Amanda Schlafke

A Thesis Submitted to the
Graduate Faculty in Partial Fulfillment
of
the Requirements for the Degree of
Master of Science in Education - Reading

Dr. Wendy M. Leppke
Major Sponsor

Dr. James Schick
Program/Department Chair

Dr. Bobbie
Dean, Graduate Studies

University of Wisconsin – Superior
An Analysis of Voyager Passport Reading Intervention Program

Amanda Schlafke,
Summer 2013

A Paper Submitted in Partial Fulfillment
Of the Requirement for a
Masters of Science in Education/Reading
University of Wisconsin - Superior
# Table of Contents

**Title Page:**
An Analysis of Voyager Passport Reading Intervention Program.......................... 4

**Chapter 1: Introduction**
Introduction ............................................................................................................. 5
Problem Statement ................................................................................................. 6
Research Question .................................................................................................. 6
Significances of the Study ...................................................................................... 6
Assumptions ........................................................................................................... 7
Limitations ............................................................................................................. 7
Delimitations ......................................................................................................... 7
Definition of Terms ............................................................................................... 7
Summary .................................................................................................................. 8

**Chapter 2: Review of Related Literature**
Introduction to the Literature Review ................................................................. 9
Oral Reading Fluency ............................................................................................ 10
Voyager Passport Compared to Other Reading Intervention Programs ............. 12
Voyager Passport Research Studies ..................................................................... 14
Voyager Passport Design ...................................................................................... 18
Summary of the Literature Reviewed ................................................................. 20

**Chapter 3: Methodology**
Introduction .......................................................................................................... 22
Participants ........................................................................................................... 22
Instrumentation .................................................................................................... 23
Current Setting in Hayward Primary School ....................................................... 24
Procedure .............................................................................................................. 25
Chapter 4: Presentation of the Data

The amount of time required daily, weekly, and yearly to deliver the program...28

The program meets the districts requirements for a progress monitoring tool, is compatible with CCSS, and is aligned to RTI...29

The program will be culturally appropriate and address the individual learning needs of students...30

Chapter 5: Discussion and Summary of Analysis

Introduction...34

Implications from the data...34

Final Summary...38

References...40

Appendixes

Appendix A- Table 4...43

Appendix B- Table 5...44

Appendix C- Table 1...46

Appendix D- Table 2...47

Appendix E-Figure 3...48

Appendix F- Figure 2...49
An Analysis of Voyager Passport Reading Intervention Program

Amanda Schlafke,

Summer 2013
Chapter 1: Introduction

Introduction

The use of Response to Intervention (RTI) and the Common Core State Standards (CCSS) for English Language Arts (ELA) are making a big impact on detecting early reading difficulties and providing students early intervention services. Students who are responding positively to RTI instruction and intervention service develop the knowledge and skills characteristic of mature, effective readers (Wixson & Lipson, 2012). Deciding what programs to use for intervention services is a difficult and time consuming process. RTI gives schools guidelines for placing students into the three tiers. Tier 1 is considered “on grade level,” the student will receive the Common Core reading instruction from the classroom teacher. Tier 2 is considered “below grade level,” the student will remain in the classroom for the Common Core reading instruction and receive intervention instruction from the classroom teacher. Tier 3 is considered “significantly below grade level,” the student will receive the Common Core reading instruction by the classroom teacher and will get additional intervention by the reading coach (Hayward Community Schools RTI Team, 2012). However, RTI and Wisconsin Department of Education are currently leaving the choice of intervention materials up to the individual school districts. They do, however, suggest that the intervention materials should be research based and compatible to the CCSS. Voyager Passport meets with the recommendations of RTI and the Wisconsin Department of Education and supports the use of providing early intervention services to help mitigate the consequences of students falling behind their peers (Henry & Peyton, 2008). This study will consider if Voyager Passport would be an appropriate tier 3 reading intervention for the Hayward Primary School.
Problem Statement

RTI is set up to provide early intervention services to all students who are at risk, regardless of their cultural or linguistic status (Brown-Chidsey & Steege, 2005; Fuchs & Fuchs, 2006; Klingner & Edwards, 2006). Low reading scores and low proficiency in schools have shown a need for new programs that meet individual and group need (Fuchs, & Fuchs, 2008). RTI also stresses that reading intervention needs to be research- based and data- driven. The use of progress monitoring is critical for evaluating student progress and the effectiveness of the intervention. Voyager Passport is a reading intervention program that is aligned with the Three-Tier Reading Model from the University of Texas Center for Reading and Language Arts and has been demonstrated to be effective in addressing these concerns (Henry & Peyton, 2008).

Research Question

This research analysis will attempt to address the researched effectiveness and reveal the potential for one specific application of Voyager Passport. The current study will attempt to answer the following question: (1) Will Voyager Passport meet the diverse instructional needs of Hayward Primary School?

Significance of the Study

Students who struggle with reading are less likely to graduate from high school and attend college than their peers who do not struggle (Wixson & Lipson, 2012). The CCSS are focused on preparing students for career and college readiness (Common Core State Standards Initiative, 2012). When selecting a tier 3 reading intervention it should be researched based with data providing proven effectiveness, provide progress monitoring, meet the schools instructional needs, and be aligned with the CCS (Wisconsin Department of Public Instruction, 2011). It is widely believed that the key to helping students be successful is early detection of reading difficulties and early intervention (Wixson& Lipson, 2012). Therefore, it is argued that using scientifically based intervention materials that complement the CCSS
are essential to helping students learn to read and prepare them for the rigorous demands of the CCSS-ELA curriculum (Wixson & Lipson, 2012).

**Assumptions**

For the purpose of this analysis, it is assumed that the selection of a tier 3 reading program may be seen as a positive reflection in addressing student reading difficulty. It is assumed that classroom teachers, parents, and administrators want to see a tier 3 reading intervention program provided to students.

**Limitations**

The most significant limitations of this analysis are that it will be limited to (1) one reading intervention program (2) that may meet the needs of one individual school (3) and the research will not include analysis of specific student data.

**Delimitations**

A broad generalized application of process is a meaningful contribution to this analysis. The analysis is only looking at an intervention program for tier 3 students that may meet the needs of Hayward Primary School. Individual student data will not be a factor as the analysis will look at characteristics of the Voyager Passport program that are compatible with the characteristics of the Hayward Primary School.

**Definition of Terms**

**Common Core State Standards**-The Common Core State Standards Initiative (CCSSI, 2012) is a state-led effort coordinated by the National Governors Association Center for Best Practices (NGA Center) and the Council of Chief State School Officers (CCSSO). The standards were developed in collaboration with teachers, school administrators, and experts, to provide a clear and consistent framework to prepare children for college and the workforce (p.1).
Response to Intervention- RTI is a process for achieving higher levels of academic and behavioral success for all students through: high quality instructional practice, balanced assessment (multiple measures), and collaboration according to the Wisconsin Department of Public Instruction (WDPI, 2011) (p.3).

Voyager Passport- Voyager Passport is a patented, data driven reading intervention program designed to move struggling readers to grade level (Voyager Expanded Learning, 2005).

Tier 3- Tier 3 refers to any students performing significantly below grade level academically (Hayward Community School Districts RTI Team, 2012).

Oral reading fluency- Oral reading fluency (ORF) is defined as reading aloud accurately, with appropriate rate and expression to maximize understanding of the text (NICHD, 2000).

