An Examination of Student Achievement in English Language Arts Through the Use of Predictive Assessments, Standardized Testing, and Academic Interventions

Bridgitte B. Griffin
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Michael Wischnowski

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Gloria Jacobs

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An Examination of Student Achievement in English Language Arts

Through the Use of Predictive Assessments, Standardized Testing, and Academic Interventions

By

Bridgitte B. Griffin

Submitted in partial fulfillment of the requirements for the degree

Ed.D. in Executive Leadership

Supervised by

Dr. Michael Wischnowski

Committee Member

Dr. Gloria Jacobs

Ralph C. Wilson, Jr. School of Education

St. John Fisher College

August 2009
Ralph C. Wilson, Jr. School of Education
St. John Fisher College
Ed.D. Program in Executive Leadership

We recommend that the Dissertation by

Bridgitte Bardell Griffin

Entitled An Examination of Student Achievement in English Language Arts Through the Use of Predictive Assessments, Standardized Testing, and Academic Interventions

be accepted in partial fulfillment of the requirements for the Education Doctorate degree.

Dr. Michael Wischnowski, Dissertation Chair

7/16/09

Date

Dr. Gloria Jacobs, Committee Member

7/18/2009

Date
Biographical Sketch

Bridgitte Bardell Griffin is currently the Assistant Principal at Benford (pseudo) Central School District. Mrs. Griffin attended State University of New York College at Buffalo from 1978 to 1982 and graduated with a Bachelor of Science degree in 1982. She attended State University of New York College at Brockport from 1997 to 1999 and graduated with a Master of Science in Elementary Education in 1999. She attended St. John Fisher College in 2002 to 2003 and graduated in 2003 with a Master of Science in Educational Administration. She came to St. Fisher College in the summer of 2007 and began doctoral studies in the Ed.D. in Executive Leadership. Mrs. Griffin pursued her research in Examining Student Achievement in Language Arts Through the Use of Predictive Assessments, Standardized Testing, and Academic Interventions under the direction of Dr. Michael Wischnowsk and received her Ed.D degree in 2009.
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Abstract

The purpose of this study is to examine student achievement in middle school English Language Arts (ELA) through the use of predictive assessments, standard testing, and academic interventions. The researcher determined whether and how teachers at the Benford Middle School use the ThinkLink assessment results to change their instructional practices for students who have scored at levels one and two on the NYS assessment, scores that indicate these students are not proficient in reading at their grade level. Furthermore, the researcher identified teachers' perceptions about the usefulness of the Discovery Education ThinkLink Series. Specifically, the following research questions have guided the investigation: How do middle school teachers use data from ThinkLink, a predictive assessment system, that indicates that certain sixth-, seventh-, and eighth-grade students will not perform at proficiency on the NYS ELA exams? The second research question is: How do middle school teachers describe their experience with the ThinkLink Predictive Assessment System? A review of test scores, teacher survey, and focus groups were conducted to gather information regarding teacher perceptions, beliefs, and strategies used to address student achievement needs. The major findings in the study are:

(a) ThinkLink is used by teachers to identify skills and provided remediation to students.
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Chapter 1: Introduction

Adolescent literacy is a complex concept involving more than the achievement scores students receive on standardized reading tests. Adolescents need to be able to build knowledge through comprehending different kinds of texts, mastering vocabulary, and sharing their ideas (National Commission on Excellence in Education NCEE, 2008). Understanding the meaning of adolescent reading requires an individual to look at the difference in required skills of early readers and that of adolescent readers. Thorndike (1973-1975) defined reading as a transition from a decoding problem (early readers) to when it becomes a thinking problem (adolescent readers), "a reasoning process rather than a distinct and specialized skill" (p. 135). Research has revealed that around the fourth grade, students make that critical transition from learning to read to reading to learn (Chall, 2000). This transition is the signature of adolescent literacy, making it distinctive and challenging. It lies the challenge of providing adolescents with effective literacy skills and focusing on their developmental needs. Researchers are pursuing ways to capture the minds of adolescents and change the status quo.

Measuring the accomplishment of these skills and developmental levels is an added challenge for middle school teachers working with these adolescents. Testing systems, such as ThinkLink Learning (Discovery Education, 2008) attempts to measure these forms and provide teachers with some information pertaining to their instruction and the students' learning. How middle school teachers use the ThinkLink information is the central purpose of this study. Educational policy and research indicate that
adolescents are not reading at the level required for success. This is a problem that has been present for sometime. A variety of tests have been used to address this problem, but the problem persists. Currently, the Benford (pseudo) Middle School is using the ThinkLink Predictive Assessment System to identify students with low reading levels, which make them at risk for failing the state tests. ThinkLink reading levels one and two are aligned with students who are recognized as reading at low levels and are identified as not proficient on the assessments. At-risk students identified in this study are those who are not proficient readers at their grade levels. What is lacking, however, is an idea of whether and how teachers actually use the assessment results to inform instruction. However, before discussing testing and teachers' use of test data, the principles and controversies around adolescent literacy must first be explored.

Vacca & Alvermann Four Literacy Principles

According to Vacca & Alvermann (1988), we can either continue the status quo, which is providing a minimalist approach to literacy in middle schools, or we can begin to think about literacy in new ways for adolescents. Educators should listen to the voices of adolescents to find ways to turn their ideas into solid instructional practices. The first principle claims that middle school students need to generate and share their ideas about complex content area text with others. Students' reading skills will improve when teachers use reading strategies that require students to organize, interpret, and reflect on text. The second principle specifies middle school students thrive in active learning. Teachers should involve students in participating in content area reading and learning, actively connecting instruction to the students' needs.
The third principle states middle school students need support in developing a critical awareness of what they read, view, and hear. Educators should take a cultural-studies approach to teach students how to critique the media literacy they enjoy reading. Alvermann suggests this approach involves guiding the readers through a self-reflective process teaching the students to question their own reading pleasures. The final principle expresses that students need opportunities to connect literacy in and out of school learning. Students become more efficient learners when they can connect what they already know with new concepts they are expected to learn in their content areas.

*The Adolescent Literacy “Crisis”*

A position statement published by the International Reading Association (IRA, 1999), identified a crisis within adolescent literacy in the United States and cited neglect of adolescent literacy by schools, policymakers, and the public and calls for the continuous development in the writing and reading skills of adolescents (Ivey, 2002). Gee (2004) suggests that “poor readers have not failed because of bad skills instruction...they have failed for a variety of more important reasons” (p. 14). One reason children are struggling in reading is aimed at the phenomenon called the fourth-grade slump. The fourth-grade slump is the phenomenon where some children seem to acquire reading in the early grades but are unable to use reading to learn in more complex school content such as science.

This fourth grade slump is made up of kids who can read, in senses of decode and assign superficial literal meanings to text, but can’t read in the sense of understanding, in any deep way, informational texts written in fairly complex language (p. 15).
The concern over the reading ability of adolescents has increased in the past two decades since the publications of national reports from the early 1980s (Jacobs, 2008). The first report is *A Nation at Risk* (National Commission on Excellence in Education, 1983), and the second report is the 1984 *Report Card* from the National Assessment of Education (NAEP, 1985).

*A Nation at Risk* reported bleak data regarding adolescents’ reading abilities; for example, “about 13 percent of all 17 year-olds in the U.S. can be considered ‘functionally illiterate’” and “functional illiteracy among minority young may run as high as 40 percent” (p. 3). Functional illiteracy refers to the inability of an individual to use reading, writing and computation skills efficiently in everyday life situations. The report affirms that the “average achievement of high school students on most standardized tests is now lower than 26 years ago when Sputnik was launched” (p. 3). The alarming factors regarding these adolescents is their lack of “higher order intellectual skills, nearly 40 percent cannot draw inferences from written materials; only one-fifth can write a persuasive essay; and only one-third can solve a mathematics problem requiring several steps” (p. 3). The 1984 NAEP Report (1985), which is consistent with *A Nation at Risk*, indicated that the reading gains for middle school students (13 year-olds) and high school students (17 year-olds) had either flat-lined or increased insignificantly.

This data raises concerns regarding the nations’ youth and their ability to enter into the workforce when the demands of highly skilled workers have rapidly increased. In 1983, prior to the emergence of the Internet, adolescents’ scores were found to have declined on college boards Scholastics Aptitude Tests (SATs), physics, and English achievements (*A Nation at Risk*, 1983). This appears to have continued. The NAEP 2002
results revealed approximately 25% of eighth- and twelfth-grade students read below basic levels, according to the Alliance for Excellent Education (2008), a national policy and advocacy organization with a mission “to promote high school transformation to make it possible for every child to graduate prepared for postsecondary education and success in life” (p. 1).

The NAEP’s 2007 Report Card indicated for students in the eighth grade that “there was no significant change in the percentage of students at or above the proficient level,” in comparison to the 1992 and 2005 results (NAEP Executive Summary, 2007, p. 2). The NAEP (2009) refers to the proficient level in reading of eighth-grade students as the ability to:

...be able to show an overall understanding of the text, including inferential as well as literal information...they should be able to extend the ideas in the text by making clear inferences from it, by drawing conclusions, and by making connections to their own experience... (p. 2).

Data from the 2007 NAEP reading report indicated 69% of eighth-grade students fall below the proficient level in their ability to comprehend meaning of text at their grade level (Lee, Griggs & Donahue, 2007), and 26% of students read below the basic level, which means these students do not have sufficient reading ability to understand and learn from text at their grade level. The NAEP refers to the basic level in reading of eighth-grade students as the ability to

...demonstrate a literal understanding of what they read and be able to make interpretations...they should be able to identify specific aspects of the text that reflect overall meaning, extend in the ideas in the text by making simple
inferences, recognize and relate interpretations and connections among ideas in
the text to personal experiences and draw conclusions based on the text (p. 1).

Furthermore, the report showed that, although there was some improvement for the
minority students and white students, the achievement gap between African American
and white students did not narrow. The NAEP data from 2007 are similar of literacy
achievement scores from more than 20 years ago indicating adolescents scores are
remaining static (NAEP, 1985).

Contrary to the sense of urgency generated from the NAEP and *A Nation at Risk*
reports, the apparent crisis in adolescent reading attention around this issue magnified in
the mid to late 1990s (Jacobs, 2008). A position statement published by IRA (1999)
supports that the reading skills of older students have long suffered and outlined seven
principles to promote adolescents’ literacy growth (Moore, Bean, Birdyshaw, & Rycik,
1999). Following the IRA position statement, a series of reports responded to the call for
action to adolescent literacy (outlined in Appendix A, cited by Jacobs, 2008). For
example, the RAND Corporation’s *Reading for Understanding* (Snow, 2002) proposed
an agenda to address the pressing problem of comprehension as older students’ inability
to meet the increasing challenges of complex tests. and *Reading Next: A vision for action
and Research in Middle and High School Literacy* (Bincarosa & Snow, 2004) outlined 15
elements of effective adolescent literacy programs and literacy achievement.

Approximately eight million children between fourth and twelfth grades struggle to read
at grade level (Bincarosa & Snow, 2004), and they are affected by the literacy crisis.
The authors argued that 70% of the middle and high school students are in need of some
form of remediation. Striving Readers Program was authorized by the United States
government in 2004, directed at improving the reading skills of low-income middle and
high school students who are reading below grade level (Office of Elementary and

In the article Adolescent Literacy: Putting the Crisis in Context (Jacobs, 2008),
Jacob states, that there is a distinct difference in the demands of reading and the skills
required at each reading stage for early readers and adolescents. Chall’s (1983) reading
stages clarify the difference between learning to read and using reading to learn. The
coldest stage in reading is stage zero where children are getting ready to read, the reading
readiness stage. Children then move into stages one and two, where they are learning and
practicing beginning reading skills. Children in the early grades require “direct skill
instruction, opportunities to practice those skills and a rich language environment”
(Jacobs, 2008, p. 13). The author suggests that decoding and fluency skills are critical,
and students who acquire these skills by the end of third grade are most likely to be
successful in fourth grade. In stage three, students are reading for learning the new, which
begins around fourth grade and continues through middle grades; they are learning how
to become strategic readers. Students reading at the high level and beyond enter into
stage four, where they are reading multiple points of view, and in stage five, students are
constructing and reconstructing meaning. Adolescent literacy is distinct from primary
grade reading, and there is a critical transition between the primary grade and adolescent
level of reading.

The definition of adolescent literacy is reflected in the following statement by the
National Council of Teachers of English (2006) indicating it is:
... more than reading and writing. It involves purposeful social and cognitive processes. It helps individuals discover ideas and make meaning. It enables functions such as analysis, synthesis, organization, and evaluation. It fosters the expression of ideas and opinions and extends to understanding how tests are created and how meanings are conveyed by various media...(p. 5).

Jacobs (2008) suggests thinking of reading as a series of stages, placing the adolescent literacy crisis in a different light. It becomes more of a challenge at certain points of development and we are "to proceed not out of alarm but, rather, with studied concern that acknowledges and builds on research and practice of predecessors" (p. 24). Although Jacobs warns not to overreact to the literacy crisis, schools are under great pressure to show proficiency in adequate yearly progress (AYP) for all students, including adolescents, through the federal policy of the No Child Left Behind (NCLB) Act.

*No Child Left Behind, 2001*

President Lyndon Johnson signed into law the Elementary and Secondary Education Act (Kennedy, 2006). This act aimed at enhancing schools' capacity to provide education for all students and "offset the debilitating effects of poverty, inequality, and discrimination." The Elementary and Secondary Education Act (ESEA) of 1965, reauthorized in 2001 as the No Child Left Behind Act (NCLB), is a federal law that directly aims to narrow racial disparities in academic performance (Kim and Sunderman, 2005). The NCLB Act requires states to display annual yearly progress in raising the proficiency levels of students in reading and mathematics (Harrison-Jones, 2007). The act also requires states to narrow the achievement gap between advantaged and disadvantaged students. The law requires "all students in grades 3 through 8 in each
racial, ethnic, and socioeconomic group...to be proficient in mathematics and reading by 2014” (Harrison-Jones, 2007).

The NCLB law has several major provisions connected to it. One provision requires states to demonstrate annual yearly progress (AYP). The AYP indicates satisfactory progress by a district or a school toward the goal of proficiency for all students on standardized, standards-based assessments. Another provision states all teachers must be highly qualified. It also indicates that all states must establish clear and high standards for student learning and test students to measure learning. The final provision is to provide students with public school choice (Harrison-Jones, 2007). States must include parent involvement and schools are required to use scientifically based research strategies in the classroom. Scientifically based research strategies are defined by NCLB as research that must:

... employ systematic, empirical methods that draw on observation or experiment; involve rigorous data analyses that are adequate to test the stated hypotheses and justify the general conclusions; rely on measurements or observational methods that provide valid data across evaluators and observers, and across multiple measurements and observations; and be accepted by a peer-reviewed journal or approved by a panel of independent experts through a comparatively rigorous, objective, and scientific review (NCLB Act, 2001).

There are aspects of the NCLB Act that have caused concerns such as the insufficient funding to implement requirements. The law states that all children will be proficient in reading and mathematics by the year 2014. The proficiency for all goal is not likely to be reached because there is not enough time to achieve that goal. Problems
exist around the definitions of proficiency, the meanings varying from state to state (Rothstein, Jacobsen & Wilder, 2006). Concerns also exist around high-stakes standardized testing promoted by the NCLB and state legislation. “Educators reject the concept of high-stakes testing” (Harrison-Jones, 2007). Students with and without disabilities are impacted by high-stakes testing. Researchers have commented if students with disabilities are excluded from taking high-stakes tests (state exams or district assessments), unintended negative outcomes occur, such as low academic expectations (Thurlow & Johnson, 2000). The NCLB Act emphasizes the inclusion of English language learners (ELLs) as a subgroup who must make measurable academic progress for schools to continue receiving federal funds without sanctions (NCLB Act, 2001). Researchers Jim Cummins and Virginia Collier indicated it takes between five to seven years of English exposure before ELL students can demonstrate academic proficiency equal to their English speaking peers (Collier, 1989; Cummins, 2000), thus increasing the level of difficulty for ELL students on standardized assessments. However, not only ELL students but all students and in particular adolescents are under great scrutiny to demonstrate proficiency in literacy on standardized tests based on state standards. The English Language Arts (ELA) exam in New York State (NYS) is an example of a standardized test used to measure adolescent literacy in NYS. The use of such tests is controversial.

**Debates on Standardized Testing**

The *fourth-grade slump* is the phenomenon that some students appear to grasp reading through passing reading assessments well in the early grades but are unsuccessful
in reading to learn classroom content in the later grades, when the language demands become more complex (Gee, 2004).

The fourth-grade slump is made up of kids who can read in the sense of decode and assign superficial literal meanings to texts, but can’t read in the sense of understanding, in any deep way, informational texts written in fairly complex language (p. 15).

Gee (2009) argues that students need the traditional skills as well as the 21st century skills to become more innovative, not just standardized skills. He indicated in order to solve the phenomenon of the fourth-grade slump, a combination of content digital tools and literacy is necessary. This can be done by delivering different ways of teaching: for example, an actual video game could become a way of teaching, simultaneously building digital and traditional skills. Educators need to marry the digital literacy to the traditional literacy. His recommendations are to: (a) fund digital research and development to invest in what works, (b) establish digital teacher corporations, (c) design and test alternative assessments and new standards, (d) create a place in every community where there are new literacy technology centers, and (e) modernize public broadcasting for the next generation. The 21st-century student is learning to read and reading to learning in an innovative way; this learning does not just involve taking standardized tests.

The National Council of Teachers of English (NCTE) (2009) argues that assessments need to consider both traditional components and elements that are different for the 21st century student literacy work. The NCTE has defined 21st century literacy through the lens of global change. “As society and technology change, so does literacy. Because technology has increased the intensity and complexity of literate environment.
the twenty-first century demands that a literate person possess a wide range of abilities and competencies, many literacies” (p. 1). According to NCTE, assessments of the 21st century may include elements such as: (a) students have access to 21st century tools in and outside of school, (b) facility of students technology tools, (c) images and sound may amplify text, (d) student products can emulate those of professionals, (e) students receive feedback from experts in the field, (f) potential interaction with and impact on global audience, and (g) students exhibit a level of ethics and safety in their online behavior. The assessment practices of the 21st century student learning should also include flexibility and responsiveness to situations related to their work. This can be accomplished, for example, through “students’ self-evaluation and reflection on process and product integrated into the learning process and contributing to students’ continued growth” (p. 4) in school.

Kohn (2000) opposes standardized testing indicating the use of these tests threatens to swallow our schools. He feels students are tested more than ever before and that testing is too frequent. He faults standardized test for measuring incorrectly. These tests have non-instructional factors on them that “explain most variance among test scores when schools and districts are compared” (p. 1). He suggests that the purpose of norm-referenced tests is not to measure quality of teaching, but to rank students. Furthermore, Kohn suggests tests often measure superficial thinking. Children under nine years of age should not be tested; important decisions (graduation or promotion) should not rest on these tests, and schools should not cut programs due to the time, energy, and cost of testing. In addition, he feels many educators are leaving the field because of the movement for tougher standards and accountability. This movement is also discouraging
prospective teachers from entering the field of education (Kohn, 2000). School principals, teachers, and students are accountable for raising test scores, but not all children will meet the challenge of improved scores because the tests are biased.

Many scholars support Kohn's belief that standardized tests are biased and the multiple-choice format of these tests raise concerns. The multiple-choice format has become the major method of evaluating academic achievement for elementary students through postsecondary level students, but it is subject to many flaws (Chalifoy & Powers, 2004; Dillon, 2006). For example, there are two common techniques used to disguise foils, which include: (a) incorporating technical words associated with the correct concept and (b) writing true statements that do not answer the question (Grolund, 1988; Haladyna, 1994). Foils are distracters, the answer statement appears to be correct; however, it has no relationship to the question.

Furthermore, multiple choice written in a nonnative language is in direct contrast to an ELL student's first language, a basis for sociolinguistic identity (Mora, 2000). The information in multiple-choice questions are decontextualized, which means the test taker is unaware of the context from which the questions come. The test taker must infer in order to answer the questions. The linguistic structure of multiple-choice test questions is dysconcatenated; for example, the question only presents the first part of a concept, sometimes as a sentence fragment (McNamara & Weitzman, 1945).

There are students sophisticated enough to maneuver their way through the test questions and use test-taking strategies to their benefit. These sophisticated test takers realize that multiple-choice questions require comparing all of the answer choices for relative correctness (Thiessen, Sternberg, & Fitzpatrick, 2004). There also is a high level
of self-restraint required when answering a multiple-choice question. Students selecting answers impulsively may help them escape from the challenging and frustrating questions (Goldstein, 2000). For years, scholars and critics have expressed that standardized tests are unfair because the questions require a set of knowledge and skills more likely to be possessed by children coming from privileged backgrounds (Kohn, 2000). Assessment, however, is different from testing. Wolf (2007) stated that regular assessment of students in a variety of ways is beneficial to their academic growth and provides valuable information to educators. He supports the use of assessments on a regular basis to improve students’ academics and life-learning functions. He suggests that frequent testing, especially diagnostic testing, informs teachers, students, and parents. Wolf provides a myriad of ways in which regular assessment of students can improve their academic performance in elementary and secondary schools. Furthermore, Wolf suggests using standardized tests and diagnostic tests focusing on important material to master, providing information regarding the needs and abilities of students to all stakeholders. Assessments provide parents and students with feedback regarding academic skills and knowledge. Testing helps identify motivational and learning problems and highlights when interventions have been successful in any subject including literacy. Finally, standardized testing provides students with an important skill, test-taking experience, and facility which will benefit them in this millennium of testing (Wolf, 2007).

**Formative and Summative Assessments**

Formative assessment involves the process of predicting student achievement performance on future summative assessments. Formative assessments have been a
central part of educational practice since the late 1960s. Formative assessment is defined as an evaluation where the “primary purpose is to provide information for program improvement…information to judge the merit or worth of part of a program,” including literacy programs (Fitzpatrick, Sanders, & Worthen, 2004, p. 16). For example, formative assessment in a reading program might include, teacher-made tests and quizzes, running reading records, and practice tests that align with high-stakes assessments. Formative and summative assessments are important because of decisions made during development stages of a program, to improve and strengthen a program, and make judgments about the future. The authors suggest that summative assessments are “evaluations [that provide] information to serve decisions or assist in making judgments about a programs adoption. continuation, or expansions” (pg 17). Formative evaluations are diagnostic tests that provide information about an individual student’s responsiveness to educational programs and the environment to which students are exposed (Bloom, 1971; Scriven, 1967).

Summative assessment helps in making judgments regarding a program’s worth or merit in relation to important criteria. “Summative assessment uses tests to grade or certify students or to evaluate the effectiveness of curriculum, where curriculum construction, teaching, and learning occurs” (Bloom, 1971, p. 117). For example, the ELA exam for eighth graders in NYS is a summative assessment that allows state education agencies to gauge the effectiveness of reading programs and adolescent literacy in schools within their jurisdiction.

The ThinkLink Assessment System (Discovery Education, 2008) serves as an example of formative assessment used systematically in a school district to predict
performance on the NYS ELA exam. Ysseldyke (1998) suggests predictive criterion-related validity refers to how accurately a person’s current performance (e.g., test score) estimates that person’s performance on the criterion measure at a later time. ThinkLink focuses on the use of formative assessments as a way to improve student learning and performances from grades kindergarten through twelfth. ThinkLink’s creators claim that their approach to formative assessments uses a scientifically research-based continuous improvement model that connects each state’s high state’s test to state standards (Discovery Education, 2008). The manual for the ThinkLink’s assessment system appears to address the following testing standards for test construction: testing reliability, content validity, criterion validity, proficiency predictive validity, consequential validity, and growth models and are based on scientifically-based research as outlined in the No Child Left Behind Act of 2001. The proficiency predictive validity “evidence supports the claim that a test can predict a state’s proficiency levels. High accuracy levels show that a high degree of confidence can be placed in the vendor’s prediction of student proficiency” (Discovery Education, 2008).

Research has demonstrated that practice tests do not improve student learning and fail to raise test scores substantially. It is the data that formative assessments provide that leads to increased student achievement. In order for this data to be actionable and effective, teachers must be able to understand it and use it in the classroom (Discovery Education, 2008).

Historically, diagnostics and other standardized assessments have been used to predict success in education, particularly in gifted and special education programs. Gifted students are cited to have many characteristics, including early language development.
solid verbal and visual memory, intense curiosity and interest in investigative problem solving, capacity for abstract thinking, and an extended attention span (Moon & Brighton, 2008). Educators have used intelligence and achievement tests, such as the Wechsler Intelligence Scale for Children (WISC) and Woodcock Johnson Test of Cognitive Abilities (WJ III COG) to identify these attributes to predict the success of children in accelerated programs.

Intelligence, behavior, and achievement assessments also have been formally used to screen students and determine eligibility for special education services, such as speech therapy and other intensive literacy remediation. Special education has been traditionally known for providing individualized services to students scoring poorly on eligibility testing. Educators developed specific teaching techniques that resulted in greater resources allocated for students in special education programs. Traditionally, these students were largely exempt from state testing of the general education curriculum. However, recent versions of NCLB and Individuals with Disabilities Education Act (IDEA) have emphasized access to the general education curriculum, including state testing systems. Students are typically given a label to identify services, and students are often placed in a separate location with a special education teacher.

For example, an IQ test combined with a behavior scale can determine eligibility for special education and can then be combined with an achievement test to pinpoint specific learning deficits in the general education curriculum. The ThinkLink assessment system is in the tradition of using achievement tests to identify progress in the curriculum or with standards or other criteria. The difference is that they attempt to predict
performance on summative assessments based on state education department standards adopted for each content area, including ELA.

In the past, students were openly segregated into classrooms based on ability levels established by these tests called tracking. In 1991, the Association for Childhood Education International (ACEI) issued a second position paper calling for a moratorium (an authorized delay) on standardized testing in the early years of schooling (ACEI/Perrone, 1991). The standardized tests are used to predict the future performance of students and used as punitive measures. “Standardized tests are now used to hold up children and schools for comparison; the scores are used to discriminate rather than diagnose, punish rather than reward” (p. 31). The ACEI position cited the rising use of standardized tests to label children, place children in special programs, and retain underachieving children in a grade level. The ACEI rejected the use of these tests in the early grades and questioned their use in later grades. In the United States, the theoretical debate on tracking has revolved around whether the system is based on ability or achievement. The educational tracking system has been identified as a system which inequality of educational opportunity is transmitted or maintained (Kilgore, 1991; Oakes & Guiton, 1995; Page, 1991).

Students receive curricular differentiation and are sorted into groups, classes, and schools as they progress through the public school system; this is commonly known as tracking. Scholars have defined tracking in various ways and at times can be conflicting. Oaks (1985) suggest “tracking is the process whereby students are divided into categories so that they can be assigned in groups to various kinds of classes.” Lucas (1999) states, “One mechanism that furthered the reproductive role of schools was tracking, the practice
of dividing students into programs that rigidly proscribed their course of study and that admitted little opportunity for mobility from program to program” (p. 1). Other scholars have used the terms tracking and ability grouping interchangeably (Brewer, Rees, & Argys, 1995; Welner, 2001).

In all these definitions, students are in some way judged, evaluated, and tested, and based on the results of the tests, it is recognized that students should receive a differentiated curriculum. The test results predicted where children would be placed, in higher tracks or lower tracks in academic school settings. The ThinkLink Assessment System assumes a classroom context that, instead of tracking, relies on inclusive classrooms, differentiated instruction, and academic intervention for struggling students. In addition, within this context, literacy instruction is central to virtually every content area. In NYS, proficiency on the ELA exam has become the ultimate academic goal for students at three stages in their academic careers: elementary, intermediate, and commencement. Middle-school students must score at the proficiency level on the intermediate exam or be assigned to academic intervention services.

**NCTE/IRA and NYS Standards**

The NYS standardized testing for ELA first originated from the National Council of Teachers of English and International Reading Association (NCTE/IRA) standards in the early 1990s. The vision of the standards is that all students are given the opportunities and resources to develop language skills they need in order to achieve life goals and to be informed, productive members of society (NCTE/IRA Standards, 1996). Furthermore, the standards assume that literacy growth starts prior to children entering into school; this is attributed to the child’s exploration and experience with literacy activities outside of
school (NCTE/IRA Standards, 1996). The NCTE/IRA standards are designed to prepare all K–12 students for the increasing literacy demands of today and tomorrow. The standards present a vision of literacy education that include the use of print, oral, and visual language and addresses six interrelated English language arts: reading, writing, speaking, listening, viewing, and visually representing (NCTE/IRA Standards, 1996).

The NYS standards and assessments concentrate on four standards that require students to use skills in reading, writing, listening, and speaking. The standards state that students will read, write, listen, and speak for information and understanding, for literacy response and expression, for critical analysis and evaluation, and for social interaction (Learning Standards for English Language Arts, 1996). To meet the requirements of No Child Left Behind (NCLB), tests in ELA are administered once a year at grade levels three through eight. Since 1998, CTB/McGraw-Hill has worked in collaboration with the Department of Education and NYS teachers in the development of the NYS Testing Program for all content areas (New York State Testing Program, 2008).

The NYS tests are designed to help measure the effectiveness of school programs; for example, literacy programs, and to measure students' yearly progress. The ELA assesses standards for reading, listening and writing. The reading section includes literacy and informational passages with multiple-choice comprehension questions and a short-response question. The listening section presents a variety of genres along with an extended response, and in the writing section, students complete an editing task and extended response (New York State Testing Program, 2008). Educators use the result of state tests to determine which students are placed in academic intervention services (AIS). Students who score at levels one and two are qualified to receive AIS services at
grade levels three through eight. At the high school level, these tests effectively serve to prevent students from graduating, and this is why the middle school levels carry so much weight. The tests predict who is at risk for failing the commencement exam and perhaps not graduating.

Due to NCLB, school districts are held accountable for the performance of their students and those not meeting AYP are subject to review by the state. According to the New York State Education Department, AYP indicates satisfactory progress by a district or school toward the goal of proficiency for all students (Benford’s NYS Report Card, 2007). Schools can be placed on the schools under registration review (SURR) list if students are not performing based on NYS standards. A screening is conducted by State Education Department staff to determine low-performing schools. Schools with the lowest Performance Indicators in English language arts and mathematics are categorized as being farthest from state standards. Schools go through a process, and the Commissioner will place them under registration review if they are farthest from state standards and most in need of improvement (NY State Department of Education, 2008).

