Students Receiving Special Education Services Succeed on OCCT after using *Voyager Passport*[™] Reading Intervention

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This report evaluates the program effects of Voyager PassportTM on the reading achievement for students receiving special education services in Poteau, Oklahoma based on results from the Oklahoma Core Curriculum Tests (OCCT). Passing rates on the OCCT and the reduction in the number of students being referred for special education services provide evidence that students receiving special education services are making gains in reading achievement.

INTRODUCTION

Many studies have shown a strong correlation between reading fluency and reading achievement. Oral Reading Fluency is the key to predicting which students will achieve grade-level reading. Several studies show that more than 80% of students who can read third-grade level text at a rate of 110 words per minute pass the highstakes state reading assessments.

Current research converges on the certainty that few students acquire reading naturally, and that most students benefit from explicit and direct, structured instruction (National Reading Panel, 2000). This research, based on sound, scientific observations and analyses, provides evidence for not only what instruction works, but why and how it works (Reyna, 2004). Those students who struggle learning to read are served as well in small groups of three to four students as they are individually (Torgesen, 2004; Vaughn & Linan-Thompson, 2003).

An intense focus of instruction as of late has been on improving reading proficiency of students and providing intervention for those students who struggle with learning to read adequately. Although many children will have difficulty learning to read, regardless of their core reading program, they cannot simply be left to fall behind. Research has provided the knowledge and tools teachers need to ensure every student becomes a successful reader (Shaywitz, 2003).

The school district in Poteau Oklahoma serves about 2,240 students in all and has two public elementary schools, one middle school, and one high school. This district has used *Voyager Passport* and other Voyager curricula for about five years. The *Voyager Passport* curriculum is used for all students receiving special education services since the 2006-2007 school year. This report examines the outcomes for students who used the Voyager curricula, particularly, *Voyager Passport*.

DEMOGRAPHICS

In the Poteau School District, approximately 16.7% of the students qualify for special education services and 6.6% of the students are classified as ELL. Within the Poteau School District, the two elementary schools serve different grade spans. Poteau Primary Elementary School serves pre-kindergarten through second grade students. This school serves about 680 students. The Ethnic or racial background of the students are 34.4% American Indian/Alaskan, 0.9% Asian, 1.9% Black, 10.1% Hispanic, and 52.7% White. Students are evenly divided between gender, 52% female and 48% male. Approximately 61.3% of the students qualify for free or reduced lunch.

The other elementary school, Poteau Upper Elementary School, serves third through fifth grade students. This school serves about 470 students. The Ethnic or racial background of the students are 28.3% American Indian/Alaskan, 0.2% Asian, 0.9% Black, 8.3% Hispanic, and 62.3% White. Students are evenly divided between gender, 47% female and 53% male. Approximately 61.9% of the students qualify for free or reduced lunch.

IMPLEMENTATION

The Poteau School District implements an in-school, pull out model for the reading intervention. Lessons are delivered to students five days a week for 30 to 45 minutes per day. The teachers were responsible for the testing of the students and for placing the assessment scores into VPORT[®], the Voyager data management system.

MATERIALS

Voyager Passport provides direct, systematic instruction in each of the essential reading components and is designed as an intervention program for students for whom the core reading program is not sufficient and for students receiving special education services. The lessons are based on the scientific knowledge about effective reading instruction. The lessons address decoding strategies, fluency, and comprehension. Each student receives a set of individual instructional materials for the duration of the program.

Phonemic Awareness: To make the greatest gains in reading, students must learn to blend and segment individual sounds in words. Student gains in reading and spelling are strongest when print is integrated with phonemic awareness instruction (Hatcher, Hulme, & Ellis, 1994). For third grade students, the phonemic activities are integrated into the phonics and spelling lessons where students can apply knowledge of the alphabetic principle and coordinate orthographic, phonemic, and graphemic knowledge.

Phonics: Phonics instruction is the systematic use of sound-symbol relationships to teach the reading and writing of words. *Voyager Passport* utilized the extensive research base in phonics to develop systematic and explicit phonics and spelling lessons, shown to be the most effective way to ensure appropriate reading growth (National Reading Panel, 2000). The instruction builds in difficulty incorporating letter combinations, affixes, and strategies for decoding multisyllabic words. Words with irregular spelling patterns are also taught explicitly with extensive review.