Summary

The current analysis will focus on the effectiveness and potential application of Voyager Passport a scientifically researched based reading intervention program. This analysis seeks to see if Voyager Passport will best meet the diverse needs of the Hayward Primary School. The analysis will focus on a rural school district in Northwestern Wisconsin. Findings for the analysis may be used, in part, to decide on future intervention services to be provided to tier 3 students at the Hayward Primary School.
Chapter 2: Literature Review

Introduction to the Literature Review

Peyton and Macpherson (2008) cited the National Reading Panel, (2000) when noting that current research converges on the certainty that few students acquire reading naturally and that most students benefit from direct and explicit instruction. The author’s reported that Voyager Passport is a reading intervention program that is delivered with direct explicit instruction. The RTI process stresses the importance of early intervention with students at-risk of failure (Wisconsin Department of Public Instruction, 2011). Small group reading intervention is one way to address this concern (Henry & Peyton, 2008).

The purpose of this literature review is to define and describe the Voyager Passport program. The review will strive to provide a clearer picture of this program in order to make an informed decision regarding the use of this program as tier 3 reading intervention in the Hayward Primary School. In order to analyze this issue a review of the literature is presented to show what has been tried in this area and where more research on the question is needed. The literature review is organized by various studies conducted on schools that used Voyager Passport as a reading intervention program for their at-risk students. The main goal of Voyager Passport is to help students achieve gains in reading bringing them up to grade level (Arguelles et al., 2007). The first section looks at the importance of oral reading fluency as it relates to Voyager Passport; the second section examines Voyager Passport compared to other reading intervention programs; the third examines how Voyager Passport was implemented in several schools ; and the fourth explains the design of Voyager Passport.
Oral Reading Fluency

Henry and Peyton (2008) remarked that learning to read builds on oral language. If that foundation is weak, reading acquisition may be slow and uncertain (Anderston, Hiebert, Scott, & Wilikinson, 1985) (p.17). Oral reading fluency is defined as reading aloud accurately, with appropriate rate and expression to maximize understanding of the text (NICHD, 2000). There has been much research done in the area of reading fluency which has shown it to be a large contributing factor into how students will perform on standardized test.

Pearce and Gayle (2009) analyzed how third-grade Native American and White student oral reading fluency could be a valid predictor of their state measure of yearly progress (AYP). The authors had 115 Native American students and 428 White students that took part in the study. The Dynamic Indicator of Basic Early Literacy Skills, (DIBELS) was used to measure student oral reading fluency (DORF) in January 2006. Those students who scored 66 words per minute or less were predicted to not pass the Dakota State Test of Educational Proficiency (Dstep). Dstep was used as the outcomes measure, and it meets AYP. It was given in April 2006 and students who scored 594 or higher were considered proficient. The authors reported that DORF was an accurate measure for predicting AYP for Native American and White students. The authors argued that DORF did a better job of predicting student success than potential reading difficulty. Table 4 shows how the authors came to their conclusion (p.424) (see Appendix A).

In the next study DORF was also used to help determine the likelihood of students passing the states standardized test. Kane, Schenberger, and Tingle (2009) looked at the scores of third graders at Charlotte-Mecklenburg School (CMS) who took the North Carolina End of Grade (EOG) test. They reported that 90% of students who were at risk on their DIBELS ORF the previous year failed the third
grade EOG. The authors also noted that 68% of “At Some Risk” and 28% of “Low Risk” students as defined by DIBELS ORF also failed the EOG (p.2). The author’s findings contradicted with Pearce and Gale (2009) who found DIBELS ORF to be a better indicator of students that would fail rather than those that would pass state standardized test.

This next study also found DORF to be a helpful in predicting student pass or fail rate on state testing. Baker et al. (2008) examined how oral reading fluency can be a predictor of student reading achievement over a period by analyzing data from approximately 2,400 students in grades 1-3 in the Oregon Public Schools that participated in Reading First starting in 2002-2003. The authors used DIBELS ORF with grades 1-3 to measure oral reading fluency three times a year, and the SAT 10 with first and second graders, and Oregon State Reading Assessment (ORSA) with third grade. The authors reported that student ORF and their performance on the SAT 10 and ORSA were aligned with the findings of other research.

This study reinforces the other research findings. Hasbrouck and Tindal (2006) developed the updated chart on ORF that gives the expected words correct per minute (WCPM) with percentile rating from 10%- 90% for grades 1-8. The authors reported that this chart could be used to help determine those students at risk of needing additional reading intervention because it lets teachers know which students fall below the 40% percentile on ORF at their grade level. The authors also noted that progress monitoring using DORF could be done on those students at-risk in order to make better informed decisions regarding their reading progress. The authors supported the use of ORF in determining student reading comprehension and ability to perform on standardized test. Table 5 shows Hasbrouck and Tindal oral reading fluency data. (see Appendix B).
This section has provided a review of the literature on oral reading fluency. It showed that oral reading fluency is helpful in determining how students may perform on standardized tests. It also showed how important it is to start early intervention services with students who are at risk in order to help improve their overall reading ability. Through the process of using DIBELS progress monitoring it appears that schools have a better way of keeping track of student progress and getting them the help they may need sooner rather than later. *Voyager Passport* uses DIBELS Next as the progress monitoring tool to keep track of students’ progress.

**Voyager Passport Compared to Other Reading Intervention Programs**

A few studies investigated the effectiveness of multiple reading intervention programs. For the purpose of this study, a closer look was taken at other intervention programs to see how they produced in comparison to *Voyager Passport*.

Plucker et al. (2007) compared four commercially available reading intervention programs in The Indiana Early Literacy Intervention Grant Program (ELIGP) Evaluation Study. The authors found schools that used *Voyager Passport* reported there was an increase in student achievement and there was minimal decrease in status for grades K-2. The authors reported that over one fourth of the student scores increased from the beginning to the middle of 2006-2007 school year. *Voyager Passport* (N=559) correlated higher achievement than the other three programs that only showed minimal gains or declines in student achievement. In *Voyager Passport* there was a 23% increase in benchmark scores, a 4% increase in strategic scores, and an 8% decrease in intensive scores. The only other program that reported better scores was Full Day Kindergarten (FDK). The student scores for all four programs are reported in Table 1 (p.102) (see Appendix C).
This next study also looked at how Voyager Passport compared to other reading intervention programs. Vaden et al. (2008) reported on the SEDL’s Afterschool Research Consortium (ARC) and the randomized controlled trial (RCT) studies to evaluate the use of reading intervention programs in afterschool programs. The authors noted that three intervention programs were selected for the study: Adventure Island, Voyager Passport, and READ 180. These programs were selected because they are all research based and contain the five key components of reading instruction (phonics, phonemic awareness, vocabulary, fluency, and comprehension). The students were randomly assigned to a treatment group or a control group following the usage of experimental design methodology. The students came from three areas of the United States; Southwestern (SFA), Midwestern (CEEP), and Northeastern (MRP). Table Two gives an overview of the student demographic information for each study (p.4) (See Appendix D).