**Standardized Reading Assessments**

Testing programs in schools are established to set high academic standards, to improve student achievement, to ensure equality in educational opportunities, to encourage family involvement, and to increase support for schools (Heubert & Hauser, 1999). A foundational testing program in most school is built around literacy. Some school districts use standardized tests, such as the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) for grades preschool through third grade along with the NYS ELA for grades three through eight, to assist them in identifying students who need
additional academic assistance. The DIBELS measures letter naming fluency, initial sound fluency, phoneme segmentation fluency, nonsense word fluency, recall fluency, and oral reading fluency (Good III & Kaminski, 2002).

Developmentally Reading Assessments Second (DRA2) is also commonly used. DRAs can be used to help students become independent readers and provide teachers with tools to assess accuracy, fluency, and comprehension (Pearson, 2008). Joetta Beaver and Mark Carter are the authors who developed DRA2 to measure students’ reading achievement in grades kindergarten through eighth grade. The assessments are used to provide teachers with information to tailor teaching instruction in order to drive reading instruction. Furthermore, teachers can identify critical points of intervention for students on an individual level (Pearson, 2008).

There are other standardized reading assessments used in middle schools to predict student performance in reading programs offered in schools such as the California Achievement Test, Sixth Edition (CTB/McGraw Hill, 2008) for grades kindergarten through twelfth, Iowa Test of Basic Skills (Hover, Dunbar & Frisbie, 2007) for grades kindergarten through eighth, TerraNova Assessments (CTB/McGraw Hill, 2008) for grades kindergarten through twelfth, Michigan Educational Assessment Program (Michigan Department of Education, 2008) for grades three through eight, and the Tennessee Comprehensive Assessment Program (Tennessee State Department of Education, 2008) for grades three through eight. The ThinkLink Predictive Assessment Series for grades third through eighth is a relatively new product in this field (Discovery Education, 2008).
ThinkLink Learning Predictive Assessment Series

*ThinkLink Learning* (Discovery Education, 2008) provides school districts with three Reading/English Language Arts tests to be administered throughout the school year. The tests are most likely administered to students in the fall, winter, and spring seasons. The first reading test (Test A) is administered in the fall and typically viewed as baseline data. Educators can use the baseline data to predict how students will perform on the ELA state standardized test. *ThinkLink* Test A consists of 32 multiple-choice questions for the middle school grades six through eight. Student performance is measured under five reading categories: information, expression, evaluation, core reading, and core writing that are aligned with NYS reporting categories (Discovery Education, 2008). Student level of proficiency is defined by NYS accountability. The growth scores are used to calculate proficiency cutoffs for each state. For example, grade six proficiency levels on the reading test are: level 1 (0-7 correct answers), level 2 (8-17 correct answers), level 3 (18-28 correct answers), and level 4 (29-32 correct answers). *ThinkLink Learning* has designed the formative assessments to align with requirements of NCLB adapting its measurement system to report state-specific proficiency levels for each student (Discovery Education, 2008).

According to its manual, the *ThinkLink Predictive Assessment Series*: . . . utilizes a unique scientific approach that matches diagnostic assessments to each state's high-stakes test. It predicts student proficiency, mastery, and AYP [annual yearly progress] performance so teachers can see student NCLB [No Child Left Behind] results before they actually test (Discovery Education, 2008).
ThinkLink predicts student performance with 80 to 90% accuracy. This may provide valuable information to focus on the individual instruction needs of each student by each skill area. The students take up to three tests a year: from these tests, reports are immediately available to teachers and administrators. The following reports can be generated to assist teachers in identifying student’s strengths and weaknesses in math and reading: (1) Class Summary Report, (2) Student Report, (3) Student Sub-skills Report, (4) Objective Report, (5) Answers Report, (6) Individual Student Report, and (7) Comparison Report. These reports can be used to inform instructional decisions and create individual student plans to enhance student achievement.

Benford Central School District (ACSD), the location of this study, is an example of a district that has adopted the ThinkLink System. The ThinkLink test A was administered to students in September 2008 and data provided to teachers immediately. Teachers had access to review the data online directly after their students took the tests. The building administrators generated five different reports that teachers could use to develop an individual student plan (ISP) for each student at levels 1 and 2 (not proficient). Teachers had collaborative meetings to discuss their pedagogical strengths and areas in need of improvement. As a result of the collaborative meetings, teacher mentors and role models surfaced and teachers had mentors they could go to for instructional support. In the Benford school, this process happened automatically, and the administration was prepared to step in if a mentor did not surface.

Teachers visited the mentors’ and role models’ classrooms based on their teaching practice need. The goal was to have teachers exposed to best practices and effective strategies that would enhance student performance. These classrooms became the
demonstration classrooms. The demonstration classrooms were used on a continuous basis to assist teachers in gaining more insight on effective strategies and practices that helped them increase student performance. Classroom teachers created an item analysis to determine grade level needs and created ISPs to improve student performance. They determined the appropriate resources and materials needed to ensure greater success on the next predictive assessment, Test B, the students would take. The administrative team and teachers evaluated the results of the predictive assessments and determined how close the school was in achieving the objectives set at each grade level. All necessary modifications and revising were made to teaching practices and ISPs to ensure success on the NYS ELA assessment in January 2009.

ThinkLink's Continuous Improvement Model aligns with each predictive benchmark assessments to NYS's curriculum and test. The model involves knowing what students need and are ready to learn, selecting teaching and learning tools, measuring results and revising teaching and learning practices. ThinkLink provides a variety of reports that predict state proficiency, mastery by skill and annual yearly progress status. The reports that are readily available to teachers and administrators are class summary report, individual student report, objective report, answers report, comparison report, and district reports. These reports are used to make sound instructional decision making based on results from the data. ThinkLink provides performance data in several organized and detailed reports. The question is: Will teachers use the data to make instructional decisions?
Teacher Use of Assessment Data

School personnel and teachers may use standardized and classroom assessments to predict the literacy success of students in middle school. The NYS English language arts standardized test is the official measure of student success in literacy that have been identified as being important by the NYS Board of Regents and for which all districts should aim. Teachers also may use classroom assessments such as classroom tests and quizzes, self-evaluation, teacher observations, classroom discussions, classroom assignments and homework assignments, student written work and projects, and teacher feedback. Black and William (1998) reviewed 250 articles and chapters on formative assessment research and found that research has provided quantitative evidence that formative assessment is directly linked to learning gains and that the gains are "significant and often substantial" (p.3).

Additionally, the Carnegie Corporation of New York and the Alliance for Excellent Education (2004) developed a set of recommendations consisting of 15 key elements in programs designed to improve adolescent literacy achievement in middle and high schools. For example, the authors argued that teachers should use text-based collaborative learning with diverse tests and ongoing use of formative assessment of students. The authors recommended the use of text-based collaborative learning to provide students with an opportunity to interact with one another around a variety of texts. During students' collaborations, they should be exposed to a variety of difficulty levels and different topics, and the classroom library should contain diverse texts. Furthermore, it is important that teachers conduct ongoing formative assessment of students in order to determine how students are progressing.
The teachers at Woodlawn Middle School in Long Grove focused on making better, school-wide instructional decisions by using assessment data in four categories, which included a balance of formative and summative assessments: classroom, common, district-level, and external assessments (Many & Jakicic, 2006). The teachers used classroom assessments such as quizzes, essays, and projects to generate descriptive information in order to use this data for regrouping students, re-teaching concepts, and monitoring individual student progress. The students’ mastery level of skills were closely watched and the strategies used as they move through the curriculum. Common assessments designed by grade level teams provided information about how students were progressing through the curriculum in comparison with other students in the school. The district assessments provided the teachers with diagnostic information pertaining to individual students and groups. The teachers often used this assessment data as entrance and exit criteria for programs. The final type of assessments used were external; these assessments were commercially designed, standardized, nationally norm referenced exams and high-stakes assessments. Providing the teachers with assessment data and opportunities to dialogue about the results changed their way of thinking. The “teachers began to think about assessment in terms of quality, matching the type and purpose, rather than quantity, the amount and frequency of assessment” (p. 48). According to the authors, if educators view assessment as a continuum (most formative to most summative), the assessment data can be effectively used, guiding teachers in making instructional decisions (Many & Jakicic, 2006).

Teachers at Glens Falls City School District in Upstate New York conducted an in-depth data analysis using NYS and Terra Nova assessment scores to highlight...
strengths and weaknesses in student performance (Danna, 2004). The teachers made instructional decisions to address the areas identified as weaknesses and came up with strategies to assist students. The teachers recognized that evaluating data and making the necessary changes to impact student performance takes time and commitment. The teachers expressed, “making real, sustainable changes in instruction based on data analysis requires building-level goals and evidence of successes that speak to identified concerns” (p. 26).

Evidence of Glens Falls’ success includes incremental improvement of students’ performance, increased teacher dialogue around data, focus on student work, and building a school culture of data analysis as well as reflection. Teachers reflecting and collaborating around assessments data promotes data literacy among educators (increasing its use) and helps raise student achievement (Ronka, Lachat, Sлаugher, and Meltzer, 2009; Steel & Boudett, 2009). The teacher practice of collaborative data analysis can help teachers identify literacy skills students need to improve in and assist teachers in developing a plan of action to take. In addition, it can help teachers determine how to use classroom assessments to help improve student performance.

*Classroom Assessment Environment Theory*

The classroom assessment environment, as a theoretical construct, developed out of the work of Striggins and his colleagues (Stiggins & Bridgeford, 1985; Stiggins & Conklin 1992). Striggins & Conklin (1992) described the classroom assessment environment in terms of teacher practices and identified the following eight dimensions: (a) the purposes for which teachers used classroom assessments, (b) the assessment methods used, (c) the criteria for selecting them, (d) the quality of the assessment, (e) the
teacher’s use of feedback, (f) the teacher’s background preparation in assessment, (g) the teacher’s perception of the students; and (h) the assessment policy environment. Classes have an assessment environment that is generated from the teacher’s approach to assessments.

The purposes for which teachers use classroom assessments play several important roles, including diagnosing individual and group needs; gathering baseline data (sizing-up the class); providing feedback to students, parents and administrators; preparing students for future tests; controlling and motivating; communicating expectations; and making instructional decisions. Teachers use a variety of assessment methods to determine students’ achievement levels. The authors identified three major categories: paper and pencil assessments (i.e., teacher developed tests, homework, assignments, and standardized tests); performance assessments (based on observation and judgment); and personal communication with students. Teachers use different criteria when deciding which method of assessment is selected. For example, measuring student achievement involves several factors such as “match to target - assessment method can be made to reflect the intended outcome of instruction...a paper and pencil test of [reading], a performance assessment of speaking skills” (p.91). The authors suggest when using a paper-and-pencil test there are several ways to check for the quality of the assessment such as matching the test to content taught, clearly written test items, and using the proper format for intended outcome.

Furthermore, the classroom assessment environment has two major forms of feedback teachers use with their students to convey information: oral and nonverbal feedback and written feedback. They also provide feedback to parents in the form of
grades on report cards, written comments, and direct communication. Teachers bring many critical attributes to the classroom such as their background preparation in assessment. This involves:

... a plan or set of values for how to spend their time, a set of personal traits, and a set of perceptions of the student with whom they work. All of these contribute to the profile of a classroom assessment environment (p. 93).

The authors claim that classroom assessments are *interpersonal activities* and they play a role in the teachers' perceptions of students' attributes (i.e., ability to learn, willingness to learn, rate of achievement, study skills, and amount of test anxiety). Teachers need to be aware of assessment policies established by school districts, which govern or constrain assessment practices and procedures. These assessment policies can influence the way teachers use their classroom assessments.

*The Statement of the Problem*

The researchers' school has embarked on a new initiative to assist in determining the academic success of the students in the middle school with the use of a formative assessment series. The school district's Instructional Council Committee, which includes the School Superintendent, Principals and Vice Principals, Instructional Coordinator, Special Education Coordinator and Technical Support, discussed the need to enhance student performance at all grade levels during regular monthly meetings and through various correspondence among the administrative team meetings. It was decided by the School Superintendent along with support from the administrative team to use the *ThinkLink Series*. The Benford Central School District has implemented the *ThinkLink*. 
The Predictive Assessment Series measures how successful students at grades levels three through eight will be on the NYS ELA and Mathematics assessments.

The school district has completed its first year using the predictive assessment system. A representative from ThinkLink trained the administrative team in June 2007, and the Vice Principals developed a workshop and trained teachers at grades three through eight in August 2007. The training provided by the Vice Principals begins the on-going dialogue with teachers and administrators regarding the effectiveness of ThinkLink and the needs of teachers and their students. The district began using ThinkLink in September 2007 to assess student performance in reading and math.

Benford Central School District has invested money on the ThinkLink Predictive Assessment System promising results; however, it is unknown whether teachers are using the predictive assessment to inform instructional practices that will positively impact achievement performance of struggling students in English Language Arts (ELA). Benford adopted the use of ThinkLink formative assessments as a way to measure more accurately how the students at grades three through eight would perform on the NYS assessments on reading and mathematics. Benford aims at improving the educational process for all students in reading and focuses on a Continuous Improvement Model. The district's expectation is that teachers will use ThinkLink as a tool to assist in informing teaching instruction and as a predictor to assist in determining how students will perform on the NYS ELA assessment.

The Statement of the Purpose

The purpose of this study is to examine whether teachers at the Benford Middle School use the ThinkLink assessment results to change their instructional practices for
students who have scored at levels one and two, indicating that these students are not proficient in reading at their grade level. Furthermore, the researcher would like to determine what interventions and strategies are used to improve student achievement in reading and to identify teachers’ perceptions about ThinkLink.

The Research Questions

The main research question for this study is: How do middle school teachers use data from ThinkLink, a predictive assessment system, that suggests that certain sixth-, seventh-, and eighth-grade students will not perform at proficiency on the NYS ELA exams? The second research question is: How do middle school teachers describe their experience with the ThinkLink Predictive Assessment System?
Chapter 2: Review of the Literature

Introduction

The No Child Left Behind (NCLB) legislation has substantially increased attention given to accountability and the data-driven decision making of school districts. The NCLB Act places an emphasis on improving the learning of all students and mandates testing of reading in the third through eighth grades. No Child Left Behind encourages teachers to think differently about the possibilities of data to inform instruction and decision making targeted at improving students’ performance. No Child Left Behind requires states to display annual yearly progress in raising the proficiency levels of students in reading (Harrison-Jones, 2007) based on state-approved tests. Teachers in the Benford Middle School are required to use ThinkLink, a formative assessment system, to predict student performance in reading on the state exams. There are limited numbers of studies addressing teachers’ use of ThinkLink data. Due to limited research, this literature review includes studies that relate to the practices of teachers using assessment data to improve teaching and student learning. The studies include teachers’ use of data through collaborating, building assessment literacy, examining student data, examining instruction, selecting interventions, developing an action plan, and assessing progress.

The findings from the studies presented in this literature review support the essential need for teachers to use assessment data to inform their instructional decisions to enhance the learning of students. Some of the findings reported in this study include
the following: (a) data initiatives are likely to be successful if teachers are allowed to
learn and work collaboratively, (b) teachers face challenges with having time to analyze
and interpret data and some teachers expressed negative opinions about standardized
tests, (c) teachers used data reports to identify areas in ELA where students scored high
and low and altered their instruction, (d) pressure to raise test scores encouraged teachers
to use instructional and assessment strategies that mirror the content and format on state
tests, (e) encouraging teachers in the process of data analysis can be done through
professional development, and (f) teachers use formative and summative assessments to
predict and to measure students’ progress.

Teachers’ Use of Assessment Data

Research indicates that the implementation of high-stakes assessments has
increased educators’ action related to improving school and student performance. In a
study conducted by Christenson, Decker, Triezenberg, Ysseldyke, and Reschly (2007), it
was reported that teachers use of data from high-stakes assessments are central to
improving instruction for students. Furthermore, the authors suggested that teachers are
changing their instructional practices due to high-stakes assessments; however, “it is
unknown whether these changes are being implemented with effectiveness in ways that
truly effect student performance” (p. 685). Boudett, City and Murane (2006) recommend
the Data Wise Improvement Process to assist teachers in using student assessment results
to improve student learning and teacher practice. The improvement process is a team
effort, which involves teachers and school leaders to work collaboratively to use data to
improve teaching practices and student learning. This process includes steps educators
can take to use student data effectively. The authors have organized these steps into three
phases: preparation, inquiry, and action. The literature review studies have been organized using the framework presented in Boudett, City, and Murane (2006). Figure 2.1 demonstrates the concepts being used by teachers to improve teaching practices and student learning.

Figure 2.1
Data Decision Making Process, adapted from Boudett, City, and Murane (2006)

Boudett, City and Murane (2006) suggest the following steps to using assessment results to improve teaching and learning. First, organizing for collaborative work begins the process. Teachers who are engaged in meaningful conversations about assessment results and other student data are recognized as being committed to building a data culture or culture of inquiry. Second, building assessment literacy is an essential step in
the preparation phase. Teachers need to interpret scores on assessment reports; they also need to understand the different types of assessment reports and the various scales that are used (i.e., reliability, predictive validity, criterion validity, and measurement) can really help in making inferences. Third, examining student data comes after teachers have had the opportunity to discuss the data overview. Teachers examine the student data to identify a learner-centered problem, a problem of understanding or skill that is common to many students and underlies their performance on assessments. This is typically known as conducting a data analysis.

Fourth, examining instruction is critical to solving the learner-centered problem teachers must focus on it as a problem of practice. Teachers are challenged with developing a shared understanding of what effective instruction around the issue would look like. Teachers develop their skills at examining their instructional practice, articulating what is actually going on in the classroom, and comparing this to the kind of instruction that is needed to enhance student performance. Fifth, developing an action plan begins the action phase. The teacher starts by deciding on an instructional strategy they feel will solve the problem of practice identified. Then, it is time to collaboratively develop a plan. This includes roles and responsibilities, accountability, professional development, and instructions. Sixth, planning to assess progress must be done before the plan is implemented. Teachers should determine how success will be measured, looking at short-term, interim, and long-term data that will be collected and how it will be gathered for student improvement.

ThinkLink has a similar data-driven decision making process to Boudett, City and Murane (2006), that is called the “Continuous Improvement Model.” The model includes
four steps: (a) knowing, (b) selecting, (c) measuring, and (d) revising. A teacher begins this process by identifying what students need, then determining if the students are ready to learn the concepts and skills. Next, the teachers need to select the appropriate teaching methods and learning tools necessary to provide the students with what they need. Once teachers have taught the concepts, teachers will need to assess student learning and measure the results. Lastly, teachers focus on revising teaching and learning based on the assessment results. The data assessments will guide teachers in the directions they need to take in order to alter their instructional programs and revise their teaching practices (Discovery Education, 2008).

Organizing for Collaborative Work

Langer, Close, Angelis and Preller (2000) found that teachers created professional working groups and collaboratively studied the demands of the high-stakes assessments students are required to take. The teachers in the study decided to take an exam themselves to identify the skills and knowledge required for students to perform at proficiency. The teachers discussed the content and skills on the exam and the knowledge students would need to know that are related to state standards and school curriculum. Wayman, Midgley, and Strignfield (2005) reported that the “relationship between data use and collaboration is reciprocal; data initiatives are more likely to be successful if teachers are allowed to learn and work collaboratively, and the use of data helps foster constructive collaboration” (p. 3). Lachat and Smith (2005) examined the role of collaborative inquiry in understanding how to disaggregate data. The schools addressed the issues of collaboration by developing a formal data accessed plan to set up timelines for when data could be accessed and disaggregated. This resulted in teachers having
access to data earlier, which contributed to their ability to target instructional strategies more effectively.

Armstrong and Anthes (2001), on the other hand, examined teachers' attitudes toward the potential students struggling academically. They noted teachers found it difficult to link data to an appropriate intervention. The authors concluded that changing a school's data culture and building teachers' capacity to use data often requires a change in staff attitudes toward the diverse student populations in a school and teachers' skills in applying appropriate interventions. Furthermore, the authors determined that teachers' use of data helped clear up false assumptions, and that effective data use requires a culture that is driven by inquiry, not fear of the unknown.

Henning (2006) indicated sharing data through literature is an important part of enriching the culture for data analysis, which provided teachers with a model of practical application. This is an important element for teachers who are interested in making principle decisions based on standardized achievement data. In Hennings' study, 24 elementary and middle school teachers analyzed standardized test in four different ways in order to effect positive change in student learning. The four approaches used were comparing to the norm, analyzing trends, correlating data, and disaggregating data.

In contrast, Klein, Zevenbergen and Brown (2006) examined the beliefs of 20 elementary, middle, and high school teachers in a semi-rural community and found that teachers were more opposed to standardized testing than accepting. Their survey results indicated 77% of teacher responses were negative and 23% were positive. Lachat and Smith (2005) reported that teachers in the study had a positive attitude toward data, which involved fostering a school culture that embraces the use of data, creating
organizational structures such as data teams and data coaches to be effective mechanisms for teachers to use student assessment data.

Research has identified other schools and teachers who have experienced positive outcomes in the collaborative approach in using data. For example, Huffman and Kalnin (2003) indicated the district team members reported growth in their district's curricular coherence and their own professional growth. Wayman, Midgley, and Strigfield (2007) found that data was most effective when teachers had access to usable data and worked together to collaborate expectations. Lee and Smith (1996) found teachers' collective responsibility for student achievement aligned with increased student achievement.

Building Assessment Literacy

Wayman, Midgley, and Strignfield (2005) reported that the "relationship between data use and collaboration is reciprocal: data initiatives are more likely to be successful if teachers are allowed to learn and work collaboratively, and the use of data helps foster constructive collaboration" (p. 3). In a study conducted by Kerr, Marsh, Ikemoto, Darilek and Barney (2006) of three school districts (Monroe, Roosevelt, and Jefferson), it was found that the districts faced the challenge of "the need to provide data that were valuable and presented in a user-friendly format that could readily benefit teachers in their daily instruction" (p. 515). Furthermore, the authors stated many teachers felt that state assessment data was not the ideal for analyzing student achievement and making decisions. Many reasons for the lack of data use in schools centered on the lack of training, cultural resistance, and fear of reprisal. Few teachers have had formal training or experience in analyzing and interpreting data or using assessment results for program change and instructional decision making (Bernhardt, 2000; Cizek, 2000). Webb (2002)
reported new teachers have very little background in assessing student learning. Teachers were given some instruction on assessments and district standards during new teacher academy programs. The author found that new teachers needed to know a considerable amount of information in regards to different forms of assessments, various purposes of the different assessments, and information teachers could or could not gain from student assessments.

In contrast, teachers in the Grow Network Study (Brunner, Fasca, Heinze, Honey, Light, Mandinach & Wexler, 2005) found reports from the web-based reporting systems easy to read, clear, and comprehensive. The authors reported that all teachers were able to understand the basic aspects of the reports; 32% of teachers used the reports monthly and 32% of the teachers used the reports three to six times throughout the year. Webb (2002) reported in a study of assessment literacy in the Milwaukee Public Schools that the author had seen the strong impact that middle school proficiencies have had on staff in the middle schools, which contributed to the collaborative work of staff within the schools. A study on data use in several U.S. high schools showed that when important questions drove the dialogue about school effective, teachers quickly learned how to identify and use different types of data to answer those questions (Lachat & Smith, 2004). A powerful strategy to use in building assessment literacy is to organize data around using essential questions about student performance (Ronka, Lachat, Slaughter & Meltzer, 2008).

*Examining Student Data*

Stone, Brace, and Hursh (2007) reported that the teachers who used supplemental assessments to gauge students’ progress were able to provide feedback to the students and sharpen their own instruction. *ThinkLink*, the same program used in the proposed
study, was used to test students' reading and math skills. The questions on the *ThinkLink* assessments aligned with the questions on Tennessee state exams. Teachers received *ThinkLink* reports that summarized students' test results from reading and math assessments three times during the school year. For students at risk of failing the state exam, reports were provided on a biweekly basis. According to the authors, instructional decisions were made by teachers regarding the skills to teach and the procedures to use on the basis of student progress data. Student groups were formed on the basis of the data, and teachers developed plans for each student who did not reach the proficiency level on the assessments.

Kerr, Marsh, Ikemota, Darilek, and Barney (2006) found that teachers were encouraged by administrators to use student achievement data to identify skills or standards student performed poorly on, and it was expected that teachers modify their instructional practices or re-teach the skills or standards that were problematic. These measures were expected from teachers in order to assist students in reaching proficiency on exams. However, some teachers expressed that the district curriculum guides “did not allow them the flexibility to address the needs identified by data analysis” (p. 516).

On the other hand, the teachers in the Grow Network Study (2005) used the reports efficiently to identify areas in ELA where students scored high and low. The reports and tools teachers had access to include: class reports, individualized student reports, tracking tools, and the ability to use flexible groupings for differentiated
instruction. This was done on an individual basis and as a class; these teachers could alter their instruction by analysis of the data. Christenson, Decker, Trizenberg, Ysseldyke, and Reschly (2007) found teachers used student data to target achievement in skill areas such as reading comprehension, fluency, and higher level thinking skills to determine if students have made improvement on required assessments.

Armstrong & Anthes (2001) also found that teachers used student data to improve student achievement. A combination of state assessment items and teacher-generated questions to create short tests were used every six weeks to predict and prevent student failure. Students who did not master certain standards were provided with extra support through flexible student groups, and as a result, student achievement scores increased 2.2 percentage points for all students in one year.

When teachers use different data sources to examine student assessment data, in others words by triangulating data, they can deepen their understanding of strengths, weaknesses, and misconceptions of students’ struggles in reading. According to Boudett, City, and Murnane (2005), “triangulating your findings from multiple data sources, that is, by analyzing other data to illuminate, confirm, or dispute what you learned through your initial analysis, you will be able to identify your problem with more accuracy and specificity” (p. 90). Once the student learned problem or problems have been identified, teachers then move from analysis of the data to teacher application of the data. Fisher and Ivey (2006) suggested five principles for developing and evaluating instruction to assistance teachers in the application of the findings from student assessment data.
Fisher & Ivey Principles for Developing and Evaluating Instructions

Educators are faced with the critical decisions of selecting effective interventions for struggling adolescent readers. Fisher and Ivey (2006) suggest five researched-based principles for developing and evaluating instructional framework that educators can use when faced with the decisions on how to help students become better readers and writers. There are two important factors to consider before the principles are revealed: (a) schools should look for intervention programs to supplement what is currently being done to improve student performance, and (b) the school body should focus on literacy achievement and teachers use content literacy approaches to engage students in meaningful curriculum. The first principle affirms the teacher should play a critical role in assessment and instruction. The teachers’ involvement reaches beyond the general thought of individualization. When implementing intervention programs, the expertise of the teachers is used to determine what student learning looks like and what measurements should be used to evaluate students’ learning.

The second principle specifies that the intervention should reflect a comprehensive approach to reading and writing. Research has pointed to some of the reading problems for students that are a result of deficiencies in word-level skills or deficiencies in comprehension (Ivey & Barker, 2004). Older students need to see the big picture when it comes to reading and writing. This means students need to be cognitively engaged in the text and understand its meaning. When teachers use effective interventions, this will help students with the process of reading, writing, listening, and thinking about the meaning of texts (Fisher and Ivey, 2006).
The third principle states reading and writing in the intervention should be engaging. The intervention programs offer instruction and materials that are easier than the student’s current grade level. Students in intervention programs who struggle with grade-level material are not likely to sit still if the instruction is not engaging. Students need to become involved in their assignments and an effective instruction design incorporates adolescents’ personal interests (Fisher and Ivey, 2006).

The fourth principle claims interventions should be driven by useful and relevant assessments. Typically, standardized tests are used to place students in reading programs, and the intervention program supports the students’ needs. The program design has students starting at the same level on fundamental skills, then progressing to more advanced skills. The intervention program comes with assessments that are administered at a particular time to measure students’ performance on skills. Ongoing assessments are important to determine what students have accomplished and to identify what assistance is needed (Fisher and Ivey, 2006).

Finally, the intervention should include significant opportunities for authentic reading and writing. Students struggling in reading need to spend time reading. It should be the central point of the reading instructional design.

Working on skills and strategies should facilitate real reading and writing. It should not take place in the context of activities where students actually need to know how to use skills and strategies and have purposes for using them. Furthermore, the amount of time students spend reading and writing ought to substantially outweigh the amount of time students spend considering skills and strategies related to literacy (Fisher & Ivey, 2006, p. 184).
Examining Instruction

Teachers experience pressure related to testing programs. This can develop when a greater emphasis is placed on test preparation materials, rather than teachers having the opportunity to use creative and authentic teaching methods. Abrams, Pedulla & Madaus (2003) found that high-stakes, state-mandated testing programs can lead to instruction that contradicts teachers' viewpoints of sound educational practices. The authors suggest that state tests have a more powerful influence on teaching practices than content standards. From the survey, teachers reported that the “pressure to raise test scores encourages them to emphasize instructional and assessment strategies that mirror the content and format of the state test, and to devote large amounts of classroom time to test preparation activities” (p. 18).

Fisher and Ivey (2006) suggest that teachers play a critical role in assessment and instruction; thus, it is expected that their expertise is used to determine what student learning looks like, how it is measured, and what interventions should be implemented. Henning (2006) reported that there was no evidence that teachers in his study used assessment data to identify instructional gaps in student performance. Henning suggested teachers map high and low scores in reading across grade levels for the purpose of discovering instructional gaps (comparing against the norm), and teachers should analyze trends in order to compare the performance of different classes. Both Henning (2006) and Kerr et al. (2006) indicated that teachers lack the capacity to successfully engage in the used data to examine instruction effectively.

Conversely, teachers in the Grow Network Study (2005) used assessment data more intensely to focus on skill areas that students struggled with on exams. One teacher
stated when she identified skills students struggled in, “she searched for ways to thread the skill throughout her instructional program” (p. 250), and other teachers reallocated instruction time spending less time in skill areas students scored well in and more time in skill areas in which students struggled. Fisher & Ivey (2006) suggest that interventions should be driven by useful and relevant assessments; it appears that the teachers in the Grow Network Study applied this principle to alter their instruction.

Armstrong and Anthes (2001) found that the most difficult aspect to using data was linking it to an appropriate intervention. The idea is to provide different instructional strategies to reach a variety of learning styles, not more of the same. Furthermore, the authors found one district in their study had reading scores that declined steadily for the past several years, and the educators thought it was due to the number of new students entering into the district. When the data was sorted into two groups, the discovery was made that it was students who had been in the district three or more years, attributing to the decline in reading assessment scores. As a result, the district identified and invested in a new reading program for those students. Fisher & Ivey (2006) suggest that a reading program should be engaging to students and an effective instructional program design incorporates adolescents’ personal interests.