Fluency: Fluency is the ability to accurately and quickly read text. Fluent reading allows readers to focus on comprehending and gaining meaning from text. Fluency instruction in Voyager Passport provides specific time for practicing reading and rereading text accurately, efficiently, and with expression. Once students can read connected text, repeated reading with feedback is an effective practice for improving fluency and reading achievement (Chard, Vaughn, & Tyler, 2002; Homan, Klesius, & Hite, 1993; National Reading Panel, 2000). As students develop more advanced reading skills, fluency lessons focus on text-level reading with teachers modeling appropriate reading rates and expression. Strategies for chunking text are also explicitly taught and timed readings motivate and challenge students to improve their reading rates.

Vocabulary: Vocabulary refers to the words a person understands and uses in listening, speaking, reading, and writing. Students learn word meanings through direct and indirect experiences with oral and printed language (Beck, McKeown, & Kucan, 2002; National Reading Panel, 2000). *Voyager Passport* addresses vocabulary instruction through a sequence of word introduction, with read-alouds, student passage reading, comprehension activities, and text discussions. The design allows repeated exposure to new vocabulary in a variety of contexts using oral and written language.

Comprehension: Comprehension is the ability to understand and gain meaning from language. Snow, Burns, and Griffin (1998) assert that the student needs both background knowledge and conceptual sophistication to understand the meaning of a word or text. Students extract meaning as well as construct meaning as they build representations and gain new meaning (Snow & Sweet, 2003). Voyager Passport teaches strategies for understanding text, including teaching students to monitor their comprehension, organizing and retelling information presented, recognizing story structure, generating questions about the text, predicting outcomes in the text, and confirming or revising predictions (National Reading Panel, 2000; Pressley & Wharton-McDonald, 1997; Rosenshine, Meister, & Chapman, 1996).

ASSESSMENTS

Assessment is embedded within Voyager Passport. Vital Indicators of Progress (VIP[®]) measures developed by Dr. Roland Good and colleagues at the University of Oregon are one-minute individually-administered fluency indicators to monitor growth in Voyager Reading Programs and are completely equivalent to Dynamic Indicators of Basic Early Literacy Skills (DIBELSTM). Concurrent validity with the DIBELS/VIP passages and the TORF (Test of oral reading fluency) ranges from .91 to .96 across the passages. The cutoffs and goals are based on finding a point where the odds would be in favor (at least 80%) of the student achieving subsequent literacy outcomes as developed by the DIBELS Benchmarks (Good, Simmons, Kame'enui, Kaminski, & Wallin, 2002). Results for the VIP benchmarks identify if a student is a struggling, an emerging, or an on-track reader.

The RCT measure (Reading Connected Text) is a standardized, individually administered test of reading fluency with connected text for students in grades 1 through 5 and above. RCT is a set of equivalent passages and administration procedures designed to identify students who may need additional instructional support, and to monitor progress toward instructional goals.

Student performance is measured by having students read a passage aloud for one minute. Words omitted, substituted, and hesitations of more than three seconds are scored as errors. Words self-corrected within three seconds are scored as accurate. The number of correct words per minute from the passages is the oral reading fluency rate which is reported as the "RCT score." The tool provides information on student performance in English.

Typically the DIBELS goals are used with the VIP[®] fluency measures based on time of year (Good, Simmons, Kame'enui, Kaminski, & Wallin, 2002). The

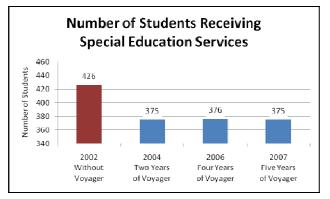
Hasbrouck and Tindal Oral Reading Fluency Norms (2006) are mentioned as a point of reference for oral reading fluency where appropriate. The DIBELS/VIP passages however are standardized passages based on end of grade level reading targets and calibrated across nine readability formulas. Hasbrouck and Tindal Norms were developed using data collected from real teachers across the nation using the text they selected individually perceived as grade level text. In both cases the samples for the norms are quite substantial and provide valuable and reliable reference points for oral reading fluency. For the purposes of this study, the end of year DIBELS goals of 110 words per minute is used for third grade students and 124 words per minute is used for fifth grade students.

RESULTS

Referral for Special Education Services

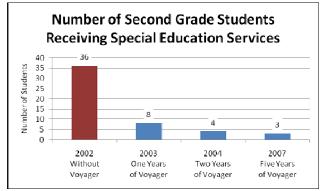
As reported by the School Psychologist and Special Education Director for Poteau Public Schools, Brenda Adams, since the district started implementing *Voyager Passport* in the fall of 2002, the referrals for special education services have dropped from 426 students to 375 students. The rate of referrals has remained fairly constant since the initial drop. Figure 1 shows the number of students receiving special education services across the five years of using *Voyager Passport*.

