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The Effect of Instruction (Rapid Automatic Naming Versus Repeated Read Aloud) on Vocabulary Building for Preschool Children

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The Effect of Instruction (Rapid Automatic Naming Versus Repeated Read Aloud) on Vocabulary Building for Preschool Children

A Project Presented to
The Graduate Faculty of
Minnesota State University Moorhead

By

Alison Mae Bendickson

In Partial Fulfillment of the
Requirements for the Degree of
Master of Science in
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STUDY ABSTRACT

Title

The Effect of Instruction (Rapid Automatic Naming Versus Repeated Read Aloud) on Vocabulary Building for Preschool Children

Purpose of the Study

The purpose of this research was to determine whether using the strategy of rapid automatic naming or repeated read aloud would increase children's vocabulary development. The study assessed children in an inclusive classroom. The participants were 3 year old students who required specialized instruction and have Individual Education Programs and students who were typically developing. The students were assessed using Individual Growth and Development Indicators (picture naming) to assess which intervention strategy produced more growth in the students achievement in their classroom assessments. Both interventions were found to positively influence students achievement in the area of picture as measured by the Individual Growth and Development Indicators (IGDI's). The Rapid automatic naming intervention group exhibited a larger increase in pictures named correctly by 1.7 pictures but also showed a larger increase in pictures named incorrectly.

Chapter One

General Problem/Issue

In the preschool setting, vocabulary development is an integral piece in the curriculum. Vocabulary is a key predictor in students literacy achievement through elementary school. Teacher can execute vocabulary instruction in many different ways.

What is the best intervention to enhance student vocabulary? Should students be read stories that have context to the vocabulary to enhance understanding? Should students be exposed to more words in shorter amounts of time through the rapid automatic naming?

In my work teaching early childhood, I tend to use a combination of both read aloud vocabulary and rapid automatic naming. However, I have never looked in depth at which intervention would produce the best results and higher achievement in their standard tests. Through the research I conduct, I would like to compare the interventions of read aloud vocabulary and rapid automatic naming. I will analyze the test results from the Individual Growth and Development Indicators to see which intervention produced the higher achievement in vocabulary building.

Subjects and Setting. Description of setting. The participants in this study are involved in an integrated preschool program. Students were chosen based on their Individual Growth and Developmental Indicators (IGDI's) scores in the area of picture naming. When a child is "proficient" in the IGDI's, they are able to label 26 pictures in one minute. Students who labeled less than 26 pictures were chosen to participate in intervention groups.

Table 1

Individual Developmental Growth Indicators

Below age Expectations	At Risk	Proficient
15 pictures and under	16-25 pictures	26 pictures

Description of subjects. Twenty students participated in this study, 10 receiving the intervention of rapid automatic naming, and 10 receiving the read aloud intervention. The students all were 3 years old at the beginning of this study. The students in this study are identified as 55% white, 15% Native American, 5% Asian, and 25% Black. The students receiving Early Intervention Services consisted of 35% of the measured population. Of the students being progress-monitored, 30% of them are identified as "low income." Low income working families are those who earn less than twice the federal poverty line. In 2018, the federal poverty line for a family of four is $30,750.

Description of Setting. This study takes place in an inclusive preschool in Moorhead, Minnesota. There is a ratio of 60% typically developing children and 40% of children who receive specialized instruction through an IEP in the program. Adults in the classroom consist of co-teaching general and special education teachers; service providing staff such as speech language pathologists, occupational therapists, and physical therapists; and one or two paraprofessionals.

Informed Consent. Permission for this study was obtained from the Institutional Review Board (IRB) at Minnesota State University Moorhead to conduct this study. The protection of the

subjects was assured and permission was obtained through the school district. Participants were under the age of 18, consequently parents were required to provide written consent and were informed of the research. Pseudonyms were used to protect confidentiality. All procedures in this research study were explained so parents are aware of the risks and benefits. It was outlined in writing that participants could withdraw their child from the study at any time.

Chapter Two

Review of Literature

Foundational literacy skills are built in the years children attend preschool. Early expressive language appears to be particularly important for later academic achievement and has been linked to both, reading and math achievement in later grades (Bohlmann & Downer, 2016). The focus of this study was the comparison of two different literacy intervention strategies to examine the impact it has on vocabulary building in students who are three years of age. Jalongo and Sobolak (2010) stated "The most effective way for early childhood educators to enhance the vocabulary development of all students is to implement evidence based strategies for teaching vocabulary." Teachers implemented evidence-based strategies to aid in vocabulary building and assess student achievement using the Individual Growth and Development Indicators, picture naming test.

Definition of Terms. For purposes of this study, the following terms are defined:

Rapid Automatic Naming: is the ability to name, as quickly as possible, visually presented familiar

symbols such as colors, objects, letters, and numbers. Papadopoulos (2013)

Repeated Read-aloud: Systematic methods of reading a story that allows teachers to scaffold students learning of the vocabulary within stories. (Walsh & Blewitt, 2006).

Vocabulary: Knowing the meanings of words (Christ & Wang, 2011)

Individual Growth and Development Indicators: Measurement to assess development of early literacy skills.

Intervention: One on one or small group activity that targets growth in a specific skill. (Cadigan & Missall, 2007)

Vocabulary Instruction. Vocabulary knowledge (i.e., knowing the meanings of words) is critical to supporting school success because it is highly predictive of future reading comprehension abilities (Christ & Wang, 2011). To bridge the gap in vocabulary among young children, researchers are encouraging early childhood professionals to provide more instruction of learning vocabulary. Preschool students receive direct language and vocabulary instruction through many different strategies including: rapid automatic naming, shared readings, repeated exposure to stories, and meaningful opportunities to practice vocabulary through play experiences.