Developing an Action Plan

Christenson, Decker, Triezenber, Ysseldyke & Reschly (2007) found that teachers’ perspectives of implementing high-stakes assessment programs for students indicated an increase in behaviors and events around improving school and student performance. Seventy-five to eighty-one percent of teachers surveyed in this study used assessment data to monitor the performance of student progress. The teachers, efforts
were to accelerate the progress of low-achieving students while maintaining awareness and knowledge regarding student progress. According to the authors, over 60% of the teachers used assessment data to monitor the quality of their own instructions, allocate time for reading instruction, and assist in determining the method of alternative teaching. The authors also found that approximately 60% of the teachers personalized educational plans to meet the needs of students in reading based on high-stakes assessment data. Some teachers perceived that high-stakes assessments did not provide information that was beneficial to informing instruction.

Klein, Z evenbergen and Brown’s (2006) survey results indicated teachers had a difficult time dealing with high-stakes assessments. It was recommended by the authors that school administrators offer teachers with in-service workshops to boost their moral and encourage them. When administrators support teachers and provide them with professional development, their understanding and use of student assessment data was enhanced.

Webb (2002) reported that the Milwaukee Public Schools (MPS) designed a workshop, “to encourage teachers and others to become more familiar with the basic types of assessment, the appropriate use to the assessments, and how assessments results can inform teachers and others about student progress in attaining the MPS Standards” (p. 16). Lachat and Smith (2005) found engaging teachers in the process of data analysis is essential, and it should be done through systematic professional development. The authors concluded, “teachers need to learn how to obtain and manage data, ask good questions, accurately analyze data, and apply data results appropriately and ethically” (p. 336). Roehrig, Duggar, Moats, Glover, and Mincey (2008) found through interviews and
surveys that teachers used the following action strategies related to assessment data that provided focus for their instruction: (a) monitoring student progress and areas of strength and weakness; (b) adjusting or forming groups for individualized instruction; and (c) identifying appropriate activities, intensity, and level of instruction.

Overall, schools and teachers are faced with the challenge of monitoring student progress toward state standards, and they are held accountable for student improvement. It is essential that administrators provide teachers with professional development aimed at enriching teachers’ skills to effectively analyze data, differentiate instruction, and implement the appropriate strategies and interventions for student learning. After identifying the appropriate strategies and interventions, the teachers develop an action plan, which includes a method of measuring student growth. It would benefit teachers to become equipped in using assessment systems that assist in predicting student performance, like the Curriculum-Based Measurement-Reading (CBM-R). Silberglit & Hintze (2005) and Roehrig, Duggar, Moats, Glover, & Mincey (2008) reported that the CBM-R is a formative assessment system that was used favorably by educators to monitor reading progress of students over time and used as a tool for predicting student success. ThinkLink is also a formative assessment system; it is used to predict the proficiency levels of students in reading and provides teachers with assessment data to help inform their instruction (Discovery Education, 2008).

Planning to Assess Progress

Black and William (1998) in their research review examined research literature on assessment worldwide, asking if formative assessments yield higher student achievement as reflected in summative assessments. If this is the case, then what kinds of
improvements in classroom assessment practice are likely to yield the greatest gains in student achievement? The authors reported that “improved formative assessment helps low achievers more than other students and so reduces the range of achievement while raising achievement overall” (p. 21). Teachers can use multiple sources to assess student growth, which include teacher-made tests as well as summative and formative assessments. Wayman, Midgley and Stringfield (2005) found in a study of four school districts that focused on three common assessments to measure the success of students: student profiles, summative, and formative assessments. Student profiles were used to gather data related to student demographic information, test histories, and relevant family information. Many teachers reported that profiles enriched their understanding about a particular student situation. The summative assessments, such as state tests, were used to document student achievement at the end of a quarter, semester, or school year. The formative assessments were given more frequently and were intended to guide planning, instruction, and daily practice. School districts and teachers can implement assessment systems to assess and measure student growth towards standards.

Silberglipt and Hintze (2005), on the other hand, showed in a study of 2,191 students from five rural and suburban districts in Minnesota that a formative assessment system called Curriculum-Based Measurement-Reading (CBM-R) was used to monitor reading progress of students over time. The authors found that CBM-R was a strong tool for predicting student success on the Minnesota state-mandated assessment, “with a moderate to high degree of predictive and concurrent validity, as well as moderate to high degree of diagnostic accuracy” (p. 319). It is important that school leaders investigate the effectiveness of any testing program system that the school district is planning to initiate.
This will help ensure that the investment in the program has the ability to produce the desired outcomes, which is effectively measuring student achievement.

Brown (2007) reported in a study of a Mid-Atlantic school that the middle school was in a crisis as a result of the annual state assessment. The school failed to meet adequate yearly progress, and their scores in reading were the lowest in the county. The school district purchased a comprehensive, computer-assisted instruction program targeting reading skills; however, the assessment system failed to predict accurate student achievement. It was reported that the system predicted that “students would achieve significant gains on the state assessment. But when the scores came in, the predicted gains did not materialize. The data on the benchmark assessments seemed unrelated to those on the state assessment” (p. 1). The author found that evidence is lacking in their predictive validity of benchmark assessments used in the Mid-Atlantic Region jurisdictions with respect to the required state or summative assessments. In contrast, Silberglitt & Hintze (2005) and Roehrig, Duggar, Moats, Glover, and Mincey (2008) reported favorable results from educators using the formative assessment system Curriculum-Based Measurement-Reading (CRM-R) to monitor student progress in reading and to individualize instructions to meet the needs of their students. Research indicates there are other assessment programs, such as QuickSmart (Graham, Bellert, Thomas, and Pegg, 2007) and the Balance Assessment System (Webb, 2002) that teachers used successfully to measure student achievement.

The QuickSmart reading program is a basic academic intervention designed for low-achieving middle school students to enhance basic academic skills in order to improve skills measured on standardized tests (Graham, Bellert, Thomas, & Pegg, 2007).
Teachers in this study administered pretest and posttest assessments to the students using the standardized Progressive Achievement Tests (PAT) and the Cognitive Aptitude Assessment System (CAAS) computer assessment package. According to the authors, QuickSmart students went through 26 weeks of structured intervention activities aimed at improving their basic academic skills. Teachers delivered the reading intervention sessions; the activities included timed flashcard activities, repeated readings aimed to improve fluency, scaffolding comprehension strategies, reading games, and regular testing. The results of the study indicated the QuickSmart students reading comprehension scores remained below the students in the comparison group; however, they improved significantly from pretest to posttest. In addition, Webb (2002) reported that the Milwaukee Public Schools transformed its assessment system into a Balance Assessment System, including both external norm-referenced assessments, criterion-referenced, and classroom-based assessment. Teachers used multiple measures of student performance (i.e., state exams, TerraNova tests) stating, “these assessments have high reliability and are adequate for looking at growth over years” (p. 12).

Overall, assessing progress is an integral part of the improvement process through which schools and teachers increase their accountability and find the most efficient ways to meet all students’ learning needs. Most studies presented in this section found favorable results in using assessment programs to help facilitate the process of advancing student proficiency. It was duly noted that the Mid-Atlantic schools did not have success with the predictive validity of benchmark assessments from the testing system they purchased. Ultimately, the goal is to use the most effective assessments and testing programs that will aid teachers in discovering what students need to learn and deciding
what effective strategies and interventions to use to elevate student achievement, thereby improving the school’s performance.

Summary

The studies presented in the literature review include teachers’ use of data through collaborating, building assessment literacy, examining student data, examining instruction, selecting interventions, developing an action plan, and assessing progress. The proposed study focuses on teachers in the Benford Middle School who are required to use the *ThinkLink Predictive Assessment System* to identify students with low reading levels, which make them at risk for failing the state tests. What is lacking, however, is an idea of whether and how teachers actually use the assessment results to inform instruction. The main research question for this study is: How do middle school teachers use data from *ThinkLink*, a predictive assessment system, that indicates that certain sixth-, seventh-, and eighth-grade students will not perform at proficiency on the NYS ELA exams? The second research question is: How do middle school teachers describe their experience with the ThinkLink Predictive Assessment System?
Chapter 3: Research Design Methodology

Introduction

The focus of this study is teachers' responses to student assessment data from *ThinkLink* assessment system, a battery of tests that claim to predict student performance and the Middle School NYS ELA assessments. How teachers use *ThinkLink* data as part of their instructional decision making will be described. Benford (pseudo) Central School District has invested money on the *ThinkLink Predictive Assessment System* promising results, but it is unknown whether teachers are using that data to inform instructional practices that should positively impact achievement performance of struggling students.

The main research question for this study is: How do middle school teachers use data from *ThinkLink*, a predictive assessment system, that indicates that certain sixth-, seventh-, and eighth-grade students will not perform at proficiency on the NYS ELA exams? The second research question is: How do middle school teachers describe their experience with the *ThinkLink Predictive Assessment System*?

Research Context

The study was conducted at Carl I. Bergerson Middle School in the Benford Central School District, Benford, New York. The district's mission statement is "Achievement, Character, and Success for Life." According to the district website, the Mission, Vision, and Values were established to:

... insure equal access to improve student learning; improve communication with all members of the ACS community; foster and develop the growth of the whole
child; establish and maintain a safe and secure environment; and enhance the professional development of all members of the learning community.

In purchasing and implementing a predictive assessment system like *ThinkLink*, the district hopes to create a vehicle for teachers to collaborate around data and to enhance efforts to build upon other aspects of a learning community. The district also hopes teachers will use the *ThinkLink* data to identify students who are struggling and use different strategies to address areas of difficulty.

The district's success is measured by or reflected through the following: (a) Team S.M.A.R.T goals, (b) School to Work Projects, (c) Finger Lakes Institute (WNY Region), (d) District and Building Leadership Teams, (e) Professional Learning Community, (f) Staff Development, and (g) Educator of the Year. The district has been recognized as a model district due to their Character Education Program, Service Learning Program, Special Education Programs, Block Schedule, and receipt of several awards and honors. Awards that Benford has received include: the National Leaders Middle School Award for Service Learning, the Section IV Good Sportsmanship Award, the National Civic Star Award, the Leading-Edge and Services Award, the Golden Empire Award, and Innovative Program of the Year Award, and Benford was also named as a “High Performing – Gap Closing” School. *ThinkLink* is a tool that has been implemented to maintain and improve efforts related to student performance, especially struggling students.

Benford is a rural district that is predominately White. Table 3.1 shows the district’s student demographics by poverty rate, student stability, English language learner status, and ethnicity. About 40% of Benford’s student body qualifies for free or
reduced lunch services, suggesting that many families in the district are poor or working poor. Many of the parents of students in the district work for Washington Mutual Bank, the Orleans County Government Offices, the Benford Correctional Facility, and the Benford School District. The median income earnings for households average in the mid thirty thousand; there is also a high unemployment rate for the Benford population. Stability statistics demonstrate that more than 90% of families stay in the district in any given school year, suggesting that not many families move away from Benford. Some of the unique challenges the people in Benford face stem from the location. The rural area isolates Benford, and getting people to come to this location is a challenge. There is no public transportation, and often the district provides transportation for programs that are organized by the schools. There are very few English language learners in the district’s school body, which is reflective of a lack of diversity generally. In the 2006-07 school year, 83% of the population was White, while African American and Hispanic students make up the largest minority at 8% and 7% respectively. A recent initiative by the district focused on diversity training for staff. The purpose of the training was to enhance the staffs’ awareness and enrich the quality of education for the students.
Table 3.1

*District Student Demographic Factors*

<table>
<thead>
<tr>
<th>Demographic</th>
<th>2004 - 05</th>
<th></th>
<th>2005 - 06</th>
<th></th>
<th>2006 - 07</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Eligible for Free Lunch</td>
<td>705</td>
<td>27%</td>
<td>733</td>
<td>29%</td>
<td>781</td>
<td>32%</td>
</tr>
<tr>
<td>Reduced-Price Lunch</td>
<td>237</td>
<td>9%</td>
<td>199</td>
<td>8%</td>
<td>262</td>
<td>11%</td>
</tr>
<tr>
<td>Student Stability (by school)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School</td>
<td>98%</td>
<td>93%</td>
<td>91%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle School</td>
<td>95%</td>
<td>93%</td>
<td>94%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary School</td>
<td>97%</td>
<td>94%</td>
<td>95%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limited English Proficient</td>
<td>50</td>
<td>2%</td>
<td>45</td>
<td>2%</td>
<td>40</td>
<td>2%</td>
</tr>
<tr>
<td>Racial/Ethnic Origin</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amer. Indian / Alaska Native</td>
<td>25</td>
<td>1%</td>
<td>23</td>
<td>1%</td>
<td>29</td>
<td>1%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>197</td>
<td>8%</td>
<td>219</td>
<td>9%</td>
<td>195</td>
<td>8%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>161</td>
<td>6%</td>
<td>173</td>
<td>7%</td>
<td>181</td>
<td>7%</td>
</tr>
<tr>
<td>Asian or Native</td>
<td>33</td>
<td>1%</td>
<td>36</td>
<td>1%</td>
<td>26</td>
<td>1%</td>
</tr>
<tr>
<td>Hawaiian or Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>2148</td>
<td>84%</td>
<td>2089</td>
<td>82%</td>
<td>2047</td>
<td>83%</td>
</tr>
</tbody>
</table>

Note. Eligible for Free Lunch and Reduced-Price Lunch percentages are determined by dividing the number of approved lunch applicants by the Basic Education Data System (BEDS) enrollment in full-day kindergarten through Grade 12. Eligible for Free Lunch and Limited English Proficient counts are used to determine Similar Schools groupings within a Need Resource Capacity category.
According to the NYS District’s report card (2008), Benford is in good standing with the state in ELA, mathematics, science, and graduation rate; meeting adequate yearly progress in all student groups that have the sufficient number of students to determine AYP status. The high school graduation rate in the school year 2006-07 was 93%, and 4% of this cohort dropped out. There were many students in the high school who expressed an interest in post-secondary plans. Eighty-three percent of this graduating class planned on attending college. 5% planned on entering into the military, and 12% indicated they would be entering into the workplace. On the comprehensive English exam, 90% of the senior class scored at or above 55, 83% scored at or above 65, and 17% scored at or above 85.

The demographics at the middle school mirrors the district’s demographics presented in Table 3.1. The middle school’s student enrollment in the school year 2006-07 was a total of 607 students in grades six through eight with an average class size of 22 students, and the annual attendance was approximately 94%. Table 3.2 shows the middle school student groups and student achievement on the NYS ELA tests at grades six through eight in the school year of 2006-07. The scores indicate that minority students appeared to have more difficulty on the ELA test than White students at each grade level. For example, at grade seven, 61% African American and 56% Hispanic students scored at non-proficient levels one and two, in comparison to 32% of White students scoring in the same levels. Students who come from economically disadvantaged homes struggle more across the grade levels on the ELA test than that of their counterparts. For example, 51% economically disadvantaged students scored at levels one and two in comparison to 39% of students who are not economically disadvantaged scoring at levels one and two.
Table 3.2

*Middle School ELA Results in 2006-07*

<table>
<thead>
<tr>
<th>Student Groups</th>
<th>Tested</th>
<th>Grade 6</th>
<th>Grade 7</th>
<th>Grade 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>1-2</td>
<td>3-4</td>
<td>1-2</td>
<td>3-4</td>
</tr>
<tr>
<td>Student Groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>America Indian or Alaska Native</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>African American</td>
<td>38%</td>
<td>62%</td>
<td>61%</td>
<td>39%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>-</td>
<td>-</td>
<td>56%</td>
<td>44%</td>
</tr>
<tr>
<td>Asian or Native Hawaiian/Other</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>White</td>
<td>34%</td>
<td>66%</td>
<td>32%</td>
<td>68%</td>
</tr>
<tr>
<td>General Education Students</td>
<td>22%</td>
<td>78%</td>
<td>31%</td>
<td>69%</td>
</tr>
<tr>
<td>Students with Disabilities</td>
<td>85%</td>
<td>15%</td>
<td>70%</td>
<td>30%</td>
</tr>
<tr>
<td>English Proficient</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Limited English Proficient</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Economically Disadvantage</td>
<td>49%</td>
<td>51%</td>
<td>46%</td>
<td>54%</td>
</tr>
<tr>
<td>Not Economically Disadvantage</td>
<td>23%</td>
<td>77%</td>
<td>28%</td>
<td>72%</td>
</tr>
<tr>
<td>Students Tested</td>
<td>577</td>
<td>173</td>
<td>195</td>
<td>209</td>
</tr>
</tbody>
</table>

Note. The dash (-) symbol indicates that data for this group has been suppressed. The groups have fewer than five students in them; the data was suppressed to protect the privacy of the students.

*Research Participants*

The participants in this study include Benford general education and special education classroom teachers at grade levels six, seven, and eight. The Academic
Intervention Services (AIS) teachers providing services to struggling students in the sixth, seventh and eighth grades also took part in this study. This population was selected for the study because these teachers are expected to use *ThinkLink* assessments to assess student performance in ELA at each grade level. The AIS teachers are responsible for delivering individualized and small group instruction to students who are struggling in ELA. The AIS teachers provide pullout services and the instruction is delivered in separate classrooms. Students who have performed below proficiency on the standardized assessments are provided with AIS services. The total number of participants in this study are 16 teachers; there are six general education teachers, five Academic Intervention (AIS) teachers, four special education (SPED) teachers, and one school psychologist. Table 3.3 outlines the teacher demographics.

**Role of the School Psychologist**

The school psychologist works closely with SPED teachers and AIS teachers to provide information pertaining to student's special needs and provides assistance with data collection. The psychologist assists in data analysis; he uses *ThinkLink* results and works with teachers individually as well as in collaborative groups. When the teachers receive student data, they work in collaborative groups to interpret the results and discuss students' needs. He facilitated the SPED and the AIS focus groups to discuss the assessments used by the teachers at the middle school.
Table 3.3

Teacher Demographics

<table>
<thead>
<tr>
<th>Teachers</th>
<th>Gender</th>
<th>Area of certification</th>
<th>Grade</th>
<th>Years of experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>(T)</td>
<td>(T)</td>
<td>initial (I) permanent (P) provisional (Pro)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1 (Eng)</td>
<td>Female</td>
<td>Elementary (P)</td>
<td>6</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reading Teacher (P)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T2 (Eng)</td>
<td>Female</td>
<td>Elementary (P)</td>
<td>6</td>
<td>23</td>
</tr>
<tr>
<td>T3 (AIS)</td>
<td>Female</td>
<td>Childhood Education (I)</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>T4 (Eng)</td>
<td>Female</td>
<td>English 7-12 (Pro)</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>T5 (Eng)</td>
<td>Male</td>
<td>English 7-12 (Pro)</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>T6 (AIS)</td>
<td>Female</td>
<td>Elementary (P)</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>T7 (Eng)</td>
<td>Female</td>
<td>English 7-12 (P)</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>T8 (Eng)</td>
<td>Female</td>
<td>Elementary (P)</td>
<td>8</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td></td>
<td>English (P) &amp; Reading Teacher (P)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T9 (AIS)</td>
<td>Female</td>
<td>Childhood Education (I)</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>T10 (SPED)</td>
<td>Female</td>
<td>Special Education (P)</td>
<td>8</td>
<td>17</td>
</tr>
<tr>
<td>T11 (SPED)</td>
<td>Female</td>
<td>Special Education (P)</td>
<td>7</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reading Teacher (P) &amp; Elementary (P)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The participants were selected using a single-stage sampling procedure, according to Creswell (2003), "a single-stage sampling procedure is one in which the researcher has access to names in the population and can sample people directly" (p. 156). The participants were selected based on the grade level taught by each teacher, resulting from the implementation of the ThinkLink at grades sixth through eighth grade in the Middle School. Training and on-going administrative support related to ThinkLink has been provided to participants. A representative from ThinkLink trained the administrative team in June 2007, and the Vice Principals developed a workshop and trained teachers at grades three through eight in August 2007. The training provided by the Vice Principals began the ongoing dialogue with teachers and administrators regarding the effectiveness of ThinkLink and the needs of teachers and their students. Teachers have been provided...
with opportunities to discuss concerns and ask questions related to *ThinkLink* during grade level meetings with administrators, weekly grade level collaboration meetings, and private meetings with administrators.

*Role of the Researcher*

The research is an Action Research/Program Evaluation conducted by the Assistant Principal of the Middle School in partial fulfillment of the requirements of an Education Doctorate (Ed.D) in Executive Leadership. The following personal statement was written in 2008 and describes the researcher and her role in the district, the school, and the research study:

I am an Assistant Principal in the middle school where the study was conducted and supervisor of the participants in the study. I am an African American, who has worked in the district four years, but new to the middle school. My hopes are that the teachers provided honest feedback in regards to the survey questions and during the focus group discussions and did not allow my supervisor role to hinder their responses. The research questions center around the teachers' use of the data, experience, and instructional decision making aligned with *ThinkLink*. My hopes are that teachers provided the most accurate information so it could be used to assist in making decisions for our students who are struggling in reading. It is expected that teachers use *ThinkLink*, because it is a district initiative that began in August 2007; however, it is unknown as to how the teachers use the data from *ThinkLink* to inform their instruction. I have two years experience using *ThinkLink*, and it is the first predictive testing system I have worked with. A representative from *ThinkLink* trained the Benford administrative team in June.
2007. After the training, the Superintendent discussed with the administrative team if we thought this system would be beneficial and we were in agreement that it should be explored. The decision to purchase the system was the Superintendents; however, I think our feedback assisted in that decision. The Assistant Principals in the district developed a workshop and trained teachers at grades three through eight in August 2007. I feel ThinkLink is a useful tool in helping us predict how close students are in achieving state standards on the ELA assessment. I am very interested in the possibility of being able to determine with greater accuracy how well our students will do on the state exams, and if ThinkLink can assist our District. I wondered if my staff shared in this enthusiasm. We are accountable for all of our students' success and we continue to explore ways to help them achieve their greatest potential. We must continue to examine ThinkLink's benefits and limitations in regards to making instructional decisions; this is the reason I elected to integrate it in my research study. The school district stands by its commitment to Continuous Improvement and strives for the success of all students.

*ThinkLink Predictive Assessment System*

The district began using ThinkLink in September 2007 to assess student performance in reading and math. According to its manual, the *ThinkLink Predictive Assessment Series:*

... utilizes a unique scientific approach that matches diagnostic assessments to each state's high-stakes test. It predicts student proficiency, mastery, and AYP [annual yearly progress] performance so teachers can see student NCLB [No
Child Left Behind] results before they actually test (Discovery Education, 2008, p. 2).

ThinkLink claims to predict student performance with 80 to 90% accuracy. ThinkLink recommends three tests to be administered in the school year: (1) Test A was administered in September and used as a baseline assessment, (2) Test B was administered in November and used to determine growth in skill areas, and (3) Test C was administered in June and used to pretest for the next year skills.

As part of their regular practice, the participants in this study examined the assessment results of approximately 500 students (grades 6 - 8) to determine the proficiency levels of each student and create student achievement plans for students at levels 1 (not proficient) and 2 (not proficient). According to ThinkLink's manual, "student proficiency levels match the state's cut-offs defined in the No Child Left Behind state plan identifying the state-specific proficiency levels" (p. 10). Students who have scored at levels 1 and 2 are not meeting state standards. ThinkLink provides educators with a variety of reports that display information pertaining to student achievement towards state standards.

Benford schools have access to the following ThinkLink reports to assist teachers in identifying student's strengths and weaknesses in math and reading: (1) Class Summary Report, (2) Student Report, (3) Student Sub-skills Report, (4) Objective Report, (5) Answers Report, (6) Individual Student Report, and (7) Comparison Report (see Appendix A through G). These reports are intended by ThinkLink to be used by teachers to inform instructional decisions, and virtual classes may be created to include any grouping of students in the same grade to monitor their performance. The assessment
worksheets (see Appendix H through J) are intended to be used for planning and grouping students by level and skills, identifying concerns, and looking at patterns. Table 3.4 is a description of seven reports and how *ThinkLink* intended the reports to be used by teachers.

Table 3.4

*ThinkLink Reports*

<table>
<thead>
<tr>
<th>Report</th>
<th>Purpose</th>
<th>Possible Teacher Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class Report</td>
<td>Identify proficiency level in each category</td>
<td>Determine the percentage of students in class who are meeting standards in skill areas</td>
</tr>
<tr>
<td>Student Report</td>
<td>Identify proficiency level for each student by skill</td>
<td>Target type of remediation needed</td>
</tr>
<tr>
<td>Objective Report</td>
<td>Provides an item analysis showing the difficulty of each item and skill</td>
<td>To gauge the percentage of students having difficulty with specific questions</td>
</tr>
<tr>
<td>Answer Report</td>
<td>Provides an answer key and details the answers for every student</td>
<td>Identify percentage of questions answered incorrectly and target skill</td>
</tr>
<tr>
<td>Individual Student Report</td>
<td>Designed to encourage student and parent involvement</td>
<td>Use during parent conferences, tutoring, and development of IEPs</td>
</tr>
<tr>
<td>Comparison Report</td>
<td>Monitors student progress</td>
<td>Compare students' progress across multiple testing</td>
</tr>
</tbody>
</table>
Benford's Middle School's Infrastructure for Assessment

The middle school teachers, department heads, and the administrators are expected to use student assessment data to identify gaps in the curriculum and instructional practices. Data analyses are expected to be conducted to assist in making data-driven decision around student performance in ELA. Combinations of formative and summative assessments are used to determine the strengths and weaknesses of students in ELA. The middle school's infrastructure for assessment includes an administrative structure, a meeting structure, and an assessment structure.

Administrative Structure

The Assistant Superintendent of Curriculum and Learning is responsible for ensuring that the district's curriculum is aligned to the state assessments. She guarantees that the grade level common assessments and item analysis of assessment data drive instruction. An analysis of state assessments was conducted to identify strengths and weaknesses in instruction. It is also the responsibility of the Assistant Superintendent to secure outside resources, such as ThinkLink, to assist in improving teachers' ability to identify gaps in the curriculum and instructional practices. The middle school Principal and Assistant Principal are expected to be seen as learning leaders. Teachers should view administrators as the go to people when they have instructional and data assessment questions.

Each building administrator analyzes data and makes data-driven decisions based on assessment results. The decisions made are based on trend data that supports instruction and programs in the middle school. The department chairs support teacher's in the building and are expected to be diagnostic and data driven in their decisions related to
assessments. They help teachers answer a critical question: When students are not mastering concepts, what will we do differently? It is expected that during grade level meetings and department meetings the chairs facilitate instructional dialogue and use assessment data.

Meeting Structure

If teachers are going to use data collaboratively, they need to meet routinely to examine the data and plan for instructional improvement (Steele & Boudett, 2008). The middle school teachers have the opportunity to meet on a regular basis, and during these meetings, assessment data is often discussed. The meetings include faculty meetings, principal advisory meetings, grade level meetings, departmental meetings, and AIS meetings. The faculty and principal meetings are scheduled once a month and directed by the building principal. The agenda items vary from month to month, however the principal does address assessment to during the meetings. The grade level meetings for the English teachers are held once a month and lead by the English chair person. Teachers discuss such things as student achievement, testing, assessment results and other related instructional items. The ELA departmental meetings are directed by the Assistant Superintendent and these meetings held quarterly; however, a special meeting can be called if a situation arises. The AIS teachers and Assistant Principal meet weekly to discuss students’ academic needs and students who are struggling in ELA. These meetings are designed to discuss the achievement of students on an individualized basis. Assessment data is examined to assist in developing instructional plans for students who scored at the not proficient levels (one and two) on standardized ELA assessments.
Assessment Structure

The district requires teachers in the middle school to use ELA assessments to measure the academic achievement of our adolescents. In addition to the ThinkLink assessments, common assessments are used in grades six, seven, and eight for ELA preparations as part of the grade levels SMART goals (see Appendix M). The SMART goals are specific (S) to ELA, measurable (M), attainable (A), realistic (R), and time bound (T). This goal is directly aimed at improving ELA tests scores. The sixth-grade teachers use the district-approved, Scott Foresman reading series pre-test (given at the beginning of the year) and the post-test (given at the end of the year). These assessments measure reading comprehension and vocabulary; the formats of the assessments are multiple-choice questions. At the seventh- and eighth-grade levels, teachers use previous ELA sample multiple-choices tests. The ELA practice style reading comprehension tests are administered three times between September and December. Teachers also use formative assessments, such as weekly tests, quizzes, projects, and other assessments to measure student growth in ELA.

Research Design

The dissertation study involved action research. According to Glanz (2003), action research is an ongoing process that examines educational concerns in a school setting. He suggests five guiding principles: (a) reflect – a practitioner seeks ways to improve a school or district; (b) select a focus – knowing, questioning, and developing a plan; (c) collect data; (d) analyze and interpret data; and (e) take action. As the Assistant Principal, the researcher has reflected upon the investment made by the district in this ThinkLink System and wondered about the teachers' adoption of the program and if she
can assist them further in their use of the potentially helpful instrument. The researcher has added teachers' perceptions to student achievement data to inform the schools' plan for further school improvement. The type of research design is a mixed method. The quantitative methods used in the study will be descriptive statistics and a survey; the qualitative method is the use of focus groups.

Data Collection

Data collection includes online surveys, focus group transcripts, and descriptive analysis for ThinkLink and NYS ELA results. Documents also included assessment worksheets and ThinkLink reports. Student performance data at all three grade levels on ThinkLink assessments was collected at three stages: (1) Test A, September 2008; (2) Test B, November 2008; and (3) Test C, June 2009. Student performance data from the NYS ELA exam at all three grade levels was collected in May 2009. Collection of the ThinkLink and NYS ELA data is part of the regular and ongoing practice of the district and would be conducted regardless of the status of the proposed research. Data specific to the research study was collected from the teachers through two primary instruments: an online survey and four focus groups. The survey was administered to all participants in the study in March 2009. The survey responses informed questions asked of teachers in the focus groups, which were conducted in April 2009.

ThinkLink Assessments

The assessments are intended by ThinkLink to be used by teachers to assess students' achievement towards state standards. The assessments are provided by ThinkLink to be administered three times during the school year. The results of the assessment are displayed on a series of ThinkLink reports, and the intent of these reports
is to be used by teachers to inform instructional decisions using the data represented in each report. The reports are available to teachers immediately following the completion of each assessment. The researcher met with AIS teachers on a weekly basis to discuss the needs of struggling students and assisted teachers in developing student achievement plans. The AIS teachers had the option to use the assessment worksheets provided by *ThinkLink* or a spreadsheet to track student progress.