Vaden et al. (2008) stated that student outcomes were measured using the Harcourt’s Stanford Achievement test (SAT 10), the Woodcock Johnson Achievement III, and DIBELS oral reading fluency scores. The authors mentioned that the students were assessed in the fall and spring of the school year. The authors argued that lack of time and proper instruction given to the Voyager Passport program interfered with getting accurate results on the programs productivity. The authors also reported that the sites using the SFA Adventure Island had not been fully implementing the program with fidelity (p.6). In the sites that used READ 180 for the first year, the authors reported that student scores on the vocabulary were 8.5 points higher, 9.5 points higher on reading comprehension, and 15 points higher on total reading scores than students in the control group (total scores limited to the 5th and 6th grade) (p.6). The authors noted that students who participated in READ 180 for year two did not report significant gains. Table 3 shows the findings for each study (p.9) (See Appendix E).
Vaden et al. (2008) concluded that there were several challenges that the afterschool programs faced in trying to implement reading intervention programs; primarily limited financial and personnel resources and competing goals for afterschool services. The authors argued that more time and research need to be done on intervention programs in afterschool settings to see if there is an impact on students reading achievement.

From this second section, it can be concluded from Plucker et al. (2007) that Voyager Passport was an effective reading intervention for several students in the Indiana school system. The results showed a much larger gain in students meeting the benchmark standard at the end of year in comparison to three of the other reading intervention programs. However, the research done by Vaden et al. (2008) was inconclusive due to lack of fidelity to the program and not enough time to correctly implement it.

**Voyager Passport Research Studies**

Peyton and Macpherson (2008) noted that 80% of students that can read 110 words per minute on a third grade reading passage can pass their states standardized reading test (p. 1). In 2006-2007 Poteau School District in Oklahoma implemented Voyager Passport for all their special education students. Students received 30 to 45 minutes of reading intervention five days a week. In the fourth grade students’ reading fluency improved by a scale score of 11, with a gain of 35.9 words per minute for the entire school year. In fifth grade students had a gain of 41.3 words across the school year. The students that were reading on track only made an average gain of 20 words per minute over the year. The authors concluded that the use of Voyager Passport helped special education students in Poteau School District make progress. In alignment with the Priority Academic Student Skills (PASS) which was adopted by the State Board of Education, Poteau students in third through eighth grade took the Oklahoma Core
Curriculum Tests (OCCT) or Criterion Referenced Tests (CRT) as it is also known. The test was aligned to the state-mandated curriculum. Figure 3 shows that 62 %, 13 out of 21 students in Special Education passed the CRT in 2006 before the use of Voyager Passport and 74%, 17 out of 23 students in Special Education passed the CRT in 2007 after Voyager Passport was implemented (p.4) (see Appendix E).

In this next study Voyager Passport was used with tier 2 and 3 students and also had good results. Arguelles et al. (2007) reported that Voyager Passport is a K-6 reading intervention program that is research based and has been shown to accelerate students to on grade- level reading. In Norwood Elementary in Miami, FL after 26 weeks using the Voyager Passport Program student scores on the SAT-10 went up by 28 percent from 2005 to 2006 with 73 percent of second graders scoring at or above the 50th percentile. The authors reported that in 2004 the school began using Voyager Passport with their struggling readers and 55 percent of third graders passed the FCAT. In 2005 the school piloted the program in one classroom and saw an increase in FCAT scores, then in 2006 all classrooms used Voyager Passport and 71 percent of third grade students passed the FCAT. They stated that Norwood also saw results in 2006 with 89 percent of their retained third graders passing the FCAT after 26 weeks of Voyager Passport instruction.

Arguelles et al. (2007) reported that in 2004-2005 Norwood created two reading classes in third grade based on students reading proficiency. They noted that the students that were in the at-risk reader group received Voyager Passport in addition to their core reading program on a daily basis. The core reading program was the only instruction used in the on-grade level classroom. The authors reported that the school leaders were positive about the outcomes. The principal reported that 80 percent of the at-risk students passed the FCAT at the end of the school year. In addition, the school’s
Reading Coach remarked that without the use of *Voyager Passport* in the classroom, on-grade-level students made less progress in their reading fluency than struggling students that received *Voyager Passport* instruction.

Arguelles et al. (2007) noted that in 2004-2005 the Miami-Dade County Public Schools used *Voyager Passport* for most their tier 2 and all tier 3 students. Eighty-three percent of tier 2 students passed the FCAT and 67 percent of tier 3 students also passed. The authors reported that in the previous two years the school had no students in tier 3 pass the FCAT. The district reported that due to the success they saw with *Voyager Passport* they had implemented it into 220 of their schools.

Arguelles et al. (2007) also reported that Lakedale Elementary in Ft. Lauderdale, FL had 61 students participate in *Voyager Passport* for 26 weeks and 56 percent of these students passed that FCAT in 2006. This was an 18 percent increase from the previous year when *Voyager Passport* was not used. The increase in student scores ranked the school in the top five percent of 52 Reading First schools using DIBELS. The authors also covered several others schools that implemented *Voyager Passport* in their summer reading programs. All the schools reported gains on their FCAT test scores.

The next study also reported positive results when *Voyager Passport* was implemented with their struggling readers. Sullivan (2012) reported that after the Knox County school system implemented the CCSS the districts test scores decreased greatly. In an effort to meet the new higher standards set by the CCSS the school district had set a goal of increasing student achievement in reading and math by an average of 6.25 percent per year. The authors also mentioned that the school was focusing on intervention services in order to get students caught up to grade level. Sullivan noted that Knox County schools now have literacy and numeracy coaches to work with students and teachers. The school piloted *Voyager Passport* in five schools in the first grade in 2011-2012. The student test scores increased and
went from 22 to 87 percent of students reading at or above grade level. The authors reported that Voyager Passport has been expanded to 15 schools in grades 1-5, with the strongest emphasis being placed on those schools with overall reading scores falling below the 25th percentile.

This next study reported little to no impact on student performance when Voyager Passport was implemented. Merriman (2008) studied the effects of Voyager Passport with third grade students in a rural Tennessee school district. Merriman looked at three areas of concentration in the study; gender, socio-economic level, and type of school personnel delivering the reading intervention program. Sixty-nine third grade students from five elementary schools in Cannon County, Tennessee took part in the study. The students were given the DIBELS benchmark assessment to determine their reading level. Students in the control group were given teacher directed instruction and the treatment group was given the scripted intervention program. Merriman’s research concluded that a scripted reading intervention program was no more effective than a teacher directed intervention program. These findings were based on student pre and posttest scores after the twelve week study and the surveys given to the interventionist that took part in the program. These findings are contradictory to the finding of Arguelles et al. (2007) in the Florida schools and that of Sullivan (2012) in the Knox County schools that implemented the Voyager Passport reading intervention program.

In this last section, the research done by Peyton and Macpherson (2008), Arguelles et al. (2007), and Sullivan (2012) showed that students who took part in the Voyager Passport reading intervention program made gains on standardized test after participating in the program. The research done by Merriman (2008) did not report any significant increase in student performance after participating in Voyager Passport. However, the author also reported that more research was needed with a larger
study group before the participating school made any decisions on implementing *Voyager Passport* as a reading intervention program with tier 2 students.

**Voyager Passport Design**

Henry and Peyton (2008) reported that *Voyager Passport* is a comprehensive intervention system for students in kindergarten through fifth grade who demonstrate difficulty in learning to read (p.5). *Voyager Passport* is designed around the five components of reading (phonemic awareness, phonics, vocabulary, fluency, and comprehension) in a comprehensive and easy-to-teach format. *Voyager Passport* provides students with expository and narrative text that is geared toward their interest.