Language is broken up into two different areas, receptive and expressive. Receptive language is the language that children hear and read. Expressive language is language the is spoken or signed. The language that is targeted in this vocabulary intervention is expressive language, more specifically, nouns. Jalongo and Sobolak (2010), described the three tiers of vocabulary instruction, the first tier describes basic labels such as *door, computer, dog, table.* The second tier describes words that are less concrete such as *hope, happy, confused.* The final tier described words that are particular to specific subjects such as o*btuse, isosceles, or chlorophyll.* Students in this study will be assessed on their teir one knowledge of labels which are basic noun labels.

Diversity in Language Development. Particular groups of young children are especially at-risk for reading failure, including children with disabilities, children who live in poverty, and children who speak a primary language other than English (Missall et al., 2007). Students who are the

most at-risk require more direct and intensive strategies to develop their language and bridge the gap between them and their peers. "English language Learners are one of the largest groups of students who struggle with literacy in general vocabulary and comprehension in particular" (Hickman, Pollard-Durodola & Vaughn, 2004, p. 4). It is vital for English language learners to maintain their native language as they are learning english. When the native language is not maintained, important links to family and other community members may be lost.

Practices to support students who are exhibiting language delays are, activating and drawing on background knowledge in relation to story content, using culturally relevant texts, and addressing basic vocabulary that is difficult to visualize. According to Wasik & Hindman (2014)., It has been found that children from middle or high class families tend to hear more words in their home and care environments. Children who know more words also typically find it easier to acquire more language to rapidly building new information onto their already solid foundation. "All students, regardless of background, need to make significant gains in receptive and expressive vocabulary at home and at school each year in order to support their growth in literacy" (Jalongo & Sobolak, 2010, p. 8).

Interventions to Teach Vocabulary. Rapid Automatic naming is the ability to name, as quickly as possible, visually presented familiar symbols such as colors, objects, letters, and numbers. Research by Georgiou, Parrila, Cui, and Papadopoulos (2013) suggest that rapid automatic naming and reading are related because both require serial processing, which is being able to attend to and process one item at a time in a shortened time frame. Rapid automatic naming requires a child to quickly produce specific names of symbols and objects as they do with reading later in development. With rapid automatic naming, children are exposed to more

language at a higher rate when given this intervention. Rapid Automatic Naming increases fluency for labeling vocabulary which contributes to fluency when students begin reading. One view focuses on how we recall and say the sounds for the names of the items. It is argued that Rapid Automatic Naming affects reading because it assesses how well we can retrieve phonological information (Johnson). It has been found that children who develop proficient phonological awareness skills but experience deficits in rapid automatic naming often have difficulty with the rate and fluency in which they read text. If a child has difficulty with fluency it in turn leads to difficulty comprehending text. Children with high fluency rates tend to read more and remember more of what they read because they are able to spend less cognitive energy on decoding individual words and integrating new information from texts into their knowledge banks (Cadigan & Missall, 2007).

Storybook reading is a common tool for teaching vocabulary in early childhood settings. Interactive book reading consists of teachers strategically and actively engage children in telling the story, discussing its characters, events, and vocabulary (Pollard-Durodola et.al., 2011). Dialogic Reading is described as when the reader focuses on pictures within the book, asks questions, and recalls. In dialogic reading, the reader moves through a familiar sequence for asking questions, first "wh" (who, what, where, when, why) about the story then moving to distancing questions to relate events in the pictures to students personal experiences. "Teachers' and children's discussion of the target vocabulary words throughout book reading, accompanied by images and explanations in the story that help children construct understanding of the meaning of a word likely play an essential role in the building of vocabulary" (Walsh & Blewitt, 2006). Repeated readings of children's books, accompanied by toys and literacy props are ways

to enrich and extend young children's understandings of picture books and vocabulary. Although reading stories straight through is still beneficial, in the study completed by Cadigan and Missall (2007) they concluded that questioning and highlighting pictures and vocabulary within the text resulted in more vocabulary learning that a straight run through of a story.

Repeated Read Aloud interventions are systematic methods of reading a story that allows teachers to scaffold students learning of the vocabulary within stories. In this intervention, teachers read the story a minimum of three times to allow repeated practice of recognizing and labeling terms to increase comprehension. The practice of using a repeated read aloud for interventions has been shown to increase student engagement and their understanding of the story. When highlighting vocabulary within the repeated read aloud, the teacher will first select up to 10 vocabulary words to focus on during the reading. The teacher will first define the words with the group then highlight the vocabulary within the story. Students are better able to comprehend literature when given vocabulary instruction prior to reading. By learning vocabulary before the readings, students are able to recognize the word without having the story interrupted by explanations that may interrupt the flow of the story.

Assessing Vocabulary Development. The Individual Growth and Development Indicators (IGDIs) were developed in the late 1990's as a General Outcomes Measurement to assess development of early literacy skills. The IGDIs assess preschool students achievement in the areas of picture naming, letter naming, letter sounds, rhyming, and alliteration (Missall et al., 2007). Research on the psychometric properties of picture naming has suggested it is a valid indicator of children's expressive language skills (Missall et al., 2007). The Individual Growth and Development Indicators (IGDIs) are an early literacy assessment tool that measures student

knowledge of noun vocabulary. The IGDIs allows educators to benchmark and progress monitor students to provide information on student achievement and rate of language and literacy development. When given the assessment, children are presented with pictures and asked to name them as quickly as possible. One picture is presented at a time and they are to name as many pictures as possible in one minute. Bradfield and Collaborators (2013) described the step by step process of administering the IGDIs (See Appendix C). Jalongo and Sobolak, 2010, describe tiers of vocabulary, the Individual Growth and Development Indicators assesses children's knowledge in Tier 1 (basic labels). The IGDIs have been noted to meet the needs of children with diverse needs, "The IGDIs have been demonstrated to be useful in monitoring progress for young children with and at risk for delays and disabilities" (Cadigan and Missall, 2007, p.9).