**NYS ELA Assessments**

The NYS ELA tests are required by the state to be administered to students in grades three through eight in January. The tests are provided by the state and the school district is responsible for testing students. The teachers at the middle school administered the ELA tests and the researcher coordinated the process. The researcher and the teachers examined the NYS ELA assessments results to determine the number of students meeting state standards and compared that number with the students predicted to meet standards based on *ThinkLink* assessments results. *ThinkLinks* ' assessment results for all three assessments (Tests A, B, and C) were compared to the ELA results. The researcher examined the skills on the assessments and compared students' performance in each skill area. Results for subgroups, such as ethnicity, SPED and regular education, economically disadvantaged and not disadvantaged were analyzed. The students who received AIS during the course of the school year were looked at to determine performance growth and predetermine possible number of students who will need services next year.

**The Teacher Survey**

All sixth-, seventh-, and eighth-grade teachers received a letter in advance asking for their consent to participate in the anonymous on-line survey. Teachers were informed
of the voluntary nature of the study. They were told that the results of the survey would be used to further inform the schools’ use of the ThinkLink system. Those who chose to participate answered questions, which focused on their responses to the implementation of the ThinkLink system for the ELA standards and assessments. Results of the survey were shared with the teachers. The survey was developed by the researcher with guidance from her Assistant Superintendent of Instruction (see Appendix L). Components from Creswell’s (2003) method for designing a survey were used to develop the researcher’s survey instrument. Steps used to complete the survey included: determining the purpose of the survey design, selecting an economically reasonable data collection instrument, identifying the population that would be surveyed, identifying the sampling procedure, deciding what content areas would be addressed, and identifying the scales to use on the survey. The survey consisted of twelve Likert scale and open-ended questions. The Likert scale continuum consisted of two scales. First, the questions related to the use of ThinkLink reports were represented as; very often (more than 8), often (4-7 times), sometimes (1-3 times), never (0), and unaware of report. The second scale ranged from strongly agree to strongly disagree; these questions are related to instruction, effectiveness, and the efficiency components of ThinkLink.

The survey was completed on-line, using SurveyMonkey. SurveyMonkey (2008) is a system that provided the researcher with the ability to create a survey design, collect responses from the participants, analyze, and export data from the completed surveys. Anonymity of participants was maintained throughout the project as data was collected without participants’ names. Responses from the survey were used to inform changes to the individual items for the focus group protocols.
Before the administration to the participants, the survey was piloted with teachers in another building within the district who are familiar with the *ThinkLink* system. The middle school survey was not revised based on the feedback received in the pilot.

**Focus Groups**

Focus groups were created to discuss the implementation and use of *ThinkLink* and its impact on teaching practices. Wholey, Hartley, and Newcomer (1994) suggest three critical steps for conducting a focus group: (a) selecting participants, (b) writing the moderator’s [or facilitator’s] guide, and (c) communicating the client’s needs. The authors stated that “participant selection is a critical element in the process because the discussion will be substantially less fruitful if the people in the room do not come from the target population” (p. 343). Teachers in grades 6, 7, and 8 participated in the focus group, and each grade level was a separate focus group. The groups consisted of teachers who use *ThinkLink* at their grade levels and the school psychologist. The discussions were scheduled as forty-minute sessions, and there were five to six participants in each group. The focus group discussions were recorded ensuring all information from participants was available to the researcher for accurate analysis.

The researcher used facilitators to conduct the focus groups. The facilitators were provided with a guide that outlined the major topics to be covered, in which the facilitator referred to during the discussion. There were three different groups: (a) the English teachers group, which was facilitated by the English department chair; (b) the AIS teachers group, which was facilitated by the school psychologist; and (c) the SPED teachers group, which was also facilitated by the school psychologist. The researcher communicated with the facilitators what her needs were and provided the facilitators with
the necessary materials and equipment to run the groups efficiently. Focus group protocols were used to gather more in-depth information from each participant in the study. Examples of the protocols are displayed in Appendix K.

The groups were recorded using an audio tape recorder. Audio recordings from the focus groups were sent directly to a transcriptionist hired by the researcher. All recordings and transcripts were returned to the researcher once the audio tapes were transcribed. The researcher only read the transcription in order to maintain confidentiality. Confidentially is important on behalf of participants involved in the study; this provided them with the freedom to express how they truly felt about the use of ThinkLink without any repercussions for unfavorable responses.

Procedures Used

Table 3.5 is a timeline of events specifying the data collected in this study and at what point all the data was completed. The elements of Action Research are represented along with the person involved in the development of instruments and the collection of data.
### Table 3.5

**Timeline for Procedures**

<table>
<thead>
<tr>
<th>Date</th>
<th>Data</th>
<th>Action Research Element(s)</th>
<th>Person(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept. 2008</td>
<td>ThinkLink Test A Administered</td>
<td>Select a focus/Collect Data</td>
<td>Researcher &amp; Teachers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select a focus/Collect Data</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Analyze &amp; Interpret Data</td>
<td>AIS Teachers &amp; Researcher</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Take Action</td>
<td></td>
</tr>
<tr>
<td>Nov. 2008</td>
<td>ThinkLink Test B Administered</td>
<td>Analyze &amp; Interpret Data</td>
<td>Researcher &amp; Teachers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select a Focus &amp; Take Action</td>
<td>AIS Teachers &amp; Researcher</td>
</tr>
<tr>
<td></td>
<td>Revised Plans / Assessment Sheets</td>
<td>Collect, Analyze &amp; Interpret Data</td>
<td>Researcher</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Take Action</td>
<td></td>
</tr>
<tr>
<td>Dec. 2008</td>
<td>Teacher Survey Developed</td>
<td>Select a Focus</td>
<td>Researcher</td>
</tr>
<tr>
<td></td>
<td>NYS ELA Test Administered</td>
<td>Take Action</td>
<td>Teachers &amp; Researcher</td>
</tr>
<tr>
<td></td>
<td>Teacher Survey</td>
<td>Collect, Analyze &amp; Interpret Data</td>
<td>Researcher</td>
</tr>
<tr>
<td></td>
<td>Focus Groups</td>
<td>Collect, Analyze &amp; Interpret Data</td>
<td>Facilitators &amp; Researcher</td>
</tr>
<tr>
<td></td>
<td>NYS ELA Test</td>
<td>Collect, Analyze &amp; Interpret Data</td>
<td>Researcher</td>
</tr>
<tr>
<td></td>
<td>ThinkLink Test C Administered</td>
<td>Collect, Analyze &amp; Interpret Data</td>
<td>Researcher</td>
</tr>
</tbody>
</table>

**Data Analysis**

The mixed-methods design involves the data collection, analysis, and interpretation of both quantitative and qualitative methods. The quantitative methods in this study are descriptive statistics, which include formative assessment results, state test
results, and an on-line survey; the qualitative methods are focus groups that are conducted by the researcher. The data was scheduled to be collected and analyzed in phases: the researcher began with the quantitative data first, the *ThinkLink* results from Tests A and Test B. The second phase was the qualitative data, which includes the survey and focus groups. Final collection included NYS ELA and *ThinkLink* results from Test C.

In analyzing the descriptive statistics, the researcher focused on skill areas on the ELA assessment, the percentage students at each level, and the growth of student performance. The *ThinkLink* reports (Appendix A-) are intended to be used by teachers to target areas to analyze and specify students who are proficient and not proficient in skills reported on the assessments. For example, the Comparison Report can be used by teachers to monitor student progress during the school year in each reporting category and compare students’ progress across multiple testing periods. The ELA state assessment results were correlated with the *ThinkLink* results; the researcher determined how many students actually met state standards in comparison to how many were predicted to meet state standards. The data was recorded using bar graphs and tables such as the examples shown in Figure 3.1 and Table 3.6.
Figure 3.1

Grade 6 ThinkLink English Language Arts - Year 2008-09

Table 3.6

Grade 7 NYS English Language Arts - Year 2009

<table>
<thead>
<tr>
<th>Levels:</th>
<th>2 - 4</th>
<th>3 - 4</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Score:</td>
<td>661</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range:</td>
<td>598-785</td>
<td>650-785</td>
<td>705-785</td>
</tr>
<tr>
<td>Percentage:</td>
<td>95%</td>
<td>69%</td>
<td>10%</td>
</tr>
<tr>
<td>Number of Students:</td>
<td>190</td>
<td>138</td>
<td>21</td>
</tr>
</tbody>
</table>

Survey

The survey items, using a Likert-scale of five alternatives ranging from strongly agree to strongly disagree was designed to evoke perceptions about various aspects of the ThinkLink Predictive Assessment System. In analyzing the survey data, the researcher reported information about participants who did and did not respond to the survey.
Content analysis was used to analyze the open-ended questions on the survey. The same technique was used for the focus group data as was used for the survey data (see Focus Groups section below). The survey data was shared with the Assistant Superintendent of Curriculum and Instruction along with the researcher’s analysis of ThinkLink’s benefits to the district. The survey was preferred because of the low cost and the rapid turnaround in collecting the data. The data was recorded using a table, such as the example shown in Table 3.7

*Teacher’s Perception - The Usefulness of ThinkLink*

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>Number of Teacher Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SA</td>
</tr>
<tr>
<td>Theme: Impact on Curriculum</td>
<td></td>
</tr>
<tr>
<td>Alignment of curriculum</td>
<td>1</td>
</tr>
<tr>
<td>Teaching to the test</td>
<td>5</td>
</tr>
<tr>
<td>More conscious of outcomes</td>
<td>0</td>
</tr>
<tr>
<td>Theme: Impact on Teaching Practices</td>
<td></td>
</tr>
<tr>
<td>Modified instruction</td>
<td>3</td>
</tr>
<tr>
<td>Focused on specific skills</td>
<td>5</td>
</tr>
<tr>
<td>Differentiated instruction</td>
<td>2</td>
</tr>
</tbody>
</table>

Note: This type of chart can include the percentage and ranking of responses.

*Focus Groups*

In April 2009, 16 English teachers, AIS teachers, and SPED teachers from the Benford Middle school participated in focus group discussions on classroom assessment.
The groups were facilitated by the English department chair and the school psychologist. The facilitators used five open-ended protocol questions (including probes, see Appendix K) to gather information. The results were compiled, the data were analyzed, and the comments were sorted into a variety of emerging themes from three different focus group discussions. Content analysis was used to analyze the open-ended questions on the survey and focus group data. Qualitative research analysis involves preparing and organizing the data; reducing the data into themes by coding; and condensing the codes and representing the data in figures, tables, or a discussion.

Huberman & Miles (1994) suggest when analyzing data to use strategies such as: writing in the margin, writing reflective passages, creating a summary sheet, writing codes, noting patterns, counting frequency of codes, and making contrasts and comparisons. The strategy counting frequency codes did not apply to this study, therefore, it was not used to analyze the data. The researcher read through the transcripts thoroughly and thoughtfully, writing notes in the margins as themes surfaced from the transcripts and reflected on each passage of the transcripts. This helped in the initial process of exploring the data to discover the themes. The researcher created summary sheets as a way to keep track of information and thoughts as the transcripts were read and kept analytic memos. In the process of describing, classifying, and interpreting, the researcher developed codes to sort text into categories. The code labels were in vivo codes, which are names that are the exact words used by participants. For example, the theme was teachers value a report, the code for the word value was VLU (+) for a positive response and VLU (-) for a negative response. The researcher shared the results from the survey and focus group discussions with the participants and building.
leadership. This study revealed some problems that may have affected the results of the study, which are outlined in the limitations section.

Limitations

The dissertation study involved action research that was conducted specifically for Benford but still may have some utility to other districts working with ThinkLink or other predictive assessment systems. According to Glanz (2003), action research is an ongoing process that examines educational concerns in a school setting. He suggests five guiding principles: (a) reflect – a practitioner seeks ways in improve a school or district; (b) select a focus – knowing, questioning and developing a plan; (c) collect data; (d) analyze and interpret data; and (e) take action. As the Assistant Principal, the researcher has reflected upon the investment made by the district in this ThinkLink System and wondered about the teachers’ adoption of the program and if she can assist them further in their use of the potentially helpful instrument. It is my hope that Benford’s experience with this study can inform other districts as well.

ThinkLink is a relatively new system and this created a limitation in the research study. The major limitation is this study is that there are limited numbers of studies addressing teachers’ use of ThinkLink data. However, the literature review includes studies that relate to the practices of teachers using other assessment data to improve teaching and student learning. The studies include teachers’ use of data through collaborating, building assessment literacy, examining student data, examining instruction, selecting interventions, developing an action plan, and assessing progress. Another limitation is that the researcher is the supervisor of the participants, and this may have had an impact on responses to the survey or even their decision during the focus
group sessions. For example, in reviewing the survey responses in Table 4.13, there are five out of nine questions with teachers’ responses over 30% in the Neutral scale. The Neutral response does not provide concrete information; in a sense, it could be viewed as a safe place.

Summary of Methodology

In this report, the researcher has provided a summary of the methodology section of the dissertation. This summary gives the reader a description of methodology and the rationale behind the study. The summary includes the dissertation topic, problem statement, research questions, research context, the participants, techniques for gathering empirical evidence, procedures used when gathering the data, ways to analysis data, and limitations in this study. The researcher implemented this framework for the dissertation study, which focused on teachers’ responses to the implementation of a predictive assessment system for the middle school ELA standards and assessments.
Chapter 4: Results

Introduction

This chapter presents the results of the data collected by the researcher regarding teacher perceptions of the *ThinkLink Assessment System*, their use of this system, and other classroom assessment data. The topics covered in this chapter include: (a) the *ThinkLink* grades six, seven, and eight student performance results from Tests A, B, and C; (b) the NYS ELA grades six, seven, and eight student achievement results from the January 2009 state exam; (c) the Teacher Likert Scale Survey results; and (d) the Focus Groups discussion results. These results will answer the research questions for this study: How do middle school teachers use data from *ThinkLink*, a predictive assessment system, that suggests that certain sixth-, seventh-, and eighth-grade students will not perform at proficiency on the NYS ELA exams? The second research question: How do middle school teachers describe their experience with the *ThinkLink Predictive Assessment System*?

The *ThinkLink* Test A was administered to grades six through eight students on September 12, 2008. This is the first of three assessments given to sixth-grade students, which was used as a baseline for student performance in ELA. This baseline information can be used to assist in guiding teacher instructional practices for students who are struggling with reading. The second assessment was Test B, which was administered on November 12, 2008 for the middle school students and used as a predictive indicator on how students might perform on the NYS ELA 2009 exam. The final assessment in the
ThinkLink series was Test C, and it was administered on June 9, 2009 for all grades. The results from Test C were used in combination with the January 2009 NYS ELA results in preparing preliminary student academic intervention services (AIS) groups and will be used to assist in AIS placement for the upcoming school year. These AIS groups were formed to provide AIS teachers with a forecast on how the student groups might be formed and possible skill areas to focus on in the 2009-10 school year. When examining the descriptive statistics data by levels (1, 2, 3, and 4) at grades six through eight, students scoring at levels 3 and 4 are proficient, which means they are meeting New York State (NYS) standards. The students who scored at levels 1 and 2 are not proficient, which means the students are not meeting NYS standards and academic intervention services are mandated by the state.

**Grade 6 ThinkLink and NYS ELA Assessment Results**

The descriptive statistics for the ThinkLink assessments (A, B, and C) and the January 2009 NYS ELA exam are presented in Table 4.1 for sixth-grade students. The baseline data was used to determine how many students were at levels 1 and 2, indicating they were not proficient, and therefore are placed into AIS. According to the Test A baseline information, 18.4% of the sixth-grade students who needed intervention services. The ThinkLink A and B Test predictions indicate that 81 to 82% of the sixth-grade students will meet state standards by scoring at levels 3 and 4. Students not meeting state standards, ranged between 18 and 19% of the students scoring at levels 1 and 2. The actual NYS ELA results exceeded the ThinkLink predictions; 86% of students scored at levels 3 and 4, 14% scored at level 2, and no students were in level 1.
The final assessment, which is the *ThinkLink* C test, indicates that students' performance was sustained in the 80%ile at levels 3 and 4 as compared to the NYS results. However, there is a slight increase in the number of students scoring in levels 1 and 2, moving from zero students in the NYS results to six students in the *ThinkLink* results. Based on Test C results, 17% of the sixth-grade students will need academic intervention services next school year (2009-10).

Table 4.1.

*Grade 6 ThinkLink and NYS ELA Test Results by Level*

<table>
<thead>
<tr>
<th>Grade 6 Tests</th>
<th>Level 4 N and % of students</th>
<th>Level 3 N and % of students</th>
<th>Level 2 N and % of students</th>
<th>Level 1 N and % of students</th>
<th>Total N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test A – Baseline</td>
<td>3</td>
<td>112</td>
<td>79.40</td>
<td>15</td>
<td>7.80</td>
</tr>
<tr>
<td>Test B – Prediction</td>
<td>4</td>
<td>111</td>
<td>78.70</td>
<td>21</td>
<td>14.90</td>
</tr>
<tr>
<td>NYS ELA – Results</td>
<td>12</td>
<td>107</td>
<td>76.98</td>
<td>20</td>
<td>14.39</td>
</tr>
<tr>
<td>Test C – AIS info</td>
<td>6</td>
<td>105</td>
<td>78.40</td>
<td>17</td>
<td>12.70</td>
</tr>
</tbody>
</table>

*ThinkLink* uses five different categories to report out standards on the Objectives and Sub-skills Report. The language arts reporting categories are: (a) Information and Understanding, (b) Literary Response and Expression, (c) Critical Analysis and Evaluation, (d) Core Reading Performance Indicators, and (e) Core Writing Performance Indicators. The descriptive statistics for the middle school students' performance are reported in these language arts categories and presented in Table 4.2. The middle school
Teachers selected a focus for instructional practice after examining categories that were below 75% proficiency in levels 3 and 4. At the sixth-grade level, after Test A, both Core Reading and Core Writing skills were addressed. Test B showed improvement past 75% proficiency in Core Reading. The Core Writing skills continued to be targeted as 38.3% of students scored at levels 1 and 2 on Test B. Information skills were focused on, due to Test B data showing less than 75% proficiency as well. The Test C data displays students' performance in Core Reading falls below 75% proficiency, indicating these students will be targeted for AIS in this skill area in the next school year (2009-10).

Table 4.2

*ThinkLink Grade 6 Reporting Categories by Level*

<table>
<thead>
<tr>
<th>Category</th>
<th>Test A % of students at 4 &amp; 3</th>
<th>Test B % of students at 4 &amp; 3</th>
<th>Test C % of students at 4 &amp; 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information</td>
<td>85.46</td>
<td>74.46</td>
<td>86.94</td>
</tr>
<tr>
<td></td>
<td>14.54</td>
<td>25.54</td>
<td>13.06</td>
</tr>
<tr>
<td>Expression</td>
<td>75.17</td>
<td>82.27</td>
<td>83.21</td>
</tr>
<tr>
<td></td>
<td>24.83</td>
<td>17.73</td>
<td>16.79</td>
</tr>
<tr>
<td>Evaluation</td>
<td>85.46</td>
<td>84.75</td>
<td>80.23</td>
</tr>
<tr>
<td></td>
<td>14.54</td>
<td>15.25</td>
<td>19.77</td>
</tr>
<tr>
<td>Core Reading</td>
<td>70.08</td>
<td>87.92</td>
<td>74.63</td>
</tr>
<tr>
<td></td>
<td>29.92</td>
<td>12.06</td>
<td>25.37</td>
</tr>
<tr>
<td>Core Writing</td>
<td>71.63</td>
<td>61.70</td>
<td>80.60</td>
</tr>
<tr>
<td></td>
<td>28.37</td>
<td>38.30</td>
<td>19.40</td>
</tr>
</tbody>
</table>

The *ThinkLink* categories and ELA standards have three common areas for reporting in English language arts skills: (a) Information and Understanding, (b) Literary Response and Expression, and (c) Critical Analysis and Evaluation. Table 4.3 presents a
comparison of the results for success rate and skill areas of difficulty of the three categories *ThinkLink* and NYS ELA assessments have in common. The data demonstrates *ThinkLink* B predictive results in comparison to the actual success of students on the NYS ELA exam. For example, the students' success rate on *ThinkLink* B in *Literacy Response and Expression* was 60.5%. The actual results of the NYS ELA exam show an 86.5% success rate, with students only having difficulty with the ability to determine the meaning of unfamiliar words. Students had the most difficulty on *ThinkLink* B in using their skills in the area of *Information and Understanding*: 45% were unsuccessful. Overall, students exceed the prediction of the *ThinkLink* B test with success rates ranging from 83 to 94% in each area.

*Summary of Grade 6*

**Grade 6 Findings and Implications**

*ThinkLink Test A*

The *ThinkLink* Test A baseline data presented in Table 4.1 offers the teachers information to help determine the possible number of students who might meet state standards on the January 2009 NYS ELA exam. Eighty-two percent of the sixth-grade students scored at levels 3 and 4, and 18% scored at levels 1 and 2. The data reveals that the trend of the *ThinkLink* results appear to be upward and the prediction indicate that improvement will occur. There are students who scored at the bottom of level 3 (proficient), which means these students could possibly fall into level 2 (not proficient) on the next assessment. For example, a student at level 3 with 16 correct answers is close in range with a student at level 2 scoring 15 correct answers. This indicates that teachers
Table 4.3

*Grade 6 Comparison Results: ThinkLink Test B / NYS ELA Success Rate and Skill Difficulty*

<table>
<thead>
<tr>
<th>Grade level/ total tested</th>
<th>Standard/ Category</th>
<th>Success rate</th>
<th>Skill area of difficulty within the standard/category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 6 / 141</td>
<td>Literary Response &amp; Expression</td>
<td>60.5%</td>
<td>Recognize Literary Devices</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Use Literary Devices</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Understand Plot/Theme</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Describe Characters</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Characteristics of Genres</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Read, View, Interpret Texts</td>
</tr>
<tr>
<td>Grade 6 / 139</td>
<td>Literary Response &amp; Expression</td>
<td>86.5%</td>
<td>Determine Meaning of Unfamiliar Words</td>
</tr>
<tr>
<td>Grade 6 / 141</td>
<td>Critical Analysis &amp; Evaluation</td>
<td>67.4%</td>
<td>Central Idea</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Support Ideas</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Analyze Information</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Supporting Evidence</td>
</tr>
<tr>
<td>Grade 6 / 139</td>
<td>Critical Analysis &amp; Evaluation</td>
<td>91.4%</td>
<td>Use Strategies</td>
</tr>
<tr>
<td>Grade 6 / 141</td>
<td>Information &amp; Understanding</td>
<td>55.1%</td>
<td>Paraphrasing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Compare/Contrast Information</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Predictions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Corrective Strategies</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Organizational Formats</td>
</tr>
<tr>
<td>Grade 6 / 139</td>
<td>Information &amp; Understanding</td>
<td>83.3%</td>
<td>Identify Implied Information</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Identify Missing, Conflicting, Unclear, Irrelevant Information</td>
</tr>
</tbody>
</table>

need to identify students who are at the top of one level and make decisions on how to move them to the next level of proficiency.

Teachers used this data to create student action plans that address the deficient skill areas. It was recommended that teachers take into consideration the data presented in Table 4.2 to refine core reading and core writing skills. The data shows only 70 to 72% of
the students at proficiency. It was also recommended that teacher examine specific

*ThinkLink* reports to identify the exact skills to target then apply strategies and

interventions to help students become more successful. For example, the Objective and

Sub-skills Report (Appendix N) helps to identify the skills associated with the core

reading and writing categories. In addition to the use of *ThinkLink* reports, teachers were

encouraged to be creative and think outside the assessment parameters to find ways to

help the sixth graders.

*ThinkLink Test B*

The *ThinkLink* Test B prediction data mirrors the *ThinkLink* A baseline data.

Again, 82% of the sixth grade students scored at levels 3 and 4, and 18% scored at levels

1 and 2. The number of students scoring at level 1 decreased from 11 on Test A to 5 on

Test B. Level 2 had a significant jump between Test A and Test B, which appears to be

accounted for by movement of students from level 1 to level 2. This shows that after

teachers examined the baseline data from Test A and targeted deficient skill areas, the

instructional interventions may have had an impact on the shift in levels. What was

recommended to teachers was to analyze the Test B predictions, identify the number of

students who are not meeting standards (levels 1 and 2), and focus their attention on

them. The students who scored at the lower end of level 3, (that is, scoring a 16, 17, or

18) needed to be monitored in order to avoid a downward movement into a level 2. For

example, some teachers used the Student Report (Appendix C) to find out what the

subject proficiency level and score for each student was and monitored the performance

of those students.
**NYS ELA Exam**

The NYS results indicated 86% of the students met state standards, exceeding the predictions of both Test A and Test B, which are at 81%. This shows that the instructional decisions made by the teachers after conducting an analysis of the *ThinkLink* Test B results may have had a positive impact on the students' performance. What this data suggests is that *ThinkLink* can provide reasonable predictions and can be a useful tool in conjunction with teacher methods of assessing and monitoring student growth.

Another finding at grade six is reflected in the upward trend in the success rate of students' performance in the three common reporting areas of *ThinkLink* and NYS ELA. The predictions on Test B (Table 4.3) indicated 60.5% of the grade six students would be successful on the NYS exam in the area of literary response and evaluation. However, 86.5% of the students were successful in this skill area, resulting in a 26% increase. This upward trend appeared in the remaining two categories. In the Critical Analysis and Evaluation categories, the *ThinkLink* prediction was 67.4%, moving to 91.4% on the NYS ELA exam, resulting in a 24% increase. The Information and Understanding category showed the highest upward trend, moving from 55.1% prediction to 83.3% on the NYS ELA.

This means that students were able to master more skills prior to taking the NYS ELA exam, which may have contributed to the overall success rate of this grade level. Prior to the NYS ELA exam, it was recommended by administration that teachers focus on skills areas in which students had the most difficulty with and target direct instruction to the areas. The information suggests to teachers that student achievement from Test B to the state exam was successful perhaps due to the measures infused in their teaching.
practices. The administration expects that teachers continue working with students on skills that presented as problems in all three assessments mentioned above. It was recommended that teachers integrate these ELA skills across content areas (that is, social studies, science, and math) to further enhance students' performance.

ThinkLink Test C

The final ThinkLink assessment, Test C, indicates that students' performance was sustained from the results of the NYS ELA exam (data presented in Table 4.1). A slight increase occurred in the number of students scoring at level 1, changing from zero students on the NYS exam to six students on the ThinkLink. The data suggest that 21 students will need intervention services in the next school year (2009-10). Building leadership recommended to teachers that they examine the reporting categories to find out which areas students were not proficient in and form preliminary groupings for the next school year. Furthermore, it recommended that teachers use the information from Test C (Appendix N) to assist in guiding their decisions for intervention and grouping of students for the upcoming school year. The ThinkLink results show that students are having the most difficulty in Core Reading and Evaluation categories, thus intervention is required.

Grade 7 ThinkLink and NYS ELA Assessment Results

The descriptive statistics for the ThinkLink assessments (A, B, and C) and the January 2009 NYS ELA exam are presented in Table 4.4 for seventh-grade students. ThinkLink Test A was used as baseline data to help determine the instructional focus needed to enhance students' performance in English. The ThinkLink B test was used as a predictor to estimate the percentage of students who were likely to meet NYS standards.
exam in January 2009. The seventh-grade student skills from Test A indicated students needing remediation in the area of Expression and Core Writing. On Test B, the seventh-grade students scored low in the Evaluation category, which became a target of instruction, along with Core Writing. The Evaluation skill proficiency percentage decreased from Test A to Test B (from 86.36% to 69.54%). Test C shows students have performed above 75% in each category. There was a 28.03% increase in Core Writing, moving from 64.95% on Test B to 92.98% on Test C.

Table 4.5

*ThinkLink* Grade 7 Reporting Categories by Levels

<table>
<thead>
<tr>
<th>Category</th>
<th>Test A % of students at</th>
<th>Test B % of students at</th>
<th>Test C % of students at</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4 &amp; 3 2 &amp; 1</td>
<td>4 &amp; 3 2 &amp; 1</td>
<td>4 &amp; 3 2 &amp; 1</td>
</tr>
<tr>
<td>Information</td>
<td>75.86 24.14</td>
<td>81.90 18.10</td>
<td>77.77 22.23</td>
</tr>
<tr>
<td>Expression</td>
<td>69.40 30.40</td>
<td>87.65 12.35</td>
<td>88.89 11.11</td>
</tr>
<tr>
<td>Evaluation</td>
<td>86.36 13.64</td>
<td>69.54 30.46</td>
<td>81.58 18.42</td>
</tr>
<tr>
<td>Core Reading</td>
<td>80.97 19.03</td>
<td>90.80 9.20</td>
<td>88.31 11.69</td>
</tr>
<tr>
<td>Core Writing</td>
<td>72.73 27.27</td>
<td>64.95 35.05</td>
<td>92.98 7.02</td>
</tr>
</tbody>
</table>

Table 4.6 data presents the student success rate and skill areas of difficulty within the standard or category at grade seven. The data shows *ThinkLink* predictive results in skills in comparison to the actual success of students on the NYS ELA exam. For example, the students success rate on *ThinkLink* B in Literacy Response and Expression
was 71%, compared to a success rate of 85% on the NYS ELA. Students’ growth in the Information and Understanding skill area was the most substantial increase. The *ThinkLink B* prediction was 67% proficiency; however, the students increased by 20% for a success rate of 87% on the NYS ELA exam.

Table 4.6

*Grade 7 Comparison Results: ThinkLink Test B / NYS ELA Success Rate & Skill*

**Difficulty**

<table>
<thead>
<tr>
<th>Grade Level / Total Tested</th>
<th>Standard / Category</th>
<th>Success Rate</th>
<th>Area of Difficulty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 7 / 174 <em>ThinkLink B</em></td>
<td>Literary Response &amp; Expression</td>
<td>71%</td>
<td>Interpret Literary Devices, Demonstrate Plot/Theme, Determine Meaning, Interpret Literary Devices, Use of Language</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Determine use and meaning of literary devices, Determine meaning of unfamiliar words</td>
</tr>
<tr>
<td>Grade 7 / 178 NYS ELA</td>
<td>Literary Response Expression</td>
<td>85%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grade Level / Total Tested</th>
<th>Standard / Category</th>
<th>Success Rate</th>
<th>Grade Level / Total Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 7 / 174 <em>ThinkLink B</em></td>
<td>Information &amp; Understanding</td>
<td>67%</td>
<td>Formulate Questions, Make Predictions, Interpret Data, Outlines/Graphic Organizers, Outlines/Graphic Organizers, Relevant/Irrelevant Information, Recall significant ideas/details and their relationship</td>
</tr>
<tr>
<td>Grade 7 / 178 NYS ELA</td>
<td>Information &amp; Understanding</td>
<td>87%</td>
<td></td>
</tr>
</tbody>
</table>
Summary of Grade 7

Grade 7 Findings and Implications

ThinkLink Test A

The ThinkLink Test A baseline data presented in Table 4.4 provides the teachers with statistical information to assisting in determining the number of students who might be successful on the January 2009 NYS assessment. Seventy eight percent of the seventh-grade students scored at levels 3 and 4, and 22% scored at levels 1 and 2. The data suggest to teachers the number of students who may not meet state standards, and this information is used to set up action plans. What the data indicates is that there are 38 students who (in Table 4.4) may not meet state standards and require remediation in ELA.