*Voyager Passport* is designed to promote student achievement and provide optimal learning time. There are five components to this instructional model that include:

1. **Teach, Model, and Probe:** Explicitly presents the specific concept or skill to be learned and why learning this concept or skill is important, followed by modeling of the expected behavior and monitoring for students understanding;
2. **Guided Practice:** Provides a limited number of items or short tasks related to the concept or skill for supervised practice and corrective feedback as necessary;
3. **Independent Practice:** Reinforces the concept or skill with decreasing amounts of teacher support;
4. **Cumulative Review:** Integrates new content with previously learned content so students receive continual practice and reinforcement; and
5. **Assessment:** Allows teachers many opportunities within each lesson to assess student responses for content mastery. (p.5)
According to Henry and Peyton (2008) Voyager Passport is designed for small group instruction. They recommend that the direct instruction lessons should be taught for 30 minutes five days a week. However, for students who are more than two years behind in reading the program recommends more time and smaller group instruction to help meet student individual needs. The curriculum is set up into ten lessons called Adventures. Each Adventure starts with an introduction on the concept and allows students to make connections to it with what they already know. For lessons 1-4 and 6-9 the curriculum follows the lesson planner routine beginning with Words Work, this is where students get instruction on letter sounds, decoding, sight words, and sentence reading followed by Reading to Understand, where students are taught vocabulary and comprehension strategies. Lesson five provides an assessment called the Quick Check to see if the student is retaining the information being taught is lessons 1-4. In lesson ten there are two forms of assessment, Vital Indicators of Progress (VIP) to progress monitor student reading acquisitions and a comprehensive assessment of the information taught in lessons 1-9. Lessons 4, 7, and 9 provide for re-teach opportunities.

VIP was created Dr. Roland Good and his colleagues at the University of Oregon and they designed it to be equivalent to DIBELS. This assessment includes Letter Naming Fluency (LNF), Phonemic Segmentation Fluency (PSF), Nonsense Word Fluency (NWF), Reading Connected Text (RCT), and Retell Fluency (RF) these are standardized, individually administered one minute test that measure reading fluency for kindergarten through fifth graders. There are three benchmark assessments given throughout the school year using VIP, fall, benchmark 1, winter, benchmark 2, and spring, benchmark 3 (P.6). In lesson ten of the curriculum VIP is designed to be used as a progress monitoring tool.

Voyager Passport provides an online data management system called VPORT, this is where student benchmark and progress monitoring data can be stored. This data management system helps
facilitate instructional decisions regarding frequency of progress monitoring, level of instructional intensity, the use of differentiated instruction, and re-teach opportunities.

Henry and Peyton (2008) remarked that *Voyager Passport* is a comprehensive program that is complimentary to all core reading programs and should be delivered to students as a supplement to core instruction. It provides teachers with a variety of re-teach opportunities including, extra practice in each lesson, center activities with writing, word study, and vocabulary practice, and independent practice with a Home Connection page provided in lessons 5 and 10.

**Summary of the Literature Reviewed**

In summary, much of the literature related to reading intervention showed that oral reading fluency is a strong predictor of how students will perform on standardized reading test. The research also indicated that students who read fluently are also better at reading comprehension, the overall goal of reading. The *Voyager Passport* reading intervention program has shown positive results in several schools throughout the country in helping improve student test scores. The review of current literature highlights the research findings, contributions, and recommendations of professionals in the field of reading education. The first section of the literature review looked specifically at oral reading fluency and the use of DIBELS in helping to assess student outcomes on standardized testing. The second section compared *Voyager Passport* to other reading intervention programs and it highlighted the importance of thorough data collection in measuring program outcomes. The third section examined the effectiveness of the implementation of *Voyager Passport* and how it impacted schools reading test results. Finally, section four looked at the design of *Voyager Passport*. Three out of four studies in the third section showed that *Voyager Passport* had a positive impact on test results.
These four sections form the basis for the current analysis and build the argument that reading intervention, like Voyager Passport, may be helpful in increasing students reading fluency and helping them move towards being on grade level. The Wisconsin Department of Education along with RTI support the use of research based reading intervention programs. They also want schools to use programs that are data driven and use progress monitoring to help make informed decisions on student progress. This analysis will help determine if Voyager Passport may be an effective reading intervention for use with tier 3 students in this particular school district. In order for this district to meet AYP it is crucial that an intervention meets well with schools individual needs and allows for crucial data to be collected to track progress. The next section provides a methodology for doing this.
Chapter 3: Methodology

Introduction

The key to helping students with reading difficulties is early detection and intervention services. As the literature has argued the use of Voyager Passport, as a tier 3 reading intervention, has the possibility of improving students reading fluency and bringing them to grade level in reading. The purpose of this analysis is to assess if the implementation of Voyager Passport at Hayward Primary School would best meet the school’s need for a tier 3 reading intervention program.

Participants

In 2012-2013 Hayward Primary School had 439 students enrolled in pre-kindergarten to second grade. The school’s Ethnic/Racial background was comprised of 67% White students, 29% of Native American students, 2% Black students, 2% Hispanic students, and .02% of Asian students. There were 59.4% of the students receiving free and reduced lunch services.

During the 2012-2013 school year at the Hayward Primary School using the STAR Early Literacy Test, PALS-K, and DRA scores there were 8 kindergarten students identified as tier 3 by the Student Support Team (SST). In first grade using the STAR Early Literacy Test and DRA scores there were 15 students identified as tier 3 by the SST. In second grade using the STAR Reading Test and DRA scores there were 31 students identified as tier 3 by the SST.

For the 2013-2014 school year at Hayward Primary School using the STAR Early Literacy Test, PALS-K, and DRA scores 16 students entering first grade have been identified as tier 3 students by the Student Support Team (SST). Using STAR Reading and DRA scores 12 students entering second grade
have been identified as tier 3 students by the SST. Using STAR Reading and DRA scores 20 students entering third grade have been identified as tier 3 students by the SST.

Instrumentation

The first assessment used to evaluate student progress was STAR Early Literacy administered to kindergarten and first grade and STAR Reading for first grade after third quarter and second grade. STAR Early Literacy and STAR Reading were developed by Renaissance Learning and were awarded the highest assessment ratings by the National Center on Response to Intervention (NCRTI). The STAR Early Literacy and STAR reading assessment were administered to students three times a year by their classroom teacher. It took students 15-20 minutes to complete the STAR Reading assessment. The teacher got a diagnostic report immediately following the assessment. The student was placed into one of four categories; At/Above Benchmark, On Watch, Intervention, or Urgent Intervention. Following the Hayward Community Schools RTI plan, students who were listed in Urgent Intervention were considered tier 3, those listed in Intervention were tier 2, and students listed in On Watch or At/Above Benchmark were tier 1. All final decisions on student tier placement were discussed at the SST. The reading coach was responsible for administering and entering all progress monitoring data for tier 3 students into the STAR data base. All tier 3 students were progress monitored using the STAR Early Literacy and STAR reading test quarterly by the reading coach (Renaissance Learning, 2013).

