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The Benefits of Reading Racetrack with Flashcards, a Smartboard and Time Delay Usage in Increasing Sight Word Recognition and Fluency with Special Education Students

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Abstract

The purpose of the study is to determine if the effects of using reading racetrack paired with flashcards and the enhancement of Smartboard technology with three-second time delay will increase the accuracy of Dolch Sight Word reading. The first participant was a second grade male diagnosed with an intellectual disability. The second participant was a fourth grade female born with Down syndrome and diagnosed with an intellectual disability. Data were taken on corrects and errors of selected sight words on a pre-test and posttest and during intervention. A generalization probe was conducted to see if they could read the 28 words without seeing them on the racetrack. In accordance with other studies, Reading Racetrack showed to be effective in increasing sight word recognition. Investigation into Smart Board enhancement with interventions needs more research.

Keywords: Fluency, Sight Words, Smart Board, Three-second time delay, Reading Racetrack

Acknowledgement

Thank you God for creating me as a special needs child and letting me be a role model or an inspiration for other individuals with special needs. Without God, nothing is impossible. To my mom (Milla Flaugher) because she loves me she raised me up to be determined, to fight through adversity and to meet my goals. I Did IT! To my husband (Sam Leffingwell jr) and child (Brooke Leffingwell) thanks for your love, for taking care of me and putting up with the grouchiness and lost family time during the last two years of graduate school. I love you both so very much. To the rest of my family thank you for the continuing love and support throughout my journey. To the best friends in the world you know who you are thanks for the encouraging words and guidance I am so very blessed to have you all. To Dr. Guyer thanks for excepting me into the H.E.L.P program many years ago and guiding me through my undergraduate degree and getting me to where I am today. Finally but not least, thanks to all my wonderful teachers throughout my education especially Judy Gray, Linda Hughes and Barbra Brandal I can only hope to be the teacher you were to me. **May God Bless You All.**

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Chapter1: Introduction

Sight word identification and fluency are difficult for students with intellectual disabilities who struggle to read. Students that have reading disabilities have discrepancies in phonological processing skills, consisting of phonological awareness, rapid naming and phonological recoding. These discrepancies make it difficult for the students to master decoding skills because they limit the ability to read sight words and to build the automatic relationship essential for fluent reading (Ayala & O'Connor, 2013).

Studies show that sight word recognition is important to the acquisition of reading fluency, and creates a bridge to comprehension. In addition, the enhancement of technology in combination with the traditional instruction increases the amount of sight word recognition. Reading essentials for young students are being addressed through technology. Technology programs and device (Smart Boards, tape recorders etc.), can be beneficial for building sight word recognition, delivery of motivation, extra practice and speech output for immediate feedback (Englert, Zhao, Collings & Romig, 2005).

There is limited amount of research on the topic of technology and sight word recognition. The challenge for the students is to execute and navigate the program or devices and to pay attention to the task being asked of them while the teacher is teaching. This is a major drawback.

Statement of the Problem

Some children cannot distinguish a distinct graphic shape automatically and the arrangement of the word and the association of sound it shows, which is how sight word

recognition is defined **(**Akcin, 2013). Children who do not learn word recognition skills most likely will have difficulty with reading through adulthood. Sight words give early readers achievement in learning decoding skills. Automatic word recognition is critical because it contributes to overall comprehension (Kaufman, McLaughlin, Derby & Waco, 2011; National Center of Health and Human Development, 2000).

Fluency is the component that links word recognition and comprehension. Fluency is an essential part of reading that helps form comprehension. Fluent readers read at a correct speed with correct emotion and expression. Evidence shows that if a child cannot read text at a single word level, he or she has a severe reading deficit. In addition, the inability to read fluently by first grade increases the likelihood of the child falling behind their classmates yearly (Van Norman & Wood, 2008). When problems occur, clear instruction must be available to meet the needs of the child.

Rationale for the Study

It is important for students to receive a specific amount of instruction targeting word recognition and fluency to reduce the gap between the fluent and struggling readers (National Reading Panel, 2000). The challenge for the teacher is to find the best way to instruct the students whether it be through whole language or a combination of strategies. The strategies focusing on word recognition and fluency in a playful way in combination with technology and structured teacher-child interaction not only can endorse reading but also motivation and communication.

The Purpose of the Study

The purpose of the study is to determine if the effects of using reading racetrack paired with flashcards and the enhancement of Smartboard technology with three-second time delay would increase the accuracy of Dolch Sight Word reading, for two intellectual disabilities students from an elementary school in the Mid-Atlantic States.

Research Question/Hypothesis Statement

Does the Reading Racetrack combined with flashcards and enhanced with Smart Board technology with a three-second time delay, increase the automatic identification of ten Dolch Sight words of two Intellectual Disabled children in elementary school? Through the independent variable of the Reading Race Track which is operationally defined as an intervention to increase sight word recognition. It consists of 28 cells on an oval track with repeated sight word in each cell. With flashcards and the enhancement of the Smart Board, which is operationally defined as an interactive projection display device that students interface with to experience a variety of activities and three-second time delay. The dependent variable was to increase the amount of automatic recognition of Dolch Sight words by ten words with two elementary students with intellectual disabilities. A pre-assessment of sight words from the pre-primer through third grade Dolch Sight word list for each student on flashcards was given. The students read from the cards and those results provided the words to work on for the data collection. Following the intervention of the Reading Racetrack, a generalization test was conducted to determine if the students could read all 28 words they learned without seeing them on the racetrack. The students read the words from the flashcards as conducted in the pre-assessment.

Chapter 2: Literature Review

Reading is a challenge for students with disabilities whether it is sight word recognition, fluency, motivation, or complex decoding skills. Everyone needs reading skills whether it is in content areas at school, for employment, or safety signs and grocery lists. Mandates have clarified that every child should have the chance to accomplish high academic standards and that teachers should implement research based instruction to all students even those with disabilities Spector (2011), citing No Child Left Behind Act (2001) and Individuals with Disabilities Education Act (2004). Improving the achievement of the low-performing students and the schools in fact is one of the purposes of No Child Left Behind (2001).

The issue is how to teach reading to students with disabilities. Some researchers promote whole-word instruction (Yaw, Skinner, Parkhurst, Taylor, Booher, & Chamber 2011; Burns, 2007; Burns & Sterling-Turmer, 2010). Other researchers promote enhancing early literacy instruction with direct whole-word instruction, which may lessen students' anxiety of not being able to read and may boost self-esteem in their ability to read (Yaw, et al., 2011; Bliss, Skinner & Adams 2006). Through teaching these instructional approaches, sight word recognition and fluency are gained.