Building leadership recommended that the seventh-grade teachers take into consideration the data presented in the reporting categories (Table 4.5) to refine the core reading and expression skills of students. The data shows only 69 to 73% of the students at proficiency. It was also recommended that teachers examine specific ThinkLink reports to identify the exact skills to target and apply strategies and interventions to help students become more successful. For example, the Objective and Sub-skills Report (Appendix O) helps to identify the skills associated with the core reading and expression skills with which students had difficulty. In addition to the use of ThinkLink reports, teachers were encouraged to be creative and think outside the assessment parameters to find ways to help the seventh graders.
ThinkLink Test B

The *ThinkLink* Test B prediction data mirrors the *ThinkLink* A baseline data (just as it did with grade 6). The statistical results show 78% of the students scoring at levels 3 and 4 and 22% below state standards, which resembles the baseline data. This information shows that there was no movement in the percentage of students predicted to meet state standards. The information also implies that the instructional focus may not have been effective enough to raise the success level of students in specific skill areas.

When examining the data in Table 4.5, there skill areas in the reporting categories moved up and down in the five different areas. For example, on Test A in the area of Expression, 69.4% of the seventh-grade students scored at levels 3 and 4. On Test B, the levels 3 and 4 increased by 18.25%, resulting in a success rate of 87.65% meeting state standards. On the other hand, in the Evaluation reporting category, Test A indicates that 86.36% of the students succeeded. Test B reflects a decrease by 16.82%. The data suggest that although growth was made in three categories, there is work needed in two categories (expression and core writing).

Recommendations made to teachers were to analyze the Test B predictions, identify the number of students who are not meeting standards (levels 1 and 2), and provide remediation for those individual students in the target categories. Teachers were reminded to continue whole-group instruction to maintain the success of the other students. In addition, the students who were scoring at the lower end of level 3 (that is, scoring a 16, 17, or 18) need to be monitored to avoid a downward movement into a level 2. For example, some teachers used the Student Report (Appendix C) to find out what the
subject proficiency level and score for each student was and track their performance on ELA-related content (including deficient skills).

**NYS ELA Exam**

The actual NYS ELA test results at grade seven exceeded the *ThinkLink* predictions; 89% of the students scored at levels 3 and 4, meeting state standards. There were only 11% of the students not meeting standards, scoring at level 2, and there were no students in level 1. In short, the Test B predictions for the NYS exams were valid. This demonstrates that the *ThinkLink* system appears to be able to deliver suitable predictions. To confirm the reliability of this, our district would have to have several years of data.

**ThinkLink Test C**

On the final *ThinkLink* assessment (Test C), the number of students scoring at levels 3 and 4 actually went down, but that may be accounted for by the increase in levels 1 and 2. However, the data demonstrates that 86% of the students were meeting state standards, which remained relatively consistent with the NYS results at 88% of the seventh-grade students who scored at levels 3 and 4. This indicates that student achievement performance from the NYS ELA exam to Test C was sustained. On the other hand, the data shows 24 students who were not proficient, scoring at levels 1 and 2. Building leadership recommended to teachers that they examine the reporting categories to find out which areas students were not proficient in and form preliminary groupings for the next year (2009-10). Furthermore, it was recommended that teachers use the information from Test C reporting categories (Appendix O) to assist in guiding their decisions for intervention and grouping of students for the upcoming school year. The
ThinkLink results suggest that students are having the most difficulty with the Information and Evaluation categories, thus intervention is required.

**Grade 8 ThinkLink and NYS ELA Assessment Results**

The descriptive statistics for the ThinkLink assessments (A, B, and C) and the January 2009 NYS ELA exam are presented in Table 4.7 for eighth-grade students. The ThinkLink B test was used as predictor to estimate the percentage of students that were likely to meet NYS standards, indicated by students scoring at levels 3 and 4. Table 4.7 shows the overall NYS performance levels of the eighth-grade students in comparison to the ThinkLink tests. The eighth grade students’ success rate was 73.6% on Test A and dropped to a prediction on Test B of 57.8% of the students meeting state standards. One of the middle schools building goals stated, “By the year 2011, the eighth-grade ELA scores will increase by 15%.” This goal was set because in the 2007-08 academic school year, only 59% of the eighth-grade students scored at levels 3 or 4. The 2009 ELA results at grade eight showed, 73% of our students scoring at the proficiency levels of 3 or 4, resulting in a 14% increase from the 2008 ELA scores. However, Test C showed an increase in student at levels 1 and 2, indicating 36.4% of eight grade students will need AIS next year (2009-10).
Table 4.7

*Grade 8 ThinkLink and NYS ELA Test Results by Levels*

<table>
<thead>
<tr>
<th>Grade 8 Tests</th>
<th>Level 4</th>
<th>Level 3</th>
<th>Level 2</th>
<th>Level 1</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>and</td>
<td>N</td>
<td>and</td>
<td>N</td>
</tr>
<tr>
<td>of students</td>
<td>of students</td>
<td>of students</td>
<td>of students</td>
<td>of students</td>
<td></td>
</tr>
<tr>
<td>Test A - Baseline</td>
<td>11</td>
<td>6.70</td>
<td>109</td>
<td>66.90</td>
<td>38</td>
</tr>
<tr>
<td>Test B - Prediction</td>
<td>6</td>
<td>3.50</td>
<td>94</td>
<td>54.30</td>
<td>67</td>
</tr>
<tr>
<td>NYS ELA - Results</td>
<td>11</td>
<td>6.25</td>
<td>117</td>
<td>66.48</td>
<td>43</td>
</tr>
<tr>
<td>Test C - AIS info</td>
<td>7</td>
<td>4.50</td>
<td>96</td>
<td>59.30</td>
<td>49</td>
</tr>
</tbody>
</table>

In Table 4.8, the *ThinkLink* skills that students were tested on are presented in five categories. The middle school teachers selected a focus for instructional practice, after examining categories that were below 75% in levels 3 and 4. This was done to enhance student performance prior to taking the NYS exam in January 2009. The eighth grade students scored below 75% in three out of five categories on test A and four out of five categories on test B. Test C results continuing to show students are in need of intervention services, specifically in the following categories: (a) information, (b) expression, and (c) core writing.
Table 4.8

ThinkLink Grade 8 Reporting Categories by Level

<table>
<thead>
<tr>
<th>Category</th>
<th>Test A</th>
<th>Test B</th>
<th>Test C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% of Students at 4 &amp; 3</td>
<td>% of Students at 2 &amp; 1</td>
<td>% of Students at 4 &amp; 3</td>
</tr>
<tr>
<td>Information</td>
<td>163 (total tested)</td>
<td>173 (total tested)</td>
<td>162 (total tested)</td>
</tr>
<tr>
<td>Expression</td>
<td>70.86</td>
<td>71.97</td>
<td>65.93</td>
</tr>
<tr>
<td>Evaluation</td>
<td>71.78</td>
<td>76.88</td>
<td>68.44</td>
</tr>
<tr>
<td>Core Reading</td>
<td>83.13</td>
<td>64.34</td>
<td>77.82</td>
</tr>
<tr>
<td>Core Writing</td>
<td>72.39</td>
<td>66.48</td>
<td>52.50</td>
</tr>
<tr>
<td></td>
<td>82.21</td>
<td>53.18</td>
<td>76.24</td>
</tr>
<tr>
<td></td>
<td>17.79</td>
<td>33.52</td>
<td>23.75</td>
</tr>
</tbody>
</table>

Table 4.9 presents the student's success rate and skill areas of difficulty within the standard or category at grade eight. The data shows ThinkLink predictive results in skills in comparison to the actual success of students on the NYS ELA exam. For example, the student's success rate on ThinkLink B in "Literacy Response and Expression" was 70% and it increased on the NYS exam to 75.8% proficient. Grade eight students showed the most difficulty with Critical Analysis and Evaluation skills on both of the ThinkLink assessments and the NYS ELA. Overall, each standard or category ThinkLink predicted success rates were exceeded on the NYS ELA exam.
Table 4.9

*Grade 8 Comparison Results: ThinkLink Test B and NYS ELA Success Rate & Skill Difficulty*

<table>
<thead>
<tr>
<th>Grade Level/Total # Tested</th>
<th>Standard / Category</th>
<th>Success Rate</th>
<th>Area of Difficulty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 8 / 173</td>
<td>Literary Response &amp; Expression</td>
<td>70%</td>
<td>Determine Meaning, Identify Context, Draw Conclusions, Understand Plot, Interpret Literary Elements, Writing Plots</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Recognize how use of language creates images or feelings, Determine meaning of unfamiliar words, Determine the use and meaning of literary devices</td>
</tr>
<tr>
<td>Grade 8 / 176</td>
<td>Literary Response &amp; Expression</td>
<td>75.8%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Recognize how use of language creates images or feelings, Determine meaning of unfamiliar words, Determine the use and meaning of literary devices</td>
</tr>
<tr>
<td>Grade 8 / 173</td>
<td>Critical Analysis &amp; Evaluation</td>
<td>49.5%</td>
<td>Supporting Ideas, Identify Meaning, Present Hypothesis, Identify Conclusions, Supporting Details, Present Analyses, Select Presentation Content, Explain Connections, Evaluate validity/accuracy of information</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade 8 / 176</td>
<td>Critical Analysis &amp; Evaluation</td>
<td>64.3%</td>
<td>Relevant/Irrelevant Information, Conclusions/Inferences, Relevant/Irrelevant Information, Support Ideas, Cite Sources, Research Sources</td>
</tr>
<tr>
<td>Grade 8 / 176</td>
<td>Information &amp; Understanding</td>
<td>68.4%</td>
<td>Relevant/Irrelevant Information, Conclusions/Inferences, Relevant/Irrelevant Information, Support Ideas, Cite Sources, Research Sources</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Apply thinking skills to interpret, Determine the meaning of unfamiliar words</td>
</tr>
<tr>
<td>Grade 8 / 176</td>
<td>Information &amp; Understanding</td>
<td>78.9%</td>
<td></td>
</tr>
</tbody>
</table>
Summary of Grade 8

Grade 8 Findings and Implications

ThinkLink Test A

The ThinkLink Test A baseline data presented in (Table 4.7) provides the eighth-grade teachers with statistical information to assist in making a determination on the number of students who might be successful on the NYS ELA exam. The predictions show 73.6% of our students meeting state standards, scoring at levels 3 and 4. The data shows 26.4% of the eighth graders at levels 1 and 2. This information suggest that 42 students are not meeting state standards and are in jeopardy of not being successful on the NYS ELA exam, thus in need of remediation. A recommendation was made to the teachers that each student will need an action plan developed and individualized instruction provided. It was suggested by the building principal that a series of ELA videos targeting critical skills areas on the state exam be created. The teachers along with the administrators created these videos, explaining to students the importance of these skills and providing them with strategies that will enhance their abilities. The videos were broadcast through the building on a regular basis. At the eighth-grade level, the teachers are under greater pressure due to the middle school eighth-grade trend data demonstrates that the ELA state exam presents challenges for the students. The administration set a building goal that “By June 2011, there will be a 15% increase in the eighth-grade ELA scores, indicated by a core of 3 and 4 on the ELA state exam.”

ThinkLink Test B

The ThinkLink Test B predictions were concerning to the teachers and administrators: only 57.8% of the eighth-grade students scored at levels 3 and 4.
indicating a low percent of the students are meeting standards. A drop of 16% occurred between Test A and Test B. Levels 3 and 4 actually went down, but that may be accounted for by the large increase in level 2. The results convey the need for teachers and administrators to examine the data, determine why the significant decrease occurred, and make a plan to help students become more successful. The building administrators examined the data to gain an understanding as to what the major difficulties were from Test A to Test B. During the AIS meetings, the vice principal worked with the AIS teachers in identifying the problem areas on Test B and implemented a plan of action for each student. It was recommended that AIS teachers provide additional time to eighth-grade students who were struggling. During the AIS meetings, all teachers shared what they thought were effective ELA strategies and materials to assist students. The ELA department chair shared the data with the English teachers, and at their departmental meetings, the teachers addressed a plan of action. The eighth-grade teachers incorporated practicing ELA tests into their instruction to help students master skills required on the state exam.

It was recommended that teachers use the ThinkLink reports to help them identify the problem areas. In Table 4.8, the results showed the reporting categories that presented the most difficulty to students. The information provided a direction teachers could take to enhance specific skill areas. There were two major focus points. The Evaluation skills proficiency rate went down from 83% on Test A to 64% on Test B. The Core Writing skills experienced a greater decrease, going from 82% proficiency on Test A to 53% proficiency on Test B. In addition to the use of ThinkLink reports, teachers were
encouraged to be creative, focus on the ELA standards, and individualize their instruction to help the eighth-grade students.

**NYS ELA Exam**

The NYS actual results paint a brighter picture, showing 73% of eighth-grade students scoring at the proficiency levels of 3 or 4, resulting in a 14% increase from the 2008 ELA scores. This shows that the teachers identified the problem areas and addressed the situations that surfaced in Test B. The teachers taught ELA content that was directly associated with standards to enhance student performance and made an impact on the overall state results. However, the positive change in the percentage of students meeting standards did not last, a downward motion occurred again.

**ThinkLink Test C**

On the final ThinkLink assessment Test C, the students scoring at levels 3 and 4 actually went down, while there was an increase in levels 1 and 2. The students' success level was not sustained from the NYS ELA at 73%. It moved downward to 64% on Test C. The data confirms that student achievement was not sustained from the NYS ELA exam to Test C. The data also indicates that there are students who experienced greater difficulties in specific skill areas. For example, in Table 4.8, the number of students at levels 1 and 2 increased in three reporting categories: (a) information, (b) expression, and (c) core reading. The data leads the teachers and administrators to wonder about the assessment tools accuracy in measuring student performance. The data speaks to the need to examine the relationship between the two assessments to see how closely aligned the assessments are. Furthermore, during the elapsed time from the state exam in January to
the *ThinkLink* Test C in June, the way classroom instruction was delivered might play a critical role on the downward slope.

Building leadership recommended to teachers that they examine the reporting categories to find out which areas students were not proficient in and form preliminary groupings for the next year (2009-10). Furthermore, it recommended that teachers use the information from Test C (Appendix P) to assist in guiding their decisions for intervention and grouping of students for the upcoming school year. The *ThinkLink* results show that students are having the most difficulty in Core Reading, Information, and Expression categories, thus intervention is required.

The *ThinkLink* system promises favorable results. According to its manual, the *ThinkLink Predictive Assessment Series*:

... utilize a unique scientific approach that matches diagnostic assessments to each state's high-stakes test. It predicts student proficiency, mastery, and AYP [annual yearly progress] performance so teachers can see student NCLB [No Child Left Behind] results before they actually test" (Discovery Education, 2008).

Comparative quantitative analysis of the *ThinkLink* results and the New York State ELA results shows *ThinkLink* predicts student performance with 80 to 90% accuracy. As such, the results can provide valuable information for teachers to focus on the individual instruction needs of each student by each skill area and inform teacher's instructional decision making process.

*Benford Middle School Subgroup Results*

Table 4.10 shows the middle school student groups and student achievement on the NYS ELA tests at grades six through eight in the school year of 2008-09. The scores
indicate that minority students appeared to have more difficulty on the ELA test than white students at each grade level. For example, at grade eight 43% African American and 33% Hispanic students scored at non-proficient levels one and two, in comparison to 24% of white students scoring in the same levels. Students who come from economically disadvantaged homes struggle more across the grade levels on the ELA test than that of their counterparts. For example, at grade 6, 27% economically disadvantaged students scored at levels one, and two in comparison to 7% of students who are not economically disadvantaged scoring at levels one and two. Student with disabilities struggled more across grade levels on the ELA test that of general education students. For example, at grade 6, 82% of students with disabilities scored at levels one, and two in comparison to 33% of the students without disabilities scoring at the same level.
Table 4.10

*Middle School ELA Results in 2008-09*

Percentage of students scoring at levels 1–4:

<table>
<thead>
<tr>
<th>Student Groups</th>
<th>Grade 6</th>
<th>Grade 7</th>
<th>Grade 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amer. Indian or Alaska</td>
<td>-</td>
<td>-</td>
<td>100%</td>
</tr>
<tr>
<td>Asia/Native Hawaiian</td>
<td>25%</td>
<td>1</td>
<td>75%</td>
</tr>
<tr>
<td>African American</td>
<td>20%</td>
<td>2</td>
<td>80%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>36%</td>
<td>4</td>
<td>64%</td>
</tr>
<tr>
<td>White</td>
<td>12%</td>
<td>13</td>
<td>88%</td>
</tr>
<tr>
<td>General Education</td>
<td>12%</td>
<td>15</td>
<td>88%</td>
</tr>
<tr>
<td>Students w/disabilities</td>
<td>50%</td>
<td>5</td>
<td>50%</td>
</tr>
<tr>
<td>English Proficient</td>
<td>12%</td>
<td>17</td>
<td>88%</td>
</tr>
<tr>
<td>Limited Eng. Proficient</td>
<td>100%</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Economically Disadv.</td>
<td>27%</td>
<td>14</td>
<td>73%</td>
</tr>
<tr>
<td>Not Disadvantage</td>
<td>7%</td>
<td>6</td>
<td>93%</td>
</tr>
<tr>
<td>Female</td>
<td>13%</td>
<td>10</td>
<td>87%</td>
</tr>
<tr>
<td>Male</td>
<td>17%</td>
<td>10</td>
<td>83%</td>
</tr>
<tr>
<td>Total Tested</td>
<td>139</td>
<td>176</td>
<td>174</td>
</tr>
</tbody>
</table>

*ThinkLink Teacher Survey Results*

In March 2009, English teachers, AIS teachers, and SPED teachers from the Benford Middle School participated in a survey. The survey teachers received 12 questions: 11 Likert-scaled questions (Q), two of which generated additional comments, and one open-ended question. Thirteen out of sixteen teachers invited to participate.
completed the survey, resulting in an 81% return rate. The data reveals that most teachers use the *ThinkLink* reports: 11 out of 13 use the reports (85% of teachers). In Table 4.11, the majority of the teachers expressed that they use the reports *sometimes*. Sixty-two percent of the teachers use the Class/Virtual Class Report and the Individual Student Report in this school year. On the other hand, four teachers report that they were *unaware* of the following reports: the Objective Report, the Answers Report, the Comparison Report, and the Student Report.

Table 4.11

Teacher Survey Likert Scale Results Q1

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Very Often</th>
<th>Often</th>
<th>Sometimes</th>
<th>Never</th>
<th>Unaware</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class/Virtual Class</td>
<td>7.7%</td>
<td>23.1%</td>
<td>61.5%</td>
<td>7.7%</td>
<td>0.0%</td>
<td>13</td>
</tr>
<tr>
<td>Objective</td>
<td>7.7%</td>
<td>30.8%</td>
<td>38.8%</td>
<td>15.4%</td>
<td>7.7%</td>
<td>13</td>
</tr>
<tr>
<td>Answers</td>
<td>8.3%</td>
<td>25.0%</td>
<td>50.0%</td>
<td>8.3%</td>
<td>8.3%</td>
<td>12</td>
</tr>
<tr>
<td>Individual Student</td>
<td>7.7%</td>
<td>15.4%</td>
<td>61.5%</td>
<td>15.4%</td>
<td>0.0%</td>
<td>13</td>
</tr>
<tr>
<td>Comparison</td>
<td>0.0%</td>
<td>15.4%</td>
<td>46.2%</td>
<td>30.8%</td>
<td>7.7%</td>
<td>13</td>
</tr>
<tr>
<td>Student</td>
<td>7.7%</td>
<td>15.4%</td>
<td>53.8%</td>
<td>15.4%</td>
<td>7.7%</td>
<td>13</td>
</tr>
<tr>
<td>Student Sub-skills</td>
<td>15.4%</td>
<td>23.1%</td>
<td>53.8%</td>
<td>7.7%</td>
<td>0.0%</td>
<td>13</td>
</tr>
</tbody>
</table>

Table 4.12 displays data related to the second question in the teacher survey. The teachers report that 50% used the practice probes *sometimes*, and 41.7% of the teachers *never* used the probes. In the comment section of question 2, the teachers expressed many concerns with the *ThinkLink* practice probes. Several of the teachers (nine out of ten, 90%) from the survey mentioned that the probes were not beneficial in one way or the
other. Only one teacher stated, “I think they are good to practice a specific skill.” In contrast, “the practice probes seem a little disjointed with the skills sometimes, making the effort of setting them up not always worth it,” stated a teacher. Another teacher stated, “I find that the questions are not posed in such a way that efficiently meet state standards for particular grade levels; therefore, I use them, but have to tweak the questions sometimes to fit certain skill requirements.” Another teacher noted, “I try not to use them because they tend to be bland. If I want to practice testing strategies to help students acclimate themselves to the style of questions they’ll be asked on a test, then I will use them.”

A teacher exclaimed:

The main problem with ThinkLink is that it covers skills, literary concepts, and vocabulary that is not included on the actual ELA exams! It is frustrating and time consuming enough to have to dedicate so much time to the teaching of one test, let alone a second standardized test with many differing skill sets.

[Furthermore.] the ThinkLink is often confusing to the students. They ask me, “Why don’t you teach some of the skills that are on the test.” The answer is, because so much more significance is put on the NYS exam; we really need to spend our time trying to master that test.

Other comments from teachers regarding the probes include: (a) “the subject matter and the questions did not provide the rigorous ELA Prep I was looking for,” (b) “the probes serve a purpose, but could hardly be called engaging,” (c) “the practice probes are not always relevant to what we need to learn by January.” (d) “I found the probes were not to be useful because the quality of questions [were] limited,” and (e)
"there are not any or enough probes available for every skill area, so other resources are used."

Table 4.12

Teacher Survey Likert Scale Results Q2

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Very Often</th>
<th>Often</th>
<th>Sometimes</th>
<th>Never</th>
<th>Unaware</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practice Probes</td>
<td>0.0%</td>
<td>8.3%</td>
<td>50.0%</td>
<td>41.7%</td>
<td>n/a</td>
<td>12</td>
</tr>
</tbody>
</table>

The descriptive statistics reported in Table 4.13 emerge through four themes: (a) instructional purposes, Q3 and Q4, (b) assessments, Q5 and Q6, (c) effectiveness, Q7, and (d) the efficiency of the process, Q8 through Q11. For example, 46.2% of the teachers agree, and 15.4% strongly agree that student skills reported on the reports are used to inform their instructional practice. One-half of the teachers displayed a neutral reaction to the benefits of the ThinkLink worksheets in helping create student skill groups. Thirty-eight percent of the teachers disagree with the statement that the ThinkLink assessments are good predictors for the NYS ELA exam. However, 61.5% of teachers, indicated remediation is done more effectively using the reports. The ThinkLink process is highly supported by the administrative team; 84.5% of the middle school teachers agree with the statement, and 7.7% strongly agree.
Table 4.13

Teacher Survey Likert Scale Results Q3 through Q11

<table>
<thead>
<tr>
<th>Question Response</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3. ThinkLink Worksheets are beneficial in creating student groups according to skill areas.</td>
<td>8.3%</td>
<td>25.0%</td>
<td>50.0%</td>
<td>16.7%</td>
<td>0.0%</td>
<td>12</td>
</tr>
<tr>
<td>Q4. The student skills identified on the reports as proficient or not proficient are used to inform instructional practices.</td>
<td>15.4%</td>
<td>46.2%</td>
<td>38.5%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>13</td>
</tr>
<tr>
<td>Q5. The ThinkLink assessments are closely aligned with the NYS curriculum.</td>
<td>0.0%</td>
<td>38.5%</td>
<td>8.5%</td>
<td>23.1%</td>
<td>0.0%</td>
<td>13</td>
</tr>
<tr>
<td>Q6. The ThinkLink assessments are good predictors as to how students will perform on the NYS exam.</td>
<td>0.0%</td>
<td>30.8%</td>
<td>30.8%</td>
<td>38.5%</td>
<td>0.0%</td>
<td>13</td>
</tr>
<tr>
<td>Q7. As a result of using ThinkLink, remediation is done more effectively by focusing on identified student skills.</td>
<td>0.0%</td>
<td>61.5%</td>
<td>23.1%</td>
<td>7.7%</td>
<td>.7%</td>
<td>13</td>
</tr>
</tbody>
</table>
Table 4.13 continued.

<table>
<thead>
<tr>
<th>Question Response</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q8. The process of students taking the test and entering the answers on the computer is effective.</td>
<td>0.0%</td>
<td>46.2%</td>
<td>36.5%</td>
<td>15.4%</td>
<td>0.0%</td>
<td>13</td>
</tr>
<tr>
<td>Q9. The ThinkLink data analysis is returned in a timely manner.</td>
<td>30.8%</td>
<td>61.5%</td>
<td>7.7%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>13</td>
</tr>
<tr>
<td>Q10. The time spent taking ThinkLink assessments is time well spent.</td>
<td>7.7%</td>
<td>23.1%</td>
<td>38.5%</td>
<td>30.8%</td>
<td>0.0%</td>
<td>13</td>
</tr>
<tr>
<td>Q11. Administrators are supportive of the ThinkLink process.</td>
<td>7.7%</td>
<td>84.6%</td>
<td>7.7%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>13</td>
</tr>
</tbody>
</table>

ThinkLink Teacher Survey Themes

At the end of the survey, the participants answered question twelve: If you don’t use ThinkLink data, explain why and describe the type of data you use. Nine surveys had comments on them. These teachers provided additional information regarding the ThinkLink reports. The emerging themes from their comments include: assessment methods, identifying students’ strengths and weaknesses, informing instruction, curriculum alignment, and report format.
Assessment Methods

The assessment methods theme identifies the various ways teachers assess student learning and measure the results. One-half of the teachers who commented on the reports indicated that *ThinkLink* is one of the evaluative methods they used.

One teacher stated:

I find other assessments, formal and informal, much more helpful than *ThinkLink*. [Furthermore], after spending time perusing the English Language Arts assessments over the years, I have established reoccurring trends, which I use to establish anchor papers. I establish various literary models: visual, auditory, and textual as standards that complement the state and national framework. These are the parameters of my curriculum and prove worthy predictors for diagnosis, prescription, and remediation.

Another teacher stated, “it is frustrating and time consuming...to have to dedicate so much time to teaching one test, let alone a second standardized test with many different skills.”

Students are under the pressure of testing, a teacher stated:

Many of the students in this age group get overexposed to standardized testing and they basically become sick of taking tests. A case in point, one of my students who got a high three or maybe even a four on the ELA had a very low *ThinkLink* score. He whipped through the test and did not take it seriously, probably because he was bored with it and knew, being a smart student, that this would not actually count as a grade. I often wonder if, between the three practice ELA tests and the two *ThinkLinks*, not to mention the standardized testing going on in other classes.
the students take all of the exams less seriously, because there are simply so many of them.

There have been efforts made by teachers to use the ThinkLink reports to identify student skill areas in need of remediation.

Identify Students’ Strengths and Weaknesses

The identifying students’ strengths and weaknesses theme relates to examining the different ELA skills on which students are tested. Teachers focus on the areas students have mastered and the areas that require remediation. The ThinkLink reports have been “a useful tool for our department in assessing which particular skills need to be addressed with the whole group,” stated a teacher. Another teacher expressed:

The Objectives and Sub-skills Report was used to determine student strengths and weaknesses with certain questions/curriculum areas. (Furthermore) after each test, questions/concepts that students missed, things that were also likely to show up on the ELA, were copied and redistributed so that students could better understand why they got some questions wrong. Data about what our kids are missing the most and what are they doing well on were reviewed and shared at our ELA department meetings.

The data results were used to assist teachers in determining specific instructional needs for students.

Informing Instruction

Data-driven decision making on the behalf of teachers correlates with the informing instruction theme; teachers use the data to adjust their instructional practices for students. One teacher noted that the results from the reports “indicate problem areas
for specific students, helping with individualized instruction." Another teacher stated that the Objective and Sub-skills report “helped inform instruction, especially if I thought similar questions might show up on the ELA.”

One teacher stated:

I don’t find [the Class Summary Report] as helpful as the other in guiding my instruction. This could be because as an AIS teacher my class is the entire grade level of students I [teach]. My actual classes vary by day, so this report doesn’t reflect any one group I have at one time.

In other words, the Class Summary Report consists of the entire grade level’s student performance data. For example, the report displays the assessment information pertaining to 139 sixth-grade students, which includes the AIS students. Teachers can create Virtual Class classrooms in the ThinkLink Assessment System and generate the Virtual Class Report from small group instruction.

Curriculum Alignment

The curriculum alignment theme explores how assessments are connected to the school district’s curriculum and standards. A teacher stated:

Some ThinkLink Questions pertained to our curriculum and our NYS ELA, but some did not, which made the results seem not completely reliable in terms of predicting ELA scores. Data about what are our kids missing the most [and] what are they doing well on was reviewed and shared at our ELA department meetings.

Another teacher noted:
The range of possible questions for certain skills that are currently available isn’t as great as I would like. In addition, teaching literacy skills solely for the sake of answering test questions accurately is discouraging for both teacher and students. It is necessary to mix these probes in with real, hopefully engaging, literacy growth experiences. The probes serve a purpose, but could hardly be called engaging.

Report Format

The report format theme conveys teachers’ viewpoints regarding the presentation of information and data shown on the reports. One teacher stated, “I think the best thing about the ThinkLink is the way that the information is broken down into measurable statistics.” In contrast, another teacher replied, “the format of the class summary report is not easy for me to use.”

Focus Groups Results

The focus groups discussion data showed common themes among the groups and showed some unique themes for certain groups. The following information presents the themes associated with each group. All the groups share eight out of eleven of the themes. The common themes are: (a) assessment training, (b) assessment philosophy, (c) assessments driving instruction, (d) assessment methods, (e) modifying instruction, (f) communication with students, (g) students’ perceptions, and (h) 21st century preparation. Other themes that emerged from the data, including the NYS ELA test preparation theme, the communication with administrators theme, and the student engagement around testing theme.
AIS Teachers Focus Group Themes

Assessment Training

In the assessment-training theme, teachers expressed the type of preparation they have experienced regarding the use of assessments. Teachers shared both college training and professional development received by the school district. One teacher stated that assessment training in college “was a long time ago,” and other teachers in the group agreed. They recalled “taking reading-type classes, [learning] things like running records, and understanding...the individual as a reader and how they comprehend.” In addition, the teachers remembered being trained on “the cloze procedure...meniscus analysis...norm standardized test.” Most of the training experience described by the teachers was conducted by the school district.