The Phonological Awareness Literacy Screening (PALS) is a research-based screening, diagnostic, and progress monitoring tool. Wisconsin teachers use PALS to identify students at risk of developing reading difficulties, diagnose students' knowledge of literacy fundamentals, monitor progress, and plan instruction that targets students' needs (PALS, 2012). PALS -K was another assessment (required by Department of Public Instruction (DPI) in accordance with Wisconsin ACT 166) that was used to help
identify kindergarten students who were behind in their literacy skills. The purpose of PALS-K was to provide a direct means of matching literacy instruction to specific literacy needs and provide a means of identifying those children who were relatively behind in their acquisition of these fundamental literacy skills. The assessment was given in a one-on-one setting by trained school staff. There were six tasks being assessed: rhyme awareness, beginning sound awareness, alphabet knowledge, letter sounds, spelling, concept of word, and word recognition in isolation which was optional (PALS, 2012).

The third assessment used to assist with placing students in tier 3 was the Developmental Reading Assessment (DRA). The DRA was developed based on what educators and extant research literature identified as being key characteristics and behaviors of good readers (Pearson, 2013). The DRA was used to assess student independent reading level based on their oral fluency being 95% accurate and their comprehension being 90% accurate (Pearson, 2013). The assessments were administered on an individual basis by the classroom teacher during the fall, winter, and spring of the school year. All student information was collected from the Hayward Primary School classroom teachers and was entered into the school’s record keeping data base for the 2012-2013 school year by the reading coach.

**Current Setting in Hayward Primary School**

For the 2012-2013 school year tier 3 students in kindergarten received intervention services for a minimum of 90 minutes a week from a teacher’s aide. Instruction was planned by the classroom teachers using data reports from PALS-K and STAR Early Literacy and focused on phonemic awareness, phonics, and sight words. Students in first grade received between 90-150 minutes of instruction per week with the reading coach in small groups of 4 to 5 students. Instruction was taught using data from student’s STAR Early Literacy reports and focused on phonemic awareness, phonics, sight words, vocabulary, fluency, and comprehension. Students were taught using best practice instruction (National Reading Panel), however no specific reading intervention program was used. In second grade students
were taught by the reading coach in small groups of 2 – 5 students and instruction ranged from 120-150 minutes a week. *Voyager Passport* was used as a piloted program with the second grade tier 3 students.

The reading coach progress monitored students on a weekly basis using DIBELS Next, a researched based assessment designed to assess the core components of reading. The student data was entered into VPort and the information was shared with the SST every two weeks.

A school wide data base listing student intervention services was filled out on a bi-weekly basis by the reading coach. The chart includes specific intervention services being received, including the amount of time and progress monitoring data. Student scores on STAR Early Literacy, STAR reading, PALS-K, and DRA were also included. Instructional decisions and changes for tiers and intervention services were made by the SST team on a quarterly basis using DIBELS Next, STAR Early Literacy, PALS-K, STAR Reading, DRA, and SST members input.

Utilizing information gathered from DIBELS Next and individual state reading test, an assessment of student progress was done to see if there was an increase in student reading scores. The fall assessments were compared to the winter assessments and the winter assessments were compared to the spring assessments to see if improvements were made in reading scores. Then the assessments from the fall, winter, and spring were analyzed to see if there had been an increase in student reading test scores over the course of the one year intervention.

**Procedures**

The data at the Hayward Primary School came from the STAR Early Literacy Test, PALS-K, and DRA scores. There were 8 kindergarten students identified as tier 3 by the Student Support Team (SST). In first grade using the STAR Early Literacy Test and DRA scores there were 15 students identified as tier 3
by the SST. In second grade using the STAR Reading Test and DRA scores there were 31 students identified as tier 3 by the SST. According to the Hayward Primary School a tier 3 student is identified as a student who is not making adequate progress in the classroom with the core program, has not made adequate progress in a tier 2 intervention (additional teacher support or computer based reading intervention), and needs small group support with a reading coach designed to meet the individual needs of the student.

The reading coach progress monitored students on a weekly basis using DIBELS Next, a researched based assessment designed to assess the core components of reading. The student data was entered into VPort and the information was shared with the SST every two weeks. A school wide data base listing student intervention services was filled out on a bi-weekly basis by the reading coach. The chart includes specific intervention services being received, including the amount of time and progress monitoring data. Student scores on STAR Early Literacy, STAR reading, PALS-K, and DRA were also be included. Instructional decisions and changes for tiers and intervention services were made by the SST team on a quarterly basis using DIBELS Next, STAR Early Literacy, PALS-K, STAR Reading, DRA, and SST members input.

Data Analysis

A comparison of Hayward Primary Schools needs and the Voyager Passport reading intervention program will be analyzed. It will see if Voyager Passport will be compatible with the Hayward Primary School setting. The following criteria will be used to make this decision:

1. The amount of time required daily, weekly, and yearly to deliver the program.

2. The program meets the districts requirement for a progress monitoring tool, is compatible with the CCSS, and is aligned with RTI.
3. The program will be culturally appropriate and address the individual learning needs of students.

Summary

An in-depth look was taken at participants, instrumentation, current setting in Hayward Primary, procedures, and data analysis forming a foundation for the criteria to be used in analyzing the possible use of Voyager Passport as a tier 3 reading intervention at Hayward Primary School. The next chapter will be a presentation of data and will go into detail about the data found in this analysis.
Chapter 4: Presentation of the Data

Introduction

A data collection was done on the needs of the Hayward Primary School. The presentation addressed the schools compatibility with the Voyager Passport reading intervention program. The presentation consisted of the amount of time required daily, weekly, and yearly to deliver the program, the program meets the districts requirements for a progress monitoring tool, is compatible with the CCSS, and is aligned to RTI, and the program will be culturally appropriate and address the individual needs of students.

The amount of time required daily, weekly, and yearly to deliver the program.

For the 2012-2013 school year 8 tier 3 students in kindergarten received intervention services a minimum of 90 minutes a week from a teacher’s aide. Instruction was planned by the class room teachers using data reports from PALS-K and STAR Early Literacy and focused on phonemic awareness, phonics, and sight words. Students in first grade received between 90 -150 minutes of instruction per week with the reading coach in small groups of 4 to 5 students. Instruction was taught using data from student’s STAR Early Literacy reports and focused on phonemic awareness, phonics, sight words, vocabulary, fluency, and comprehension. Students were taught using research based best practices as required by RTI; however no specific reading intervention program was used. In second grade students were taught by the reading coach in small groups of 2 – 5 students and instruction ranged from 120-150 minutes a week. Voyager Passport was used as a piloted program with the second grade tier 3 students.

Students attended 90% of the Voyager Passport lessons. Some lessons ran over the 30 minutes of allotted time. These lessons were continued in the following session, allowing students to master the materials. The school was able to offer the majority of components of the Voyager Passport program.
The schedule did not allow time to include the Extra Practice and Adventure Centers. In the 2012-2013 school year, the tier 3 students in second grade at Hayward Primary School completed Adventure lessons 1-6 in *Voyager Passport* Book C. There were 10 lessons in each Adventure lesson. *Voyager Passport* indicates it would take 12 weeks to complete Adventure lessons 1-6 if students have 30 to 45 minutes of instruction five days a week.

For the 2013-2014 school year all first and second grade students identified as tier 3 were to receive intervention services with the reading coach for a minimum of 120 minutes per week, for at least one quarter (8 weeks), and in a small group setting. The students were to receive instruction in phonemic awareness, phonics, vocabulary, fluency, and comprehension based on their individual needs identified by the STAR reports.

