Victorious Through Sight Word Recognition

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Introduction

This paper primarily focuses on a student struggling in the areas of fluent reading, sight word recognition, and low self-confidence. The main strategy reported here and implemented in this case study, is the use of direct instruction of sight word recognition to enhance fluency of progress monitoring scores for Dynamic Indicators of Basic Early Literacy Skills (DIBELS) assessment. The overall topic for this case study was whether or not a struggling reader can be victorious on progress monitoring assessments through the recognition of basic sight words. The case study further examines the impact of sight words on the scores of progress monitoring assessments, also known as reading assessments, on a low performing student in the second grade.
Demographics

This study occurred in a public primary school in a southeastern state, where a majority of the students received a free breakfast and lunch. This inner city Title 1 school includes a prekindergarten through fifth grade classes. This city school primarily consists of African American students (98.6%), some Hispanic students (1.4%) the school and serves 362 students. The school is part of the Alabama Mathematics, Science, and Technology Initiative (AMSTI) which provides additional manipulatives, materials, and activities for educating students in the areas of mathematics, science, and technology. The teachers are AMSTI certified receiving mathematics and science materials for all grade levels. All students in the second grade placement were African American at the time of the study in fall 2014. There were nine female and nine male students in my second grade class, comprising 18 total students. The students were placed within an inclusion-based classroom, with students of all performance levels. A majority of the students performed on a relatively low reading level. Most of the struggling students were seated near the front of the room, from which the classroom teacher taught a majority of the lessons. There were four students with Individualized Education Programs (IEP’s) and one student was receiving services through the school’s Response to Intervention (RTI) program. One female and one male student were pulled out for speech services.

The classroom’s configuration consisted of four groups of three or four students. The desks appeared to be in rows, but these rows consisted of the groups of students. The classroom was arranged in this manner to work with behavior management. Numerous manipulatives were available for the students to use at various locations in the classroom.

Statement of the Problem

Out of the 18 students, there were several struggling readers performing below a second grade level. One student correctly read only seven words per minute (WPM) on his Dynamic Indicators of Basic Early Literacy Skills (DIBELS) assessments, and skipped a majority of basic sight words during the reading of simple passages on a second grade reading level. Over the course of the semester, the student exhibited signs of a strong disinterest towards reading, which appeared to result from his inability to identify basic sight words: words that should be easily recognizable for readers. The student often seemed to zone out during class instructional times. This student struggled to remain attentive during lessons, frequently becoming noticeably inattentive and during reading and mathematics. This student received the accommodation of having his tests read aloud to him, because he was unable to read the content presented on the test. This student could determine correct choices on tests, but could not read any of the questions or answers. I realized the student lacked motivation to practice independent reading, and seemed to be unmotivated to independently practice his sight words. I realized he was not receiving a lot of amount of daily and individualized instruction on his recognition of sight words, which led me to question my ability to develop effective strategies to help this struggling reader’s recognition of basic sight words.
After reflecting on the problem, I began searching for reasons as to why this student had relatively low performance on his DIBELS assessments. After assessing the student on second grade level sight words, I found he did not correctly recognize a single sight word on the second grade list. Therefore, I developed an action research question investigating my ability to meet this student’s needs.

**Review of Literature**

What is the purpose of sight word recognition for beginning and struggling readers? Many articles provide insight on the impact sight word recognition has on reading abilities, and often describe successful implementations of effective pedagogical approaches for teaching students how to easily and quickly identify common words throughout most literary compositions. Sight words appear to be an integral and vital foundation for successful reading skills among elementary students. Sight word recognition enhances students’ pace, rhythm, and fluency for various levels of text. The recognition of sight words ultimately permits students to develop strong literacy skills that assist and encourage multiple academic, social, emotional, verbal, and non-verbal skills in exceptional students with varying disabilities (Crowley, McLaughlin, & Kahn, 2012; Fosset & Mirenda, 2005; “Struggling Readers”, n.d.). According to “Teaching Sight Words” (2014), once students learn “…all of the Dolch’s list of sight words…[the students] have access to [approximately] 75% of what is printed in almost any piece of children’s literature” (Teaching Sight Words – Effective Strategies for Reading Success section, para 1).

The primary source of improving sight word recognition is the use of repetitive exposure through direct instructional methods (“Teaching Sight Words”, 2014; Crowley et al., 2012; Mugurussa, 2012). Mugurussa suggests music, word walls, games, writing, manipulatives, and reading as successful strategies for teaching sight word recognition. Although Mugurussa believes in implementing various activities, Crowley et al. encouraged elementary teachers to use direct instruction flashcards, where students are permitted to be consistently and repeatedly exposed to any Dolch sight words missed during a sight word assessment. Crowley’s preference for using basic index cards for repeatedly exposing autistic students to their missed sight words has been tested by other researchers, who implemented additional studies to test the validity of using these direct instructional flashcards. These researchers indicate a highly effective use of direct instructional flashcards for sight word recognition in young students with learning disabilities (Crowley et al., 2012; Kaufman, McLaughlin, Derby, & Waco., 2011).