Another teacher stated, “I have had training on teaching certain comprehension strategies to students and how to analyze. I’ve also done QRIs, which [are] qualitative reading inventories and it tells me about the comprehension level of the student.” Writing assessments were a component of the AIS teachers training. A teacher mentioned, “We were trained in 6+1 writing, which is a little bit different than the reading, [it was focused on] what we look for when we have the kids write a passage or a paragraph.” The mentor teacher “actually showed me within the curriculum that was used at that time, this is how we assess the students...we did DRPs at that point” stated a teacher.

A consensus from the AIS teachers was that each of them had ThinkLink Training. “We all were trained on the ThinkLink, they showed us how to use the probes, the practice tests, [and] how to pull questions off of it that were geared towards the topics we wanted to test.” One teacher stated that the administrators:
brought us in the computer lab and they walked us through how to use the
program and also the data...how to interpret some of the data, we got to decide
what we needed to test the kids on, what they were strong in, [and] what they
were weak on.

The teachers expressed their own thoughts and feelings about using assessments
in their classrooms.

Assessment Philosophy

The assessment philosophy theme portrays teachers’ fundamental beliefs about
their use of assessments to enhance student achievement and inform their teaching
practice. One of the focus group questions specifically asks the teachers about the
philosophy regarding using assessments to inform their ELA instruction. One teacher
stated:

I really try to find the time to get to know my students on a more individual level,
to really understand how they are as learners...some students they are very
capable, but there are other issues that come up and some of it’s just test-taking
strategies. Really knowing your students helps me to determine what to do with
them, but I definitely use the ThinkLink as a tool to help get me started in the right
direction.

Three teachers stated that they use multiple methods of assessments to measure
student learning. A teacher noted:

As far as the assessment goes...I want more, different assessments, like portfolios
are a good way to assess the kids on what they’re learning, how they’ve grown.

There are other ways to assess kids! It doesn’t always have to be a test, so I guess
that’s more of my philosophy. Yes, assess the kids, but don’t always test them on the material with a written test... there [are] much better, easy ways to do it.

Summative and formative assessments are used by teachers to inform their instruction practices.

Assessments Driving Instruction

In this theme, teachers share how they use assessments to make informed discussion about their instruction. A teacher said:

I’ve used the ThinkLink results to help me determine areas of weaknesses and strengths for my students and used that [information] to guide my instruction. For example, if a majority of my students did poorly on an inference question, I would then go and find resources on how to teach [students to make] inferences or basic skills maybe not at their grade level, but at a lower grade level.

Their instructional decisions included both whole group and individualized instruction. A teacher stated:

I’ll look at the whole group and what they struggle with as a whole then I’ll use that [concept or skill] in my instruction. For example, if I had a worksheet with questions on them, I’ll include that type of question that they struggled with [in my instruction] and then go a little deeper.

Interim assessments are also used to drive instruction practices. A teacher stated, "I’ll take a look at what each individual student does...at the five-week marking period point and see how students have grown or not." As a result of student performance, “certain lesson plans [are] changed, to accommodate students’ needs.” During the discussion,
teachers shared that they use multiple assessment methods to gauge the achievement level of their students.

Assessment Methods

The assessment methods theme identifies the various ways teachers assess student learning and measure the results. The teachers agreed that exams are used as an assessment method in their classrooms. "We take exams...three times a year, and I know that the English teachers in their classroom use practice or old ELA exams." A teacher stated, "I do my own mini assessments on certain skill areas." Most teachers stressed the importance of using multiple assessment methods. One teacher said, that "different methods of assessment [are used] to help you further guide your instruction for future lesson plans as well." Furthermore, "formative and summative assessments are used throughout the class[es]" The teachers provided the following examples, "I'll just ask them a quick question to see if they know what I taught." For example, "I use an exit question [and it becomes] a verbal assessment." Another teacher stated, "interview questions are used...you can talk about a situation or a passage [the students] have read." Lastly, "there are tests that you [administer], each [of these formal and informal assessments] guides your instruction differently."

Another teacher noted, "It's not always the test that gives the best assessment of what kids know. There are other ways...like portfolios. Student portfolios "start in the beginning of the year...and throughout the year they add to that portfolio and you can see from the beginning of the year to the end of the year how much that kid has grown," remarked a teacher. A student may not be successful on the NYS ELA test, "but that kid has grown and learned different skills and is able to apply what he/she learned to
different things, and you can see that throughout the year in a portfolio...and that’s one way you can assess them,” remarked a teacher. Projects are another assessment method used in classrooms by the teachers. A teacher stated, for example, “…expressive kids don’t want to…take a paper-and-pencil test all the time. They want to make something to show what they know.” A colleague stated that “testing is hard; you get a little more from creativity, which helps with the fact that [students] might not have a whole lot of experiences doing other things...outside of the world of Benford, New York, a project would help [students] experience other things.” In other words, students who are involved in community service learning projects (sponsored by the school) have an opportunity to enhance their learning through a real-world experience.

In the following statement, a teacher expressed the ineffectiveness of the probes:

I don’t use ThinkLink a whole lot. I mean the ThinkLink is there and it’s a good thing to start with, but once I get in the rhythm of developing lessons, I don’t necessarily go back to it a whole lot. [Furthermore,] …we’re told that we can use the probes as assessments, but some of the areas that my students are tested in, there are not probes available, or there’s only one question.

The teacher continued the statement that ThinkLink probes appear to be limited “once you have used that one question, then you’re out of resources and you have to find your own anyways or find one that’s appropriate.”

On the other hand, another teacher stated:

Some of the questions aren’t really based on what you want to test. It might be an inference question..., but it’s too hard, or sometimes it’s too easy, and it’s hard to find just the right question [a teacher] is looking for.
When students are struggling in English language arts, the teachers supported the idea of modifying their classroom instruction to meet the needs of their students.

Modifying Instruction

In this theme, teachers discuss methods they use to modify instruction for students who struggle with ELA content. A teacher stated, "Interactions and activities you do with the student... [are] more helpful than sitting down and saying okay, we're going to have a formal assessment. It's time consuming and not always indicative..." Most of the teachers support the idea of "interviewing the kids... just talk to them."

A teacher stated:

If you're listening to them read, you can tell that they don't understand something and as a teacher you might understand that it's because of vocabulary... or maybe it's because they don't understand what characters are doing in a story, or because they don't understand the tone of the story. [Furthermore], you can just develop questions to probe them [guiding students to] think about those topics to clear those things up.

Several of the teachers exclaimed, "Just talk to them!" Communication is a valid means of assessing students.

Communication with Students

The communication theme displays how teachers provide assessment feedback to students. Communicating with students regarding their performance is a critical element in students' academic success. In regards to the NYS ELA exam, "we don't get the results until late and we really can't even talk to the kids about how they did... we don't get those reports." The students "get their letters at home in the mail" stated a teacher.
On the other hand, English teachers discussed with students "practice ELA exams and the goal... for their students to improve each time [a practice is administered]."

A teacher noted:

When I [administer] my QRIs, I try to talk to the students individually... there's time during class to talk to students... these students they know their own strengths and weaknesses. If they're motivated... they are constantly resetting goals on how to do better each time. I try to give feedback within a week usually when I give the assessment.

Testing places demands on both teachers and students. The student perceptions play an important role in their ability to perform on assessments.

**Student Perceptions**

The purpose of this theme is to share what students have expressed to their teachers concerning their thoughts and feelings related to testing. The teachers discussed students' perceptions on the administration of assessments in the school district.

According to one teacher, students are:

- over-tested; they'll tell you that; they hate it. They don't like it. They [will say], it's not fun for them; they get overwhelmed with it, and... they tell us that constantly. All the practice we do beforehand overwhelms [the students, and] by the time are ready for the big test... they're just really anxious. Some kids... won't struggle and they really want to do really well.

Another teacher said, students "don't take [the assessments] seriously enough, because there are so many [tests]." A teacher stated that the students "don't know [the difference] between the ThinkLink exam and a practice ELA exam, [and will say] I've already taken
this test two times...and [protest] taking the practice exams again.” A teacher concluded, that students “don’t realize practice makes perfect; [testing is viewed] as a hassle.” The teachers supported the fact that there are other obstacles that interfere with test preparations.

NYS ELA Test Preparation

In this theme, teachers express their thoughts about preparing students for the NYS ELA exam. In addition, they discuss the administration date of the exam and the impact it has on students.

A teacher stated:

I personally wish that the ELA exam wasn’t so early in the year that even if you had another month or so just to help us relax a little bit more. I have no control over when the state gives it necessarily, but I do think [that] with the winter holiday and you come back...a lot of students deal with emotional things just from that and then to get back into the swing of things [is not easy]. Then we take a test; it’s a bit much [for students]: I think we need more time.

Another teacher added:

It’s true because you teach from January to January, right, so [the students instruction from] January to June is part of their next ELA, which they forget all summer long. It’s like you’re stepping backwards...because you have to go back and teach what they’ve learned the year before. I agree, it’s a bad time of the year. Later in the year would be better for these kids to give them more material and more review to understand [what’s expected of them]. [Furthermore,] they don’t
look at the January to June as preparation for the next go-around; it's [viewed by the students as] just a waste of their time.

21st Century Preparation

One focus group probe specifically asked teachers: How do the ELA assessments used at the middle school prepare students for the 21st Century? This theme focuses on the ability or lack of ability that assessments have to prepare students for the global demands of the 21st century.

A teacher noted:

They will know how to take a test, not necessarily how to live in real life... it's not teaching them what's out there, its teaching them how to take a test. The test material provides students with "some experiences through what they read, maybe things they have never heard of, which in turn, makes it difficult sometimes for them to answer questions about it because they are not familiar with it, but at least they are being exposed to different things.

Another teacher stated that students can "learn a little perseverance, too, by getting through things that are unpleasant. I don't know if the test itself is really preparing them for the 21st Century in any long-term, meaningful way." In contrast "when you have a job, you will have performance evaluations, based on how you do will determine how you continue in your job... it's just a part of life and [testing is] practice for that, being responsible and doing your best..." stated a teacher.
Assessment Training

In the assessment training theme, teachers expressed the type of preparation they have experienced regarding the use of assessments. Teachers shared both college training and professional development received by the school district. “Maybe there was one class that I took [in college]; it’s been a long time, but we went over certain types of tests, certain standardized tests, which [were] norms and norm reference and that sort of thing. statistics,” stated a teacher. “Honestly, I do think that most of the training, the effective training has been done, truly on campus here [at Benford],” noted a teacher.

The focus group participants supported the teacher’s statement and provided the following examples of professional development they have received: (a) “creating smart goals.” (b) “correcting the ELA state tests.” (c) “curriculum work,” (d) “ThinkLink and Six Traits,” (e) “strategy training,” (f) “Learning Styles [Inventories]...it’s huge,” and (g) “Ruby Payne [and] brain-based research...and that’s also what we can use to help the assessment [of students]. to help students get through those tests.”

Assessment Philosophy

The assessment philosophy theme portrays teachers’ fundamental beliefs about their use of assessments to enhance student achievement and improve their teaching practice. One of the focus group questions specifically asks the teachers about the philosophy regarding using assessments to inform their ELA instruction.

One teacher stated:

I always had trouble with this because I feel sometimes the test has nothing to do with what I’m teaching in class, so my philosophy is I’m going to do my best now
to teach to the test, but somehow make the skills they need for the test become part of the curriculum they’re already learning.

A teacher stated “it’s very much important to have common language throughout, ongoing and common language” [that is my philosophy].

Another teacher stated:

Focusing on the students ability that, they have to write on demand and they have to write in the form that’s very different than what they would do in the real world sitting down and preparing something. I mean, if anybody wrote a resume letter in one draft, I’d be a little shocked so the test doesn’t teach them real-life writing skills.

Assessment Methods

The assessment methods theme identifies the various ways teachers assess student learning and measure the results. The teachers agreed that they use “all different types of” assessments and that “there ongoing.” “Some formal, some informal [assessment methods are] used as a pretest measurement for our department goals...there are common assessments, too,” noted a teacher. Another teacher said:

We also use the ThinkLink, which is another assessment method, and we have the on-demand tests, too, which in a sense is similar to the writing prompts that [students are] asked to do on the ELA. You could use the rubric because of the way we evaluated, just like we use a rubric for ELA.

The teachers stressed the importance of using informal assessments. A teacher stated, “We can use our own informal assessments based on you and me, item analysis, things like that.” A teacher noted, “I definitely feel that general pressure that even if we were to
come up with very on-point exams that were really actually quite good...they need to be in line with state tests.” A method used by the English teachers is “we use old state tests for practice to get more in-depth with them and look at each question and get into their topic” a teacher explained.

Assessments Driving Instruction

In this theme, teachers share how they use assessments to make informed discussions about their instruction. Assessments “drive instruction” exclaimed a teacher. “Short assessments are very nice. on-the-spot, remedial interventions for kids because you can identify the particular area that you’re working on and remediate on the spot,” stated a teacher.

Another teacher said:

I find it difficult to use tests sometimes to find out what [students are] struggling with because it’s all put into categories like literary analysis; okay, well what exactly, which part? I mean everything in English is literary analysis, so exactly what part of that are they struggling with...it was very difficult to actually remediate because [the test results stated] they’re struggling with vocabulary, but maybe it’s just this one word. maybe it’s not.

Modifying Instruction

In this theme, teachers discuss methods they use to modify instructions for students who struggle with ELA content. Assessments are used to help adjust instruction for students who are identified as needing of intervention. “You can develop the kind of analysis on assessments and plug into it some of the weakest skills for your class, which helps you to develop your curriculum if you have to monitor and adjust” noted a teacher.
Another teacher stated, [assessments help] “identify weaknesses and strength [and] individualized instruction for AIS.” When a teacher uses “short assessments...you can bring them up and use one-on-one or small-group teaching so you’re managing and adjusting is great when you do that with a short assessment.” stated a teacher.

In the following statement, a teacher expresses ways to adjust instructional practices:

The best information for adjustment of instruction is usually our classroom tests and quizzes and that ongoing instruction we do with kids and checking for understanding of projects. [Furthermore], we certainly spend more time on [informal] than we do on actually giving them formal [tests] and that’s teacher discretion.

*Communication with Students*

The communication theme displays how teachers provide assessment feedback to students. Communicating with students regarding their performance is a critical element in students’ academic success. In regards to teachers communicating the official ELA results to students, “we don’t because we don’t have the results in time to give the students feedback,” stated a teacher. Other teachers responded, “and you’re really not supposed to [the students will] all get it in the summertime...probably they receive it in the mail.”

A teacher said:

The only feedback I think the students get is the fact that if they do not score high enough that they will be placed into AIS, so that’s the feedback they get from the school district. Unless you’re referring to the incoming population, which by then...
we would have the feedback from the previous year [that teachers share with
students].

In the following statement, a teacher shares a story regarding communicating information
to a student:

The teacher recalls that sometimes the communication is a little awkward because
I’ve had students come to me with letters saying they need to be in a special
program. Once there was a bright student who…sent me a magazine that she just
got a poem published in, a very, very bright student and she was put into a
remedial literature course, writing course and she comes to me in tears saying
‘why am I put in this class, did I do that badly on the ELA?’ I said, you missed
six questions on the ELA and that made you get a score that wasn’t as you might
have wanted, but you by no means need to take this course, and I said, I’ll hack
that up to the highest level possible if I need to. But, it was insane that six
multiple choice questions were taking this most brilliant, talented student and
putting her in a remedial course.

Communication with Administration

In this theme, the teachers dialogued about their communication with building
administrators concerning assessments and student placement based on test results. A
teacher elaborated on the story in the communication with students theme where the
student was placed in a remedial course.

A teacher stated:

To speak to the feedback part with that situation I didn’t know: I was not given
the passing scores. Now, hopefully, we’ll be able to get that information out to
teachers sooner, but generally the kids get it first: we get it second. We get raw scores [from] data warehouse.

Another teacher stated:

There's not a whole lot of communication between the "higher ups" and us when it comes to selecting students for these programs based on raw scores that they must be pulling from. Even though they don't have that stat data, they must be getting their information from somewhere if they're not asking us how the kid is doing in class, so maybe from grades and report cards. On the other hand, they did ask us this year about that high school group. They gave a list of students in eighth grade and wanted them to be in a class in ninth grade that is like a double English class. [The administration] did ask for our feedback, our input on that.

*Student Perceptions*

The purpose of this theme is to share what students have expressed to their teachers concerning their thoughts and feelings related to testing. One focus group question specifically asked teachers: Tell me how you think students perceive the assessments that are administered to them to monitor their progress in ELA...? "I don't think they really care too much whether they take them or not. I don't think they take them seriously the majority of them. I really don't think they do," stated a teacher. In contrast, "I think the younger kids take them a little bit more seriously I think, but they also end up viewing them as not fun, long, boring, not something you look forward to and I think that leads to them not caring about them," a teacher noted. The teachers agreed that there is a lot of stress and pressure associated with students taking standardized tests. One teacher said in particular:
I always feel partly to blame because I want to get them excited about the test so they do put their best effort forward, and at the same time, I know that I'm stressing them out...I keep [a] list of names on the wall of [students] who got an 80% this time and then the kids that can't quite get the 80%. Furthermore, I think that's really hard on kids to work really hard and can't click with that particular assessment and I think that can be very hard on them in their self esteem and the way that they think about [assessments].

**Student Engagement around Testing**

In this theme, teachers shared their techniques to keep students engaged in the testing process. The teachers and administrators at the middle school have found some ways to help students become more engaged with the ELA state exam.

A teacher stated:

I think if you break [the practice ELA tests] down and not give it in the whole timeframe that's similar to the regular ELA, that you [will] find it more manageable and kids are more receptive to it. When I do my first ELA prep test and I [found out] that the next day when we go over it, I give them a chance to listen to what the answer is. They listen; they can't pick up their pencil. Then [later], they go back and they can make any revisions that they want. So basically, what they're doing is they're listening to a [correct] answer, with which listen is the integral part of the test, and they're given a chance to revise it. [Furthermore], when you break it down into small chunks, it's very effective, and they can see firsthand with each chunk how they have to improve...I give them a chance to take one listen, learn, revise, and then redo.
The teachers’ colleagues supported her in this test-taking strategy. Another teacher stated, “I think in the past two years...that students’ level of concern has been raised...like with the [ELA-generated] videos and Mr. Monacelli talking about the test and its importance. too, I think it has helped somewhat.” A teacher noted that the students “see it as kind of a challenge...I stole one of the teachers’ thoughts in the department [that came from the ELA video and tried it with my students]; it worked and across the board I should improve my kids.”

21st Century Preparation

One focus group probe specifically asked teachers: How do the ELA assessments used at the middle school prepare students for the 21st Century? This theme focuses on the ability, or lack of ability, that assessments have to prepare students for the global demands of the 21st century.

A teacher stated:

We always look at the lists of a student who didn’t get a 3 or 4 on their ELA and that’s what we use for interventions, so how does it prepare them for the 21st Century? Well, we’re hoping with intervention to better prepare them... to make them better readers and writers. [Furthermore], to find the deficits now so that we can remedy them and get them through school and give them, hopefully, the motivation to graduate instead of just burning out and saying, “I’m no good at this.”

One teacher said, “Although the test isn’t. I don’t think [it] is, particularly representative of anything they’re going to have to do in the real world, unless they’re college bound. If they are not reading and writing at their grade level...they are not going to do well.”
Special Education Teachers Focus Group Themes

Assessment Training

In the assessment training theme, teachers expressed the type of preparation they have experienced regarding the use of assessments. Teachers shared both college training and professional development received by the school district. The teachers support the idea that they did not receive much training in college. A teacher noted, that “there was a lot of statistics...we were never taught to do data-driven assessment...or going along with curriculum. the curriculum-based assessment.” Another teacher exclaimed, “I would second that, I mean very, very little! I took one class in my undergraduate [studies] that focused on assessment...the title of the class was Assessments, and the majority of the class just talked about different special education assessments.” For example, we discussed: (a) “educational achievement tests and IQ tests,” (b) “the Wyatt,” (c) “the Woodcock-Johnson,” and (d) “the CAT.” The teachers agreed that they were not exposed to “testing based on the curriculum and then making an informed decision that would affect the direction that you were headed with each student.”

One teacher recalled:

I can remember like administering the Woodeock-Johnson several times as a practice measure to students, and then, we’d have to actually go through and grade it and, you know, discuss the results. But, there wasn’t anything after that point in terms of...what kind of instruction would you recommend...where do you go from there. It was here are the results and that was it.

One teacher pondered:
I wonder what the assessment class was for the general education students, like if it was different. I mean that seems like it might have been an area that we missed out on because they felt like they needed to teach us the educational achievement test.

Assessment Philosophy

The assessment philosophy theme portrays teachers’ fundamental beliefs about their use of assessments to enhance student achievement and inform their teaching practice.

A teacher stated:

I like the benchmark assessment that we take quarterly. I think that [the benchmark assessments] really does give me a lot of information. However, I know for a fact that I’m not using it the way that ThinkLink intends me to use it. I think they think that you can take the sub-skills out and teach and hammer the sub-skills that the kids are deficient in and you’re going to make them better. I’m sure that’s probably the way that you’re supposed to use it, I’m sure it does work. I just don’t do it’s. I feel like it’s more effective for me to use the benchmark to see where [the students are] at...then I use the stuff in the curriculum that we teach and the phonics, strategies, and specific skills.

Another teacher stated:

To be honest, that ThinkLink, I rarely use that information because the kids are so tested out that they don’t take it seriously. What I do day to day in class or what I see done day to day in other classes. It’s easier for me and better for me to know where they are than taking another two classes. to complete the ThinkLink tests.
On the other hand, teachers have used *ThinkLink* to drive their instruction practice to some capacity.

**Assessments Driving Instruction**

In this theme, teachers share how they use assessments to make informed discussion about their instruction.

A teacher stated:

At the beginning of the year we did the *ThinkLink* and results came back from that. [It provided] you with ideas to where each kid was with what skills...it’s interesting data that comes back, but I’ll be the first person to say that it wasn’t something that I pulled out weekly, you know, to really drive my instructions.” [Furthermore], it did give me an idea as to the [student] levels that I was starting with at the beginning of the year, and then when [the students] took the [second] test...the progress that we had made from it [was available].

One teacher noted:

The majority of the reading comprehension that we do are from old past ELAs...they’re appropriate in terms of preparing students to take the ELA, but I wouldn’t necessarily say that the ELA is the end all...it serves a purpose definitely.

**Assessment Methods**

The assessment methods theme identifies the various ways teachers assess student learning and measure the results. The teachers shared a variety of methods they use in their classroom to assess student performance in English Language Arts. One teacher stated, “I use pre and post old ELA like reading comprehension tests to see where my
kids are at the beginning and middle before the test. I think that’s more useful to me that the ThinkLink.”

Another teacher said:

I use writing examples that give us some ideas, too...what kind, what areas we need to work on like something structure, and [areas] in sixth grade. I also [execute] flex files for Read 180; we do that multiple times during the school year. The reason teachers use the assessments is to see the areas that you still need to work on...to make [the students] better writers and readers. [Furthermore], just like most of the ELA, I mean that goes along with our curriculum so we follow our curriculum and a lot of the curriculum has the kind of skills that kids are deficient in [that teachers assess].

*Modifying Instruction*

In this theme, the teachers shared their assessment practices used in adjusting instruction for students who may be struggling with ELA content. “Curriculum-based assessments, definitely,” stated a teacher. Another teacher said, to help students in ELA content “some measuring of reading comprehension, fluency decoding, those are your key assessments.” ThinkLink is also used to adjust instruction; a teacher articulated that “it does provide the thing that you’re for in terms of areas that you need to improve on or students need to improve on.”

*Communication with Students*

The communication theme displays how teachers provide assessment feedback to students. Communicating with students regarding their performance is a critical element
in students’ academic success. The teachers provide feedback to students regarding the student performance on ELA assessments.

A teacher mentioned pre-conferencing:

I think you establish certain strategies that you want to encourage them to use while they are taking the test. I know that’s something that everybody pushes for. That enables [students] to be successful. I mean that’s one of the things that we, as far as talking [to students] about their performance on the test. [We get the students] in the right mindset in terms of how they should be performing and what they should be doing and what their goal is to achieve on a test...that’s kind of pre-conferencing that you do with them until the test.

Another teacher shared, “I know the teachers when they assess [students] most of the time they give them their grades within one or two days to let them know how they’re doing, the individual student whether they care about how they’re doing.”

Students Perceptions

The purpose of this theme is to share what students have expressed to their teachers concerning their thoughts and feelings related to testing. The teachers discussed students’ perceptions on the administration of assessments in the school district.

A teacher commented:

I think if you look at the number of assessments that are given at the elementary school...at the elementary school they are testing those students on a frequent basis. They have to do quarterly writing assessments; in addition to that, they have NYS assessments, they are bombarded with tests, and by the time they get to the middle school, they are done with tests. They have had it. Furthermore,
regardless of the fact that they have been successful or not, you have those high-performing students who want to do well; they want to succeed so they try to do their best.

Another teacher stated on the other hand:

You have the lower end of the spectrum where the students are just done: their tired of being tested and can push them to do their best, but again, the fact that they don’t perceive it as important, and their...desire is not always there to be successful.

21st Century Preparation

One focus group probe specifically asked teachers: How do the ELA assessments used at the middle school prepare students for the 21st Century? This theme focuses on the ability or lack of ability that assessments have to prepare students for the global demands of the 21st century. As with the other focus groups, teachers expressed their thoughts around assessments preparing students for the 21st century.

A teacher stated:

I don’t really think that any test, paper-pencil, on the computer, anything is going to prepare you for real. [Assessments] might help, I think honestly the reason people take tests is [for teacher benefit, not student benefit. [The test], it’s going to help the teacher figure out where you are at, but it’s not going to help the student at all...if you want real-life application, you need to make it. You can’t give [students] a test question and ask them to answer it with paper and pencil and expect that it’s going to necessarily prepare them for real life.
Another teacher stated, assessments will help students “read better...you need to read every day.”

Summary

This chapter presented the results of the data collected by the researcher regarding teacher perceptions of the ThinkLink Assessment System, their use of this system, and other classroom assessment data, which included formative and summative assessments. The topics covered in this chapter included: (a) the ThinkLink grades six, seven, and eight student performance results from Tests A, B, and C; (b) the NYS ELA grades six, seven and eight student achievement results from the January 2009 state exam; (c) the Teacher Likert Scale Survey results; and (d) the Focus Groups discussion results. Overall, the student performance results on the NYS ELA 2009 exam exceed the predictions of the ThinkLink B assessments. Table 4.14 presents a summary of each of the grade percentages in levels one through four. The actual Grade 6 NYS ELA results exceeded the ThinkLink predictions; 86% of students scored at levels 3 and 4, 14% scored at level 2, and no students were in level 1. The actual NYS ELA test results at grade seven exceeded the ThinkLink predictions; 89% of the students scored at levels 3 and 4, meeting state standards. There were only 11% of the students not meeting standards, scoring at level 2, and there were no students in level 1. The 2009 ELA results at grade eight showed 73% of our students scoring at the proficiency levels of 3 or 4 and 27% scoring below proficiency.
In addition to the ThinkLink and NYS assessment data, the teacher survey data was presented. Thirteen out of sixteen teachers invited to participate completed the survey, resulting in an 81% return rate. The following are some highlights from the survey: the data reveals that most teacher use the ThinkLink reports, 11 out of 13 use the reports (85% of teachers). The majority of the teachers expressed that they use the reports sometimes. The ThinkLink probes surfaced as a strong concern of the teachers. Several of the teachers (nine out of ten, 90%) from the survey mentioned that the probes were not beneficial in any way. In the comment sections of question 12, the teachers’ responses created five themes: (a) assessment methods, (b) identifying students’ strengths and weaknesses, (c) informing instruction, (d) curriculum alignment, and (e) report format. The survey themes and focus group themes have showed connections; four out of five of the survey themes correlated with the focus group themes presented in Table 4.15.

The focus groups discussion data showed common themes among the groups and some themes that were unique to certain groups. Table 4.15 presents the themes
associated with each group. For example, all the groups share eight out of eleven of the themes. The common themes are: (a) assessment training, (b) assessment philosophy, (c) assessments driving instruction, (d) assessment methods, (e) modifying instruction, (f) communication with students, (g) students’ perceptions, and (h) 21st century preparation.

The AIS teachers’ focus group data presented an emerging theme unique to just this group, which was the NYS ELA test preparation theme. On the other hand, the English teachers’ focus group data exhibited two emerging themes that the other two groups did not have, which were the communication with administrators and the student engagement around testing themes. The special education teachers’ focus group is the only group that did not have a theme that was different from the other two groups.

Chapter 4 covered the data analysis for the researcher’s study, which centered on teachers’ use of data from ThinkLink, classroom assessments, and NYS ELA standardized exams. It also conveyed teachers’ experiences with the ThinkLink Predictive Assessment System. Chapter 5 will include an introduction, summary of the major findings, discussion, implications, recommendations for future research, and conclusions.
Table 4.15.

Summary of Focus Groups Common Themes

<table>
<thead>
<tr>
<th>Themes Focus Group</th>
<th>AIS teachers</th>
<th>English teachers</th>
<th>SPED teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Assessment Training</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2. Assessment Philosophy</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>3. Assessments Driving Instruction</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>4. Assessment Methods</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>5. Modifying Instruction</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>6. Communication with Students</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>7. Communication with Administrators</td>
<td>n/a</td>
<td>X</td>
<td>n/a</td>
</tr>
<tr>
<td>8. Students’ Perceptions</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>9. Student Engagement Around Testing</td>
<td>n/a</td>
<td>X</td>
<td>n/a</td>
</tr>
<tr>
<td>10. NYS ELA Testing Preparation</td>
<td>X</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>11. 21st Century Preparation</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
Chapter 5: Discussion and Implications

Introduction

This study showed that despite overall progress on ThinkLink and No Child Left Behind (NCLB) exams, teachers' use of the ThinkLink assessment system was, through their own self-reporting on a survey and in focus groups, that teachers used ThinkLink sometimes. It is used by some teachers as a tool to assist in making instructional decisions. The majority of teachers acknowledged that as a result of using ThinkLink, remediation for students in English language arts is done more effectively by focusing on identifying student skills. However, their preference is to use multiple assessment methods to guide their instructional practices. Furthermore, their experience with ThinkLink was described as using an assessment system that has parts of it that are more useful than other parts. For example, most teachers support the use of ThinkLink to assist in remediation for students and using reports to identify deficient skill areas. The assessments probes were considered by the teachers to the least beneficial aspect of the system. Teachers stated that: (a) the practice probes seem a little disjointed with the skills sometimes, (b) there are a limited number of questions in the skill areas needed, and (c) the practice probes are not always relevant.

