study to support such findings across a larger population.

Conclusion

I have investigated why ELLs routinely performed poorly on the NYS ELA standardized assessment. Congress made changes with ESSA (2015); however, ELLs attending NYS public schools are still assessed by the NYS ELA exam after 1 year of academic instruction without having developed the cognitive language skills necessary to do well on the exam. Research shows that ELLs need at least 3 to 7 years to acquire the second language (Collier & Thomas, 2004; Conger, Hatch, McKinney, Atwell, & Lamb, 2012; Cook, Boals, Wilmes, & Santos, 2008; Cummins, 1984, 1999; Greenberg, 2015; Hakuta, Butler, & Witt, 2000). This research also shows that even those students with 7 years of ENL still have difficulty communicating in the second language.

My study's findings are aligned with studies that have shown that native language proficiency has a positive effect on second language acquisition. Cognitive skills developed in the native language can be transferred to the second language (Baker, 2000; Cummins, 1991; Krashen, 1991; Terrell, 1991; Zergani, 2017). Developing a strong foundation in the native language is more efficient for second language acquisition than developing the second language directly (Zergani, 2017). My study revealed that a sample of ELLs instructed in a DL program achieved significantly higher scores on the NYS ELA standardized assessment than did a sample of ELLs instructed in the ENL program. I plan to offer a professional development curriculum designed to encourage educators and administrators to implement effective DL programs and research-based teaching strategies to improve outcomes on standardized assessments among ELLs.

Dual Language programs, if implemented correctly, may close the achievement gap between ELLs and their English-speaking peers. The population of ELLs in NYS schools is increasing each year. New York State educators have made a commitment to prepare all students for college and career in the 21st century. This is not an easy task, especially when working with ELLs; however, research has shown that nurturing their native language and culture as assets rather than liabilities helps them to succeed. As these youngsters take their place in the global economy, encouraged and equipped by an effective bilingual education, they may be the social change the world needs them to be.

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Appendix A: Project

A Professional Development Curriculum for Educators and Administrators

The Every Student Succeeds Act of 2015 (ESSA, 2015) provided for an annual assessment of U.S. public schools in part by mandating that all students pass an English Reading Language Assessment, known in New York City as the New York State English Language Arts (NYS ELA) exam. English Language Learners (ELLs) perform poorly on this standardized test. Because ELLs constitute a significant portion of the school-age population in New York City, their poor performance puts public schools there at risk of closure. In response to the pressure for performance on high-stakes tests, New York State (NYS) educators are teaching to the test. Results of my study indicated that Dual Language (DL) programs for language-supported instruction (LSI) may improve outcomes on the NYS ELA exam. My presentation of this professional development curriculum calls for further research into how DL programs may be an effective alternative to teaching to the test.

I call upon state board members and practitioners in the field of bilingual education, especially educators and administrators in attendance here at the Annual National Association for Bilingual Education (NABE) Conference to become change agents. I urge you to be instrumental in bringing about social change in your schools and in the global economy by nurturing ELLs' native language and culture as assets rather than liabilities. My presentation is designed to help you make better instructional decisions regarding ELLs. Innovative programs and teaching strategies that meet the

needs of ELLs, including how to achieve on standardized tests, deserve further investigation to prevent test preparation from replacing researched curriculum.

English Language Learners in NYS are struggling to keep pace with their native English-speaking peers in a challenging academic curriculum taught in a second language (National Center for Education Statistics, 2011-2013). New York State Education Department regulations and assessment policies appear to be at odds with scientific research and may predispose ELLs to poor academic achievement and failure in school. Despite research that shows ELLs need at least 3 to 7 years to acquire the second language (Collier & Thomas, 2004; Conger, Hatch, McKinney, Atwell, & Lamb, 2012; Cook, Boals, Wilmes, & Santos, 2008; Cummins, 1984, 1999; Greenberg, 2015; Hakuta, Butler, & Witt, 2000), ESSA (2015) mandates that NYS assess ELLs by standardized exam after 1 year in the public-school system, without regard to whether they have developed the cognitive language skills necessary to do well on the exam. Given the sheer numbers of ELLs in NYS public schools, there is a pressure among educators and administrators to "teach to the test."