Common themes appear when reviewing the literature/research. First, fluency is the essential part of reading that helps form comprehension. Fluent readers read at a correct speed with correct emotion and expression. Sight words give early readers achievement in learning decoding skills. Automatic word recognition is critical because it contributes to overall comprehension. Finally, instructional strategies (Reading Racetrack, flashcards, Smart Boards and three-second time delay) are examined, targeting sight words and fluency.

Reading Racetrack is an intervention to increase sight word recognition. It consists of 28 cells on an oval track with repeated sight words in each cell. Flashcards are used for practice during intervention. Enhancement of a Smartboard and time delay provides motivation, attention and time on task for students with disabilities (Erbey, Mclaughlin, & Derby, 2011; Kaufman et al., 2011; McGrath, McLaughlin, Derby, & Bucknell, 2012; Sullivan, Konrad, Joseph, & Luu, 2013). A Smart Board is an interactive projection display device that students interface with to experience a variety of activities.

Fluency

The five components to reading instruction that contribute to achieving literacy skills are phonics, phonemic awareness, fluency, vocabulary, and text comprehension The National Reading Panel (2000). The fluency component is the ring that links word recognition and comprehension. Fluency is the essential part of reading that helps form comprehension. Fluent readers read at a correct speed with correct emotion and expression. Evidence shows, that if a child cannot read text at a single word level, that child has a severe reading deficit. In addition, reports of being unable to read fluently by first grade increase the likelihood of the child falling behind their classmates yearly (Van Norman & Wood, 2008). When problems occur, clear instruction should be given that meets the needs of the child. Reading Race Track, flash cards and drill list with low technology were used to increase sight word recognition and fluency (Erbey, et al., 2011; Kaufman et al., 2011; McGrath, et al., 2012; Sullivan, et al., 2013). Overall, the results presented an increase in sight word recognition and fluency over a certain period. There were a few mixed reviews as to which strategy worked the best. Another question was if the technology had any effect on the words. Most of the evidence showed significant increases

when using the Reading Race Track. The results are relevant in that a combination of strategies is effective and meets the needs of all students.

Sight Word Recognition

Akcin (2013) defines sight word recognition as identifying words as distinct graphic shapes without effort, and to examine the arrangement of the word and the relationship to the sound it shows. It has been well documented, that word recognition plays a critical part in reading text (Sullivan, Konrad, Joseph, & Luu, 2013; National Reading Panel, 2000). Children who do not learn word recognition skills most likely will have difficulty with reading through adulthood. Sight words give early readers achievement in learning decoding skills. Automatic word recognition is critical because it contributes to overall comprehension (Kaufman, McLaughlin, Derby & Waco, 2011 & National Center of Health and Human Development, 2000). To reduce the gap between the fluent and struggling readers, it is important for students to receive a specific amount of instruction targeting word recognition and fluency National Reading Panel, (2000).

Strategies for teaching sight word recognition are drill list, reading racetrack, flash cards and picture support. Several researchers show positive results in increasing word recognition when using Reading Racetrack instead of drill and practice alone (Erbey, Mclaughlin & Derby, 2011; Kaufman et al., 2011; McGrath, et al., 2012; Sullivan, et al., 2013). In addition, the combination of Reading Racetrack and the use of flash cards increased the amount of word recognition and fluency a student has learned in a shorter time. When doing drill list alone, the students improved but at a slower rate and with smaller increases in the number of words (Erbey et al., 2011 & Kaufman et al., 2011).

Further research discussion of the Picture Support versus the Word Only approach to learning sight words was studied. The first group had the intervention of word only approach. The results showed an increase of sight words at a quicker pace over a period. The control group used the picture support and word strategy. The combination of the two items brought about an increase for identifying words in a faster time (Meadan, Stoner, & Parette, 2008).These findings are similar to previous literature, which show the use of a combination of strategies affect the amount and speed of sight word recognition. When sight words come automatically then fluency begins to form.

A previous study compared Smart Board technology and traditional flash cards on functional sight words. Results showed that both Smart Board and flash card instruction were effective in teaching target sight words to students with moderate intellectual disabilities. Findings also designate that on the competency measures of percentage of errors and number of sessions to criteria, the two formats varied little (Mechling, Gast, & Thompson, 2008),

Technology

This explosion of technology transforms the whole landscape of literacy. Precisely, the multimodal stresses of contact with technology at a young age, has educators reevaluating how to teach early literacy skills, which include sight word recognition and fluency. A perspective into how students learn sight words is that learning is stimulated through technology no matter what type.

Computer-assisted instruction has been used at length with students with disabilities since its appearance in the 1970's. This instruction has boosted motivation, attention and time on task (Mechling, et al., 2007). Before the intervention, the students with moderate disabilities could

not read grocery words and could only match a few of the pictures to grocery items. After the computer assisted programs on the Smart Board and three-second time delay steps, the students met the targeted goal through six sessions of reading and matching the selected words (Mechling, et al., 2007). These results show the efficiency of the computer-assisted instruction with the Smartboard technology and three-second constant time delay procedures in teaching the students with moderate disabilities.

In addition, another study compared the use of Smartboard and flashcards on functional sight words. Traditionally, the steps for delivering instruction in small groups have been to use flash cards. Researchers added the presentation of a Smartboard to deliver instruction. Both Smart Board and flash card instruction were effective in teaching target sight words to students with moderate intellectual disabilities. A considerable amount of learning of non-target words (group mean 89.6%) occurred using Smart Board technology compared to flash card presentation (group mean 50% (Mechling, Gast, & Thompson, 2008).

A longitudinal study was conducted on computerized intervention on literacy skills. There were five tests given, one before, three during and one follow-up a year later. Two computer programs were used; Omega-15 for comprehension and Computerized Phonological Training was for decoding skills. Four groups were placed in categories: decoding and phonological awareness, word and sentence level, a combination level and tradition instruction. Results showed a combination of programs was most effective in teaching literacy skills (Falth, Gustafson, Tjus, Heimann, & Svensson, 2013),

Computer software has been developed such as Board Making for picture support to learn sight words and Computer –Based Software Word Reading Instruction (CBSWRI) for flash card

reading practice. In addition to internet-based sites, the software increases literacy skills in a more interactive way within a shorter amount of time.