Statement of the Hypothesis

Students who receive the intervention of rapid automatic naming will show a greater improvement of picture naming vocabulary scores than students receiving the intervention of repeated read aloud story vocabulary.

Chapter Three

Research Question

In preschool, language and vocabulary development is of the utmost importance. Being able to communicate with peers and teachers to express ideas, wants, and needs is an integral part of our literacy and social emotional curriculum. Students with needs in the area of vocabulary have a difficult time participating in dialog throughout the day and may miss out on many opportunities in the social and academic portions of the day. It is important to me that students are able to express themselves at school and are able to capitalize on every learning opportunity both at school and at home.

Within our program, teachers use various interventions to increase student achievement in the area of vocabulary. Teachers read stories and highlight the vocabulary throughout the story, this intervention is called the “Read Aloud” intervention. The “Read Aloud” intervention allows students to understand the context of the vocabulary they are learning, teachers ask questions, and they are able to talk about the words. Another intervention most commonly used is the “Rapid Automatic Naming” intervention, this intervention exposes students to more words in a shorter amount of time. I formulated the following question, what is the difference in performance between vocabulary acquisition in both groups

Research Plan

Instruments. The Individual Growth and Developmental Indicators (IGDI’s) is an assessment designed to measure individual student achievement in the area of literacy. IGDI’s is a norm referenced tool that evaluates young children on their way towards becoming successful readers.

IGDI's were developed and researched through the University of Minnesota and is research based practice that is widely used in early intervention programs to assess early literacy skills. The University of Minnesota continues to conduct research to expand on their existing literacy measures. The IGDIs were designed to allow quick and efficient assessment of skills indicative of progress toward the outcome of literacy. While a child is in preschool, age 3-5, research indicates that children need certain prerequisites that would lay the groundwork for reading. The skills that encompass the elements that are required for reading in the elementary grades are picture naming, learning lettering naming and letter sounds, alliteration, and rhyming. All skills are assessed using the IGDIs.

Methods and Rationale. The Individual Growth and Development Indicators assessment was administered one on one with a student and teacher. The teacher set the timer for one minute and mix picture cards in random order, when the timer started, the student named as many pictures as possible in a one minute time. Scripts (Appendix C) during the administration of this test are required for the continuity among test administrators. Test administrators were required to pass a validity screening at the beginning of each year to be certain test instructions are given to students correctly. The process for monitoring the students is as follows:

1. Teachers will test all of the students
2. Students will be chosen based on their picture naming test scores
3. Teachers will provide interventions in either Rapid Automatic Naming or Storybook Reading.
4. Teachers will administer second test after 3 months of providing this intervention.
5. Analyze data.

Student scores were compared to their previous scores to see which vocabulary building strategy produced the best results.

Group one. The teacher taught vocabulary using read aloud stories (Appendix F). Teacher used one book a week highlighted at least ten vocabulary words and discussed them as they were reading. The teachers asked questions relating the vocabulary words to make them meaningful to the students. The questions focused on background knowledge and use of the vocabulary. One of the main ideas of this intervention will be repeated exposure and practice using the vocabulary words within the read aloud intervention.

Group two. The teacher used the rapid automatic naming intervention (Appendix E). Students were be exposed to 5 new words a day, name them, talk about what they know about the words, and name them fast 2 more times to practice. Each day this intervention was repeated with 5 new words. The idea was to expose the children to more words at a faster rate.

Both. Both groups received the large group vocabulary instruction within the general education classroom which highlighted both read aloud vocabulary and rapid automatic naming.

Schedule. This study was administered during a 1 month period between September and October progress monitoring assessments. Students received interventions two times a week for approximately 10 minutes.

Ethical issues. No ethical issues arose within this study.

Chapter Four

Results

Data Collection

Data was collected in two testing periods, the first testing period began September 24th, 2018, the second testing period began October 29, 2018. Students were brought out to a quiet area individually. One teacher administered every assessment to ensure validity throughout the group. A student is considered “on target” for the picture naming assessment when they are able to label twenty six pictures (Appendix D).

The assessment results were gathered in two testing periods in the fall (fall 1, first assessment period. Fall 2, second assessment period).

Table 2

Rapid Automatic Naming Intervention Data

RAN	Fall 1 Correct	Fall 2 Correct	Fall 1 Errors	Fall 2 Errors
Student 1	12	18	10	11
Student 2	16	22	7	9
Student 3	8	11	8	9
Student 4	14	16	7	9
Student 5	12	12	11	13
Student 6	20	20	8	11
Student 7	10	11	14	12
Student 8	15	18	7	4
Student 9	17	22	9	7
Student 10	14	21	10	10

The results of this study showed that Students given the intervention of rapid automatic naming had an average increase in picture naming scores of 3.3 pictures correct from the first assessment period to the second. Students in this intervention showed an average error increase of .4 pictures from assessment period one to assessment period two. 60% of the students who received the intervention of rapid automatic naming identified more pictures incorrectly in the second assessment period than in the first assessment period. The average error rate in the first assessment increased from 9.1 pictures named incorrectly to 9.5 pictures labeled incorrectly.