Standardized tests are designed to be diagnostic tools. Test results should inform educators how they might adjust their curricula to address the needs of each learner in their classroom, rather than paint a picture of students' achievements to date for comparison with other students' achievements. To focus curriculum on drilling test content and practicing test-taking skills to improve test results is unacceptable. Preoccupation with test-taking skills threatens to replace researched curriculum when educators interrupt the content subjects for several months to focus students' attention on

test preparation worksheets. Test results should determine curriculum, not replace it. This is how I want to challenge you to respond to test results: identify areas where you can promote lifelong learning for every student, both ELL and native English-speaker alike.

Purpose

The purpose of my project is to provide professional development for educators and administrators. I plan to prepare and deliver curriculum training presentations at various educational forums held every year across the United States. The project is based on the findings of my study. I found that achievement scores on the NYS ELA standardized assessment among ELLs are associated with LSI program type. Results of my study revealed that DL instruction may improve outcomes on standardized assessments among ELLs. I will promote DL programs among educators and administrators, encouraging them to recommend to policy makers appropriate changes in existing educational policies.

Craig Jerald, former Senior Editor at *Education Week* and president of Break the Curve Consulting, is a thought leader in education. His article, "Teach to the Test? Just Say No," made the critical distinction that educators should determine when and how to teach to the test when designing curriculum in compliance with federal standards (Jerald, 2006). Jerald asked the question, does teaching to the test necessarily mean dumbing down the curriculum? Perhaps aligning the classroom curriculum to the current CCSS is acceptable, even helpful to students as lifelong learners. Jerald relied upon academic assessment expert, James Popham, to explain the difference between educators' use of

strategy versus tactics when teaching to the test. If educators provide a wealth of information around topics presumably covered in the test, then they are strategically taking advantage of teaching moments related to the test. If, however, educators present simulated test questions specifically related to topics presumably covered in the test, then they are practicing test-taking tactics that can rarely be applied in real-life situations.

Such narrow instruction may miss the mark altogether, as the specific question covered in class may not appear on the test. Similarly, some educators prepare their students with vocabulary words they think will appear on the test, a tactic that fails if those words do not appear on the test. Teaching strategies, rather than such tactics, enrich a student's vocabulary so that they are prepared for whatever words appear on the test. Teaching strategies create long-term positive outcomes for lifelong learners.

Greatschools.org made this judgment about test content: "If teaching content standards is considered teaching to the test, [then] it may not be such a bad thing" ("What's So Bad", 2016). Specifically, this respected online newsletter identified the following content standards that qualify test preparation as acceptable curriculum:

- becoming familiar with text and format,
- learning time management,
- following directions,
- determining which answer needs to be eliminated,
- embedding test strategies into the daily lessons,
- demonstrating comprehension of a reading passage,
- deriving meaning of words from context,

- identifying facts where needed to draw conclusions, and
- tackling analytical skills required in professional life. ("What's So Bad", 2016)

These are useful skills for lifelong learners. For educators and practitioners who work with ELLs, these skills sound familiar; indeed, they support how ELLs learn English.

Rationale

Educators are under pressure to bring ELLs' performance on standardized exams up to par with that of their English-speaking peers. In response to this pressure, educators seek the most effective LSI program for ELLs as well as teaching strategies that are associated with improved outcomes on standardized assessments. Without proper guidance, however, educators do not use effective teaching strategies to help ELLs achieve on standardized exams, nor do administrators necessarily choose the most effective LSI program. It is important to build the capacity of educators and administrators in order for them to make better decisions on instructional programs and teaching strategies to support ELLs. Professional development serves this purpose and enhances educators' and administrators' knowledge.