There are pros and cons to these advancements in technology. One benefit is that these programs are inexpensive. They give immediate responses to the child's printed word; also, they give immediate positive feedback on the student's word recognition correctness in the form of scores. Specifically designed programs meet the needs of all students and the teacher is able to attend to other students or problems in the class.

A drawback of the computer/internet based software is that there is a limited amount of research on the topic. The challenge for the students is to independently execute and navigate the program while attending to the task that has been asked of them. .

Time Delay

Time delay is a systematic prompting in which the instructor fades out the delay between the performance of the stimulus and the prompt, until the child is able to respond correctly without a prompt **(**Spector, 2011; Browder, Ahlgim-Delzell, Spooner, Mims, & Baker, 2009). Time delay meets certain criteria to be recognized as an evidence–based practice: defining individuals and setting, naming dependent and independent variables, demonstrating baseline data, experimenting with the control of internal validity, and explaining external and social validity **(**Spector, 2011 & Browder, et al., 2009). Results show, that constant time delay is more effective than fading stimulus in experimental errors, responses and time. The validity of time delay is that it has been useful in teaching skills relevant to students with moderate to severe disabilities (Akcin, 2013).

In 2009, Browder reports that time delay instruction is well organized, produces positive engagement during the activity, and student performance is about perfect .It is easy taught, and production is generalized across the curriculum. Regarding time delay, the researchers gave examples of two to five seconds for students to respond. In that interval of time if a correction was made then the word was counted correct. Browder, (2009) describes components of time delay: progressive or constant, type of prompts, number of pilots at a specific delay stage, method of reinforcement, how to diminish reinforcement, types of mistake corrections, and rules for repeated mistakes.

Time delay procedures are specific and limit tasks to students with disabilities. The teachings appear in both academic and social settings. The participants vary from one individual to a small group. Various times where used in the studies. One outcome of the research shows that allowing up to five seconds slowed down the sight word recognition and fluency. Suggested recommendations for two to three seconds response times with gradual fading are to be used. This intervention of time delay procedures looks to be effective among teaching students with mild to severe disabilities. In addition, to the strategies of Reading Race Track, flash cards, drill list, picture support and time delays, recent advancements in technology are acknowledged with regard to teaching in the classroom and how it affects student outcomes.

Summary

With the mandates of No Child Left Behind and IDEA, expectations are high for students with disabilities to gain literacy skills. The challenge for the teacher is to find the best way to instruct the students whether it be through whole language or a combination of strategies. The

strategies focusing on word recognition and fluency in a playful way, in combination with technology and structured teacher-child interaction can endorse reading, motivation, and communication.

Conclusion

Through this literature review, results show that sight word recognition is important to the acquisition of reading fluency, which is a bridge to comprehension. In addition, the enhancement of technology in combination with traditional instruction increases sight word recognition in a shorter amount of time. Lastly, the animation and speech voice outputs motivate the students to interact and stay on task.

These studies have made an important contribution by demonstrating that through a combination of traditional strategies and presentation of information using large-screen computer-based instruction and three-second time delay, students can learn their own information. Motivating and engaging features of technology may further support students' preference to use such an interactive medium over traditional formats for delivering instruction.

Chapter Three: Procedure and Methods

Hypothesis

Operationally defined the independent variable of the Reading Race Track was an intervention to increase sight word recognition. It consisted of 28 cells on an oval track with repeated sight word in each cell. With flashcards and the enhancement of the Smart Board, which was operationally defined as an interactive projection display device that students interface with to experience a variety of activities and three-second time delay. The dependent variable was to increase the amount of automatic recognition of Dolch Sight words by ten words with two elementary students with intellectual disabilities. An administration of a pre-assessment on sight words from the pre-primer through third grade Dolch Sight word list for each student on flashcards were given. The students read from the cards and those results provided the words to work on for the data collection. Following the intervention of the Reading Racetrack, a generalization test were conducted to determine if the students could read all 28 words they learned without seeing them on the racetrack. The posttest consisted of a replica from the pre-assessment.

Setting and Participants

There were two participants in this study. The students were chosen based on the recommendation of their classroom teacher and their individual Education Plan (IEP) objectives to increase their sight word vocabulary. The first was a white eight year old second grade male diagnosed with a mild intellectual disability with an IQ of 71. The second participant was an African American ten year old fourth grade female born with Down syndrome and diagnosed with a moderate intellectual disability with an IQ of 54. Both students receive services in the

intellectual disabilities classroom for reading, math and social skills during the time of the study. In addition, both students receive speech therapy and read on a second grade level.

The self-contained classroom was located in an elementary school in the central part of West Virginia. Sessions were held in the intellectual disabilities room three to four times a week, lasting ten to twenty minutes a session. The intellectual disabilities room serves seven students including one autistic student throughout the day. During the sessions with the participants, there were one to four other students, the classroom teacher and instructional aide in the classroom.

Variables

The independent variable of the Reading Race Track was operationally defined as an intervention to increase sight word recognition. It consisted of 28 cells on an oval track with repeated sight word in each cell. With flashcards and the enhancement of the Smart Board, which was operationally defined as an interactive projection display device that students interface with to experience a variety of activities and three-second time delay. The dependent variable was to increase the amount of automatic recognition of Dolch Sight words by ten words with two elementary students with intellectual disabilities.

Threats to validity

The threat to internal validity was the short period of treatment that involved five weeks. A replica of a pre and posttest showed to be threat to internal validity. The differential selection threatened the validity. The two students have an intellectual disability, communication disorder and reading on the same level in common but the varying degrees of IQ, ability and motivation affected the testing results. A small sample size of two students with intellectual disabilities

threatened the external validity and generalization of this study. The difficulty of transitioning from different aide everyday due to retirement of the permanent aide was a threat to validity.

Treatment

A pre-assessment of sight words from the pre-primer through third grade Dolch Sight word list for each student on flashcards was administered. The students read from the cards and those results provided the words to work on for the data collection. Following the five weeks of intervention of the Reading Racetrack enhanced with a Smart Board and three-second time delay, a generalization test was conducted to determine if the students read all 28 words they learned without seeing them on the racetrack. The students read the words from the flashcards as conducted in the pre-assessment.