Figure 1

Rapid Automatic Naming Comparison

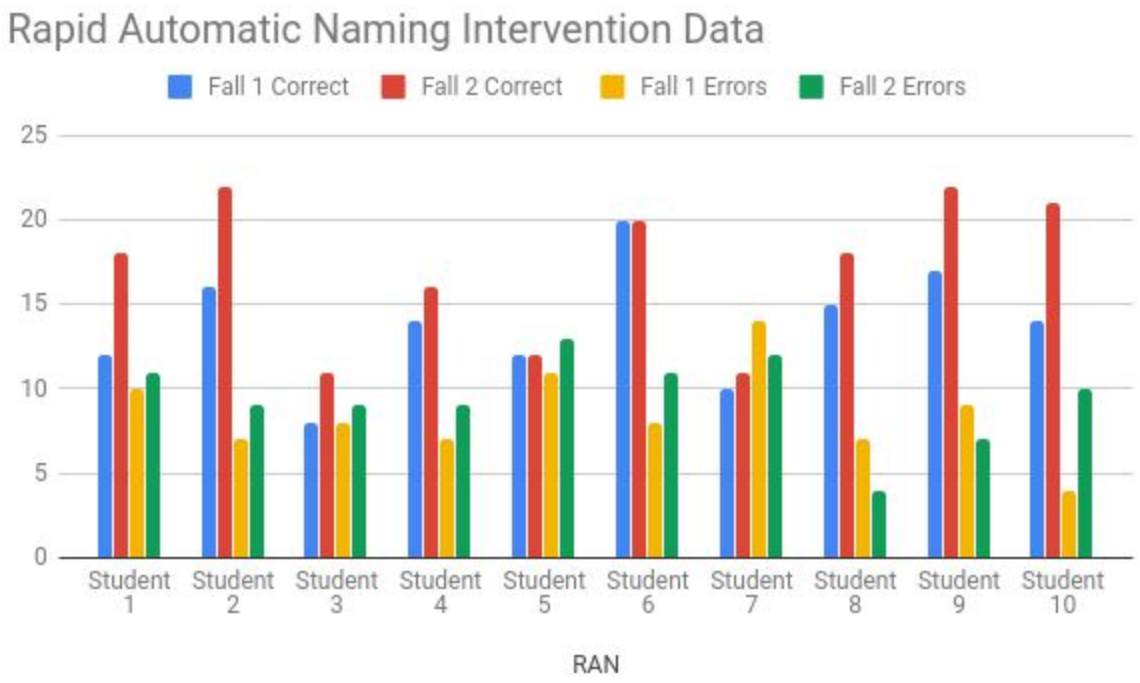


Table 3

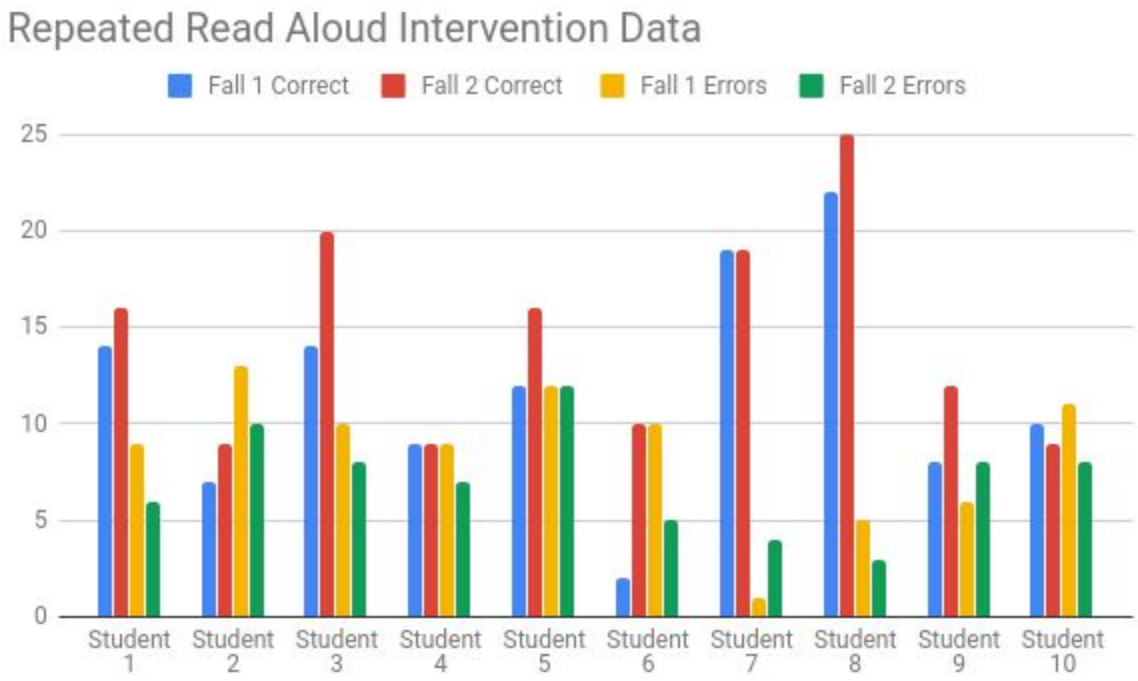
Repeated Read Aloud Comparison

RRA	Fall 1 Correct	Fall 2 Correct	Fall 1 Errors	Fall 2 Errors
Student 1	14	16	9	6
Student 2	7	9	13	10
Student 3	14	20	10	8
Student 4	9	9	9	7
Student 5	12	16	12	12
Student 6	2	10	10	5
Student 7	19	19	1	4
Student 8	22	25	5	3
Student 9	8	12	6	8
Student 10	10	9	11	8

Students receiving the intervention of Repeated Read Aloud had an average increase of 2.8 pictures correct from the first assessment to the second. 70% of the students in the repeated read aloud group showed a decrease in the amount of pictures named incorrectly. In the first assessment, the average number of pictures incorrect was 8.6 pictures incorrect. The second assessment yielded an average of 7.1 pictures incorrect. This intervention influenced a positive result for both pictures named correct and pictures named incorrectly.