James Cummins's leadership in the field of language learning established the connection between fluency in the native language and second language acquisition. Cummins (2001) broke new ground when he wrote, "When children continue to develop their abilities in two or more languages throughout their primary school years, they gain a deeper understanding of language and how to use it effectively" (p. 2). Cummins (2001) also discovered that bilingual students "develop more flexibility in their thinking because

of processing information through two different languages" (p. 2). He observed that ELLs, who receive English language (L2) instruction in an environment that reinforces their native language (L1), transfer higher order thinking skills from L1 to L2 (Cummins, 2001). This effort reinforces learning strategies that ELLs can apply in real-life situations where they may be called upon to problem solve, including answering questions on a standardized test. The phenomenon of higher order thinking skills transferred from the native language to the second language deserves future research.

Anna Uhl Chamot has written extensively on learning strategies and she emphasized that when they become automatic for the learner, they can be applied to whatever setting or situation is appropriate (Chamot & O'Malley, 2009). Educators who teach in DL programs use such strategies by teaching content in both the native language and the second language. When students comprehend a concept in two languages, they are exposed to the underlying strategy with which their minds have comprehended that concept. This process repeats daily when learning in two languages simultaneously. With repeated exposure, such strategies become automatic for the learner; so, they can apply them readily in whatever situation they may be called upon to solve problems.

Collier and Thomas (2004); Conger, Hatch, McKinney, Atwell, and Lamb (2012); Cook, Boals, Wilmes, and Santos (2008); Cummins (1984, 1999); Greenberg (2015), and Hakuta, Butler, and Witt (2000) have gathered evidence in study after study that ELLs transfer cognitive skills learned in their native language to the second language, thereby speeding up second language acquisition. Contrary to the misconception that ELLs who learn the content areas in their native language will not be prepared to do well on high-

stakes tests in English, Cummins (2001) and Chamot and O'Malley (2009) have observed how teaching strategies used in DL programs enable ELLs to complete rigorous academic tasks in the second language, such as problem solving on a standardized test.

Results of my own study are aligned with these findings. My research compared NYS ELA exam scores for a sample of ELLs who participated in a DL program with those for a sample of ELLs who participated in an English as a New Language (ENL) program. Results showed a statistically significant difference in the direction predicted by the hypotheses: The ELLs supported by a DL program achieved higher scores than did those supported by the English-only program. My study design called for an ANOVA to determine if a significant difference in ELA scores existed between two sample populations of ELLs supported by two different LSI program types. The data was collected from two separate schools, each school exclusively using one of the two LSI programs. I conducted an ANCOVA to test for differences in ELA scores between the two schools while controlling for students with disabilities (SWD). I designed the sampling method to control for gender and ethnicity as well as extraneous variables that are likely to influence results on standardized assessments, such as socioeconomic status, school size, school location, and school sector. By selecting two schools that were comparable on these demographic statistics, and by controlling for SWD as a covariant, I attempted to control for all relevant extraneous variables. I would recommend a longitudinal study to support such findings across a larger population.

Thomas and Collier (2004) found similar results. To answer their research question, "Which program is better, when extraneous variables (e.g., initial differences

between groups) are controlled?" (p. 44), the researchers conducted multiple regression tests and ANCOVAs across eight different LSI programs in a series of longitudinal studies. They concluded that ELLs, who participated in programs where academic content was taught in both the learner's native language and in English, achieved better outcomes than did learners who were taught academic content in English only. Collier and Thomas (2004) also noticed that in the DLI programs they examined both English Proficient learners and ELLs scored above the norm on English reading tests. Here is evidence that DL programs may benefit ELLs as well as their native English-speaking peers by exposing them to learning strategies that they can apply to problem solve on English reading tests. More research is indicated.