**The program meets the districts requirement for a progress monitoring tool, is compatible with the CCSS, and is aligned with RTI.**

The reading coach progress monitored students on a weekly basis using DIBELS Next, a researched based assessment designed to assess the core components of reading. The student data was entered into VPort and the information was shared with the SST every two weeks. A school wide data base listing student intervention services was filled out on a bi-weekly basis by the reading coach. The chart included specific intervention services being received, including the amount of time and progress monitoring data. Student scores on STAR Early Literacy, STAR Reading, PALS-K, and DRA were also included. Instructional decisions and changes for tiers and intervention services were made by the SST team on a quarterly basis using DIBELS Next, STAR Early Literacy, PALS-K, STAR Reading, DRA, and SST members input.
Utilizing information gathered from DIBELS Next and individual state reading test, data collection and analysis was consist of three parts. First, data from the fall assessments was compared to data from the winter assessments to see if improvements were made in reading scores. Second, data from the winter assessments was compared to data from the spring assessments to see if improvements were made in reading scores. Finally, data gathered from the fall, winter, and spring was analyzed to see if there had been an increase in student reading test scores over the course of the one year intervention.

*Voyager Passport* provides an online data management system called VPORT, this is where student benchmark and progress monitoring data can be stored. This data management system helps facilitate instructional decisions regarding frequency of progress monitoring, level of instructional intensity, the use of differentiated instruction, and re-teach opportunities.

The Hayward Primary School used VPort to track student progress monitoring data and also used DIBELS which is compatible with *Voyager Passport*.

However, RTI and Wisconsin Department of Education are currently leaving the choice of intervention materials up to the individual school districts. They do, however, suggest that the intervention materials should be research based and compatible to the CCSS. *Voyager Passport* meets with the recommendations of RTI and the Wisconsin Department of Education and supports the use of providing early intervention services to help mitigate the consequences of students falling behind their peers (Henry & Peyton, 2008).

The program will be culturally appropriate and address the individual learning needs of students.

In 2012-2013 Hayward Primary School had 439 students enrolled in pre-kindergarten to second grade. The schools Ethnic/Racial background was comprised of 67% White students, 29% of Native American
students, 2% Black students, 2% Hispanic students, and .02% of Asian students. There were 59.4% of the students receiving free and reduced lunch services.

During the 2012-2013 school year 12% of students in the Hayward Primary School were identified as tier 3. In kindergarten 2% were identified as tier 3, in first grade 3% were identified as tier 3, and in second grade 7% were identified as tier 3. The end of the year results from the 2012-2013 PALS-K, STAR Early Literacy, and DRA indicated that 16 students going into first grade were identified as tier 3. This is a 2% increase going from 8 to 16 students needing intervention services for the 2013-2014 school year. The end of the year results from the STAR Early, STAR Reading, and DRA indicated that 12 students going into second grade were identified as tier 3. The percentage of students needing intervention services in this grade remained the same for the 2013-2014 school year. The end of the year results from STAR Reading and DRA indicated that 20 students going into third grade were identified as tier 3. This is a 2% decrease going from 31 to 20 students needing intervention services for the 2013-2014 school year.

In 2012-2013 at the Hayward Primary School using the STAR Early Literacy Test, PALS-K, and DRA scores there were 8 kindergarten students identified as tier 3 by the SST. The strengths of the kindergarten students were letter identification and sound recognition. The weaknesses of the kindergarten students were in phonemic awareness and word identification. In first grade using the STAR Early Literacy Test and DRA scores there were 15 students identified as tier 3 by the SST. The strengths of the first grade students were in letter identification, letter sounds, and phonemic segmentation. The weaknesses of the first grade students were in sight word identification, phonics, vocabulary, reading comprehension, and fluency. In second grade using the STAR Reading Test and DRA scores there were 31 students identified as tier 3 by the SST. The strengths of the second grade students
were in phonemic awareness, sight word identification, and non-sense words. The weaknesses of the second grade students were advanced phonics rules, vocabulary, fluency, and comprehension.

The end of the 2012-2013 school year data for first grade indicated that 2 students were identified as special education, 10 students continued to be identified as tier 3, 3 students moved up to tier 2, and 2 students that were previously tier 2 moved to tier 3.

_Voyager Passport_ was taught for a minimum of one quarter to all second tier 3 students at the Hayward Primary School during the 2012-2013 school year. At the end of the 2012-2013 school year 8 students were identified as special education, 19 students continued to be identified as tier 3, 4 students moved up to tier 2, and 1 student moved up to tier 1. The end of the year testing also found that 1 student who had been tier 2 went down to tier 3.

For the 2013-2014 school year using the STAR Early Literacy Test, PALS-K, and DRA scores 16 students entering first grade were identified as tier 3 by the SST. In the first grade group consisted of 94% boys, 6% girls, 69% White students, 25% Native American students, and 6% Hispanic students. Using STAR Reading and DRA scores 12 students entering second grade were identified as tier 3 by the SST. In the second grade group there were 58% boys, 42% girls, 67% White students, 25% Native American students, and 17% Black students. Using STAR Reading and DRA scores 20 students entering third grade were identified as tier 3 by the SST. In the third grade group there were 40% boys, 60% girls, 65% White students, 30% Native American students, and 5% Hispanic students.

For the 2013-2014 school year using the STAR Early Literacy Test, PALS-K, and DRA scores 16 students entering first grade were identified as tier 3 by the SST. The strengths of these students were letter identification and sound recognition. The weaknesses of these students were in phonemic awareness and word identification. Using STAR Reading and DRA scores 12 students entering second
grade were identified as tier 3 by the SST. The strengths of these students were in letter identification, letter sounds, and phonemic segmentation. The weaknesses of these students were in sight word identification, phonics, vocabulary, reading comprehension, and fluency. In second grade using the STAR Reading Test and DRA scores there were 31 students identified as tier 3. Using STAR Reading and DRA scores 20 students entering third grade were identified as tier 3 by the SST. The strengths of these students were in phonics, sight word identification, and non-sense words. The weaknesses of these students were in vocabulary, fluency, and comprehension.

Summary

Chapter four was a presentation of the data. It looked at the needs of the Hayward Primary School and addressed the schools compatibility with Voyager Passport. In the final chapter a discussion and summary of analysis will be conducted looking collectively at all the data presented.
Chapter 5: Discussion and Summary of Analysis

Introduction

The purpose of this analysis was to see if Voyager Passport would be a reading intervention program that would meet the individual needs of the Hayward Primary School. A comparison of the Hayward Primary School's needs and characteristics was compared to studies done by Voyager Passport. The areas of comparison were: 1. The amount of time required daily, weekly, and yearly to deliver the program. 2. The program meets the district's requirement of a progress monitoring tool, is compatible with CCSS, and is aligned with RTI. 3. The program will be culturally appropriate and address the individual learning needs of students.

Implications from the data

A comparison of Hayward Primary Schools needs and the Voyager Passport reading intervention program was analyzed. The following criteria were used to make this decision:

1. The amount of time required daily, weekly, and yearly to deliver the program.

For the 2013-2014 school year at Hayward Primary School all first and second grade students identified as tier 3 will receive intervention services with the reading coach for a minimum of 120 minutes per week in a small group setting.

According to Henry and Peyton (2008) Voyager Passport is designed for small group instruction. They recommend that the direct instruction lessons should be taught for 30 to 45 minutes five days a week. However, for students who are more than two years behind in reading the program recommends more time and smaller group instruction to help meet student individual needs.
Voyager Passport was implemented into the Poteau School District in 2002 and was used with all Special Education students since the 2006-2007 school year. The teachers delivered 30 to 45 minutes of instruction five days a week to students in a pull out model.