Most students appear to greatly benefit from the implementation of direct instructional flashcards without illustrations (Crowley et al., 2012; Meadan, Stoner, & Parette, 2008; Fossett & Mirenda, 2005). Samuels’ indicated using pictorial cues for struggling students was an unsuccessful pedagogical approach (as cited in Meadan et al., 2008). When the Dolch sight word assessment is administered after using flashcards with pictures, most students have been found to perform worse on the assessment, because they begin looking for the picture instead of reading the sight word (Meadan et al.; Fosset & Mirenda). Fosset and Mirenda (2005) strongly suggest teachers
engage students in active or experiential learning as a strategy for teaching sight word recognition, because active and experiential learning allows students to become proactively involved in a meaningful learning process.

Beyond the flashcard method, researchers suggest implementing the use of iPad applications with younger students (Northrop & Killeen, 2013). Integrating the use of iPad applications begins a series of active learning opportunities, because students begin manipulating the features offered on iPads, which allows direct instruction with active learning to occur (Northrop & Killeen). Using iPads during sight word instruction significantly increases student motivation to learn the sight words, thus resulting in a slight improvement for student reading performances (Jameson, Thompson, Manuele, Smith, Egan, & Moore, 2012). Although these two studies provide some insight on the implementation of iPad applications, there is not enough research conducted on the success or implications of integrating this form of instruction.

Method

For the purposes of this action research study, I implemented a case study approach examining direct and repetitive instruction through the use of Ace Writer - iTunes®, and colored AMERICAN CLASSICS-Craft Popsicle Sticks®, in order to enhance my ability to help a struggling reader improve his scores on Pre-Primer sight words and DIBELS assessments. Before implementing the strategies for my study, I observed the student’s reading habits closely. I noted and reflected on how he approached various literature pieces, how he engaged in whole and small group lessons, and how he behaved during instructional and independent times. Also, I examined the student’s sight words and DIBELS scores from the beginning of the student’s second grade year. After examining the student’s initial scores, I administered a Dolch’s sight word recognition assessment on Pre-Primer and Primer words, which were provided in a familiar format. I also assessed the student using a progress monitoring sheet available from the southeastern school’s reading program for DIBELS assessments.

The student did not receive any additional instruction on sight words the day before the previously mentioned assessments. After assessment I began directly instructing the student by solely implementing the iPad application, which is the full version of Ace Writer - iTunes®. This inner, city school does not have access to iPads within or outside of the general education classroom so I used my personal iPad. In order to gain an understanding of whether or not the application is effective for the struggling reader, the assessments occurred immediately [approximately two minutes] after implementation of the first strategy for direct instruction.

After implementing the use of the iPad application, I began implementing the use of colorful popsicle sticks. I implemented only the popsicle sticks for a short amount of time, but eventually integrated the strategies simultaneously. The Dolch sight word lists continued to be administered immediately after direct instruction of these strategies, but the DIBELS assessments was occasionally administered.
Description of and Reasons for Selected Materials: Excluding Assessments

The Ace Writer - iTunes® application was selected for implementation, because the iPad application exhibits several vibrant colors, provides opportunities for users to experience sight words in diverse contexts, permits users to engage in tactile learning opportunities, and provides all of the Dolch sight word lists. This application also allows users to select words for tracing purposes, where users may select a desired color for tracing the letters displayed in the selected sight word. The application proactively engages students in a world of color and manipulation. This application was selected, because of the lack of research regarding the effectiveness of implementing iPad applications to enhance sight word recognition and reading scores.

The popsicle sticks were a bright and inviting color of yellow. Missed sight words need to be clearly and legibly written in dark blue or black ink, in order for the student to clearly see the words on the popsicle sticks. Popsicle sticks were primarily selected, because they are a useful alternative way of presenting sight words in a rote manner. The bright colors of the popsicle sticks would hopefully provide the focal student with a stronger desire to enhance his sight word recognition skills.

Both materials were selected because of results reported in the research, but also due to my personal questions about the effectiveness of technology and manipulatives in the general education classroom. These resources were ultimately used to directly instruct the focal student on sight word recognition, in order to hopefully enhance the student’s overall reading ability. Implementing these materials provided a glimpse of how I can effectively or ineffectively approach teaching with technology and manipulatives.