Well integrated DL programs expose native English-speaking students to cultural diversity in a way that uniquely adds value to public education in the United States. Students in New York City public schools speak more than 120 different languages. Cummins observed early on that educators and policy makers have approached this cultural diversity as if it were a problem to fix (Cummins, 2001). He advised, instead, that students who speak two or more languages "have an enormous contribution to make to their societies, and to the international global community" (Cummins, 2001, p 3). Far from being a problem, multi-lingual students may be a solution for the global economy. Given the proper resources, cultural and linguistic diversity can smooth the transition of American workers to a global workforce.

Researchers have consistently found that when ELLs have a solid foundation in their native language, they readily develop the second language (Baker, 2000; Cummins,

1991; Krashen, 1991; Terrell, 1991; Zergani, 2017). ELLs already possess the key ingredient to success in second language acquisition: native language proficiency. This awareness among educators and administrators will logically lead to instructional design and educational policies that respect ELLs and value their contribution not only to their own education but also to the cultural literacy of their English-speaking peers. Educators should take advantage of ELLs' linguistic foundations to build a healthy respect among all students for cultural diversity.

I join my voice with James Cummins and urge you to do the same. At the dawning of a new Millennium, Cummins (2001) called for a shift away from viewing native language proficiency as a problem to solve, toward recognizing biliteracy as a rich resource to nurture. This is the learning outcome I offer in my professional development curriculum. Far from having a negative effect on acquisition of the second language, teaching in the native language better equips ELLs for college and career in the global economy.

Professional Development Goals

The following are the goals of the professional development curriculum:

- To provide professional development training at the local level across the United States.
- To build capacity among administrators and educators to learn how to most effectively support ELLs.

- To equip administrators and educators with the necessary knowledge, skills, and support to help them make sound educational decisions around strategies and programs that facilitate lifelong learning experiences for ELLs.
- To provide administrators and educators with the opportunity to collaborate with colleagues.

Learning Outcomes

The learning outcomes for the professional development curriculum include making administrators and educators more knowledgeable about the DL program and teaching strategies associated with improved results on the NYS ELA standardized assessment among ELLs.

Target Audience

The following are included in the target audience of the professional development curriculum:

- teachers in public schools,
- certified Bilingual teachers in DL programs,
- administrators in public schools,
- policy professionals, and
- NYS Testing Coordinators.

Agenda

Ongoing Professional Development Training Session Agenda

48th Annual National Association for Bilingual Education Conference to be held at Disney's Coronado Springs Resort in Lake Buena Vista, Florida, on March 7-9, 2019

Friday, March 8, 2019

8:30 AM – 9:00 AM	Breakfast - Registration/Sign-in WELCOME/Introductions
9:00 AM – 10:00 AM	**A Comparison of Two Language-Supported Instruction Programs for English Language Learners** *María de los Ángeles Barreto,* Doctoral Student at Walden University
10:00 AM – 10:15 AM	Reflection
10:15 AM – 10:30 AM	Break
10:30 AM – 11:30 AM	Group Activity: Identifying NYS Assessment Teaching Strategies in English that Work for ELLs
11:30 AM – 12:00 PM	Share-Out
12:05 PM – 1:00 PM	Content Standards that Qualify Test Preparation as Acceptable Curriculum Benefits of Native Language Instruction & ELLs in a Global Society: **Questions & Answers** Evaluation and Self-Evaluation

Materials and Equipment

- Index cards
- Pocket folder with handouts
- Post-its
- Parking Lot Chart to post reflections
- Chart paper and markers
- Tape
- Handouts and presentation of CCSS materials by grades for group work
- Evaluation forms
- PowerPoint presentation
- SmartBoard/Laptop

Timeline

I plan to present this professional development curriculum on March 8, 2019, at the annual NABE conference and in September, 2019, at the NYS School District Principal Training Session. I will focus on teaching strategies that help improve achievement scores on standardized tests among ELLs. During each presentation, I will involve the participants in deep discussions, group work and turn-and-talk activities. The participants will have an opportunity to share their thinking around various topics. At the end of each session participants will evaluate and share feedback about the presentation.