Measurement

Before baseline data was taken or the intervention began, a teacher generated pre-assessment of sight words was given to each participant. The teacher assessed the first student on pre-primer, primer, first and second grade words and the second student on pre-primer, primer, first, second and third grade words from the Dolch sight word list on flashcards. The teacher asked both participants to read the words from the flashcards. The teacher recorded the number of correct and incorrect responses on her word list for each student. The student matching the pronunciation of the word defined a correct. An error was defined as a student reading the word incorrectly or skipping the word. Errors did not count if the participant self-corrects before three-seconds or going to the next word. The numbers of responses whether correct or incorrect counted within the allowed one-minute reading. After the intervention employment, a replica of this measure assessed participants.

Chapter Four: Results

The purpose of the study was to determine if the effects of using reading racetrack paired with flashcards and the enhancement of Smartboard technology with three-second time delay would increase the accuracy of Dolch Sight Word reading, for two intellectual disabilities students. The first was a white eight year old second grade male diagnosed with a mild intellectual disability with an IQ of 71. The second participant was an African American ten year old fourth grade female born with Down syndrome and diagnosed with a moderate intellectual disability with an IQ of 54. A pre-assessment of sight words from the pre-primer through third grade Dolch Sight word list for each student on flashcards was given. The students read from the cards and those results provided the words to work on for the data collection. Three 15-20 minute sessions were conducted during the intervention. Following the intervention of the Reading Racetrack, a generalization test was conducted to determine if the students could read all 28 words they learned without seeing them on the racetrack. The students read the words from the flashcards as conducted in the pre-assessment and posttest. Results from the pre-test and posttest are shown in the chart below.

Figure 4.1 Results of Pre-test and Post test

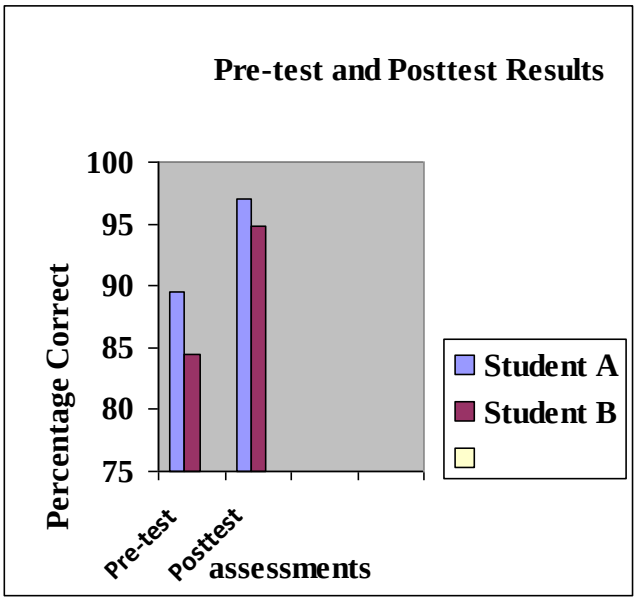
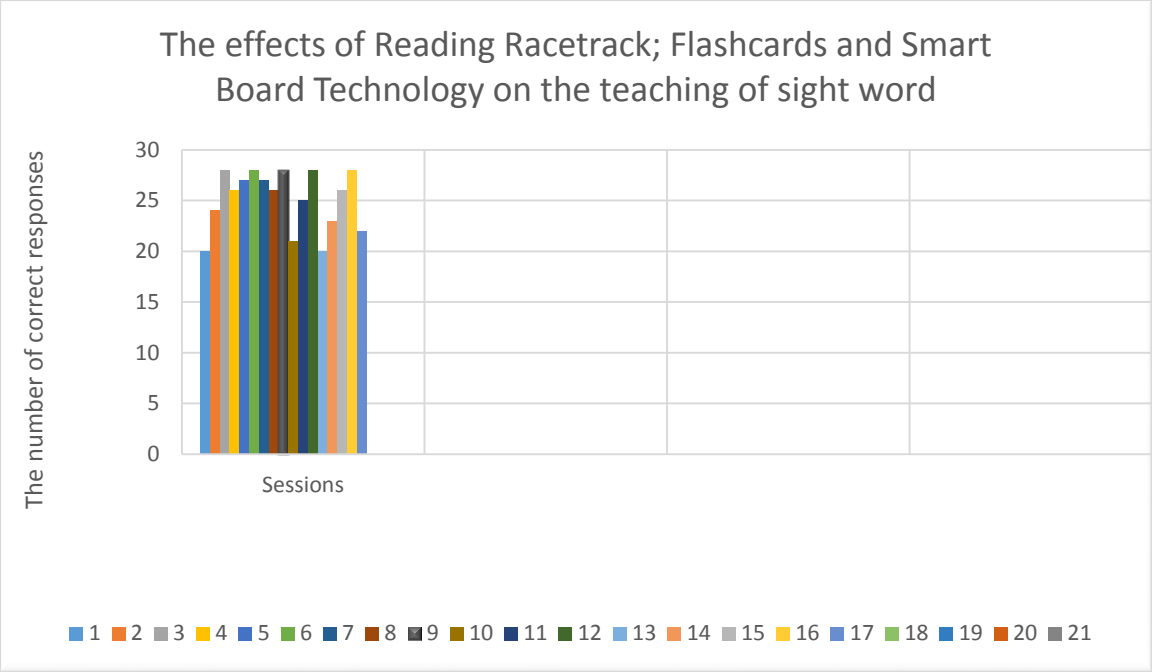


Figure 4.1 reflects the success from the pre-test to posttest of student A and student B from them reading off flashcards from the Dolch Sight word list. Student A's scores on their pre-test was 89% on their posttest was 97% with an average of 93%. Student B's scores on their pre-test was 84% on their posttest was 94% with an average of 89%.

Figure 4.2 the eff4ects of Reading Racetrack; Flashcards and Smart Board Technology on teaching sight words Student A



The chart above represent the Reading Racetrack sessions of student A. Completion of the Reading Racetrack word list took three readings to accomplish for participant A. The Review list reading took five readings to complete. Generalization probe showed Student A read twenty-two words out of the twenty-eight without seeing them on the Reading Racetrack. Therefore, the goal of reading all twenty-eight words without the Reading Racetrack did not generalize.