The teachers expressed their use of the ThinkLink system and experience with it in the survey and focus groups, and common themes emerged: (a) assessment training, (b) assessment philosophy, (c) assessments driving instruction, (d) assessment methods, (e) modifying instruction, (f) communication with students, (g) students' perceptions, and (h)
21st century preparation. There are four major findings in this study. To begin with, *ThinkLink* was used by middle school teachers to identify skills and provide remediation to students. Secondly, *ThinkLink* predicted English Language Arts (ELA) scores with accuracy between 80 and 90%. However, the third finding showed that the predictive element had little or no value to more than a third (39%) of the teachers. Finally, the middle school teachers use a range of assessment methods for informing instructional practices.

This chapter will discuss these findings, beginning with the perceptions of teachers as to how they actually used this data. Then their experience with the *ThinkLink* system will be discussed and compared with the research literature. Implications for teacher and leadership practice as well as future research will follow. The two research questions are addressed: (a) How do middle school teachers use data from *ThinkLink* a predictive assessment, that suggests that certain sixth-, seventh-, and eighth-grade students will not perform at proficiency on that New York State (NYS) ELA exam? (b) How do middle school teachers describe their experience with the *ThinkLink Predictive Assessment System*?

*Teachers’ Use of ThinkLink Assessment Data*

The theory connected to this study is the classroom assessment environment, it is a theoretical construct developed out of the work of Striggins and his colleagues. Striggins & Conklin (1992) described the classroom assessment environment in terms of teacher practices and identified the following eight dimensions: (a) the purposes for which teachers used classroom assessments, (b) the assessment methods used, (c) the criteria for selecting them, (d) the quality of the assessment, (e) the teacher’s use of
feedback, (f) the teacher's background preparation in assessment, (g) the teacher's perception of the students; and (h) the assessment policy environment. Classes have an assessment environment that is generated from the teacher's approach to assessments.

This section will review Striggins and Conklin's recommendations for teacher use of data in their theory and a comparison of the Benford's teachers' approach to using ThinkLink is displayed. According to Striggins and Conklin (1992) the purposes for which teachers use classroom assessments play several important roles, including diagnosing individual and group needs; gathering baseline data (sizing-up the class); providing feedback to students, parents and administrators; preparing students for future tests; controlling and motivating; communicating expectations; and making instructional decisions.

Teachers use a variety of assessment methods to determine students' achievement levels. The authors identified three major categories: paper and pencil assessments (i.e., teacher developed tests, homework, assignments, and standardized tests); performance assessments (based on observation and judgment); and personal communication with students. Teachers use different criteria when deciding which method of assessment is selected. For example, measuring student achievement involves several factors such as "match to target - assessment method can be made to reflect the intended outcome of instruction...a paper and pencil test of [reading], a performance assessment of speaking skills" (p.91). The authors suggest when using a paper-and-pencil test there are several ways to check for the quality of the assessment such as matching the test to content taught, clearly written test items, and using the proper format for intended outcome.
Furthermore, the classroom assessment environment has two major forms of feedback teachers use with their students to convey information: oral and nonverbal feedback and written feedback. They also provide feedback to parents in the form of grades on report cards, written comments, and direct communication. Teachers bring many critical attributes to the classroom such as their background preparation in assessment. This involves:

... a plan or set of values for how to spend their time, a set of personal traits, and a set of perceptions of the student with whom they work. All of these contribute to the profile of a classroom assessment environment (p. 93).

The authors claim that classroom assessments are *interpersonal activities* and they play a role in the teachers’ perceptions of students’ attributes (i.e., ability to learn, willingness to learn, rate of achievement, study skills, and amount of test anxiety). Teachers need to be aware of assessment policies established by school districts, which govern or constrain assessment practices and procedures. These assessment policies can influence the way teachers use their classroom assessments.

A major finding in this study is that teachers indicated they used *ThinkLink sometimes*, and it is used by some teachers as a tool to assist in making instructional decisions. The majority of teachers acknowledged that as a result of using *ThinkLink*, remediation for students in English language arts is done more effectively by focusing on identifying student skills. One reason why teachers use assessment data for students is to diagnose individual and group academic needs (Striggins & Conklin, 1992). However, their preference is to use multiple assessment methods to guide their instructional practices. A key component in using assessment data is the teacher being able to work in
collaborative groups to discuss the content and skills that appear on the exam (Langer et al., 2000; Wayman et al. 2005). Benford’s middle school teachers, as did the teachers in the Langer study, have opportunities to disaggregate data in collaborative teams. For example, during grade level meetings, faculty meetings, AIS meetings, and even during the focus group discussions, teachers explored the use of assessment data. Sixty-one percent of our teachers in Table 4.13 acknowledged that as a result of using ThinkLink assessment data, indicating remediation is done more effectively by focusing on identifying student skills. Christenson, Decker, Trizenberg, Ysseldyke, and Reschly (2007) found teachers used student data to target achievement in skill areas, such as reading comprehension, fluency, and higher level thinking skills to determine if students have made improvement on required assessments. Some of the Benford English teachers stated that the ThinkLink data helps guide their instructional decisions around ELA skills. For example, a teacher stated, the ThinkLink reports have been “a useful tool for our department in assessing which particular skills need to be addressed with the whole group” and “individualized instruction.” The classroom assessment theory (Striggins & Conklin, 1992) supports this finding of identifying individual and group needs through the use of assessment data.

*Teachers’ Use of ThinkLink Reports*

Thirteen out of sixteen teachers expressed their feelings about the quality and usefulness of ThinkLink. In Table 4.11, the majority of the teachers stated that they used the reports *sometimes*. The teachers recognized several benefits using the ThinkLink reports and pointed out disadvantages. In reviewing the data, the reports that appear to be most useful to teachers are the Class/Virtual Class Report, the Individual Student Report,
and the Student Sub-skills Report. These reports provide teachers with the ability to identify students' strengths and weaknesses and can be used to determine the type of remediation needed in deficient skill areas. Striggins and Conklin (1992) stated that assessment data is used by teachers for diagnosing individual and group needs. Benford's teacher's used data specifically for the purpose of diagnosing and planning. The teachers in the Grow Network Study (2005) used the reports efficiently to identify areas in ELA where students scored high and low. The reports and tools teachers had access to include: class reports, individualized student reports, tracking tools, and the ability to use flexible groupings for differentiated instruction. This was done on an individual basis and as a class; these teachers could alter their instruction by analysis of the data.

The Class Summary Report (Appendix A), which indicates a comparison of results in categories from Test A to Test B, appeared to hold the least value to teachers, and the probes were the least effective. Teachers reported the major disadvantage in the use of ThinkLink related to the testing probes, which are designed to assess students' achievement in skill areas associated with the NYS ELA. Ninety percent of the teachers commented that the probes were not beneficial. Some of the remarks made by the teachers centered on the lack of alignment to state standards and the limited number of probes. A teacher stated that, "the probes cover skills and concepts that are not included on the NYS ELA." Some teachers found the probes to be "frustrating and a waste of time." Striggins and Conklin suggests that there are several ways to check for the quality of the assessment, such as matching the test to the content taught, clearly written test items, and using the proper format for intended. The methods can be used to enhance the
quality of the ThinkLink probes. Several teachers in the survey also commented on the need to use a variety of assessments.

Professional Development for Teachers

The survey also revealed that 39% of the teachers feel that the ThinkLink assessments are not good predictors as to how students will perform on the NYS exams. The quantitative analysis indicates the ThinkLink predicts with 80 to 90% accuracy rate; however, more than a third of the middle school teachers are unaware or do not believe it. This implies that the teachers are in need of professional development around the ThinkLink data. Although most teachers were trained during the initial implementation of the system two years ago, somewhere along the discourse regarding the primary purpose of using ThinkLink, the predictability factor has been lost for some teachers. Webb (2002) reported that the Milwaukee Public Schools (MPS) designed a workshop “to encourage teachers and others to become more familiar with the basic types of assessment, the appropriate use to the assessments, and how assessments results can inform teachers and others about student progress in attaining the MPS Standards” (p.16). A similar workshop could be helpful to teachers at Benford. Striggins and Conklin (1992) stated that, teachers bring many critical attributes to the classroom, such as their background preparation in assessment.

Teachers’ Use of Multiple Assessments

Striggins & Conklin (1992) recommended that teacher’s use a variety of assessment methods to determine students’ achievement levels. One teacher in Benford stated that using multiple assessments “prove worthy predictors for diagnosis, prescription, and remediation.” In the assessment philosophy theme, most of the teachers
stated a stronger belief in the use of “multiple methods of assessment.” Teachers did acknowledge using ThinkLink to assist them with making instruction decisions. One teacher stated, “I definitely use the ThinkLink as a tool to help get me started in the right direction.” On the other hand, a teacher stated, “to be honest, that ThinkLink, I rarely use that information because kids are so tested out.” It was discovered in the assessment methods and assessments driving instruction themes that ThinkLink, along with a variety of different assessments methods, are used to assess students’ performance and guide teachers’ instructional practices in the area of ELA. When teachers use different data sources to examine student assessment data, in other words by triangulating data, they can deepen their understanding of strengths, weaknesses, and misconceptions of students struggles in reading (Boudett, City, and Murnane, 2005). The teachers expressed that ThinkLink impacted their instruction in terms of identifying students’ strengths and weaknesses, teaching whole and small groups, identifying skill areas to focus on, and individualizing instruction. A teacher stated, “At the beginning of the year we [administered] the ThinkLink and results came back from that. [It provided] you with ideas to where each kid was with what skills.” and the second test showed the progress the students.

ThinkLink is one assessment method used by teachers. Findings from the focus groups revealed that teachers use a variety of assessments in their classrooms. The methods teachers shared include (a) pre and post old state ELA tests, (b) comprehension tests, (c) writing prompts and rubrics, (d) Read 180, (e) interim assessments, (f) verbal assessments, (g) portfolios, and (h) projects. The English teachers stressed the importance of using all types of formal and informal instruments and that assessing students is an on-
going process. This shows that teachers view ThinkLink as a tool and they value the use of different assessment methods. What is interesting is that many teachers did not make reference to the predictive ability or lack thereof with the ThinkLink systems. This indicates that the predictive element of ThinkLink holds little or no relevance to these teachers. However, it is an important factor to the district and the reason why the system was purchased and implemented for use with grades three through eight. The district also expects that it is used to assist in assessing and identifying ELA skills areas students are struggling with and use the information to make necessary modifications.

In the modifying instruction theme, it was found that teachers use a variety of formal and informal ways to adjust. ThinkLink was mentioned by one teacher stating, “it does provide [you with] areas that you need to improve on or students need to improve on.”

Teachers’ Use of ThinkLink to Modify Instruction

The Benford teachers offered more responses in regards to other techniques used to modifying their instruction as opposed to using ThinkLink to make adjustments. To assist students who are struggling in ELA, some of the teachers use curriculum-based assessments, measurement of reading comprehension, and fluency decoding. The teachers expressed that interviewing, listening, and talking to students was essential to modifying instruction for students struggling. The teachers’ involvement reaches beyond the general thought of individualization. When implementing intervention programs, the expertise of the teachers is used to determine what student learning looks like and what measurements should be used to evaluate students’ learning (Fisher and Ivey, 2006).

Again, what surfaced is that teachers use a variety of methods in this theme aiming to modify their instruction. This further supports the notion that teachers view ThinkLink as
a tool and value the use of different methods in their instructional decision making process. Furthermore, this also aligns with the assessment theory to use data for the purpose of constructing informed decision around student achievement (Striggins & Conklin, 1992).

Overall, in reviewing the results from the teacher survey on Table 4.13, what this information is telling me about the teachers’ perceptions regarding ThinkLink is that there are parts of the system that are more useful than other parts and teachers prefer to use multiple assessment methods. The teacher responses on the survey for Strongly Agree and Agree ranged from 62 to 92% (8 to 12 teacher responses). The parts of ThinkLink that appear to be most beneficial to teachers are: (a) identifying skill areas as proficient and not proficient to inform instruction (62%), (b) remediation is done more effectively (62%), (c) data analysis is returned in a timely manner (92%), and (d) administrative support is provided (92%). This data supports some of the purposes Striggins and Conklin (1992) identified for which teachers use classroom assessments, including diagnosing, gathering baseline information to inform instructional decisions, and communicating with administration. According to 42% of the teachers (5 responses), the assessment probes are the least beneficial feature of the system and stated they Never use them. Some teachers stated that: (a) the practice probes seem a little disjointed with the skills sometimes, (b) there are a limited number of questions in the skill areas needed, and (c) the practice probes are not always relevant. The data has a direct correlation to the study research question: How do middle school teachers use data from ThinkLink, a predictive assessment system, that suggests that certain sixth-, seventh-, and eighth-grade
students will not perform at proficiency on the NYS ELA exams? In short, the teachers use the assessment data for identifying skills and student remediation.

This data implies that the teachers use the reports to find the skill areas that students are struggling with in ELA. Once the skills are identified, teachers use the data to set up remediation for students struggling in certain ELA concepts that were revealed from the tests results. The teacher responses suggest that they find value in the assessment data derived from the reports. In a study conducted by Kerr, Marsh, Ikemoto, Darilek and Barney (2006) of three school districts (Monroe, Roosevelt, and Jefferson), it was found that the districts faced the challenge of “the need to provide data that were valuable and presented in a user-friendly format that could readily benefit teachers in their daily instruction” (p. 515). Benford’s implementation of ThinkLink and the administrative staff commitment to ensure that teachers receive valuable data and in a timely fashion increases teachers’ ability to use the data effectively.

Teachers’ Experience with the ThinkLink System

The teachers described their experience with the ThinkLink system, which included other classroom assessments, through common themes: (a) assessment training, (b) assessment philosophy, (c) assessments driving instruction, (d) assessment methods, (e) modifying instruction, (f) communication with students, (g) students’ perceptions, and (h) 21st century preparation. Assessment training is also needed in order that teachers build their capacity in understanding how to use data. It was reported that few teachers have had formal training or experience in analyzing and interpreting data or using assessment results for program change and instructional decision making (Bernhardt, 2000; Cizek, 2000). The teachers from the focus groups support this finding, indicating
that they received “little or no training in college” on how to use assessment data for instructional purposes. Some teachers stated that they were taught how to administer intelligence tests, but not trained on what to do with the results. Teachers have received most of their training and how to use data for instructional decision making from school districts.

In regard to teachers acquiring training in assessment while in college, the vast majority of the teachers indicated the courses provided within their field of study did not cover assessments. Many of them supported the fact college training “was a long time ago,” and there was “very little” focus on “data-driven assessment.” This means that the majority of teachers in these focus groups expressed that the college courses they completed as part of their educational teacher program did not prepare them for what is expected in school districts today around the use of assessment data. On the other hand, the special education teachers supported the notion they were trained to administer tests such as: (a) “educational achievement tests and IQ tests,” (b) “the Wyatt,” (c) “the Woodcock-Johnson Test of Cognitive,” and (d) “the California Achievement Test (CAT).” However, this training did not include learning how to use the data result to inform their instructional practices. This further implies that the college assessment training experiences of these teachers was limited in its function. A teachers background preparation contributes to the profile of the classroom assessment environment (Striggins & Conklin, 1992).

The Benford teachers stated that most of the assessment training they have received was sponsored by the school district. Several types of professional development was mentioned including, but not limited to, ThinkLink (Discovery Education, 2008). Six
Traits of Writing (Culham, 2003). NYS ELA Test Correction Training (NYS Department of Education, 2009), Qualitative Reading Inventories-QIR’s (Leslie & Caldell, 2006), Ruby Payne Framework (1996), and instructional strategies (International Center for Leadership in Education, 2000). This would imply that the school district supports the use of ThinkLink and other related reading assessment models and methods to assist teachers in understanding and assessing student performance in reading.

The teachers in the Stone et al. (2007) study and the teachers at Benford utilize ThinkLink in a similar fashion. The teachers received ThinkLink reports that summarized students’ test results from reading and math assessments three times during the school year. The teachers used supplemental assessments to gauge students’ progress. In contrast, one teacher from Benford stated, “to be honest, that ThinkLink, I rarely use that information because kids are so tested out.” Benford teachers’ preference is to use multiple methods of assessments to inform their instructional practices. When teachers use different data sources to examine student assessment data, in other words by triangulating data, they can deepen their understanding of strengths, weaknesses, and misconceptions of students’ struggles in reading. According to Boudett, City, and Murnane (2005), “triangulating your findings from multiple data sources, that is, by analyzing other data to illuminate, confirm, or dispute what you learned through your initial analysis, you will be able to identify your problem with more accuracy and specificity” (p.90).

From the Abrams et al. (2003) study, teachers reported “pressure to raise test scores encourages them to emphasize instructional and assessment strategies that mirror the content and format of the state test, and to devote large amounts of classroom time to
test preparation activities" (p.18). The teachers at Benford acknowledge the pressure that state tests create and the impact they have on the students. The teachers at Benford are different in their reaction in how it impacts their instruction in comparison to the teachers in the Abrams study. The middle school teachers take more of a balanced approach to delivering their instruction, and they did not express devoting large amounts of time to test preparation activities. Benford teachers use both formative and summative assessments. Black and William (1998) found that formative assessments yield higher student achievement as reflected in summative assessments. Teachers are able to provide feedback to students on a consistent basis using formative assessments. The classroom assessment theory has two major forms of feedback teachers use with their students to convey information, oral and nonverbal, and written feedback (Striggins & Conklin, 1992). In the communication theme, the major finding discovered was that teachers do provide feedback to students on a regular basis regarding how they are doing on assessments. In addition, a teacher stated that they encouraged the students to do their best when completing tests.

It was also found that teachers did not have time to share NYS ELA results with students due to the fact that the results are received late in the school year. Teachers from each grade provide feedback to students regarding their students' performance on tests completed in class. Students are made aware of their strengths and areas in need of improvement and the interventions teachers are applying to specific ELA-deficient skill areas. The teachers discuss with students, "practice ELA exams and the goal...for their students to improve.” In short, this means teachers make it a practice to communicate with students regarding their performance on assessments and get them involved in the
instructional process. Students in intervention programs who struggle with grade-level material are not likely to sit still if the instruction is not engaging. Students need to become involved in their assignments, and an effective instruction design incorporates adolescents’ personal interests (Fisher and Ivey, 2006).

What is interesting is that teachers expressed not being able to discuss NYS results with the students in the current school year due to the late arrival of the results. In one of the focus groups, the teachers felt the January administer date by the state was a conflict with the school’s holiday break and “wished that the ELA test was taken later in the year.” In fact, if this was to happen, then the result of the ELA state exams might arrive even later to the school district, administrators, and teachers. The NYS results are used for strategic planning, goal setting, and placement of students in programs, such as academic intervention services (AIS). Striggins and Conklin (1992) claim that classroom assessments are interpersonal activities and they play a role in the teachers’ perceptions of students’ attributes (i.e., ability to learn, willingness to learn, rate of achievement, study skills, and amount of test anxiety).

The major finding from the student perceptions theme was that teachers strongly feel “students are over-tested” and “bombarded with tests.” The teachers expressed that students are tested throughout elementary into high school, and the students “are tired of being tested” and “don’t take them seriously.” The students view tests as “not fun and boring.” The teachers agreed that “there is a lot of stress and pressure associated with students taking standardized tests.” This indicates that teachers perceive the testing demands on students to be a burden and suggests that the process of testing does not always allow teachers the freedom and creativity they want to have in their instructional
practices. This can develop when a greater emphasis is placed on test preparation materials rather than teachers having the opportunity to use creative and authentic teaching methods (Abrams, Pedulla & Madaus, 2003). Teachers set the tone and environment of testing in their classrooms; thus, the atmosphere plays a role in how students perceive assessments and the preparation behind getting them ready for state and other assessments. When students sense the teachers’ frustrations with the testing process, it is likely that students will inherit the same feelings as their teachers. Behaviors exhibited by the teachers around testing, whether positive or negative, have an impact on students’ perceptions. Teachers need to be aware of assessment policies established by school districts, which govern or constrain assessment practices and procedures. These assessment policies can influence the way teachers use and view their classroom assessments (Striggins & Conklin, 1992).

Lastly, the theme of 21st Century preparation revealed that teachers do not feel tests prepare students for the 21st century. There were two teachers who supported testing, stating that it helps students with becoming “better readers and writers.” A teacher noted, “I don’t necessarily feel that any test, paper-pencil, on the computer, anything is going to prepare you for the real world.” One teacher stated that, “tests are not particularly representative of anything they’re going to have to do in the real world.” Another teacher stated, “I don’t know if the test itself is really preparing them for the 21st Century in any long term meaning.” What this data supports is the frustration teachers have expressed behind standardized testing and perhaps wondering why are they being held accountable for administering these tests and adjusting our teaching practices to “teach to the test.” Abrams, Pedulla and Madaus (2003) found that high-stakes, state-
mandated testing programs can lead to instruction that contradicts teachers’ viewpoints of sound educational practices. This finding suggests that state tests have a more powerful influence on teaching practices than content standards. Therefore, building leaderships must listen to the perceptions of teachers and provide support in their efforts to produce balance in teaching and assessing students.

In regards to the *ThinkLink Predictive Assessment System* implemented in the Benford School District, the predictive assessment results did indicate successful predictions at grades six, seven, and eight at the middle school. In comparison, Silbergliett and Hintze (2005) used a formative assessment system called Curriculum-Based Measurement-Reading (CBM-R) with 2,191 students from five rural and suburban districts in Minnesota to monitor reading progress of students over time. The authors found that CBM-R was a strong tool for predicting student success on the Minnesota state-mandated assessment. In contrast, Brown (2007) reported in a study of a Mid-Atlantic school that the middle school was in a crisis as a result of the annual state assessment. The school failed to meet adequate yearly progress and their scores in reading were the lowest in the county. The school district purchased a comprehensive, computer-assisted instruction program targeting reading skills; however, the assessment system failed to predict accurate student achievement.

**Implications for Practice**

Based on this study, I would suggest that the Benford Central School District Middle School Administrator’s continue to use the *ThinkLink Predictive Assessment Systems* and conduct further evaluation of the effectiveness of the system. Also, the administrators will need to incorporate the feedback teachers have expressed in the
teacher survey and focus group discussions. In my role as the assistant principal, I would continue working with the teachers during the 2009-10 school year to gain additional data to further evaluate ThinkLink. This additional information will allow a decision to be made regarding the continued use of ThinkLink after it is evaluated another school year (2009-10). It is evident from the data presented in the Chapter 4 grade level ThinkLink and NYS assessment results that the predictions were exceeded, with the exception of the grade eight Test C. Therefore, ThinkLink has served the purpose to produce fairly accurate predictions. The Silberglitt and Hinite (2005) study showed that a formative assessment system called Curriculum-Based Measurement-Reading (CBM-R) was used to monitor reading progress of students over time. The authors found that CBM-R was a strong tool for predicting student success on the Minnesota state-mandated assessment, “with a moderate to high degree of predictive and concurrent validity, as well as moderate to high degree of diagnostic accuracy” (p. 319). ThinkLink could benefit from similar findings in the Silberglitt and Hinite (2005) study. However, the teachers at Benford, according to their own self admissions, used ThinkLink sometimes. Based on teacher responses from the survey and focus groups, teachers’ use of ThinkLink is inconsistent, and thus, the use and the value of the system for driving instruction is inconclusive. Teachers indicated that there were parts of ThinkLink that were more beneficial than other parts.

ThinkLink should be altered based on the teachers’ responses from the survey and the focus group discussions. The primary concern of teachers regarding ThinkLink was the assessment probes. As indicated in the findings, in the comment section of question 2, the teachers expressed many concerns with the ThinkLink practice probes. A majority of
the teachers (90%) from the survey mentioned that the probes were not beneficial in one way or the other. The assessment probes are different than the ThinkLink Test A, Test B, and Test C for each grade level assessment (that mirrors the state exam). The assessment probes are additional test questions offered by ThinkLink to measure students’ performance in particular skill areas. The teachers enter into the system and select the probes that are aligned to the skills that the students had difficulty with, indicated by the results from Tests A, B, or C. Once teachers have used all the supply of test probes offered by ThinkLink, they begin to repeat using the same test probes, and there is no variety to further assess students in a particular skill area; herein lies the problem.

I suggest that middle school teachers discontinue using the current ThinkLink assessment probes due to the ineffectiveness from the teachers’ viewpoints. Therefore, I recommend that the Benford middle school teachers develop an abundance of formative assessment probes for each grade level that align with the NYS ELA exam, administer them to our middle school students (testing the effectiveness of the probes), and send sample protocols to the ThinkLink Discovery Education as suggested future use. Black and William (1998) in their research review concluded that formative assessments yield higher student achievement as reflected in summative assessments. If this is the case, then what kinds of improvements in classroom assessment practice are likely to yield the greatest gains in student achievement? The authors reported that “improved formative assessment helps low achievers more than other students and so reduces the range of achievement while raising achievement overall” (p. 21). Furthermore, Wayman, Midgley, and Stringfield’s (2005) study showed that formative assessments were given more
frequently by teachers and were intended to guide planning, instruction, and daily practice.

A second recommendation is that teachers make changes to the *ThinkLink* worksheets and use the worksheets to develop student groups. On the survey, teachers asked the following question: Are *ThinkLink* Worksheets beneficial in creating student groups according to skill areas? Sixty-seven percent of the teachers’ responses were found in the *Neutral* and *Disagree* categories. This is another aspect of the *ThinkLink* system that should be altered to address the instructional concerns of teachers, thereby meeting the instructional needs of students with greater efficiency. Teachers should incorporate their own expertise in determining what the content and the format of the worksheet looks like for planning instruction. In the Stone, Brace, and Hursh (2007) study, *ThinkLink* was used to test students’ reading skills. According to the authors, decisions were made by teachers regarding the skills to teach and the procedures to use on the basis of student progress data. Student groups were formed on the basis of the data, and teachers developed plans for each student who did not reach the proficiency level on the assessments.

The third recommendation is that the use of multiple assessment methods continues and teachers share the most effective ELA assessments methods across and among grade levels. I commend our teachers for their judgment in using multiple assessment methods. The administrative body does not want the teachers to put all their eggs in one basket. It is preferred that they use various assessments to determine the needs of our students. In addition to the use of *ThinkLink*, teachers use common assessments at each grade level, district assessments, summative, and formative
assessments to assess student achievement, discover precisely the needs of the students, and guide their instructional practices. According to Boudett, City, and Murnane (2005), "triangulating your findings from multiple data sources, that is, by analyzing other data to illuminate, confirm, or dispute what you learned through your initial analysis, you will be able to identify your problem with more accuracy and specificity" (p. 90).

The fourth recommendation is for Benford leadership to provide additional professional development for teachers who have professed not using ThinkLink for one reason or another. This training will provide the teachers a more in-depth view of what the system offers. The training will also assist teachers who responded on the survey with Unaware of Report. Benford teachers can work in collaborative groups during the ThinkLink training to discuss the data, share their perceptions, and determine how to apply the information in their instruction. It is important that teachers are provided with opportunities to work collaboratively with data. Wayman, Midgley, and Strignfield (2005) reported that the "relationship between data use and collaboration is reciprocal: data initiatives are more likely to be successful if teachers are allowed to learn and work collaboratively, and the use of data helps foster constructive collaboration" (p. 3). The teachers indicated they did not use ThinkLink sends an inconsistent message to the staff, which is that using the ThinkLink system is optional, and this certainly is not the case. The district's expectation is that teachers will use ThinkLink as a tool to assist in forming teaching instruction and as a predictor to assist in determining how students will perform on the NYS ELA exam. It is important that the administrators re-address the purpose and intent of using or continuing to use ThinkLink in order to gain buy-in and to get everyone on the same page. Benford administrators will need to clarify the intent of the ThinkLink
data while encouraging all teachers to use the system to assist them with students who are struggling in ELA. Kerr, Marsh, Ikemota, Darilek, and Barney (2006) found that teachers were encouraged by administrators to use student achievement data to identify skills or standards students performed poorly on, and it was expected that teachers modify their instructional practices or re-teach the skills or standards that were problematic. These measures were expected from teachers in order to assist students in reaching proficiency on exams.

I recommend that the educators at Benford conduct an internal examination of the district curriculum, standards, and assessment methods used in grade eight. The purpose is to re-visit the content and skills students are being taught and compare them with the NYS requirements for eighth-grade students. It appears that our eighth-grade students had the most difficulty in meeting proficiency, scoring at levels 3 and 4 on the NYS ELA exam. This is important due to the inconsistent eighth-grade tests results shown in Table 4.7. On Test A, 74% of the eighth-grade students were scoring at levels 3 and 4, dropping to 58% on Test B, increasing to 73% on the NYS ELA, and finally dropping to 64% on Test C. The teachers should work in collaborative groups to examine the assessments in order to enhance their knowledge about this situation. Webb (2002) reported in a study of assessment literacy in the Milwaukee Public Schools that the author had seen the strong impact that middle school proficiencies have had on staff in the middle schools, which contributed to the collaborative work of staff within the schools. In addition to examining the eighth grade scores, tracking student's cohorts could provide a more in-depth view of how students are actually performing in reading from grade-to-grade. Teachers should
focus on the individual development stages and growth in literacy to determine how successful students are in each cohort.

**Implications for Policy**

There is a perception that there is an adolescent literacy crisis. Jacobs (2008) suggests thinking of reading as a series of stages, placing the adolescent literacy crisis in a different light. It becomes more of a challenge at certain points of development and we are "to proceed not out of alarm but, rather, with studied concern that acknowledges and builds on research and practice of predecessors" (p. 24). Furthermore, Jacobs (2008) implies that the literacy has been constructed by a culture of educational testing. Based on this study and the work conducted in the Benford Central School District, the data indicates that if we look at teacher practices and the success of students, there is no literacy crisis in the district. However, if we focus only on test scores, the eighth grade students are certainly in a crisis. Therefore, if we conclude that literacy achievement is accurately measured by testing, then the eighth grades are in a crisis, but not the sixth and the seventh grade students in Benford. The literature review section in this study questioned the construct of testing and if we question the construct of the adolescent literacy crisis, and if we believe in our teachers, then this implies that there is no literacy crisis in Benford.