In Norwood Elementary in Miami, FL after 26 weeks using the Voyager Passport Program student scores on the SAT-10 went up by 28 percent from 2005 to 2006 with 73 percent of second graders scoring at or above the 50th percentile.

Arguelles et al. (2007) reported that in 2004-2005 Norwood created two reading classes in third grade based on students reading proficiency. They noted that the students that were in the at-risk reader group received Voyager Passport in addition to their core reading program on a daily basis.

Arguelles et al. (2007) also reported that Lakedale Elementary in Ft. Lauderdale, FL had 61 students participate in Voyager Passport for 26 weeks and 56 percent of these students passed that FCAT in 2006.

Voyager Passport is designed to be used with small groups and taught for 30-45 minutes daily. The research shows that most schools used the program for at least 26 weeks to obtain results. This model fits well with the Hayward Primary Schools set up for providing reading intervention time to students.

2. The program meets the districts requirement of a progress monitoring tool, is compatible with CCSS, and is aligned with RTI.

The reading coach at Hayward Primary School progress monitored students on a weekly basis using DIBELS Next, a researched based assessment designed to assess the core components of reading. The student data was entered into VPort and the information was shared with the SST every two weeks.

Voyager Passport provides an online data management system called VPORT, this is where student benchmark and progress monitoring data can be stored. This data management system helps
facilitate instructional decisions regarding frequency of progress monitoring, level of instructional intensity, the use of differentiated instruction, and re-teach opportunities.

The Hayward Primary School is currently using VPort to track student progress monitoring data and also uses DIBELS which is compatible with Voyager Passport.

However, RTI and Wisconsin Department of Education are currently leaving the choice of intervention materials up to the individual school districts. They do, however, suggest that the intervention materials should be research based and compatible to the CCSS. Voyager Passport meets with the recommendations of RTI and the Wisconsin Department of Education and supports the use of providing early intervention services to help mitigate the consequences of students falling behind their peers (Henry & Peyton, 2008).

Arguelles et al. (2007) reported that in 2004-2005 Norwood created two reading classes in third grade based on students reading proficiency. They noted that the students that were in the at-risk reader group received Voyager Passport in addition to their core reading program on a daily basis.

Henry and Peyton (2008) remarked that Voyager Passport is a comprehensive program that is complimentary to all core reading programs and should be delivered to students as a supplement to core instruction.

The data shows that Voyager Passport is designed to be complementary to the CCSS and should be delivered as an additional support to the core reading program.

Students who are responding positively to RTI instruction and intervention service develop the knowledge and skills characteristic of mature, effective readers (Wixson & Lipson, 2012).
RTI also stresses that reading intervention needs to be research-based and data-driven. The use of progress monitoring is critical for evaluating student progress and the effectiveness of the intervention. 

*Voyager Passport* is a reading intervention program that is aligned with the Three-Tier Reading Model from the University of Texas Center for Reading and Language Arts and has been demonstrated to be effective in addressing these concerns (Henry & Peyton, 2008).

*Voyager Passport* is designed as an intervention program and provides data in VPort that tracks student progress and places them into the three RTI tiers.

3. **The program will be culturally appropriate and address the individual learning needs of students.**

The study done as the Poteau School district in Oklahoma had similar demographics to the Hayward Primary School. In 2012-2013 Hayward Primary School had 439 students enrolled in pre-kindergarten to second grade. The school’s Ethnic/Racial background was comprised of 67% White students, 29% of Native American students, 2% Black students, 2% Hispanic students, and .02% of Asian students. There were 59.4% of the students receiving free and reduced lunch services.

At the Hayward Primary School for 2012-2013 the Ethnic/Racial background of tier 3 students was comprised of 48% White students, 40% Native American students, 9% Black students, and 4% Hispanic students.

During the 2006-2007 school year Peyton and Macpherson (2008) evaluated the use of *Voyager Passport* in the Poteau Primary School in Oklahoma. There were 680 students in pre-kindergarten to second grade. The school’s Ethnic/ Racial background of students was 34.4% American Indian/Alaskan, 0.2% Asian, 1.9% Black, 10.1% Hispanic, and 62.3% White. There were 61.9% of students qualifying for free or reduced lunch (p.1).
During the 2012-2013 school year at Hayward Primary School 8 tier 3 second grade students ended up qualifying for special education services. Only 2 of the 8 students who qualified for special education had received intervention services in first grade as well as second grade.

Peyton and Macpherson (2008) reported that in the Poteau School District the number of second grade students receiving special education services had dropped from 36 in 2002 to 3 in 2007. This was after five years of using the Voyager Passport reading intervention program. (See Appendix G). Voyager Passport has been implemented in rural settings similar to Hayward Primary School, with populations that have similar demographics, and was shown to be culturally appropriate in various settings.

Final Summary

Voyager Passport’s design appears to be compatible with the needs of the Hayward Primary School. The program was piloted in second grade in 2012-2013 and there was some positive gains made by students with 4 moving up to tier 2 and 1 student moving up to tier 1. The research shows that in order to get maximum results from the program it takes at least 26 weeks of direct instruction as provided by the teacher’s manual done on a daily basis for 30 to 45 minutes. The amount of time required to implement the program on a daily basis needs to be addressed by the SST to make sure students are getting the proper amount of intervention services to meet their individual needs. It appears that the program may do a good job of meeting the needs of students who are about one year or less behind in grade level. However, the program may not be the best fit for those students who are two or more years behind. For the purpose of the Hayward Primary School it seems that implementation at kindergarten would be best followed by first grade and then possibly continued on in second grade for those students who are still tier 3, but making gains towards being on grade level. In looking at the data from other schools it appears that with several years of proper implementation student test scores continue to go up, putting
them on grade level. One of the goals of the Hayward Primary School is to reduce the number of students needing special education services and to increase the number of students being at or above grade level academically. It appears that the use of Voyager Passport in the Hayward Primary School may help the school in meeting this goal if it is given time to be properly implemented.
Reference


for 3rd-grade reading performance in Charlotte-Mecklenburg schools. Retrieved from

http://www.cms.k12.nc.us/.../cfre/.../DIBELS%20Research%20Study.pdf


Reading Research Quarterly, 41 (1), 108-117.


http://digitalscholarship.tnstate.edu/disertations/AA13320569


Appendix A

Table 4. Diagnostic Efficiency Statistics Using DStep Proficiency Scores and DORF

Mid-year At-Risk Cutoff Scores

<table>
<thead>
<tr>
<th>Group</th>
<th>Sensitivity</th>
<th>Specificity</th>
<th>PPP</th>
<th>NPP</th>
<th>DStep BFR</th>
<th>DStep BPR</th>
<th>OCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>.59</td>
<td>.87</td>
<td>.41</td>
<td>.93</td>
<td>.13</td>
<td>.87</td>
<td>.83</td>
</tr>
<tr>
<td>W</td>
<td>.51</td>
<td>.87</td>
<td>.28</td>
<td>.95</td>
<td>.09</td>
<td>.91</td>
<td>.83</td>
</tr>
<tr>
<td>AI</td>
<td>.68</td>
<td>.88</td>
<td>.70</td>
<td>.87</td>
<td>.30</td>
<td>.70</td>
<td>.82</td>
</tr>
</tbody>
</table>