Figure 4.3 the eff4ects of Reading Racetrack, Flashcards and Smart Board Technology on teaching sight words Student B

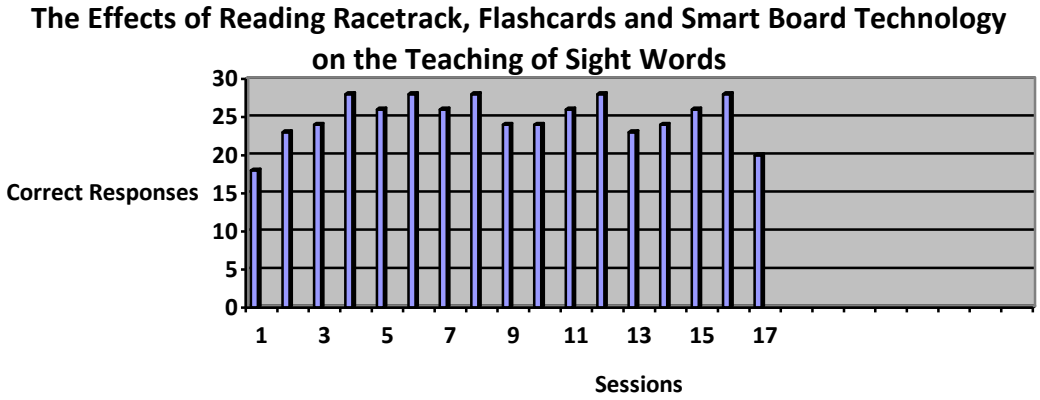


Figure 4.3. represent the Reading Racetrack sessions of student B. Completion of the Reading Racetrack word list took between two to four readings to accomplish for participant B. The Review list reading took five readings to complete. Generalization probe showed Student B read twenty words out of the twenty-eight without seeing them on the Reading Racetrack. Therefore, the goal of reading all twenty-eight words without the Reading Racetrack did not generalize.

Limitation of the study

Factors contributing to the limitations of this study consist of 1.The small sample size lead to low generalization. 2. The short time period of five weeks due to some absences and weather condition resulting in the inability to see students limited the study. 3. indirectly, the retirement of the aide in the middle of the study and the students having to transition from one aide everyday effected their attitudes and behaviors to work.

Chapter 5: Discussion

The bases for the research were the use of Reading Racetrack as an intervention to increase sight word recognition in a self-contained classroom. By conducting the research, the goal was to see if two intellectual disabilities students could increase their Dolch Sight Word recognition by ten words using the Reading Racetrack intervention.

As referred to earlier, to reduce the gap between the fluent and struggling readers, it is important for students to receive a specific amount of instruction targeting word recognition and fluency National Reading Panel, (2000). The results from this study showed the use of the Reading Racetrack to be a beneficial instructional strategy or intervention for targeting word recognition and fluency for students with intellectual disabilities.

Both students have significant differences in cognitive levels. They are different in age and grade level. In addition, their instructional level varies. These factors could be considered threats to validity. However, even with these variables, results showed employment of the Reading Racetrack with both participants increased their Dolch Sight Word recognition and fluency.

The results between the pretest and posttest assessments indicated an eight percent increase for Student A and ten percent increase for Student B. As a result, using Reading Racetrack had a positive effect on the participants and helped them accomplish their goal of increasing their word recognition by ten words. It is important to note that even though there was improvement between pretest and posttest, due to the engaging activity being presented in a board game manner. This does not reflect the true rate of learning for these individual.

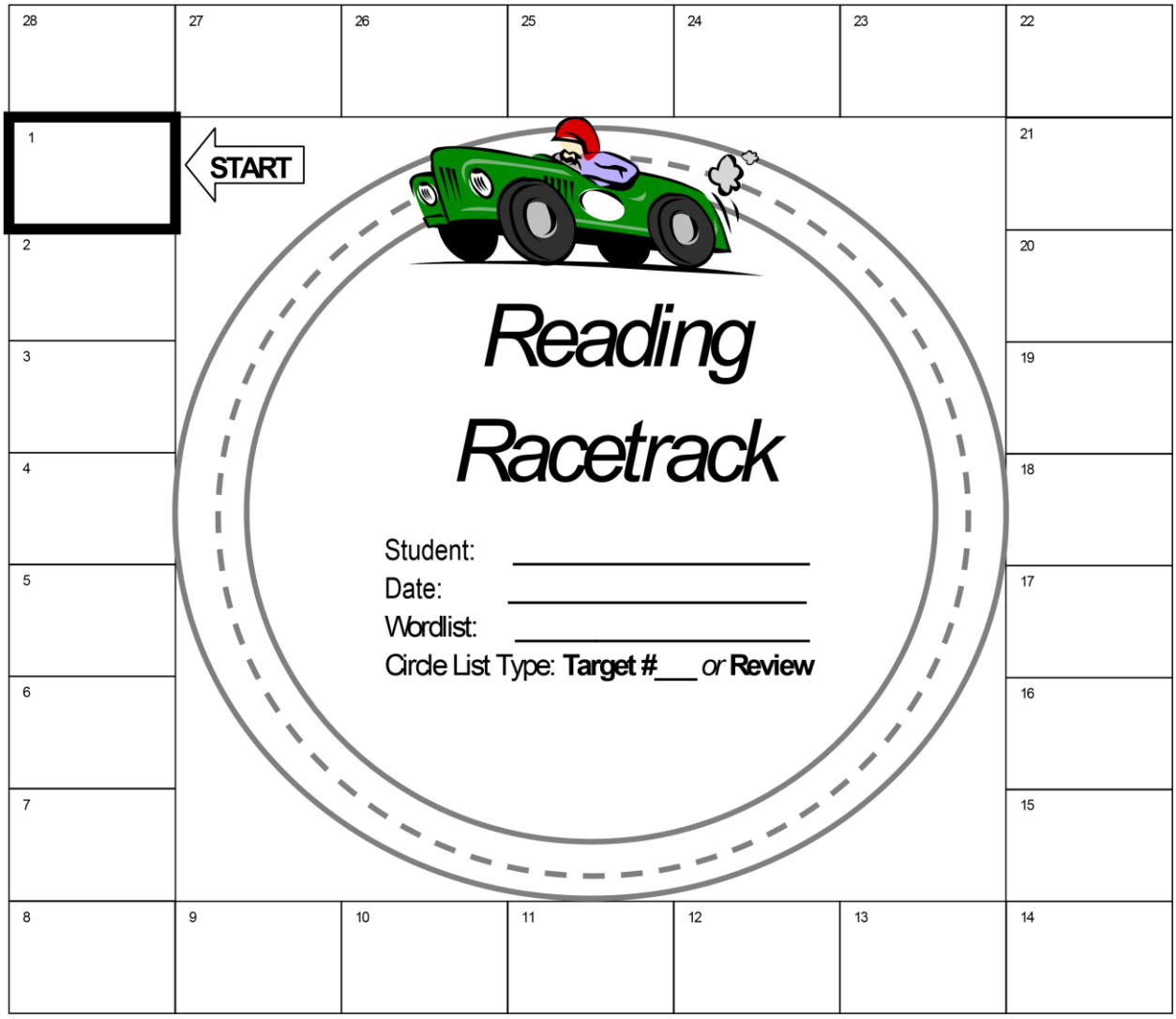
The results of the research coincide with previous studies of Erbey et.al. (2011), Kaufman et. al. (2011) & McGrath et.al.(2012), on the use of Reading Racetrack and Flashcards. With the