Dates	**9:00 – 10:00AM**	**10:30 – 11:30AM**	**11:30AM – 12:00PM**	**12:05 – 1:00PM**
March, 2019: Coronado Springs Resort in Lake Buena Vista, Florida	A Comparison of Two Language-Supported Instruction Programs for English Language Learners	Group Activity: Identifying NYS Assessment Teaching Strategies in English that Work for ELLs	Share-Out Content Standards that Qualify Test Preparation as Acceptable Curriculum	Benefits of Native Language Instruction & ELLs in a Global Society Questions & Answers Evaluation and Self-Evaluation
September, 2019: NYS School District Principal Training Session	A Comparison of Two Language-Supported Instruction Programs for English Language Learners	Group Activity: Identifying NYS Assessment Teaching Strategies in English that Work for ELLs	Share-Out Content Standards that Qualify Test Preparation as Acceptable Curriculum	Benefits of Native Language Instruction & ELLs in a Global Society Questions & Answers Evaluation and Self-Evaluation

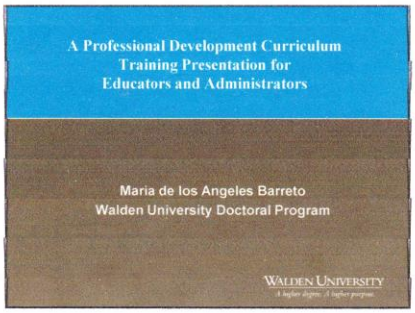
Conclusion

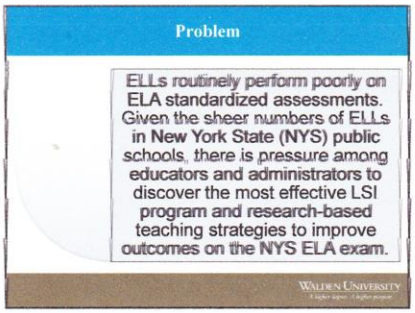
I encourage you to applaud your ELLs' capabilities rather than cure their deficiencies. Furthermore, I urge educators and administrators to become change agents. Consider how this revolutionary way to view ELLs' struggle for second language acquisition will ease the pressure to "teach to the test." Dual Language programs necessarily balance rigorous tasks with researched teaching skills, exposing the learner to

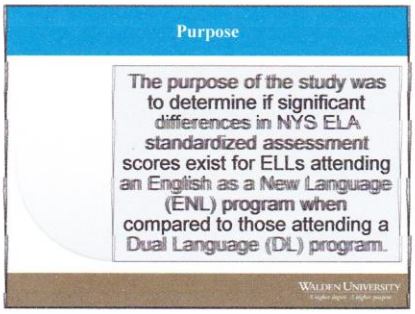
strategies that can be applied to solving problems in real life, including problems on a standardized test.

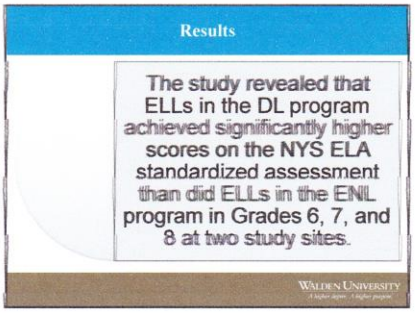
Presentation

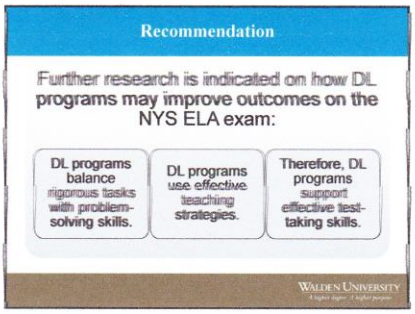
A Professional Development Curriculum
María de los Ángeles Barreto