Figure 2

Repeated Read Aloud Data Comparison



The average amount of pictures seen by students was higher in those who received the intervention of Rapid Automatic Naming versus the intervention of repeated read aloud. Students who received the intervention of rapid automatic naming saw an average of 26.6 pictures in the second assessment period, while the students in the repeated read aloud intervention group saw an average of 21.6 pictures in the second assessment. With the average amount of pictures being below the target of 26 pictures for fluency, students in the repeated read aloud intervention did not have a chance to reach that goal.

Figure 3

Error Comparison

Table 4

Repeated Read Aloud

	Average Pictures Shown
Fall 1	20.3
Fall 2	21.6

Table 5

Rapid Automatic Naming

	Average Pictures Shown
Fall 1	22.9
Fall 2	26.6

Data Analysis. What is the difference in performance between vocabulary acquisition in both groups? It was found that both of the intervention techniques, rapid automatic naming, and repeated read aloud, showed improvement in student achievement as tested with the Individual Growth and Development Indicators. Of the 20 students assessed, two students, one in rapid automatic naming and one student who received repeated read aloud interventions showed no increase in pictures named correctly. One student labeled one less picture in the second assessment period.

Within this study, I found that a majority of students who received the intervention of rapid automatic naming showed an increase in pictures named correctly as well as an increase of pictures named incorrectly. The students in the intervention of repeated read aloud showed positive results in both areas, with an increase in the amount of pictures named correctly and a decrease in the amount of pictures named incorrectly. Although the goal of the assessment is to reach twenty six pictures, the error rate must be considered when assessing fluency.

Conclusion

As hypothesized, it was found that that intervention of rapid automatic naming showed a greater increase in pictures named correctly as assessed by the Individual Growth and Development indicators. Students in the intervention of rapid automatic naming saw a greater amount of pictures in the second assessment period. I believe students in this group saw a greater amount of pictures because the intervention emphasized vocabulary development as well as speed, which is also a great contributor to achievement within the assessment. It can be argued that the emphasis on speed increased the amount of pictures named incorrectly as the error rate in

the students with the intervention of rapid automatic naming was higher than the students in the repeated read aloud intervention.

Both intervention strategies showed an average increase in the amount of pictures named correctly. The repeated read aloud strategy did show positive results in pictures named correctly as well as a decrease in the amount of pictures named incorrectly, while the repeated read aloud showed a greater increase of pictures named correctly but also a greater increase in pictures named incorrectly. The data that was collected in this study indicated that both intervention strategies yield positive results in vocabulary building.

Chapter Five

Action Plan

Both interventions were found to positively influence students achievement in the area of picture as measured by the Individual Growth and Development Indicators (IGDI's). I would plan to continue to use these interventions as they are shown increase vocabulary. I will continue to use these interventions with these groups to monitor growth for the remainder of the year to obtain more extensive, concrete, data. I would like to continue to monitor the error rate in the rapid automatic naming group to determine if their error rate will decrease with more interventions.

The amount of preparation for the interventions was quick and easy. For the repeated read aloud, the teacher chose one book to repeat with the students for the two days they were there. The vocabulary was based on the story and typically did not have a theme, other than that it went with the story. Within the rapid automatic naming group, the teacher chose vocabulary words that were related, such as clothing items, food, transportation, or animals. I would encourage my colleagues to choose books and vocabulary that is relevant to the children and developmentally appropriate.

Plan for Sharing

I was able to collaborate with two other teachers during my study. I was excited to share the data of which intervention generated greater results with my fellow teachers. These strategies are the two most popular interventions within our program so having data to show that both led

to positive outcomes in Individual Growth and Development Indicators is reassuring that we are making a difference.

I would share that I found an increase in the amount of errors with the rapid automatic intervention and would caution my colleagues to pay attention to their students error rates as well as their pictures named correctly. I believe the intervention choice should depend on the individual student. If a student is needing more emphasis on speed and processing, I would recommend that they receive the intervention of rapid automatic naming. If the student is needing to become more fluent and is able name pictures quickly, I would recommend that the student and use the intervention of repeated read aloud to allow them more context and understanding of the words they are learning. I look forward to sharing my results with my colleagues and anyone who would be interested. The goal of this study was to find which intervention led to greater increase in scores in the area of picture naming, the results weren't black and white. Both interventions showed positive results, although one intervention showed a greater amount of pictures named correctly, the other showed an increase in fluency. Given this data, I believe it is up to the teachers to decide which intervention best suits their students.