School districts are under great pressure to show proficiency in adequate yearly progress (AYP) for all students. The NCLB Act requires states to display annual yearly progress in raising the proficiency levels of students in reading (Harrison-Jones, 2007). The law also requires "all students in grades 3 through 8 in each racial, ethnic, and socioeconomic group...to be proficient in...reading by 2014" (Harrison-Jones, 2007).
The AYP indicates satisfactory progress by a district or a school toward the goal of proficiency for all students on standardized, standards-based assessments. If all school districts are required by law to show student proficiency only through standardized assessments, then for school districts like Benford, the NCLB law does not take in consideration the varied approaches to measuring the achievement of students in reading. This implies that although the law was established to ensure that all students become proficient in reading, it negates the creative, authentic, and multiple assessment methods teacher’s use to assess student learning in English language arts. The teachers at Benford use multiple assessments to gauge where students are and to determine what students needs are in reading. For example, the teachers use common grade level assessments, aligned curriculum, rigorous instruction, and data from a number of sources to drive instruction.

Recommendations for Future Research

Teachers must be provided with adequate assessment training to address the academic needs of student’s. Few teachers have had formal training or experience in analyzing and interpreting data or using assessment results for program change and instructional decision making (Bernhardt, 2000; Cizek, 2000). The critical point is that data assessment training is necessary prior to teachers entering into a classroom in order to made effective instructional decisions. I recommend that a research study is conducted involving teacher education programs to examine the type of assessment training teachers are provided in colleges. According to the teachers in this study, it appears to be a lack of “how to use assessment data to drive instruction.” The majority of teachers indicated that
their college courses were limited in the use of data assessments and some of the general education teachers stated that they “did not have data assessment training” in college.

I recommend that an examination of the ThinkLink Predictive Assessment System formative assessments be conducted at each grade level (with a particular focus at eighth grade). I further recommend that the district compares the teacher-initiated assessments to the NYS ELA test requirements and standards. This would be an important and valuable course of action to take; in fact, if this examination was conducted and it was found that the teacher-initiated assessments were just as predictive as ThinkLink, this could save the district considerable money. It could result in the district discontinuing the use of ThinkLink completely and relying on teacher assessments to make predictions on how successful students will be on the state exams.

I recommend that ThinkLink expand their database, providing educators with a greater selection of assessment probes. The probes should range in level of difficulty and aim at assisting educators in the interim assessment of students’ skills. This is important for teachers after they have identified particular deficit skills of students based on the ThinkLink assessments results. They should have access to a large quantity of quality probes for each skill area students are expected to master on the NYS ELA. These probes should be engaging and meaningful; this means students need to be cognitively engaged in the text (or test questions) and understand its meaning. When teachers use effective interventions (and test methods), this will help students with the process of reading, writing, listening, and thinking about the meaning of texts (Fisher and Ivey, 2006). I also recommend that the ThinkLink worksheets designed to help form student groups based on proficiency levels are re-visited. Only a third of middle school teachers expressed that the
worksheets were beneficial. This instrument should assist teachers with the remediation process, which begins with the effectiveness of forming flexible instructional groups. The Benford teachers use the revised worksheets to create groups that are more aligned to the deficient skill areas shown in the grade level data and provide them with extra support. In the Christenson et al. (2007) study, the students who did not master certain standards were provided with extra support through flexible groups, and as a result, student achievement scores increased 2.2% for all students in one year.

Another recommendation is that the ThinkLink should examine Test B and Test C at the eighth-grade level and re-evaluate the alignment to the ELA state exam. In reviewing the Benford student results, I was gravely concerned with the percentage of students predicted at proficiency levels 3 and 4 at grade eight. On the ThinkLink Test A, 73% scored at levels 3 and 4, and Test B results showed a decline with 57% scoring at levels 3 and 4. The actual NYS ELA results revealed the eighth-grade students exceeding the predictions with 73% scoring at levels 3 and 4. The final ThinkLink assessment, which was Test C, showed 64% of the students scoring at levels 3 and 4. The inconsistency of the results indicates that there may be degrees of difficulty related to the assessments and the alignment of the tests to the NYS standards. It is important that ThinkLink assessments are accurately aligned with the state assessments and predictions are reliable; this is the reason why school districts purchase predictive assessment systems. In the Brown (2007) study of a Mid-Atlantic middle school, the district purchased a comprehensive, computer-assisted instruction program targeting reading skills, but the assessment system failed to predict accurate student achievement. Thus, the
recommendation is made for ThinkLink to investigate Test C in order that it is not perceived as a failing assessment item in which accurate predictable is questionable.

I also recommend another study is conducted on the effectiveness of ThinkLink prediction rate and success rate of students by researching other school districts’ use of this system since the completion of the current research presented in this study. This is important because when I began conducting research on ThinkLink, it was a relatively new system and there were limited studies on ThinkLink. In comparison with ThinkLink's ability to measure student growth, research indicates there are other assessment programs, such as QuickSmart (Graham, Bellert, Thomas, and Pegg, 2007) and the Balance Assessment System (Webb, 2002) that teachers successfully used to measure student achievement. According to Stiggins and Duke (2008) “assessment systems must provide a variety of decision makers with a variety of different kinds of information in different forms at different times to support or to verify student learning” (p. 287), which is critical to leaders assisting teachers with assessment decision making.

It is extremely important to incorporate the voices of the student’s when making decision regarding their learning and how they are assessed. I recommend that student focus groups are conducted in order to gain student perceptions on testing and the use of assessment data in the classroom. The teachers in this study support the need to include students in the classroom assessment process and most teachers strongly feel “students are over-tested” and “bombarded with tests.” The student’s voices will offer another viewpoint to the testing environment and reveal the role students feel they have in the assessment decision making process.
Based on the worth of this study, I recommend that Benford leadership and other practitioners in the field of education examine their role as effective assessment leaders and make the necessary adjustments to ensure that they are well equipped to support teachers in their use of assessments to improve learning. It is important for instructional leaders to provide teachers with what you expect them to do on behalf of students. Stiggins and Duke (2008) suggest that an effective assessment leader possesses ten leadership competencies in assessment. I recommend Benford leaders and other practitioners to evaluate and measure the attributes to the competencies, and then, take into consideration any changes that are needed. The authors stated that a well-qualified principal:

Understands the principles of assessments for learning and works with staff to integrate them into classroom instruction. [The leader] understands the necessity of clear academic achievement targets and their relationship to the development of assessments. [The principal] knows and can evaluate the teacher’s classroom assessment competencies and helps teachers learn to assess accurately and use the results productively. [In addition], can plan, present, or secure professional activities that contribute to the use of sound assessment practices. [The leader] accurately analyzes student assessment information, uses the information, and assists teachers in doing the same. [Also, the leader] can develop and implement sound assessment and assessment-related polices. Creates the conditions necessary for the appropriate use and reporting of student achievement information, and can communicate effectively with all members of the school community about assessment results and their relationship to improving
curriculum and instruction. [Furthermore, they] understand the standards of quality for student assessments and how to verify their use in their school/district assessments [as well as] the attributes of a sound and balanced assessment system. [Lastly, leaders] understand the issues related to the unethical and inappropriate use of student assessment and protects students and staff from such use (p. 287).

The final recommendation is that teachers apply the same leadership competencies mentioned in the statement above. Teacher should inherently possess these competencies (as they related to the teacher), it is important that they move forward in becoming distinguished educators and teacher leaders in the use of assessments. The teachers in this study provided valuable information regarding the use and experiences with assessments. This applies to the use of formative and summative assessment methods and how they impact the classroom practices of teachers to assist students who are struggling with ELA concepts.

Conclusion

The purpose of this study was to discover whether Benford Middle School teachers are using the predictive assessment system to inform their instructional practices that will positively impact achievement performance of struggling students in English Language Arts (ELA). Teachers’ general feelings about classroom assessments, including ThinkLinks’ quality and usefulness was examined. The teachers expressed their use of the ThinkLink System and experience with it in the survey and focus groups, and common themes emerged: (a) assessment training, (b) assessment philosophy, (c) assessments driving instruction, (d) assessment methods, (e) modifying instruction, (f) communication with students, (g) students' perceptions, and (h) 21st century preparation.
Findings in the Study

There are four major findings in this study. To begin with, ThinkLink was used by middle school teachers to identify skills and provide remediation to students. Secondly, ThinkLink predicted ELA scores with accuracy between 80 and 90%. However, the third finding showed that the predictive element had little or no value to more than a third (39%) of the teachers. Finally, the middle school teachers use a range of assessment methods for informing instructional practices.

Philosophy of Assessment

Educational assessment is an integral part of a student’s educational experience from primary to secondary grade levels. The primary goal of assessing students is to improve the students learning performance. Therefore, instructional leaders and teachers need to be equipped with the knowledge and skills necessary to create, administer, and interpret assessments. Both summative and formative assessments should be used in conjunction with any additional information about a student. When educators triangulate their findings from multiple data sources, they will be able to discover with greater accuracy the needs of the students. In order to increase students’ performance in English languages arts, multiple assessments are necessary. The ThinkLink System appears to be a useful instrument to predict how students might perform on the NYS ELA exam. This system, based on teachers’ perceptions in this study, serves as a tool to identify deficit skill areas in ELA. However, specific recommendations were offered to enhance the overall efficiency of ThinkLink in order to be of greater use for the teachers.

Administrators, teachers, parents, and students working as a collaborative team will
create an environment that supports lifelong learning through the assessment and evaluation process for students.

*Teachers Use of Assessments*

In this study, the middle school teachers use a range of assessment methods for informing instructional practices. The purpose of teachers using various assessment methods is to focus on how students learn best. The assessment process is an essential part of teacher practices and what is done everyday in their classroom. These are classroom practices that involve both the teacher and the student discussing assessment results and learning outcomes. Furthermore, teachers use assessments as a communication tool, which promotes understanding of test criteria and setting goals. Teachers use assessments to plan effectively by identify students' strengths and areas in need of improvement. After the student skills have been identified, teachers modify instruction practices to promote individual growth in ELA for students who are struggling. Overall, assessments are used to discover what students know and to help students learn more.
References


Appendix A

Jacob's report of Response to the Adolescent Literacy Crisis

**Sample Responses to the Adolescent Literacy Crisis**

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
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<tbody>
<tr>
<td>1997</td>
<td>IRA's Reading Initiative established</td>
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<tr>
<td>1998</td>
<td>Vaclav's &quot;Let's Not Marginalize Adolescent Literacy&quot;</td>
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<td>1999</td>
<td>IRA / Moore, Beae, Birdshaw, &amp; Hycka's Adolescent Literacy: A Position Statement for the Commission on Adolescent Literacy of the International Reading Association</td>
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<td>2000a</td>
<td>IRA's Excellent Reading Teachers: A Position Statement on Adolescent Literacy</td>
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<td>2000b</td>
<td>IRA'S Teaching All Children to Read: The Roles of the Reading Specialist</td>
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<td>2002</td>
<td>RAND / Snow’s Reading for Understanding: Toward a Research and Development Program in Reading Comprehension</td>
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<td>2004a</td>
<td>The Alliance for Excellent Education’s Reading for the 21st Century: Adolescent Literacy Teaching and Learning Strategies</td>
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<tr>
<td>2004b</td>
<td>The Alliance for Excellent Education’s How to Know a Good Adolescent Literacy Program When You See One: Quality Criteria to Consider</td>
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<td>2004</td>
<td>Carnegie Corporation / Biancara &amp; Snow’s Reading Next: A Vision for Action and Research in Middle and High School Literacy</td>
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<td>2004</td>
<td>NCTE’s Guidelines: A Call to Action. What We Know about Adolescent Literacy and Ways to Support Teachers in Meeting Students’ Needs</td>
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<td>2004</td>
<td>NEA’s Reading at Risk</td>
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<td>2004</td>
<td>Striving Readers funded</td>
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<td>2005a</td>
<td>Alliance for Excellent Education’s Adolescent Literacy: Opening the Doors to Success</td>
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<td>2005b</td>
<td>Alliance for Excellent Education’s Adolescent Literacy Policy Update</td>
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<td>2005</td>
<td>Carnegie Corporation / RAND / McCombs, Kirby, Barney, Darilek, &amp; Magee’s Achieving State and National Literacy Goals: A Long Uphill Road.</td>
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<td>National Governors Association Center for Best Practices’ A Governor’s Guide to Adolescent Literacy</td>
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<td>Snow, Griffin, &amp; Burns’s Knowledge to Support the Teaching of Reading: Preparing Teachers for a Changing World</td>
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<td>NAEP / NASBE Study Group on Middle and High School Literacy’s Reading at Risk: The State Response to the Crisis in Adolescent Literacy.</td>
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<td>NCTE’s Position Paper on the Role of English Teachers in Educating English Language Learners</td>
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<td>NCTE’s Principles of Adolescent Literacy Reform: A Policy Brief</td>
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<td>NEA’s To Read or Not to Read: A Question of National Consequence</td>
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Appendix B

Class Summary Report

Class and Grade Summary Report

Color Coded Objectives:
Red = Not Proficient
Yellow = Proficient
Green = Advanced

Proficiency is specific to each reporting category.
Appendix C

Student Report

Student Report

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<th>Individual students within class</th>
<th>Proficiency level by student</th>
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<td>Student performance on each reporting category</td>
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<td>2</td>
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<tr>
<td>Perez, N</td>
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<td>3</td>
<td>2</td>
<td>4</td>
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<td>Thompson, M</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>2</td>
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<td>Anderson, C</td>
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<td>3</td>
<td>1</td>
<td>4</td>
<td>3</td>
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<td>Smith, D</td>
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<td>3</td>
<td>2</td>
<td>4</td>
<td>3</td>
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<tr>
<td>Wilson, E</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>2</td>
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</tbody>
</table>
Appendix D

Student Sub-skill Report (A)

### Student Subskill Report (A)

**School:** Albion Elem

<table>
<thead>
<tr>
<th>Test Code</th>
<th>(18 students)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher</td>
<td>Bonnie Baldwin</td>
</tr>
<tr>
<td>Class</td>
<td>Baldwin Grade 5</td>
</tr>
<tr>
<td>Grade</td>
<td>Grade 5</td>
</tr>
<tr>
<td>Subject</td>
<td>Reading/English Arts</td>
</tr>
</tbody>
</table>

#### Question Number

| Question Number | 6 | 7 | 8 | 9 | 10/20/30/34 | 11 | 12 | 13/14 | 15/16 | 17/18 | 19/20 | 21 | 22 | 23 | 24 | 25 | 26 | 27/28 | 29/30 | 31/32 | 33 | 34/35 | 36/37/38 |
|----------------|---|---|---|---|-------------|---|---|------|------|------|------|------|---|---|----|---|---|---|------|------|------|---|------|---------|
| State Code     |   |   |   |   |             |   |   |      |      |      |      |      |   |   |    |   |   |   |      |      |      |   |      |       |

#### Correct Answer

<table>
<thead>
<tr>
<th>Correct Answer</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
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<tr>
<td>Allen, S</td>
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<td></td>
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<tr>
<td>Aran, A</td>
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<td></td>
<td></td>
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<td>Arnold, D</td>
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<tr>
<td>Angrish, Y</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Blanche, E</td>
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<td>Blackmon, D</td>
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<td>Dumarde, A</td>
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<td>Fennell, J</td>
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<td>Finneyer, R</td>
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<td>Graham, E</td>
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<td>Reid, R</td>
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<td>Rivets, C</td>
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<td>Rosato, M</td>
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<tr>
<td>Scottsford, J</td>
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<td>Voyg, D</td>
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#### Total Number Correct

<table>
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<th>18</th>
<th>25</th>
<th>25</th>
<th>25</th>
<th>25</th>
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#### Test C of ABE (18 students)
Appendix E

Objectives and Sub-skill Report

Objective Report

State Curriculum Code, Standard, Sub-skill

<table>
<thead>
<tr>
<th>Item</th>
<th>Difficulty Level</th>
<th>Color Coding Indicates Overall Class Proficiency by Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 1</td>
<td>Easy</td>
<td>Red and Green indicate proficiency levels</td>
</tr>
<tr>
<td>Item 2</td>
<td>Medium</td>
<td>Yellow and Blue indicate proficiency levels</td>
</tr>
<tr>
<td>Item 3</td>
<td>Hard</td>
<td>Orange and Purple indicate proficiency levels</td>
</tr>
</tbody>
</table>

Item difficulty level

Color coding indicates overall class proficiency by item
Appendix F

Answers Report

Answer key

Actual Student Response

Growth Score indicates estimated percentage of skills mastered at grade level for each student.
Appendix G

Individual Student Report

Great for Parent Conferences, Tutors, IEPs and Student Files

Description of reporting categories

Compare across multiple test periods

Report shows student Proficiency for each assessment across all reporting categories

Proficiency and Growth Score Data

Individual Student Report

<table>
<thead>
<tr>
<th>Skills</th>
<th>Test 1</th>
<th>Test 2</th>
<th>Test 3</th>
</tr>
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<tbody>
<tr>
<td>RL Info</td>
<td></td>
<td></td>
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<tr>
<td>RL Express</td>
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<td></td>
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<tr>
<td>RL Anal</td>
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<td>RL Test</td>
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<td></td>
</tr>
<tr>
<td>WR Info</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WR Express</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WR Anal</td>
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</tr>
<tr>
<td>WR Test</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Core Reading</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Core Writing</td>
<td></td>
<td></td>
<td></td>
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</table>

Reading/Lang Arts

<table>
<thead>
<tr>
<th>Subtest</th>
<th>Test 1</th>
<th>Test 2</th>
<th>Test 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reader Correct</td>
<td>2</td>
<td>15</td>
<td>2</td>
</tr>
<tr>
<td>Parent Correct</td>
<td>94</td>
<td>13</td>
<td>96</td>
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<tr>
<td>Proficiency Score</td>
<td>80</td>
<td>60</td>
<td>80</td>
</tr>
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</table>
Appendix H

Assessment Worksheet and Planning Guide

Assessment Worksheet and Planning Guide

Teacher: ____________________  Subject: ____________________  Term: ________  Qtr. ________  Date ________

ThinkLink Administration: Test P _____  Test A _____  Test B _____  Test C _____

Student Report (list student names in appropriate levels)

| Level 1: | ____________________________________________ |
|__________|__________________________________________|
|__________|__________________________________________|
|__________|__________________________________________|

| Level 2: | ____________________________________________ |
|__________|__________________________________________|
|__________|__________________________________________|
|__________|__________________________________________|

| Level 3: | ____________________________________________ |
|__________|__________________________________________|
|__________|__________________________________________|
|__________|__________________________________________|

| Level 4: | ____________________________________________ |
|__________|__________________________________________|
|__________|__________________________________________|
|__________|__________________________________________|

Class Summary Report (identify skills upon which you will focus)

<table>
<thead>
<tr>
<th>Skill</th>
<th>1)</th>
<th>2)</th>
<th>3)</th>
<th>4)</th>
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</thead>
</table>

Objective Report (identify items in each skill)

<table>
<thead>
<tr>
<th>Items</th>
<th>Color (R/Y/G)</th>
<th>Difficulty (E/M/H)</th>
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<tr>
<td></td>
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Sub-skill Concerns

<table>
<thead>
<tr>
<th>Instructional Objective:</th>
<th>Instructional Objective:</th>
<th>Instructional Objective:</th>
<th>Instructional Objective:</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</table>

Login Codes:  

*Indicates at-risk, advanced, or main stream students needing identified assistance.
Appendix I

Assessment Worksheet: By State Proficiency

AL, FL, IL, MS, NY

ASSESSMENT WORKSHEET: By State Proficiency

Teacher Name: ________________________  Class Name: ________________________

ThinkLink Administration:  Test 1: ________  Test 2: ________  Test 3: ________

Class Summary Report: Identify skills upon which you will focus

<table>
<thead>
<tr>
<th>Subject</th>
<th>Skill</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</table>

Student Report: List names in appropriate levels

<table>
<thead>
<tr>
<th>Color</th>
<th>Red</th>
<th>Yellow</th>
<th>Green</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

Objective Report: Identify items in each skill

<table>
<thead>
<tr>
<th>Question</th>
<th>Color</th>
<th>Difficulty</th>
<th>Subskill Concerns</th>
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</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

Student Subskill Report: Identify proficiencies

<table>
<thead>
<tr>
<th>Not Proficient</th>
<th>Partially Proficient</th>
<th>Proficient</th>
<th>Advanced</th>
</tr>
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<tbody>
<tr>
<td></td>
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</table>

Student Subskill Report: Answer Patterns

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</table>
Appendix J

Assessment Worksheet: Using the Reports by Student

Discovery Education Assessment

Using the Reports by Student

<table>
<thead>
<tr>
<th>Teacher Name:</th>
<th>Class Name:</th>
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**Benchmark Administration:** (circle)

<table>
<thead>
<tr>
<th>Test 1</th>
<th>Test 2</th>
<th>Test 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Student of concern:**

<table>
<thead>
<tr>
<th>Subject:</th>
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<tbody>
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</table>

**Why was this student selected?**

<table>
<thead>
<tr>
<th>Number correct:</th>
<th>Benchmark Administration: (circle)</th>
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</thead>
<tbody>
<tr>
<td>Test 1</td>
<td>Test 1</td>
</tr>
<tr>
<td>Test 2</td>
<td>Test 2</td>
</tr>
<tr>
<td>Test 3</td>
<td>Test 3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proficiency Range:</th>
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<tbody>
<tr>
<td>Test 1</td>
</tr>
<tr>
<td>Test 2</td>
</tr>
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<td>Test 3</td>
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</table>

<table>
<thead>
<tr>
<th>Grade +% Correct:</th>
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</thead>
<tbody>
<tr>
<td>Test 1</td>
</tr>
<tr>
<td>Test 2</td>
</tr>
<tr>
<td>Test 3</td>
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<table>
<thead>
<tr>
<th>Skill Concern:</th>
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</thead>
<tbody>
<tr>
<td>Test 1</td>
</tr>
<tr>
<td>Test 2</td>
</tr>
<tr>
<td>Test 3</td>
</tr>
</tbody>
</table>

**Identify # of NCLB Subgroups**

<table>
<thead>
<tr>
<th>Objective Report Information:</th>
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</thead>
<tbody>
<tr>
<td>Question #</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Find new strategy using websites listed on Skills/Tools

Create Practice Probe for this student

List student login code:
Appendix K

Focus Group Protocol

Classroom Assessment
Proposed Focus Group Protocol

In addition to the ThinkLink Learning Teacher Survey, the researcher wanted to gain a greater understanding of the practices of classroom assessment through the Focus Group participants. The questions below are proposed focus group protocol questions. These questions will be revised and probes will be added once data is received and completed from the survey.

The researcher will be holding focus groups of participants in the study, which includes the ELA classroom teachers, Academic Intervention teachers (AIS), and Special Education teachers (SPED). The focus groups will be facilitated by someone other than the researcher, the school psychologist, at each grade level.

**Question #1**

Tell me about your experiences, if any, of using assessments to inform your ELA instruction at Albion Middle School.

Probe #1: What can you tell me about the ELA assessment methods, if any, used by Albion Middle School teachers?

Probe #2: What can you tell me about the purposes, if any, for which Albion Middle School teachers use classroom assessments for ELA instruction?

**Question #2**

What has been your background preparation, if any, for using assessments to inform your instruction?

Probe #1: Tell me about the assessment training that you received, if any, in college, for using assessment data to inform instruction?

Probe #2: Tell me about the assessment training that you received, if any, through professional development, for using assessment data to inform instruction?

Probe #3: What is your philosophy regarding using assessments to inform your ELA instruction?

**Question #3**

What can you tell me about the quality, if any, of assessments used by teachers to inform instruction at Albion Middle School?

Probe #1: What can you tell me about the criteria that teachers use, if any, for selecting assessments to inform instruction?
Question #4

Tell me about how Albion Middle School teachers provide feedback, if any, to students regarding student performance on ELA assessments?

Probe #1: Tell me how you think students perceive the assessments that are administered to them to monitor their progress in ELA content at Albion Central School?

Probe #2: How do the ELA assessments used at Albion Middle School prepare students, if at all, for the 21st Century?

Question #5

Is there anything else you would like to say about ELA assessments used at Albion Middle School to inform your instruction?
Appendix L
Teacher Survey

ThinkLink Learning Survey

By completing the survey, you are giving consent for this data to be used for purposes of research explained in the accompanying letter. No identifying marks will be associated with your responses in order to protect your anonymity.

Please answer the following questions based on your experiences in using ThinkLink Learning. Your honest answers will provide the researcher with valuable information regarding the usefulness of ThinkLink.

ThinkLink Reports
Note: Very Often (more than 8), Often (4-7 times), Sometimes (1-3 times), Never (0)

1. ThinkLink offers the following reports, how often have you used them in this School Year / 2008-09?

   a. The Class Summary Report
      - Very Often
      - Often
      - Sometimes
      - Never
      - Unaware

   b. The Objective Report
      - Very Often
      - Often
      - Sometimes
      - Never
      - Unaware

   c. The Answers Report
      - Very Often
      - Often
      - Sometimes
      - Never
      - Unaware

   d. The Individual Student Report
      - Very Often
      - Often
      - Sometimes
      - Never
      - Unaware

   e. The Comparison Report
      - Very Often
      - Often
      - Sometimes
      - Never
      - Unaware

   f. The Student Report
      - Very Often
      - Often
      - Sometimes
      - Never
      - Unaware

   g. The Student Sub-skills Report
      - Very Often
      - Often
      - Sometimes
      - Never
      - Unaware

Provide your comments:
ThinkLink Probes

2. Do you use the Practice Probes?

☐ Very Often ☐ Often ☐ Sometimes ☐ Never

Why or Why not? Provide your comments:

Instructional Purposes

3. The ThinkLink Worksheets are beneficial in creating student groups according to skill areas.

☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

4. The student skills identified on the reports as proficient or not proficient are used to inform instructional practices.

☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

Assessments

5. The ThinkLink assessments are closely aligned with the New York State Curriculum:

☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

6. The ThinkLink assessments are good predictors as to how students will perform on the NY State Exam.

☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

Effectiveness

7. As a result of using ThinkLink, remediation is done more effectively by focusing on identified student skills.

☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

The Efficiency of the Process

8. The process of students taking the test and entering the answers on the computer is effective?

☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

9. The ThinkLink data analysis is returned in a timely manner?

☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

10. The time spent taking the ThinkLink assessments is time well spent.
11. Administrators are supportive of the ThinkLink process.

☐ Strongly Agree  ☐ Agree  ☐ Neutral  ☐ Disagree  ☐ Strongly Disagree

12. If you do not use ThinkLink data, explain why and describe the type of data you do use.

Provide your comments:
## Appendix M

### Grade Level SMART Goals

#### Building Goal

By June 2009, 75% of our students will be proficient in reading comprehension at their grade level.

<table>
<thead>
<tr>
<th>2008-2009 Team Department Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>By June 2009, sixteen 6th grade students from Atison Middle School's categorization (as identified by No Child Left Behind) who scored 70% or below on the Stan Foresman reading placement test will score ten percent higher on the Stan Foresman post test.</td>
</tr>
</tbody>
</table>

**Strategy:**

At least once monthly, teacher will meet with identified students to help them structure what they understand from their reading using a specific Reading in the Content Area strategy. Choices include but are not limited to Plan and Label, Visual Visual, Ed 3 II, QR, and SQ3R.

**Steps to Implement Strategy:**

1. A specific strategy will be used (see examples above) to help students with reading comprehension.
2. Teacher will meet with students (pull out or during class) to evaluate in our progress.
3. Students will be monitored to make sure they apply the strategies to similar tasks.

**Timelines:**

**Incoming:**

- At least once a month from September to June

**Outgoing:**

- Scott Foresman pre-test
- Quarterly reading grades

**Final Assessment Measurement:**

- Scott Foresman post-test

---

#### Building Goal

By June 2009, 75% of our students will be proficient in reading comprehension at their grade level.

<table>
<thead>
<tr>
<th>2008-2009 Team Department Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>By January 2009, sixteen economically disadvantaged students per teacher in 7th and 8th grade English will score ten percent higher on reading comprehension between the initial reading comprehension evaluation and the final grade level score assessment.</td>
</tr>
</tbody>
</table>

**Strategy:**

At least once monthly, teacher will introduce a specific Reading in the Content Area Strategy to help students structure what they understand from their reading; or the teacher will re-teach a strategy students are currently familiar with. Choices include but are not limited to Plan and Label, Visual Visual, Ed 3 II, QR, and SQ3R.

**Steps to Implement Strategy:**

1. A specific strategy will be used (see examples above) to help students with reading comprehension.
2. Teacher will meet with students (pull out or during class) to evaluate in our progress.
3. Students will be monitored to make sure they apply the strategies to similar tasks.
4. After the ELA in January, teachers will continue to reinstate strategies to prepare kids for 8th or 9th grade.

**Timelines:**

**Incoming:**

- At least once a month from September to June

**Outgoing:**

- Practice ELA style reading comprehension tests
- Quarterly grades

**Final Assessment Measurement:**

- 7th or 8th grade NY State ELA Exam.
Appendix N

Grade 6 Test C Reporting Categories

Objectives and Subskills Report
School: Carl V. Bergerson Middle School

<table>
<thead>
<tr>
<th>Test C: 24 Students</th>
<th>Teacher: Grade 6 Pool Grade 6 Pool</th>
<th>Grade: Grade 6</th>
<th>Subject: Reading/Language Arts</th>
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<table>
<thead>
<tr>
<th>Category</th>
<th>Reporting Category</th>
<th>Level</th>
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<tr>
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<td>NY State Reporting Categories</td>
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</table>

<table>
<thead>
<tr>
<th>GI #</th>
<th>Right</th>
<th>Wrong</th>
<th>Grade</th>
<th>Reporting Category</th>
<th>Level</th>
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<tbody>
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<td>82</td>
<td>18</td>
<td>Easy</td>
<td>Reading: Information and Understanding</td>
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</tr>
<tr>
<td>2</td>
<td>104</td>
<td>36</td>
<td>Easy</td>
<td>Reading: Information and Understanding</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>63</td>
<td>37</td>
<td>Easy</td>
<td>Reading: Information and Understanding</td>
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<tr>
<td>4</td>
<td>87</td>
<td>13</td>
<td>Hard</td>
<td>Reading: Information and Understanding</td>
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NY State Reporting Categories:

- Grade 6: Reading/Language Arts
# Objectives and Subskills Report

**School:** Carl I. Bergerson Middle School

**Test C:** Grade 7 Test C Reporting Categories

**Teacher:** Grade 7 Pool Grade 7 Pool

**Class:** Grade 7 Reading

**Grade:** Grade 7

**Subject:** Reading/Language Arts

## Report

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# Appendix P

## Grade 8 Test C Reporting Categories

### Objectives and Subskills Report

**School:** Carl I. Bergerson Middle School

### Test C Reporting Categories

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**Note:** The above table contains the grading criteria for the Grade 8 Test C Reporting Categories. Each subskill is evaluated based on specific criteria, and the level of achievement is indicated for each subskill.