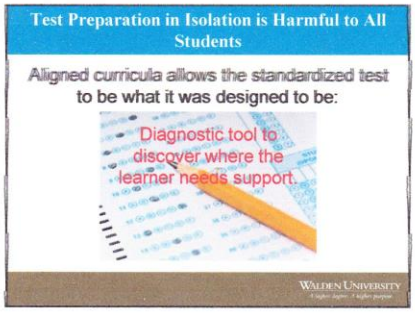


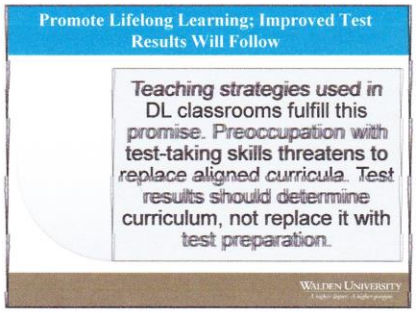


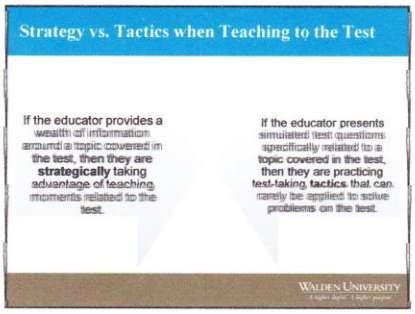


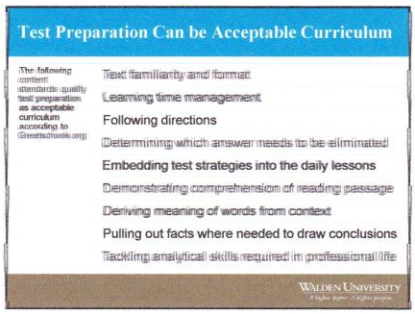


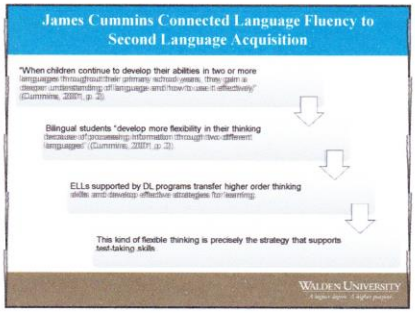
A Professional Development Curriculum
María de los Ángeles Barreto

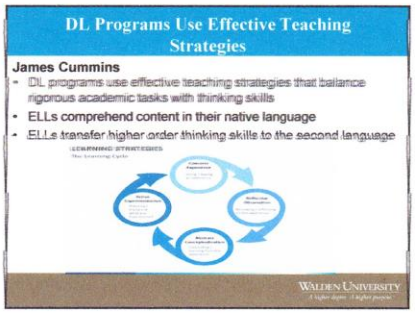












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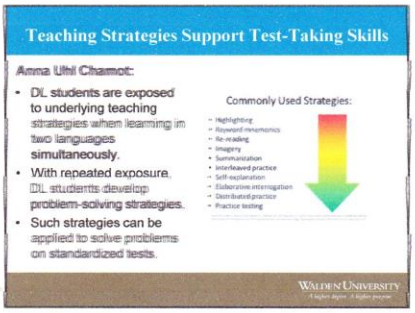