Time and Environmental Conditions

The study occurred during the middle of the classroom’s reading block, when six other students are pulled out for Response to Intervention (RTI) instruction. The remaining students were expected to silently read books around the classroom, or explored reading strategies through the use of various computer programs. My remaining students were familiar with the teacher helping individuals during various times of the school day. The focal student and I were positioned at the left side of the classroom, where one of the teacher-student work areas is located. The student sat across from me, and was presented with appropriate materials at appropriate times.

Timeline

Day one: Administer DIBELS progress monitoring assessment for one minute. Mark any skipped words, words that have to be stated by the teacher for the student to continue reading, and words that are mispronounced as errors. Compare and contrast this assessment with the student’s first DIBELS progress monitoring score from the beginning of the semester, and briefly discuss the student’s progress with the student.
Day two: Assess student using Dolch Primer sight word list. If student misses a word, place a check mark to indicate an error has been made. Correct words remain blank. If the student says a wrong word, write the word the student says. Once finished with assessment, count the number of errors.

Day three: Assess the student using the Dolch Pre-Primer sight word list. Follow the guidelines from Day two for marking errors and determining the score of the assessment.

Day four: Use Ace Writer - iTunes® application for all Pre-Primer words. Ask student to state the words from the Pre-Primer set. If the student misses a word or claims he does not know a word, have the student trace the word on the application. Allow the student to choose a color for tracing the word. After tracing the word, have the student say the word at least three times. (If the student continues to struggle with a word, have the student spell the word as he traces the letters). This instruction should last for at least thirty minutes. After engaging student with the iPad, immediately assess student on Dolch Pre-Primer assessment.

Day five: Administer DIBELS progress monitoring assessment for ONE minute. Mark errors as any skipped words, words that have to be told, and words that are mispronounced. Compare and contrast this assessment with the student’s first DIBELS progress monitoring score from the beginning of the semester.

Day six: Same as Day four.

Day seven: Write frequently missed words from the Dolch Pre-Primer assessment onto yellow popsicle sticks. The missed words should be written in blue or black sharpie, in order to be greatly contrasted against the yellow popsicle stick. Start off with the teacher having all of the popsicle sticks. Have student say each word on the popsicle stick; if the student says the correct word, the student receives the popsicle stick. If the student struggles to say the words, tell the student the word. However, the student will not be allowed to receive a popsicle stick if he has to ask the teacher to say the sight word. By the end of the instructional time, the student should have all popsicle sticks.

Day eight: First, use the Ace Writer - iTunes® application; follow guidelines from the fourth and sixth days. After using the iPad, use the popsicle sticks; follow guidelines from the seventh day. Assess the child immediately after using the popsicle sticks; use Dolch Pre-Primer set of words as assessment.

Day nine: Same as the eighth day.

Day ten: Assess student using Dolch Pre-Primer list after no instruction for approximately one full week. Compare and contrast results from this assessment with previous assessments.
Day eleven: Use popsicle sticks to review missed sight words from the tenth day. Assess the student with the Dolch Pre-Primer set of sight words.

Day twelve: Assess the student like on the first and fifth days.

**Data**

The data gathered from this action research study were based upon my focal student’s performances on a list of Dolch Pre-Primer sight words and on progress monitoring passages that are similar to DIBELS assessments. The Pre-Primer sight word list was adapted from the bogglesworldesl.com website, which reserves the right to distribute its’ assessment(s) for classroom use(s) only. The use of the assessment was to assess a low-performing student’s progress, but will not be contained in this paper due to copyright laws. If one should desire to obtain the assessment, one should access the assessment via the bogglesworldesl.com website. The use of various progress monitoring passages are obtained from the cooperating teacher, but may only be accessed for the use within the classroom.

The following graphs are provided, in order to indicate the results of implementing the application, popsicle sticks, and a combination of the two strategies. The errors in the sight word assessment are indicated in Figure 1, in order to provide perspective on the effectiveness of the strategies on sight word recognition. The errors in the sight word assessments were easier to calculate than the numbers correct, and provide insight on the student’s personal progress throughout the research. However, the total correct could easily be displayed, and was provided to the student.

*Figure 1. Errors made in Dolch sight words*
The DIBELS assessments are shown in Figure 2, in order to indicate the significant impact that Dolch sight words have on reading scores. These assessments were administered at the beginning, middle, and end of the study. The DIBELS’ scores are based on the correct words read per minute (WPM), which indicates the student’s level of fluency skills. The student’s initial rate is included, in order to compare and contrast the difference in the student’s reading rates from the beginning of the semester to the implementation of Ace Writer – iTunes® and popsicle sticks.