enhancement of the Smart Board, Three-second time delay with the Reading Racetrack and Flashcards, these results can add to the mounting research data on the effectiveness of Reading Racetrack on sight word recognition and fluency.

In conclusion, the study was very practical in that it was inexpensive, time-efficient for both researcher and students, and easy to create. The intervention was easy to implement in a classroom setting, and did not take significant time out of the student's school day.

The study showed that Reading Racetrack paired with Flashcards and Smart Board technology can be effective in teaching sight words to two students with intellectual disabilities, in a self-contained classroom. The research was able to replicate and extend the data dealing with reading racetrack and flashcards, adding to it the Smart Board technology and three-second time delay procedure.

Appendix A


28
27
26
25
24
23
22
1
START
21
2
20
3
19
4
18
5
17
6
16
7
15
8
9
10
11
12
13
14
Reading
Racetrack
Student: _____
Date: _____
Wordlist: _____
Circle List Type: Target #___ or Review

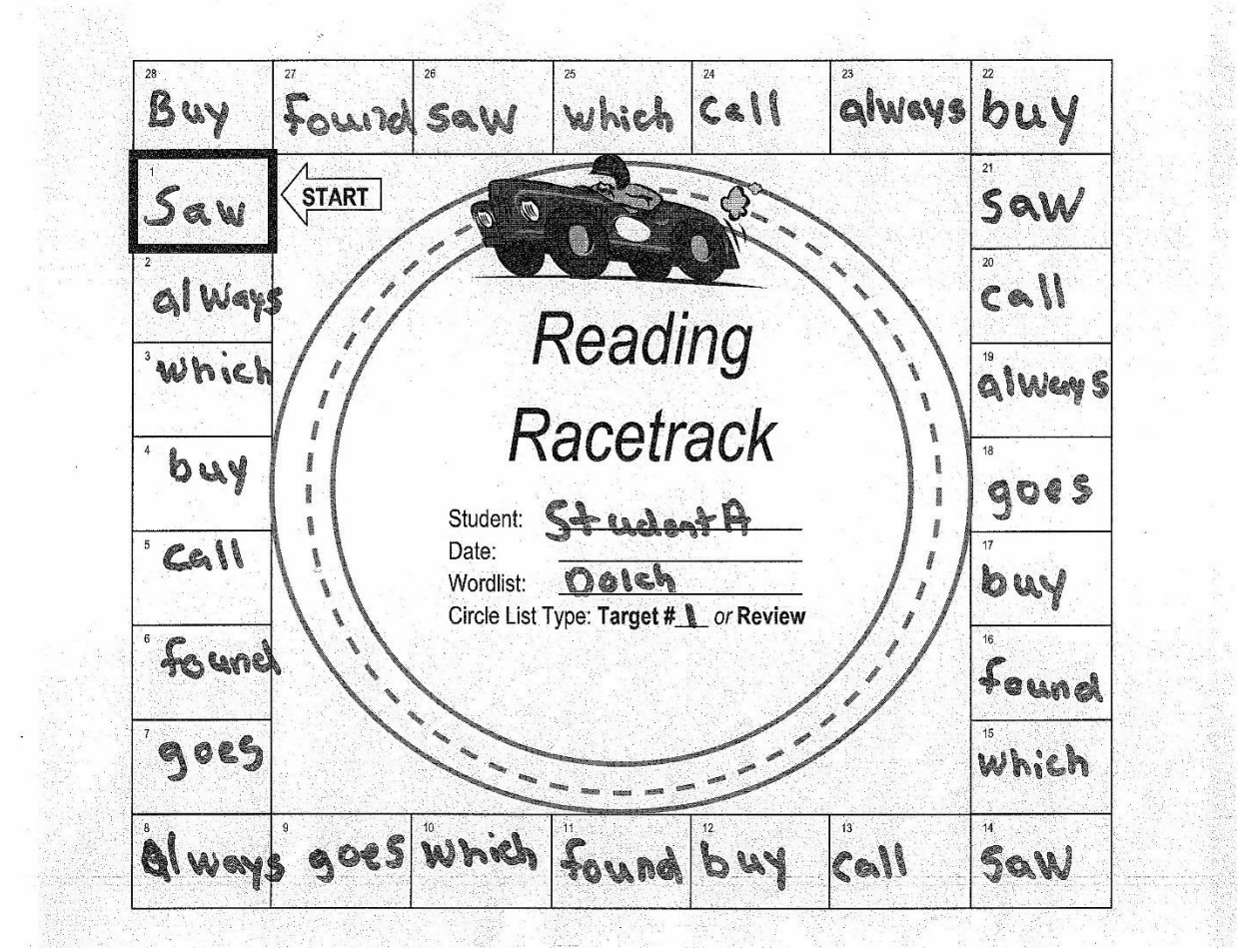
 www.interventioncentral.org 4

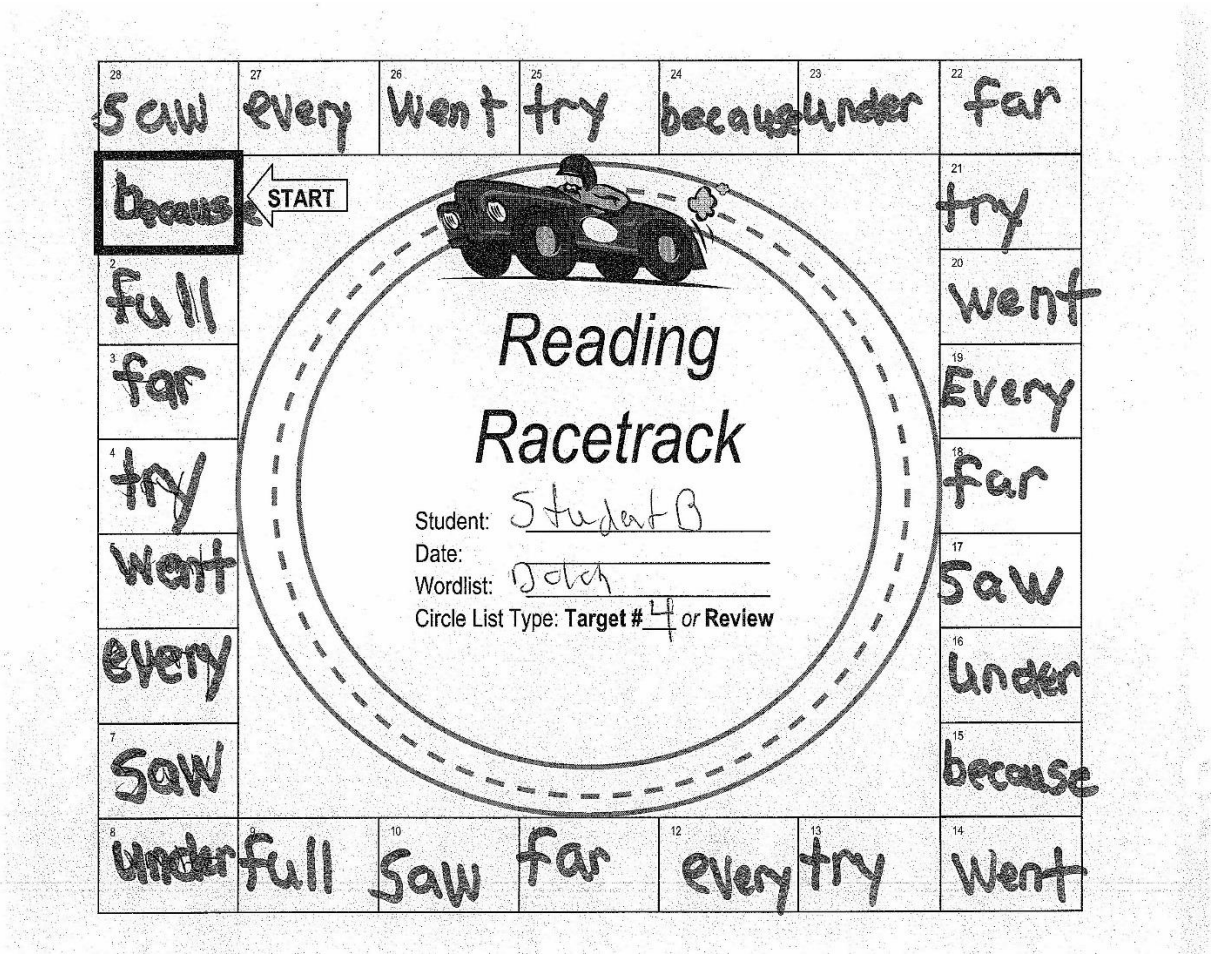
Reading Racetrack Score Sheet

Student:_____ Wordlist: _____ Date: _____

TARGET LIST 1	#/Words Correct	#/Errors	Practice Words	TARGET LIST 3	#/Words Correct	#/Errors	Practice Words
First Read				First Read			
Second Read				Second Read			
Third Read				Third Read			
Fourth Read				Fourth Read			
Fifth Read				Fifth Read			

TARGET LIST 2	#/Words Correct	#/Errors	Practice Words	REVIEW LIST	#/Words Correct	#/Errors	Practice Words
First Read				First Read			
Second Read				Second Read			
Third Read				Third Read			
Fourth Read				Fourth Read			
Fifth Read				Fifth Read			


28 Buy
27 found