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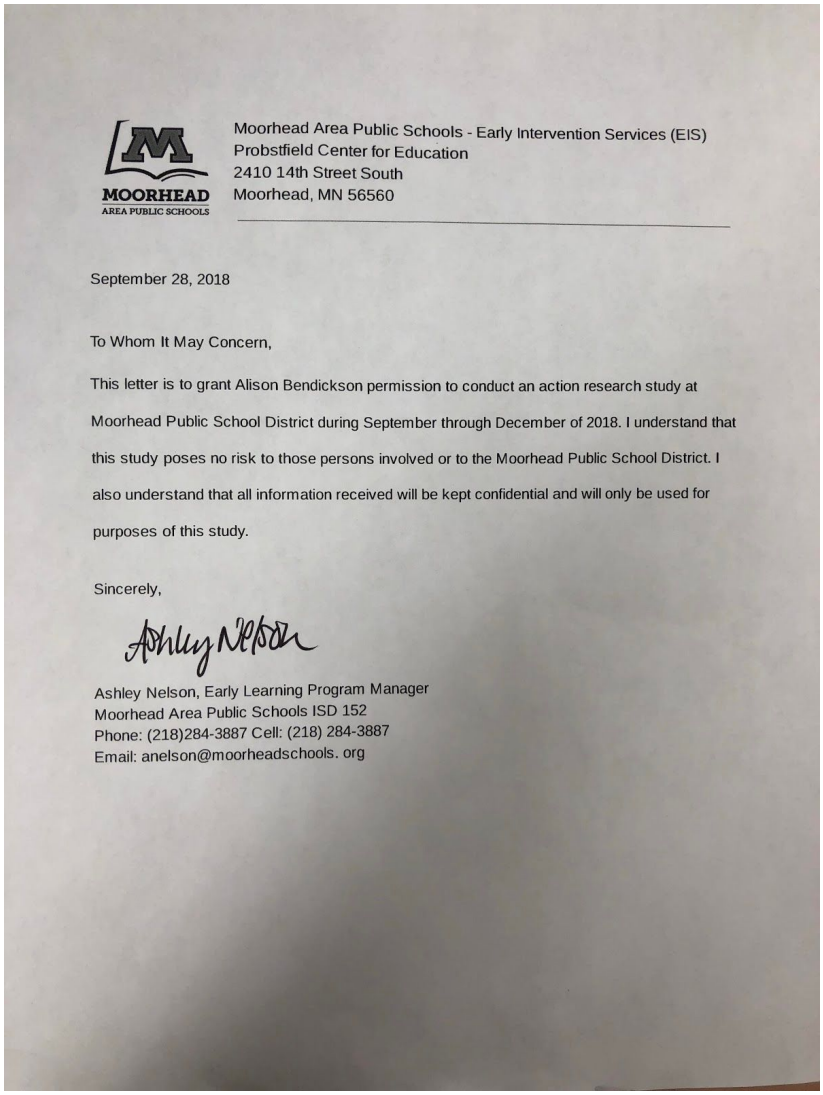
Appendix/Appendices

APPENDIX A

District Approval form



Moorhead Area Public Schools - Early Intervention Services (EIS)
Probstfield Center for Education
2410 14th Street South
Moorhead, MN 56560

MOORHEAD
AREA PUBLIC SCHOOLS

September 28, 2018

To Whom It May Concern,

This letter is to grant Alison Bendickson permission to conduct an action research study at Moorhead Public School District during September through December of 2018. I understand that this study poses no risk to those persons involved or to the Moorhead Public School District. I also understand that all information received will be kept confidential and will only be used for purposes of this study.

Sincerely,

Ashley Nelson

Ashley Nelson, Early Learning Program Manager
Moorhead Area Public Schools ISD 152
Phone: (218)284-3887 Cell: (218) 284-3887
Email: anelson@moorheadschools. org

APPENDIX B

Parent Consent form

Moorhead Area Public Schools ISD 152

Early Intervention Services

2410 14th Street South Moorhead, MN 56560
Phone: (218)284-3801 Fax: (218)284-3833

Consent Form

Participation in Research

Title: The Effect of Instruction (Rapid Automatic Naming Versus Repeated Read Aloud) on Vocabulary Building for Preschool Children

Purpose: The purpose of this research is to determine whether the intervention of rapid automatic naming (naming vocabulary quickly for short amount of time) or highlighting vocabulary through reading stories would show better results in vocabulary building in preschool students.

Study Information: Student will be chosen for intervention groups based on their fall Individual Growth and Developmental Indicators (picture naming) scores. The teachers will determine the intervention that will be appropriate for that student. The teacher will do interventions of repeated read aloud or rapid automatic naming. Students will be assessed during the benchmark time, no additional testing will be done. The students scores will be documented, the investigator will be looking for which intervention helps students show the most growth.

Time: The participants will complete this study during their regular class period. The fall Benchmark scores and the Winter Benchmarks scores will be used to assess students growth.

Risks: While the purpose of this study is to increase vocabulary, the outcome of the study is unknown. Increased Individual Growth and Developmental indicator scores are not guaranteed.

Benefits: Participation may increase students vocabulary building and assessment scores. Following the study, the investigator may have data to determine best practices for interventions

in vocabulary building for preschool students.

Confidentiality: Participant's identity will not be shared with anyone beyond the principal investigator, Ximena Suarez-Sousa, and the co-investigator, Alison Bendickson. All individual information will be recorded and tracked under an identification number and not the participant's name.

Participation and withdrawal: Participation in this study is optional. Students can choose not to participate or choose to withdraw at any time without any negative effects on relationship with the instructor, or relationship with Probstfield Center for Education.

Contact: If you have any questions about the study, you may contact any of these people:

Alison Bendickson Co-Investigator ph. 218.284.3874 Email: abendickson@moorheadschools.edu	Ximena P. Suarez-Sousa, Ph. D. Principal Investigator Assistant Professor, School of Teaching and Learning, Lommen 211C College of Education and Human Services Minnesota State University Moorhead ph. 218.477.2007 Email: suarez@mnstate.edu

Any questions about your rights may be directed to Lisa Karch, Ph. D., Chair of the MSUM Institutional Review Board, at 218-477-2699 or by lisa.karch@mnstate.edu. You will be given a copy of this form to keep.

"I have been informed of the study details and understand what participating in the study means. I understand that my child's identity will be protected and that he/she can choose to stop participating in the study at any time. By signing this form, I am agreeing to allow my child to participate in the study. I am at least 18 years of age or older."