![DIBELS - Words Per Minute (WPM)](image)

*Figure 2. DIBELS Words per minute*

**Data Analysis**

Before implementing the strategies of Ace Writer from iTunes® and the popsicle sticks, the focal student performed far below the indicated reading level for second grade students. The results from the first graph (Figure 1) indicate the student significantly improved on sight word recognition through the use of the iPad application, because the student reduced his amount of errors. The student improved from 16 errors on Pre-Primer sight words to nine errors on Pre-Primer sight words. After assessing the student on the application again, the student slightly improved on one of his sight word errors and made eight errors instead of nine errors, on the second day with the iPad application. The student improved slightly more with the implementation of the popsicle sticks. The amount of errors with the popsicle sticks is extremely similar to the amount of errors with Ace Writer – iTunes®.

The student improved the most when both the iPad application and the popsicle sticks were implemented. The focal student missed six sight words with the first implementation of using both strategies in the same practice session, and eventually only missed three sight words with the implementation of both strategies during the instructional time. The student was re-assessed on the individual strategies during two separate practice sessions for two days of the research, which indicated the sight words were learned the most during the time spent practicing both strategies on the same day during the same practice sessions.

After assessing and analyzing the results from the student’s sight word lists, I decided to assess and analyze the results from the student’s DIBELS’ assessments (see Figure 2). The results
indicate an overall improvement on reading strategies after engaging in the implementation of the iPad application and popsicle sticks. However, these results are possibly affected by additional factors. The student receives some accommodations due to being on an Individualized Education Program (IEP). The focal student spends time engaging in classroom assignments with the special education instructor, in order to enhance reading and math strategies. The student was not pulled out as frequently as usual during the implementation of my research.

**Conclusion**

Overall, the implementation of the Ace Writer - iTunes® application and the popsicle sticks appears to be highly effective. I am surprised by the results, because of my student’s drastic improvement after engaging in the strategies. My student greatly enjoyed using the application and the popsicle sticks during his instructional times, which led him to become extremely motivated. After completing this study, the student asked to use the iPad application several times and began independently working on his sight words by using his popsicle sticks. The student has benefited from the implementation of these strategies, and developed not only a stronger self-confidence, but also demonstrated a stronger desire to learn his sight words with or without direct instruction.

The school’s special education instructor has requested for a copy of my action research study, in order to continue implementing these strategies with not only my focal student, but also with other struggling readers across the curriculum and grade levels. I am excited about implementing the strategy of direct and repetitive instruction through the use of the Ace Writer-iTunes® application and the popsicle sticks, in order to help the struggling readers in my future classroom(s). From this study, I have learned that I can help struggling readers improve their recognition of sight words, in order to impact their reading abilities.

In order to be a successful reader, a student must have a strong foundation in the recognition of sight words during all stages of his or her educational journey. Teaching sight word recognition is a key to developing successful readers in the classroom. I have also learned that struggling readers require a tremendous amount of repetitive exposure of sight words through the strategy of direct instruction. The use of iPad applications and flashcards appear to be highly effective and positive strategies for teaching sight words to young, struggling readers in the second grade. These strategies have taught me the purpose for engaging students in not only proactive instruction, but also for teaching sight word recognition in the lower elementary grades.

As previously mentioned, I would strongly consider implementing this pedagogy in my future classroom. For future experiences, I would like to extend the length of implementation, in order to gain a stronger understanding of the effectiveness of the applications. In my future classroom, I would like to see how this approach impacts students on all ability levels, and I would see how implementing various iPad applications for science, social studies, and mathematics enhances instructional efforts and student performances on various assignments. This strategy of using iPad applications and popsicle sticks could be easily adapted for any content area, and could be used throughout the classroom’s instructional periods.
The special education instructor suggested placing the iPad application on the SMART interactive board, in order to engage whole group discussions. She suggested there is a way to project the application or duplicate the image of the iPad application onto the projector screen. This strategy is intriguing to me, because I want to integrate the use of SMART board technology with various applications on the iPad. I am motivated to discover how projecting the iPad and features are possible, and am determined to discover the benefits and costs of implementing the strategy of direct instruction through iPad applications in a whole group. Most people believe iPad instructional times must occur during small group or center times; however, discovering how to project the iPad’s screen and features might impact my ability to teach students in a direct, yet general format.

I would like to try writing various mathematics facts on popsicle sticks, in order to provide students with an interesting way to study basic addition, multiplication, subtraction, and division facts. I would also consider integrating this strategy in whole group instructions on grammar, punctuation, and other English skills. Ultimately, I want to experiment with these strategies throughout the curriculum, and hope to continue discovering how to implement the use of direct instruction and repetitive exposure through the use of iPad applications and popsicle sticks across the curriculum and grade levels. My study suggests the iPad applications and popsicle might have potential to benefit students of all ages in strategic and various ways.

References