Note. DStep= Dakota State Test of Educational Proficiency; W= White; AI=American Indian; PPP=positive predictive power; NPP= negative predictive power; DStep BFR= base failure rate; DStep BPR= base pass rate; OCC= Overall correct classification; AI false negative=9.57%; AI false positive= 8.70%, W false negative= 4.40%; W false positive=12.10%
Appendix B

Table 5. 2006 Hasbrouck & Tindal Oral Reading Fluency Data

*WCPM= Words Correct Per Minute  **Average average per week growth

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentile</th>
<th>Fall WCPM*</th>
<th>Winter WCPM*</th>
<th>Spring WCPM*</th>
<th>Avg, Weekly Improvement**</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>90</td>
<td>(Students WCPM not tested yet)</td>
<td>81</td>
<td>111</td>
<td>1.9</td>
</tr>
<tr>
<td></td>
<td>75</td>
<td></td>
<td>47</td>
<td>82</td>
<td>2.2</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td></td>
<td>23</td>
<td>53</td>
<td>1.9</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td></td>
<td>12</td>
<td>28</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td></td>
<td>6</td>
<td>15</td>
<td>0.6</td>
</tr>
<tr>
<td>2</td>
<td>90</td>
<td>106</td>
<td>125</td>
<td>142</td>
<td>1.1</td>
</tr>
<tr>
<td></td>
<td>75</td>
<td>79</td>
<td>100</td>
<td>117</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>52</td>
<td>72</td>
<td>89</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>25</td>
<td>42</td>
<td>61</td>
<td>1.1</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>11</td>
<td>18</td>
<td>31</td>
<td>0.6</td>
</tr>
<tr>
<td>3</td>
<td>90</td>
<td>128</td>
<td>146</td>
<td>162</td>
<td>1.1</td>
</tr>
<tr>
<td></td>
<td>75</td>
<td>99</td>
<td>120</td>
<td>137</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>71</td>
<td>92</td>
<td>107</td>
<td>1.1</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>44</td>
<td>62</td>
<td>78</td>
<td>1.1</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>21</td>
<td>36</td>
<td>48</td>
<td>0.8</td>
</tr>
<tr>
<td>4</td>
<td>90</td>
<td>145</td>
<td>166</td>
<td>180</td>
<td>1.1</td>
</tr>
<tr>
<td></td>
<td>75</td>
<td>119</td>
<td>139</td>
<td>152</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>94</td>
<td>112</td>
<td>123</td>
<td>0.9</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>68</td>
<td>87</td>
<td>98</td>
<td>0.9</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>45</td>
<td>61</td>
<td>72</td>
<td>0.8</td>
</tr>
<tr>
<td>5</td>
<td>90</td>
<td>166</td>
<td>182</td>
<td>194</td>
<td>0.9</td>
</tr>
<tr>
<td></td>
<td>75</td>
<td>139</td>
<td>156</td>
<td>168</td>
<td>0.9</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>110</td>
<td>127</td>
<td>139</td>
<td>0.9</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>85</td>
<td>99</td>
<td>109</td>
<td>0.8</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>61</td>
<td>74</td>
<td>83</td>
<td>0.7</td>
</tr>
<tr>
<td>6</td>
<td>90</td>
<td>177</td>
<td>195</td>
<td>204</td>
<td>0.8</td>
</tr>
<tr>
<td></td>
<td>75</td>
<td>153</td>
<td>167</td>
<td>177</td>
<td>0.8</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>127</td>
<td>140</td>
<td>150</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>98</td>
<td>111</td>
<td>122</td>
<td>0.8</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>68</td>
<td>82</td>
<td>93</td>
<td>0.8</td>
</tr>
<tr>
<td>7</td>
<td>90</td>
<td>180</td>
<td>192</td>
<td>202</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>75</td>
<td>156</td>
<td>165</td>
<td>177</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>128</td>
<td>136</td>
<td>150</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>102</td>
<td>109</td>
<td>123</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>79</td>
<td>88</td>
<td>98</td>
<td>0.6</td>
</tr>
<tr>
<td>8</td>
<td>90</td>
<td>185</td>
<td>199</td>
<td>199</td>
<td>0.4</td>
</tr>
<tr>
<td></td>
<td>75</td>
<td>161</td>
<td>173</td>
<td>177</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>133</td>
<td>146</td>
<td>151</td>
<td>0.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>25</td>
<td>106</td>
<td>115</td>
<td>124</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>77</td>
<td>84</td>
<td>97</td>
<td>0.6</td>
<td></td>
</tr>
</tbody>
</table>
Appendix C

Table 1. Comparison of DIBELS Data Beginning to Mid-Year

<table>
<thead>
<tr>
<th>General Population</th>
<th>ALL ELIPG</th>
<th>Waterford</th>
<th>Read Well</th>
<th>Scott Foresman ERI</th>
<th>Voyager Passport</th>
<th>Full Day Kindergarten (FDK)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fall/Winter</td>
<td>Fall/Winter</td>
<td>Fall/Winter</td>
<td>Fall/Winter</td>
<td>Fall/Winter</td>
<td>Fall/Winter</td>
</tr>
<tr>
<td>Benchmark (80%)</td>
<td>55%,57%</td>
<td>63%,64%</td>
<td>61%,37%</td>
<td>52%,49%</td>
<td>34%,57%</td>
<td>38%,75%</td>
</tr>
<tr>
<td>Strategic (15%)</td>
<td>27%,27%</td>
<td>20%,25%</td>
<td>29%,32%</td>
<td>30%,34%</td>
<td>30%,34%</td>
<td>37%,17%</td>
</tr>
<tr>
<td>Intensive (5%)</td>
<td>18%,17%</td>
<td>17%,11%</td>
<td>10%,31%</td>
<td>17%,17%</td>
<td>25%,17%</td>
<td>25%,8%</td>
</tr>
</tbody>
</table>
Appendix D

Table 2. Overview of Student Demographic Information for Each Study

<table>
<thead>
<tr>
<th></th>
<th>Average % Free-Reduced-Lunch</th>
<th>Average % Minority Student Enrollment</th>
<th>Average % Female</th>
<th>Number of Students and Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFA Adventure Island</td>
<td>76</td>
<td>90</td>
<td>47</td>
<td>T: 242 ( C: 242 ) ( S: 5 )</td>
</tr>
<tr>
<td>CEEP Voyager Passport</td>
<td>52</td>
<td>7</td>
<td>50</td>
<td>T:119 ( C: 133 ) ( S: 15 )</td>
</tr>
<tr>
<td>MRP READ 180 Year 1</td>
<td>68</td>
<td>72</td>
<td>54</td>
<td>T: 155 ( C: 157 ) ( S: 4 )</td>
</tr>
<tr>
<td>MRP READ 180 Year 2</td>
<td>91</td>
<td>65</td>
<td>53</td>
<td>T: 152 ( C: 152 ) ( S: 4 )</td>
</tr>
</tbody>
</table>

*NOTE: T: Treatment Group, C: Control Group, S: Sites*
Appendix E

Figure 3. Percent of Fourth Grade Students Receiving Special Education Services Passing the Reading CRT.
Appendix F

Figure 2: Number of Second Grade Students Receiving Special Education Services

- 36 students in 2002 without Voyager
- 8 students in 2003 with one year of Voyager
- 4 students in 2004 with two years of Voyager
- 3 students in 2007 with five years of Voyager