26 saw
25 which
24 call
23 always
22 buy
1 Saw
START
2 always
3 which
4 buy
5 call
6 found
7 goes
21 saw
20 call
19 always
18 goes
17 buy
16 found
15 which
8 always
9 goes
10 which
11 found
12 buy
13 call
14 saw
Reading Racetrack
Student: StudentA
Date:
Wordlist: Dolch
Circle List Type: Target #_1_ or Review


28 saw
27 every
26 went
25 try
24 because
23 under
22 far
because
START
21 try
2 full
20 went
3 far
19 every
4 try
18 far
went
17 saw
every
16 under
7 saw
15 because
8 under
9 full
10 saw
far
12 every
13 try
14 went
Reading
Racetrack
Student: Student B
Date:
Wordlist: Dolch
Circle List Type: Target # 4 or Review

Appendix B

LEFFINGWELL PRE-TEST/POSTTEST

Dolch Pre-Primer Sight Word Assessment

Student Name: [redacted] Student A

Date: 2/5/16

Number of words correct: 40 of 40

Percentage correct: 100%

a	down	here	little	one
and	find	I	look	play
away	four	in	make	red
big	funny	is	me	run
blue	go	it	my	said
come	help	jump	not	see
the	three	to	two	up
we	where	yellow	you	

Dolch Primer Sight Word Assessment

Student Name: _____

Date: _____

Number of words correct: 49 of 52 Percentage correct: 94

all	but	have	on	say
am	came	he	our	she
are	did	into	out	so
at	do	like	please	soon
ate	eat	must	pretty	that
be	four	new	ran	there
black	get	no	ride	they
brown	good	now	saw	this
too	under	want	was	well
went	what	white	who	will
with	yes			

LEFFINGWELL PRE-TEST/POSTTEST

Dolch First Grade Sight Word Assessment

Student Name: [redacted] Student #1

Date: 2-15-14

Number of words correct: 41 of 41 Percentage correct: 100%

after	every	him	of	stop
again	fly	his	old	take
an	from	how	once	thank
any	give	just	open	them
ask	going	know	over	then
as	had	let	put	think
by	has	live	round	walk
could	her	may	some	were
when				

Dolch Second Grade Sight Word Assessment

Student Name: Gavin

Date:

Number of words correct: 31 of 46 Percentage correct: 67%

always	call	gave	pull	these
around	cold	goes	read	those
because	does	green	right	upon
been	Don't	its	sing	us
before	fast	made	sit	use
best	first	many	sleep	very
both	five	off	tell	wash
buy	found	or	their	wish
which	why	work	would	write
your				

LEFFINGWELL PRE-TEST/POSTTEST

Post

Dolch Pre-Primer Sight Word Assessment

Student Name: Student A

Date: _____

Number of words correct: 39 of 40

Percentage correct: 99

a	down	here	little	one
and	find	I	look	play
away	four	in	make	red
big	funny	is	me	run
blue	go	it	my	said
come	help	jump	not	see
the	three	to	two	up
we	where	yellow	you	

Dolch Primer Sight Word Assessment

Student Name: Student A

Date: _____

Number of words correct: 49 of 52 Percentage correct: 94

all	but	have	on	say
am	came	he	our	she
are	did	into	out	so
at	do	like	please	soon
ate	eat	must	pretty	that
be	four	new	ran	there
black	get	no	ride	they
brown	good	now	saw	this
too	under	want	was	well
went	what	white	who	will
with	yes			

LEFFINGWELL PRE-TEST/POSTTEST

Post

Dolch First Grade Sight Word Assessment

Student Name: Student A

Date: _____

Number of words correct: 39 of 41 Percentage correct: 95

after	every	him	of	stop
again	fly	his	old	take
an	from	how	once	thank
any	give	just	open	them
ask	going	know	over	then
as	had	let	put	think
by	has	live	round	walk
could	her	may	some	were
when				

Dolch Second Grade Sight Word Assessment

Student Name: Student A

Date: _____

Number of words correct: 45 of 46 Percentage correct: 98

always	call	gave	pull	these
around	cold	goes	read	those
because	does	green	right	upon
been	Don't	its	sing	us
before	fast	made	sit	use
best	first	many	sleep	very
both	five	off	tell	wash
buy	found	or	their	wish
which	why	work	would	write
your				

LEFFINGWELL PRE-TEST/POSTTEST

Dolch Pre-Primer Sight Word Assessment

Student Name: [redacted] Student B

Date: 2-15-16

Number of words correct: 39 of 40

Percentage correct: 95

a	down	here	little	one
and	find	I	look	play
away	four	in	make	red
big	funny	is	me	run
blue	go	it	my	said
come	help	jump	not	see
the	three	to	two	up
we	where	yellow	you	

Dolch Primer Sight Word Assessment

Student Name: Student B

Date:

Number of words correct: 48 of 52 Percentage correct: 92

all	but	have	on	say
am	came	he	our	she
are	did	into	out	so
at	do	like	please	soon
ate	eat	must	pretty	that
be	four	new	ran	there
black	get	no	ride	they
brown	good	now	saw	this
too	under	want	was	well
went	what	white	who	will
with	yes			

LEFFINGWELL PRE-TEST/POSTTEST

Dolch First Grade Sight Word Assessment

Student Name: [redacted] Student 15

Date: [redacted]

Number of words correct: 34 of 41 Percentage correct: 83

after	every	him	of	stop
again	fly	his	old	take
an	from	how	once	thank
any	give	just	open	them
ask	going	know	over	then
as	had	let	put	think
by	has	live	round	walk
could	her	may	some	were
when				

Dolch Second Grade Sight Word Assessment

Student Name: _____

Date: _____

Number of words correct: 30 of 46 Percentage correct: 78

always	call	gave	pull	these
around	cold	goes	read	those
because	does	green	right	upon
been	Don't	its	sing	us
before	fast	made	sit	use
best	first	many	sleep	very
both	five	off	tell	wash
buy	found	or	their	wish
which	why	work	would	write
your				

LEFFINGWELL PRE-TEST/POSTTEST

Dolch Third Grade Sight Word Assessment

Student Name: [redacted] Student B

Date: 2/15/19

Number of words correct: 31 of 41 Percentage correct: 75

about	drink	hold	much	small
better	eight	hurt	myself	start
bring	fall	if	never	ten
carry	far	keep	only	today
clean	full	kind	seven	together
cut	got	laugh	shall	try
done	grow	light	show	warm
draw	hot	long	six	

LEFFINGWELL PRE-TEST/POSTTEST

Post

Dolch Pre-Primer Sight Word Assessment

Student Name: Student B

Date: 3-22-16

Number of words correct: 37 of 40

Percentage correct: 93

a	down	here	little	one
and	find	I	look	play
away	four	in	make	red
big	funny	is	me	run
blue	go	it	my	said
come	help	jump	not	see
the	three	to	two	up
we	where	yellow	you	

Dolch Primer Sight Word Assessment

Student Name: Student B

Date: 3-23-16

Number of words correct: 50 of 52 Percentage correct: 98

all	but	have	on	say
am	came	he	our	she
are	did	into	out	so
at	do	like	please	soon
ate	eat	must	pretty	that
be	four	new	ran	there
black	get	no	ride	they
brown	good	now	saw	this
too	under	want	was	well
went	what	white	who	will
with	yes			

LEFFINGWELL PRE-TEST/POSTTEST

Dolch First Grade Sight Word Assessment

Student Name: Student B

Date: 3-23-16

Number of words correct: 37 of 41 Percentage correct: 90

after	every	him	of	stop
again	fly	his	old	take
an	from	how	once	thank
any	give	just	open	them
ask	going	know	over	then
as	had	let	put	think
by	has	live	round	walk
could	her	may	some	were
when				

Dolch Second Grade Sight Word Assessment

Student Name: Student B

Date: 3-23-16

Number of words correct: 43 of 46 Percentage correct: 93

always	call	gave	pull	these
around	cold	goes	read	those
because	does	green	right	upon
been	Don't	its	sing	us
before	fast	made	sit	use
best	first	many	sleep	very
both	five	off	tell	wash
buy	found	or	their	wish
which	why	work	would	write
your				

LEFFINGWELL PRE-TEST/POSTTEST

Post

Dolch Third Grade Sight Word Assessment

Student Name: Student B

Date: 3/23/16

Number of words correct: 41 of 41 Percentage correct: 100

about	drink	hold	much	small
better	eight	hurt	myself	start
bring	fall	if	never	ten
carry	far	keep	only	today
clean	full	kind	seven	together
cut	got	laugh	shall	try
done	grow	light	show	warm
draw	hot	long	six	

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