Figure 1. Students Receiving Special Education Services.



Breaking out second grade students in particular, there was a significant drop in students receiving special education services after implementing *Voyager Passport* in 2002. Figure 2 shows the number of second grade students receiving special education services across the five years the district has been implementing *Voyager Passport*.

Figure 2. Second Grade Students Receiving Special Education Services.



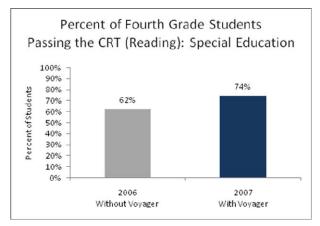
Passing Rates on the OCCT

The Oklahoma Core Curriculum Tests (OCCT), also known as the Criterion Referenced Tests (CRT), is given to students in third through eighth grades. The tests are aligned with the state-mandated curriculum, the *Priority Academic Student Skills* (PASS) which has been adopted by the State Board of Education and is the curriculum foundation for all public schools. The district has provided information about the progress of fourth and fifth grade students who receive special education services, including *Voyager Passport* for reading instruction.

Fourth Grade Students. During the 2006-2007 school year, *Voyager Passport* was implemented with all fourth grade students receiving special education services. The group of students who had all of the VIP ORF scores (n = 11) had a gain of 35.9 words per minute across the school year. The average gain for students who are on track for meeting the next fluency goal is 25 words per minute.

The OCCT information provided by the district shows that before implementing *Voyager Passport*, 62%, 13 of 21 third grade students receiving special education services passed the state test in 2006. After implementing Voyager Passport, 74%, 17 of 23 fourth grade students receiving special education services passed the state test in 2007. This represents a healthy increase in students passing the state test. Figure 3 shows this fourth grade information.

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



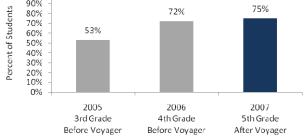
Fifth Grade Students. During the 2006-2007 school year, *Voyager Passport* was implemented with all fifth grade students receiving special education services. The group of students who had all of the VIP ORF scores (n = 9) had a gain of 41.3 words per minute across the school year. The average gain for students who are on track for meeting the next fluency goal is 20 words per minute for students in fifth grade.

The OCCT information provided by the district shows that before implementing *Voyager Passport*, 53%, 10 of 19 third grade students receiving special education services passed the state test in 2005. In 2006, 72%, 13 of 18 fourth grade students receiving special education services passed the state test. After implementing *Voyager Passport*, 75%, 12 of 16 fifth grade students receiving special education services passed the state test in 2007. Figure 4 shows the increase of students passing the CRT from 2005 through 2007.

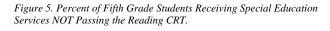
Percent of Fifth Grade Students Passing the CRT (Reading): Special

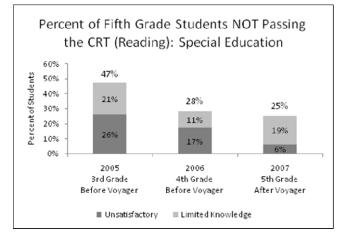
Figure 4. Percent of Fifth Grade Students Receiving Special Education

Services Passing the Reading CRT.



Almost more interesting than the passing rate for fifth grade students receiving special education services is the information about what happened to the students who did not pass the CRT from 2005 to 2007. Figure 5 shows what happened to the students who did not pass the CRT. Notice that there are two categories for students who did not pass, Limited Knowledge and Unsatisfactory. Not only did the percent of student not passing go down, but the number of students who received an Unsatisfactory rating fell substantially over the years.





CONCLUSION

The information provided by the district allows us to come to the conclusion that students who receive *Voyager Passport* as part of the special education services make progress. Students made positive growth in oral reading fluency during the *Voyager Passport* reading intervention. Growth in fluency transfers to greater success on high-stakes measures such as the Oklahoma CRT. Because oral reading fluency as measured by RCT is a significant predictor of scale scores on high stakes tests, the focus of improving reading proficiency and measuring fluency with progress monitoring will enable educators to best predict which students need additional support to reach subsequent literacy goals.

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