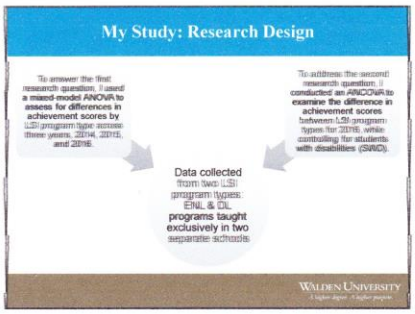

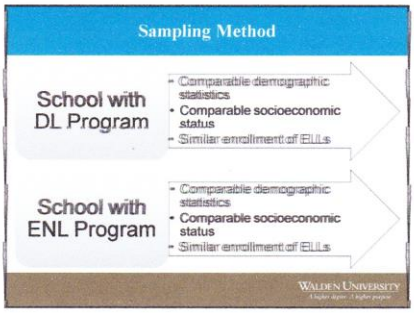

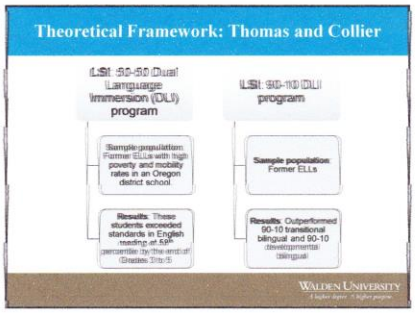

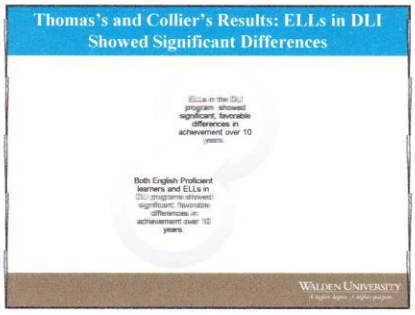

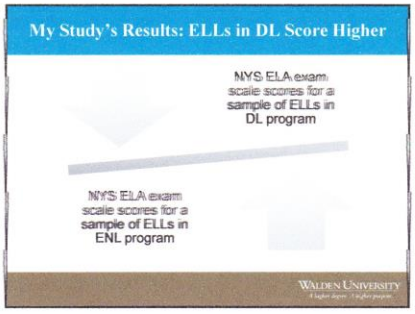

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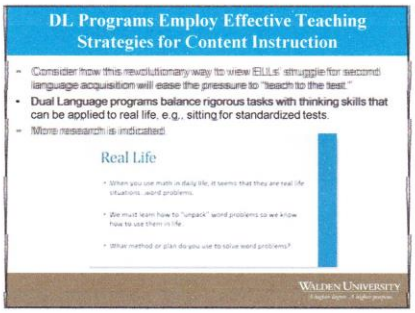

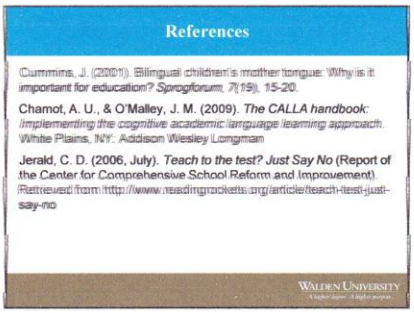

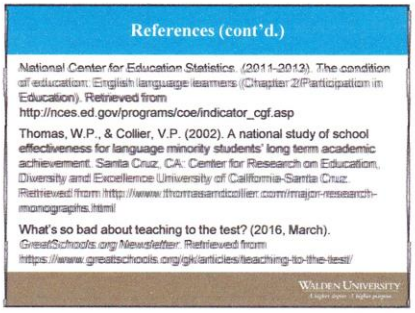

Evaluation for Presentation

(Directions: Please complete and return this form to the presenters of the professional development activity.)

Date: _____

A Professional Development Curriculum: Presentation and Materials
Presenter: María de los Ángeles Barreto

Please answer the following questions by marking the scale according to your perceptions of the professional development activity:

	Strongly Agree	Somewhat Agree	No Opinion	Somewhat Disagree	Strongly Disagree
1. This activity increased my knowledge and skills in my areas of certification, endorsement and/or teaching assignment.					
2. The relevance of this activity to the NYSED teaching standards was clear.					
3. It was clear that the activity was presented by a person with education and experience in the subject matter.					
4. The material was presented in an organized, easily understood manner.					
5. The activity included discussion, research, critique, or application of what was presented, observed, learned or demonstrated.					

The best features of the activity were:

Comments and/or reactions for improvement:

Attendance Record

Participants' Attendance Sheet

Date: _____

____ AM/PM - ____ AM/PM

Presentation of Professional Development Curriculum
María de los Ángeles Barreto, Presenter

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