_____

Name of Child (Print)

_____ _____

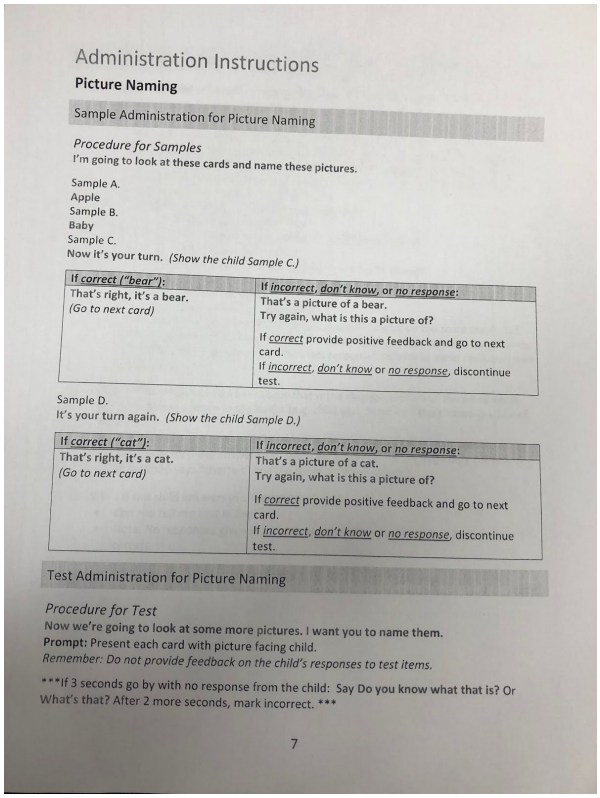
Signature of Parent/Guardian Date

_____ _____

Signature of Investigator Date

APPENDIX C

IGDI's Admission Instructions



Administration Instructions

Picture Naming

Sample Administration for Picture Naming

Procedure for Samples

I'm going to look at these cards and name these pictures.

Sample A.
Apple
Sample B.
Baby
Sample C.
Now it's your turn. *(Show the child Sample C.)*

If *correct ("bear")*:	If *incorrect*, *don't know*, or *no response*:
That's right, it's a bear. *(Go to next card)*	That's a picture of a bear. Try again, what is this a picture of? If *correct* provide positive feedback and go to next card. If *incorrect*, *don't know* or *no response*, discontinue test.

Sample D.
It's your turn again. *(Show the child Sample D.)*

If *correct ("cat")*:	If *incorrect*, *don't know*, or *no response*:
That's right, it's a cat. *(Go to next card)*	That's a picture of a cat. Try again, what is this a picture of? If *correct* provide positive feedback and go to next card. If *incorrect*, *don't know* or *no response*, discontinue test.

Test Administration for Picture Naming

Procedure for Test

Now we're going to look at some more pictures. I want you to name them.
Prompt: Present each card with picture facing child.
Remember: Do not provide feedback on the child's responses to test items.

***If 3 seconds go by with no response from the child: Say Do you know what that is? Or What's that? After 2 more seconds, mark incorrect. ***

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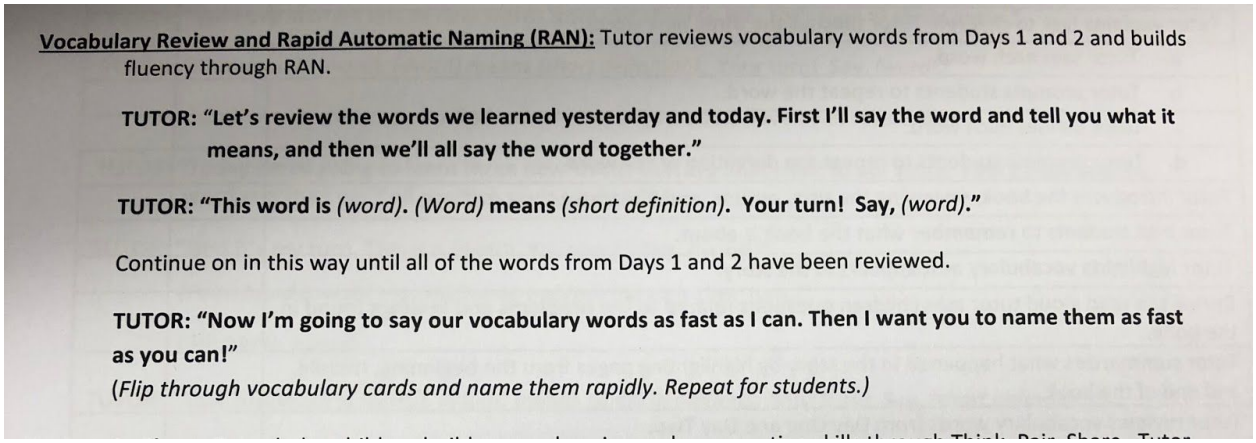
APPENDIX D

IGDI's Picture Naming Targets

3 year old Children Spring Targets				
	Green		Yellow	Red
	Above Target	On Target	Close to Target	Far from Target
Rhyming	8+	7	4-6	0-3
Letter Name Non-Timed	9+	8	5-7	0-4
Picture Naming	27+	26	16-25	0-15
Alliteration	5+	4	2-3	0-1

APPENDIX E

Rapid Automatic naming Intervention Script



Vocabulary Review and Rapid Automatic Naming (RAN): Tutor reviews vocabulary words from Days 1 and 2 and builds fluency through RAN.

TUTOR: "Let's review the words we learned yesterday and today. First I'll say the word and tell you what it means, and then we'll all say the word together."

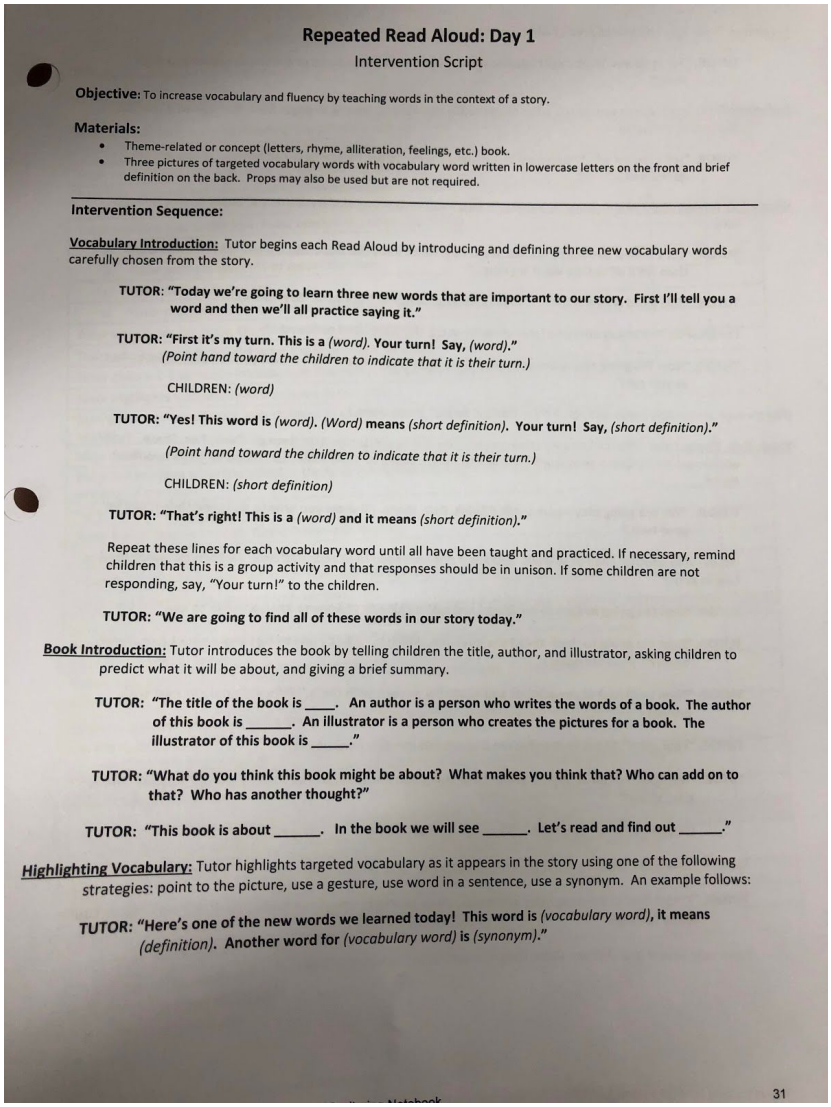
TUTOR: "This word is *(word)***.** *(Word)* **means** *(short definition)***. Your turn! Say,** *(word)***."**

Continue on in this way until all of the words from Days 1 and 2 have been reviewed.

TUTOR: "Now I'm going to say our vocabulary words as fast as I can. Then I want you to name them as fast as you can!"
(*Flip through vocabulary cards and name them rapidly. Repeat for students.)*

APPENDIX F

Repeated Read Aloud Intervention Script



Repeated Read Aloud: Day 1

Intervention Script

Objective: To increase vocabulary and fluency by teaching words in the context of a story.

Materials:

- Theme-related or concept (letters, rhyme, alliteration, feelings, etc.) book.
- Three pictures of targeted vocabulary words with vocabulary word written in lowercase letters on the front and brief definition on the back. Props may also be used but are not required.

Intervention Sequence:

Vocabulary Introduction: Tutor begins each Read Aloud by introducing and defining three new vocabulary words carefully chosen from the story.

TUTOR: "Today we're going to learn three new words that are important to our story. First I'll tell you a word and then we'll all practice saying it."

TUTOR: "First it's my turn. This is a *(word).* **Your turn! Say,** *(word).***"**
(Point hand toward the children to indicate that it is their turn.)

CHILDREN: *(word)*

TUTOR: "Yes! This word is *(word).* *(Word)* **means** *(short definition).* **Your turn! Say,** *(short definition).***"**

(Point hand toward the children to indicate that it is their turn.)

CHILDREN: *(short definition)*

TUTOR: "That's right! This is a *(word)* **and it means** *(short definition).***"**

Repeat these lines for each vocabulary word until all have been taught and practiced. If necessary, remind children that this is a group activity and that responses should be in unison. If some children are not responding, say, "Your turn!" to the children.

TUTOR: "We are going to find all of these words in our story today."

Book Introduction: Tutor introduces the book by telling children the title, author, and illustrator, asking children to predict what it will be about, and giving a brief summary.

TUTOR: "The title of the book is ____. An author is a person who writes the words of a book. The author of this book is _____. An illustrator is a person who creates the pictures for a book. The illustrator of this book is _____."

TUTOR: "What do you think this book might be about? What makes you think that? Who can add on to that? Who has another thought?"

TUTOR: "This book is about _____. In the book we will see _____. Let's read and find out _____."

***Highlighting* Vocabulary:** Tutor highlights targeted vocabulary as it appears in the story using one of the following strategies: point to the picture, use a gesture, use word in a sentence, use a synonym. An example follows:

TUTOR: "Here's one of the new words we learned today! This word is *(vocabulary word),* **it means** *(definition).* **Another word for** *(vocabulary word)* **is** *(synonym).***"**

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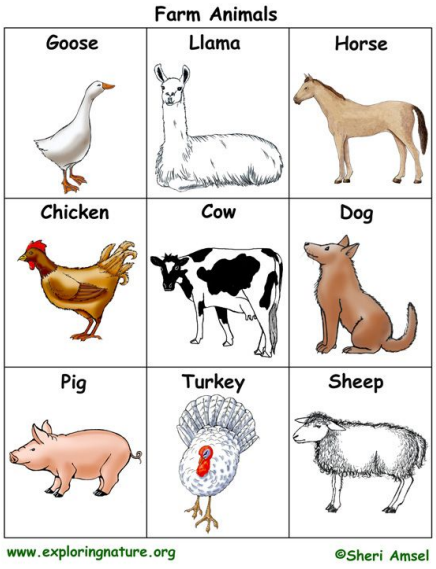
APPENDIX G

Rapid Automatic Naming Vocabulary



APPENDIX H

Repeated Read Aloud Story and Vocabulary